Addressing the school culture as part of the change process

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ADDRESSING THE SCHOOL CULTURE AS PART OF THE CHANGE PROCESS

by

Peggy Chnupa Ondrovich

A Dissertation Submitted to the Faculty of the Graduate School of Education of Loyola University Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

January 1993
Peggy Chnupa Ondrovich  
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Addressing the School Culture as Part of the Change Process

Education has been characterized in the last decade by discussions about reform. Much of the focus of school reform has been directed at creating the characteristics of effective schools but there has been little written about attempts to address the school culture that provided the environment for these effective practices. The historic pattern of resistance to change by public schools has forced a dialogue in communities that has threatened change or the alternative of choice and its similar alternatives. Therefore, the need became apparent to focus on school culture, a topic not widely discussed in dialogue about school reform.

The purpose of the study was to determine whether there is an organized set of principles or strategies that are used prior to the introduction of change into the school culture. An in-depth analysis of the collected data contributes to the developing data base on school culture and how it relates to the change process. The study provides specific strategies for building and central office administrators to incorporate into their plans as they approach major curricular change.

The study was limited to Indiana public school superintendents who had implemented a major curricular change within their school corporation. This study relied
heavily on the degree of specificity provided by the individual being interviewed in order to identify specific strategies used to implement the major curricular change. Initial questionnaires mailed to all public school corporations in Indiana were analyzed to determine a pool of fifty school corporations that would receive followup telephone interviews. Responses from the initial questionnaire and the followup telephone interview were analyzed through the use of the McNemar Test for Correlated Proportions.
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VITA

Peggy Chnupa Ondrovich was born on June 10, 1952 in Gary, Indiana. She is the daughter of John and Dessie Robinson, and is married to William Ondrovich. Their family consists of Jeffrey, Katy, and Daniel.

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CHAPTER I

INTRODUCTION

Significance of the Study

Education has been characterized in the last decade by discussions about reform. The many reports, including "A Nation at Risk," identified problems within the public schools and provided possible solutions that centered around the need for change. As a result of the discussion in the literature about change, there has been renewed dialogue about reform. Much of the focus of school reform has been directed at creating the characteristics of effective schools but there has been little written about attempts to address the school culture that provided the environment for these effective practices. Combs identified three reasons that reform, as it is commonly addressed in current literature, has not been successful:

1. Reform has concentrated on things rather than on people.

2. Traditional efforts have been based on tired, old assumptions.

3. Solutions are usually dictated from another source
which means they rarely achieve their anticipated results.¹ The historic pattern of resistance to change by public schools has forced a dialogue in communities that has threatened change or the alternative of choice and its similar alternatives. Therefore, the need became apparent to focus on school culture, a topic not widely discussed in dialogue about school reform.

Statement of the Problem

This study examines whether there is an organized set of principles or strategies that are used prior to the introduction of change into the school culture. An in-depth analysis of the collected data contributes to the developing data base on school culture and how it relates to the change process. The study provides specific strategies for building and central office administrators to incorporate into their plans as they approach major curricular change.

Purpose of Study

Examination of the current literature on implementing change in schools indicated many strategies once the change was initiated. However, few studies addressed any preparation for the change that might occur prior to the implementation phase. This preparation phase was more complex than identifying several variables similar to the

treatment of the effective schools research in the literature. But the terminology for this phase was not consistent, which made searching for similar studies more difficult.

For example, Fullan defined eight organizational factors that defined effective schools. Those factors were as follows:

- instructional leadership at school level,
- district support,
- emphasis on curriculum and instruction,
- high expectations for students,
- system for monitoring performance and achievement,
- ongoing staff development,
- parental involvement,
- and an orderly and secure climate.  

The implication, after reviewing these factors, is that a school will become effective by developing a plan that will address those eight factors. The use of the factors implies that producing an effective school is a matter of following a recipe.

However, similar factors related to change are not as clearly identified or consistent with terminology. Red and Shainline describe four factors of educational change:

- process requires two-three years,
- turmoil provokes the ability to change,
- change is personal and complex,
- and each individual develops a personal meaning in the change.  

Sarason defines change factors as follows: gaining

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knowledge of the culture of the setting they wish to influence and change, understanding that many of those who are part of the culture do not seek change, realizing the complexity of the change process, and understanding that the existing structure is a barrier to experimenting with alternative structures.\(^4\) Deal identifies two essential preconditions for change: felt need for the change by the employees and a respected individual or group that advocates the change.\(^5\)

It was the initial intent of this study to analyze school ecology, defined as climate and culture. However, it became clear after the review of related literature that these concepts were similar but not the same. The difference in concepts can be realized through definitions provided in the literature. Jones and Jones define climate in the following manner:

Climate is a set of characteristics that describe an organization and that (a) distinguish the organization from other organizations, (b) are relatively enduring over time, and (c) influence the behavior of people in the organizations.\(^6\)

Kasten studied problems with the relationship between

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\(^6\)Katherine Lewellan Kasten, "School Climate and Planned Educational Change: A Review and Critique of the Literature," working paper at Wisconsin University, Madison (December 1979), 10.
climate and change, indicating that few studies focused on organizational characteristics prior to the introduction of an innovation.\textsuperscript{7} Webster's definition of culture is

\begin{quote}
the integrated pattern of human behavior that includes thought, speech, action, and artifacts and depends on man's capacity for learning and transmitting knowledge of succeeding generations.\textsuperscript{8}
\end{quote}

The contrast concerns the likelihood that climate characteristics that are enduring over time will be static which is in direct opposition to the concept of change and the culture that transmits that change. Since Kasten's work, Johnson, Deal, Fullan, and Sarason have defined culture as a separate concept from climate and established climate as a byproduct of the change process and as a part of the organization's culture, as in the climate of values and norms.

Eight doctoral dissertations since 1984 reflected the growing body of research about change and school culture. However, they also provided a contrast in the definitions of elements or factors within culture and the change process.

Examination of the current literature indicated a growing interest in school culture as it related to school change. However, that interest has been in very recent literature, forcing the researcher to look for elements of school culture under other titles. There is very little

\begin{itemize}
\item \textsuperscript{7}Ibid., 40.
\item \textsuperscript{8}J. Howard Johnson, "Values, Culture and the Effective School," \textit{NASSP Bulletin} 71 (March 1987): 79.
\end{itemize}
information relating the practical steps necessary to implement the preparation stage for change but there is significant information regarding the actual implementation of an innovation or other change process.

This study examined, in depth, the specific actions of superintendents in the preparation and implementation of curricular change in selected Indiana school districts. These actions were reviewed in an effort to identify specific strategies in implementing change and the degree of success these strategies have enjoyed.

**Limitations of the Study**

The field work for the study, conducted over a four month period, was limited to Indiana public school corporations. Public school corporations were identified through State of Indiana Directory of Public Schools. No attempt was made to eliminate any K-12 public school corporations in the initial survey.

The study was also limited to those institutions which had implemented a major curricular change in the last decade. A further limitation grew out of the definition of major curricular change which relied on the interpretation of the researcher to categorize such changes. This type of study relied heavily on the degree of specificity provided by the individual being interviewed in order to identify specific strategies used to implement the curricular change. The value of the data relied upon the candor of that
individual in sharing the problems and pitfalls in the implementation process.

The literature search was conducted through the Loyola University Chicago library as well as the extension campus at Purdue University Calumet, Hammond, Indiana. An additional search was conducted through an information network provided to Indiana public school corporations through a computer search system. All materials were limited by its availability through local access, interlibrary loans, university microfilm, and ERIC files. Selective reading of all sources provided through the computer searches produced the review of related literature in Chapter II.

Research Design, Methods, and Procedures

In order to identify Indiana public school corporations that have attempted to implement a major curricular change, all 298 corporations were initially surveyed to determine the degree of participation in such activities. Each corporation was asked to supply specific data concerning such factors as number of students and teachers, years in current position, examples of major curricular change, implementation plans, indicators of success or lack of success, and identification of specific problems. The introductory letter and initial questionnaire are presented in Appendix A.
Identification of Population

A total of 298 questionnaires was sent to the superintendent of each Indiana K-12 public school corporation, resulting in 159 responses by the superintendent or person designated to complete the survey.

Of the 159 responses, 19 indicated that no major curricular change had been attempted since 1980, 106 indicated the attempt to implement a major curricular change, and 34 indicated changes that could not be classified as significant for purposes of the study. A review of responses is contained in Appendix B.

After the initial questionnaire was analyzed, the pool of available candidates for in-depth study was determined. This group was organized based on the major curricular change cited. The initial data collection indicated that few leaders had problems initiating these changes. From that group, 50 corporations were randomly selected with certain characteristics in mind to provide a representative sample for the study. The number fifty provided a manageable number for followup interviews. Responses were reviewed to provide a mix of rural, suburban, and urban settings. The group was also narrowed based on the perception of the reviewer of the scope of the change project. Only those projects that represented major curricular change were considered for the group of fifty to be interviewed on the telephone. As a result, followup
interviews were coordinated with the initial questionnaire response to determine if written responses were consistent with verbal responses. The hypothesis was that followup interviews would reveal candid information about problems with initiating change that were not indicated on the initial survey.

**Development of Data Collection Instrument**

The initial questionnaire and interview instrument was reviewed by Dr. Jack Kavanagh, Loyola University Chicago. A pilot study for reliability was conducted by mailing the questionnaire to twenty-eight Indiana public school corporations for response and review. Twenty-three questionnaires were returned with completed information as well as suggestions for clarity and thoroughness.

From that feedback, the questionnaire was revised for distribution in the remaining 270 Indiana public school corporations.

**Data Collection Procedures**

A total of 50 school superintendents were contacted by the author for a followup telephone interview. The indepth questions focused on preparation strategies, follow-through strategies, implementation plans, reward systems, power structures, support systems, communication strategies, the role of the building principal, staff development plan, identification of problems and positive results, and funding
issues. These interviews provided insights into the strategies, plans, problems, and pitfalls used in the preparation and implementation of major curricular change being used by Indiana public school corporations. Permission was granted by each school superintendent to examine appropriate written documents (memos, action plans, notes) and to conduct indepth interviews with appropriate administrative personnel.

Analysis of Data

The following research questions were formulated prior to distribution of the questionnaire:

1. Prior to the significant curricular change, how did the superintendent or central office staff prepare the school culture for the change?

2. As change was implemented, did the superintendent utilize an implementation plan and what were the components of those plans that proved successful?

3. What specific strategies did the superintendent employ to implement the change?

4. What were the pitfalls and problems related to school culture encountered during the change process?

Upon completion of the data gathering, a thorough analysis was conducted to categorize responses by participants. Responses were then reviewed to identify specific strategies used in the preparation and implementation of the major curricular change as they
related to school culture. This review included an analysis of the strategies in terms of strengths, weaknesses, and patterns as well as in terms of the descriptions and guidelines contained in the related literature.

Responses were categorized using the following criteria:

- Developing supportive arrangements key to the implementation
- Staff development/training
- Coaching/problem-solving
- Monitoring the implementation
- Communicating the innovation to others
- Preparing innovation for replication

Data were then examined in terms of the administrative implications for future implementation of major curricular change as they related to these areas:

- Preparation of culture for change
- Review of change process
- Presence of an implementation plan
- Staff development or training
- Follow-through strategies after initial training
- Model of intended innovation
- Coaching of implementation
- Rewards for proper implementation sequences
- Heroes or heroines that exemplify the innovation
- Problem-solving through stages of the implementation
- Adequate financial resources
- Political considerations - internal/external power structures
- Ownership by building principals
- Adequate time/calendar resources
- Support from central office staff
- Unresolved problems
- Communication systems

Initial survey data was used to screen responses of the potential 298 school corporations based on their description of the change process and school culture. Those responses were analyzed and fifty school corporations were then selected for further study. The responses gained in the initial survey were compared to the second responses obtained through the followup telephone interview. The responses from these 50 corporations were statistically analyzed through the use of the McNemar Test for Correlated Proportions.9

Definition of Terms

For this study, the following definition of terms have been obtained from the literature:

School culture - patterns of thought, behavior, and artifacts that symbolize and give meaning to the workplace.

Meaning derives from the elements of culture: shared values and beliefs, heroes and heroines, ritual and ceremony, stories, and an informal network of cultural players (Deal, 1985).

Values - basic concepts and beliefs of an organization that form the heart of the corporate culture (Deal, 1982).

Heroes/heroines - individuals who personify the values the school system wants to have shared (Johnston, 1987).

Ritual - systematic and programmed routines of day-to-day life in the company (Deal, 1982).

Ceremonies - special recognitions that celebrate heroes, myths, or special events (Johnson, 1987).

Cultural network - a collection of informal historians (priest, priestess), gossips, spies, and storytellers whose primary role is to reinforce and to protect the existing ways (Deal, 1987).

Renorming - changing the beliefs of a sufficiently large number of people in the school district in such a way that these people consciously influence others to see new, different values as standards for judging what is quality schooling (Prince, 1989).

Organization of the Study

The study was developed in four chapters, a bibliography, and appendices.

Chapter I includes the purpose, methodology, research design, methods, and procedures, limitations of the study,
and other structural information.

Chapter II contains review of the related literature.

Chapter III presents the data collected and the resulting analysis of that data.

Chapter IV includes the summary, conclusions, recommendations, and suggestions for further study.

Appropriate appendices and a bibliography are attached as concluding sections.
CHAPTER II

REVIEW OF RELATED LITERATURE

The concept of culture as it related to the process of change was popularly introduced by Peters and Waterman in the book, *In Search of Excellence*. They identified eight attributes that marked excellent companies, including strong cultures as reflected in values, stories, myths, and legends. While the book was published in 1982, it was only in recent time that much has been published on school culture as it related to the change process.

Definition of Culture

Deal brought together the definition of culture as it relates to schools:

Culture is an expression that tries to capture the informal, implicit - often unconscious - side of business or any human organizations. Although there are many definitions of the terms, culture in everyday usage is typically described as "the way we do things around here." It consists of patterns of thought, behavior, and artifacts that symbolize and give meaning to the workplace. Meaning derives from the elements of culture: shared values and beliefs, heroes and heroines, ritual and ceremony, stories, and an informal network of cultural players. Effective businesses typically show a remarkable consistency across these

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cultural elements.\(^2\)

Blendinger and Jones define culture as "the shared understandings people have about what is valued and how things are done in an organization."\(^3\) Prince adds the dimension of attitudes of the teachers and students as part of school culture, particularly as it relates to teaching and learning.\(^4\) This is further reinforced by Saphier and King as they relate school culture to school improvement:

Eventually, the culture of the school is the foundation for school improvement.... Academically effective school is distinguished by its culture: a structure, process, and climate of values and norms that channel staff and students in the direction of successful teaching and learning.\(^5\)

Parish, Eubanks, Aquila, and Walker name conditions, relationships, configurations, and norms as part of school culture.\(^6\)

**Why Culture is Important**

Once the concept of culture is understood, it is


important to understand why it is important to schools and the change process. Johnson identifies that culture is the variable that makes people behave in certain ways. As a result, the culture will affect school areas such as school performance and student outcomes. For example, if the school values excellence the culture will speak to high expectations for students within its environment. The absence of artifacts that speak to excellence such as displays of student work or process-oriented group work by students form a culture that does not promote student achievement. Therefore, the culture gives meaning to the instructional activity within the school.

Kilmann adds the dimension of culture to the documents of the organization and how they are interpreted. He observes the following information:

Culture, as manifested in norms of behavior, greatly affects how formal statements are interpreted and fills in what written documents omit. This affects all decision making and action taking, which in turn affect morale and performance.

For example, if the faculty handbook encourages growth and development among teachers but there are no funds budgeted, the interpretation will be that growth and development is not truly valued. Culture provides meaning and direction

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for the membership of the organization.

When a culture is strong, the members understand and work toward the corporation goals. Promotions and decisions are made based on achievement of those goals. The tone for the school environment is set by the culture. Teachers that value the professionalism within their school and a businesslike atmosphere will dress as professionals avoiding casual or sloppy clothing. They know that their clothing communicates a message to children about how they should behave.

Culture explains the common and stable patterns of schools despite the fact that society has changed dramatically over the past one hundred years. This is the very reason that culture can inhibit the change process since stable patterns are immune to change.\(^9\) Change can be successful if it is consistent with the values, past experiences, and needs of the organization. If not, the values and experiences of the organization must be changed to allow the change process to take hold.\(^{10}\)

Parish and others outline the need for change in the culture of schools in four areas:

1. Focus as participatory organizations instead of

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\(^{10}\)Sylvia Rosenfield and Florence Rubinson, "Introducing Curriculum-Based Assessment Through Consultation," *Exceptional Children* 52 (November 1985): 283.
individual, competitive, power-hungry organizations.

2. Change from adversarial relationships to trusting and collaborative relationships.

3. Promote staff renewal and planned change to take advantage of the people within the organization.

4. Develop collaborative partnerships between colleges and universities.

If these areas are addressed to modify the school culture, change can occur.

Deal makes the observation that the culture of a school can determine its ultimate success or failure.

Where cultures are cohesive, people contribute their efforts toward a common destiny, rallying around shared values that give meaning to work - and to their lives. When cultures are fragmented, people "do their jobs," worry about salaries, and spend their time struggling for power.

His observation has serious implications for engaging the culture as part of the change process if schools are to be successful.

**Element of Culture: Shared Values and Beliefs**

Changing the behavior of individuals within an organization requires changing the values and beliefs under which those individuals operate. Beliefs and values set the tone for a school district and influence how administrators involve people in the decision making process or the extent to which the needs of others are addressed. Deal defines

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11 Parish, 393-394.

values as "basic concepts and beliefs of an organization that form the heart of the corporate culture. They define "success" in concrete terms for employees and establish standards of achievement within the organization." These values are shaped and developed by management and communicated to every worker within the organization. Everyone in the organization is clear about how that organization is going to conduct business, creating a distinct identity. That identity is communicated through a cultural network that includes slogans, myths, stories, and legends.

Sapirer and King suggest that values that positively influence school improvement efforts include the following characteristics: collegiality, experimentation, high expectations, trust, confidence, and tangible support. Teachers help each other and are constantly looking for more effective ways to teach. Regular evaluations hold teachers and administrators accountable for performance and parents trust the judgment of professional staff. Time and resources are available to address learning priorities. They also list the cultivation of a knowledge base which provides a common language to professional staff about instruction, reducing isolation. Additional characteristics include appreciation, recognition, celebration, involvement

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in decision making, protection of what is important, traditions, and honest, open communications.\textsuperscript{14}

Six principles that are key to organizing for excellence are defined by Sergiovanni. Cooperation between teachers and empowerment build ownership of the values of the school. Responsibility communicates the importance of the teacher’s work and accountability provides structures for staff to own decisions. Meaningfulness establishes the importance of a job and ability-authority allows those with proven competence to hold power positions in making decisions.\textsuperscript{15} These six principles represent values that Sergiovanni (as reported by Duttweiler and Hord) feels must be present in organizing for excellence.

Altering the belief system of people within the school organization has not been the historic pattern of reform. Combs notes this issue by indicating that the external items, such as teaching methods, technology, or materials, are those we have traditionally addressed in reform. He has suggested that we focus on altering the belief systems of the school decision makers and those individuals that work with students. Combs asserts that unless a strategy for reform becomes a part of the belief system for teachers about themselves as well as students and the teaching task

\textsuperscript{14}Saphier and King, 68-70.

\textsuperscript{15}Patricia Cloud Duttweiler and Shirley M. Hord, Dimensions of Effective Leadership (Austin, Texas: Southwest Educational Development Laboratory, 1987), 11-13.
itself, it will not likely succeed in changing behavior in the desired direction of reform. This change in belief systems cannot be mandated or legislated but created through conditions for change that allow more open patterns of thinking about how schools conduct their business. This change will only occur if the individuals involved are aware of what they believe and see the need for a change in that particular way of thinking. Once they realize that need, they must be willing to confront their beliefs and values by conflicting information that challenge their current system of operation.  

It is clear that values are the central focus for school culture by setting the proper tone for the school. These values influence how administrators react to the needs of people and how they involve others in decision making. These values must be articulated throughout the organization consistently and constantly to all employees so that they behave in accordance with these values and beliefs.

Element of Culture: Heroes and Heroines

Heroes personify the values of an organization and represent the picture of success that the organization is trying to communicate to all employees. They articulate the vision of what the organization can become. These individuals serve as role models that motivate others to

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perform and set high expectations for performance. The events in the lives of these school heroes instruct others about coping with the challenges of schooling.\textsuperscript{17}

There is little within the literature regarding the heroes and heroines of the culture. Deal has been the most prolific writer in this area. He defines heroes and heroines as "human beings whose thoughts, deeds, and personal qualities represent core company values."\textsuperscript{18} He identifies those characteristics that create legends out of heroes and heroines:

1. They were right about a new product, a new method, or other organizational aspect.
2. They were persistent about their vision becoming a reality.
3. They felt a personal commitment for making the business a successful enterprise.\textsuperscript{19}

When the organization faces difficult challenges, Deal indicates that these heroes and heroines become the people that everyone can count on to find the answer, try some unconventional solutions, and never give up on the problem.\textsuperscript{20}

It is clear that heroes and heroines provide tangible role models for others to follow that embody the values of

\textsuperscript{17}Johnson, 83-85.
\textsuperscript{18}Deal, "The Symbolism of Effective Schools," 606.
\textsuperscript{19}Deal and Kennedy, 45.
\textsuperscript{20}Ibid., 37.
the organization.

**Element of Culture: Rituals and Ceremonies**

The routines and celebrations that exhibit the values of the culture are important in communicating expectations. Rituals are defined as the "systematic and programmed routine of day-to-day life in the company." Ceremonies are "special recognitions that celebrate heroes, myths, or special events." Rituals and ceremonies set standards of behavior and provide illustrations about the values of the school.

Typical examples of rituals include the weekly staff meeting, teachers at the doorway to greet students as they enter the building, and planning future lessons. Ceremonies include graduation, retirement dinners, and student awards ceremonies.

Bolman and Deal note that ritual and ceremony have been traditionally used to create "...order, clarity, and predictability...." They identify four major functions of these events: "to socialize, to stabilize, to reduce anxieties and ambiguities, and to convey messages to external constituencies."  

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21 Ibid., 14.  
22 Johnson, 86.  
Element of Culture: Network of Cultural Players

This element of culture typically includes stories, myths, legends, and symbols. Myths explain, express, legitimize, communicate, mediate contradictions, narrate, and maintain cohesiveness. Stories provide explanations when procedures go astray and assign praise when things go right. 

Symbols and slogans express the values of the organization and provide a constant reminder to employees of the mission of the company.

There are times when the informal network acts as a barrier to change. Individuals known as historians (priest-priestesses), gossips, and storytellers can keep the existing culture alive, creating a difficult challenge when change agents are trying to influence the culture in a new direction.

As employees within an organization communicate, these interactions take many forms. Teaming, lunch partners, or departmental colleagues develop relationships that influence each other's opinions. As change is introduced into the environment, these relationships offer support as questions about the innovation surface. The direction in which these interactions focus is dependent on the value system of the

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24 Ibid., 153.

The cultural network serves as the primary vehicle for communication. It can transmit information, interpret events within the company, pass on legends about heroes or heroines to new employees, and reinforce the value system of the organization. Managers who are successful at implementing change have recognized that they must use this network to set the climate for a new direction. They develop their own set of contacts within the network and cultivate special relationships with them.²⁷

There are obvious subcultures within a school organization. Students are one subculture with peer pressure as a major influence on other students. This pressure influences scholastic performance and future aspirations as students choose groups that range from athletes, clubs, or gangs. The teacher subculture dictates relationships with other teachers as well as attitudes toward innovations. There are parent and community subcultures that may demonstrate their influence through groups such as parent-teacher associations or Partners in Education committees. The administrative subculture struggles with accountability measures in conflict with the encouragement of teachers to try innovative ideas. For any


²⁷Deal and Kennedy, 85.
school to be effective, these subcultures must be pulling in a similar direction of shared values. If this does not happen, then one subculture and its values dominates the environment.\textsuperscript{28}

Once the concept of culture has been defined and its importance to schooling, it is important to review the related literature on the change process. While culture is critical to changing the environment, it is pertinent to understand various components of effective change processes as well as how culture relates to that process.

**Systems Theory**

It is appropriate to begin with information about systems in general before proceeding to literature about the change process. Prince defines seven characteristics of all systems:

1. Tendency toward natural decay (entropy) - Lasting change is a result of current use of new procedures under closely supervised and constant scrutiny.

2. Exist in time-space - Living systems are fluid in nature, operating in one direction, forward in time. There is a history to the organization to the present moment in time. How people work together is largely a result of local cultural norms (values) and past staff development.

3. Has boundaries - The boundaries are defined as the point at which the vocabulary (educational jargon) changes. All members of that organization share their common vocabulary.

4. Has an environment, which is everything outside

\textsuperscript{28}\textsuperscript{}Deal, "The Symbolism of Effective Schools," 610-611.
the system's boundary - There are proximal influences, those of which the school is aware, and distal influences, those of which the school is not aware and may have little influence.

5. Have variables (factors within the system) and parameters (factors in the environment) - Examples would include training within the system (variable) and community advisory committees (parameters).

6. Have subsystems, working units of the organization. These have the same components as listed previously for larger systems.

7. Under the influence of suprasystems - All schools are under the control and direction of some larger agency.

Change Process

Sarason has written extensively in the area of the culture of change. His premise is that the reason little has been written about the change process in the school setting is the lack of perceived need for having such information. He also noted that change within the school setting is a complex issue. He provided the following descriptions of the change process in the school setting:

-What were the specific conditions giving rise to the need for change?

-Which individuals or groups were associated with these conditions?

-Which individuals or groups formulated and initiated the need for change?

-What actions were considered, and what was the basis for choosing the final course of action?

-To what degree were problems anticipated and what

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strategies were developed to prevent or improve the problem situations?

- In what way were those who wanted the change personally affected by the change process?

- What were the criteria by which the individuals who wanted the change and others judged the effort and how did those criteria change from the original premise?

He continued with a theory of change that embodied the following characteristics:

1. It must recognize that each social setting is different in many unique ways which will ultimately cause each group to react to the proposed change in a different way.

2. There will always be a group or groups that pose themselves in opposition to the change. Success with the change process will not happen unless these groups are faced as existing social forces.

3. Since the change process involves a series of decisions that affect many groups, it is critical for the leadership to address those groups affected by the change but not represented in the decision making process.

4. The time perspective introduced to the goals within the change process are always underestimated. Allow sufficient time for initiation of the change and achievement of the intended outcomes.

5. It is assumed that the change to be introduced into the school setting is desirable according to the values of the organization and that the outcomes are clear.

6. The introduction of change involves the changing of the existing routines and regularities of the organization. Two important questions for consideration include the rationale for the regularity and the identification of alternatives that could be considered.

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7. Alternatives and intended outcomes are overwhelmed by the power of faith, tradition, and habit.

8. The degree to which intended outcomes are being achieved is measured by the degree of change in existing behavioral regularities.31

These characteristics must be considered throughout the preparation, initiation, implementation, and maintenance of change within a school district. Leadership must focus attention on the plans, trouble-shooting, decision making, and follow through of those individuals acting as change agents.

Fullan has written about the change process at the school level. He identified three broad phases within this process: initiation, implementation, and institutionalization. These are explained as the adoption phase, putting the innovation into practice, and making the new process part of the normal routine. He stressed that all three phases require planning, action, and reflection on a continual basis.32

He described eight guidelines necessary to implement an innovation:

1. Develop a plan and design instruments to test the plan, get feedback, and make adjustments as needed.

2. Clarify and develop the role of the central office liaison to support the development and implementation of the innovation.

31 Ibid., 58-75.

32 Fullan, 405.
3. Decide if the innovation is going to be within one school or throughout the district. Have a system developed to match external or internal innovations with need. Begin with volunteers and provide continual assistance during the initial stages of implementation.

4. If the principal has ownership of the innovation, he/she will provide ongoing assistance to those teachers. His/her influence on others can make the difference.

5. Remember these steps in learning to be proficient at new task: initial anxiety, variety of assistance, small experiences of success, incremental skill development, and clarity of concept.

6. Decide on types of information to be gathered regarding outcomes. Should a survey be used or will test data be necessary to collect? Be sure the communication network is sharing information about the innovation to influence opinions.

7. Make the innovation part of the system. Have a continual training cycle for new teachers. Incorporate innovation into curriculum guides and give it a budget line item. Keep working to influence more users.

8. Develop the capacity for future change by monitoring the needs and the availability of different innovations.\(^{33}\)

The listing of the components of Fullan’s theory does not lessen the complexity of its use in the change process. This process is a continual cycle of many variables that requires constant monitoring and adjustment.

Johnson and Friedan presented their concept of successful change efforts in three phases: preannouncement, transitions, and consolidation. The preannouncement phase is defined as the time after the decision to initiate change

\(^{33}\)Ibid., 405-412.
has been made but no formal announcement has been made. Efforts during this time involve gathering information about the change and its effects on current efforts as well as identifying strategies for building support among organization members. The transition phase is the actual initiation of the change effort during the time in which the normal routine is occurring within the organization. Key variables during this time include managing the change process and its components, communicating the vision to employees and supporting their needs as they attempt change, and maintaining the support of key people within the organization. The final phase is consolidation, defined as the time in which the change is in place, modifications are being made, and evaluations of the effect of the change are being conducted. Johnson and Fredian stressed that three factors are critical for success: support of key people within the organization, development of a thorough plan to implement the change, and support of the employees within the organization most directly affected by the change.\textsuperscript{34}

The role of change facilitators is discussed by Hord, Rutherford, Huling-Austin, and Hall. The major emphasis of that role is successfully guiding the implementation of the change process through monitoring, adjusting procedures, expert knowledge about the innovation, and integration of

the change within normal routines.  

They defined stages of concern that assisted the change facilitator in determining the nature of the problem and making a decision regarding the appropriate strategy to suggest, given the particular concern. Those concerns fall into the following categories:

1. Awareness Concerns - lack initial information about the innovation.

2. Informational Concerns - need information about the innovation and how it affects the individual’s current practice.

3. Personal Concerns - need reassurance about how the innovation will affect the individual on a personal level.

4. Management Concerns - provide step-by-step information on the innovation components.

5. Consequence Concerns - need information on other places where the innovation is currently in use.

6. Collaboration Concerns - address needs about working with others.

7. Refocusing Concerns - may significantly modify the existing innovation.

These innovations are based on the concerns of the individual involved in the innovation, creating a more individualized approach.

A checklist of change facilitator behaviors is provided by the authors in these areas:

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36 Ibid., 44-46.
1. Developing Supportive Organizational Arrangements
   i.e., planning, providing materials or equipment

2. Training
   i.e., increasing knowledge, observing innovation use

3. Consultation and Reinforcement
   i.e., promoting innovation among groups, sharing tips

4. Monitoring
   i.e., collecting data, assessing innovation use

5. External Communication
   i.e., reporting to the Board of Education, making presentations at conferences

6. Dissemination
   i.e., marketing the innovation, mailing brochures.

These categories were derived from studies of innovations within schools.

In addition to defining categories of behaviors for change facilitators, the authors defined levels of use of any innovation. These eight levels identified behaviors that would distinguish the sophistication of the implementation:

1. Non-Use - No involvement in the innovation

2. Orientation - Takes action to learn more about the innovation

3. Preparation - Preparing for use of the innovation

4. Mechanical - Begins use of the innovation, focusing on short-term, day-to-day needs

5. Routine - Innovation use is stabilized

6. Refinement - User varies the implementation to

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37 Ibid., 75.
meet the needs of students

7. Integration - Collaborating with others in varying the implementation of the innovation

8. Renewal - User makes major modifications in use and sets new goals for self.

Levels of use require different strategies to promote the use of the innovation.

The importance of the research of Hord, Rutherford, Huling-Austin, and Hall is in the identification of different strategies dependent on the individual user. It is clear that no one strategy will work with all situations or every individual involved in the change process.

Prince referred to five elements in the renorming process, which he defined as "changing the beliefs of a sufficiently large number of people...in such a way that these people consciously influence others to see new, different values as standards for...quality schooling." These five elements included the following steps:

1. Provide visionary leadership. Spur individuals to action through your vision for what the organization can become.

2. Create middle managers as enablers. Keep principals in charge, providing critical information about the change to the superintendent.

3. Create a network of informal leaders.

4. Utilize steering committees.

38 Ibid., 55.

39 Prince, 5.
5. Focus on centralized planning and evaluation. Determine a measure of productivity.\textsuperscript{40}

He continued with a checklist of elements of change for use by implementors of innovations. Each element would be reviewed utilizing these criteria:

--Mission – clear statement
--Involvement – representative group
--Support – training, finance, knowledge
--Ownership – personal possession of the change
--Local Option – flexibility to change implementation at the building level
--Feedback – information of success/failure of plan
--Institutionalizing – internal procedures
--Maintaining – annual efforts in keeping the change intact within the organization\textsuperscript{41}

He defined a structure that included district-wide consensus on a mission statement, focus of activity on mission by all groups, provision for trial and error in implementing the change, and building a delivery system. The delivery system would include procedures that were research-based, management techniques that would support new behaviors by employees, definition of alternatives in implementing the innovation, development of measures to determine achievement of goals, and communication of successes and failures to

\textsuperscript{40} Ibid., 25-34.
\textsuperscript{41} Ibid., 51-53.
Duttweiler and Hord outlined four stages in the change process: planning and initiation, building a temporary operating system for the project, developing and implementing, and ending and institutionalizing. These stages are similar to those previously mentioned by other authors.

Jackson described seven stages in a change process: awareness, understanding, belief, effort, reward, feedback, and system accommodation. During the awareness stage, alternatives to the current system are reviewed. The alternatives are considered during the understanding stage and desired outcomes are selected. A belief is developed in the third stage that the alternative will be successful. The fourth stage encourages individuals to translate knowledge of the change into concrete behavior. The reward stage is designed to provide reinforcing rewards when individuals attempt to change behaviors. The feedback cycle is structured to gain information about how change efforts are being perceived by employees within the organization. The final stage of the cycle acknowledges that one single change causes other parts of the system to require

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42 Ibid., 37-41.

43 Duttweiler and Hord, 79.
Proper conditions for change instead of stages are described by Beer and Driscoll. When these conditions are present, it creates a screen through which change efforts can develop. Those conditions are as follows:

1. Key managers must be dissatisfied.
2. The lead person of the organization must be committed and be prepared to provide leadership.
3. Additional financial and human resources must be made available for the change effort.
4. Political support must exist before the change effort begins.
5. The scope of the change effort must be met with the appropriate level of time, energy, and support.

These authors made it clear that dissatisfaction with the current situation plus the necessary leadership to provide a suitable alternative are necessary conditions for change to succeed.

Joyce summarized in the 1990 ASCD Yearbook, Changing School Culture Through Staff Development, three distinct phases of change that would encompass most of the existing literature: initiation, implementation, and


institutionalization. The preceding research literature could be organized to fit those three categories. While there may have been variations on the change process, the basic elements revolved around these three phases.

The Role of Teachers in the Change Process

The literature has thus far referred to organizational members or employees as the change process was defined. In schools, teachers are the critical organizational members that must embrace the change for it to succeed.

Sarason reflected that teachers tended to teach the way in which they were taught. He noted that professional training did little to establish a clear relationship between theory and practice, particularly in the area of question-asking. He established the need to change the existing teacher-child regularities, but observed that these remain unchanged despite efforts to influence them.

He also focused on the isolation of teachers in the school environment. Despite their placement in a populated setting, they remain psychologically alone. The nature of the school schedule does not encourage or support collegiality among teachers or extensive interaction with the principal or other administrative personnel. This makes

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47 Sarason, 76-86.
innovation and change unlikely.  

Joyce summarized from existing literature the need for teachers to experience collegiality and experimentation. He defined these development strategies for success with change: teachers consciously reflect on their own practices, teachers share ideas about their own instruction, and teachers try new techniques in their classrooms. He quoted Rosenholtz’s definition of four conditions that influence collaboration among teachers: teacher certainty about their own instructional competence, shared teaching goals, involvement in school decisions, and team teaching opportunities that create the need for collegiality.

He also highlighted the need for teachers to feel that the causes of student learning lie inside the school and are influenced by the efforts of teachers to increase student learning. He felt that if the school culture was permeated by an attitude that the causes of student learning were outside the school, such as the social background of the students, that school improvement efforts would be seen as futile.

The role of teachers in providing leadership for change was outlined by Duttweiler and Hord. They defined three

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48 Ibid., 106-108.


50 Joyce, 248.
problems facing change efforts as the need for leadership to provide lasting and effective change, the need to reduce the amount of principal's time spent on management tasks, and the need for teachers to improve their professional skills with leadership from within their own ranks. 51

Hord, Rutherford, Huling-Austin, and Hall reminded others that the single most important factor in the change process is teachers, since they are most affected by the change. Their concerns will be specific and individualistic in the manner that it will affect their teaching routines. These concerns exert a powerful influence on the change process and determine the type of assistance teachers find useful. 52

The Role of the Principal in the Change Process

Previous research quoted has noted the powerful role of the manager, or in the case of schools, the building principal. The ownership of the principal in the change process is necessary if he/she is to influence others. The principal must guide the implementation of the change. Most of all, the principal must be dissatisfied with the status quo within the school to promote school improvement.

However, as we review the list of ten job factors of effective administrators as outlined by Duttweiler and Hord, 51

51 Duttweiler and Hord, 72.

52 Hord, Rutherford, Huling-Austin, and Hall, 29-30.
we find that there is no mention of the skill for dealing with change. Those job factors are as follows:

1. Student interaction and social control
2. Administration and planning
3. Personnel management
4. Observation and feedback
5. Instructional management
6. Policy development
7. Parent and community relations
8. Coping with disorder
9. School-system interaction
10. Keeping up-to-date

The ability to deal with change is a skill that is not taught in administrative classes nor is it recognized in the literature as a skill that is necessary to success.

Peters and Waterman quoted Andrew Pettigrew as he defined the prime management role:

The (leader) not only creates the rational and tangible aspects of organizations, such as structure and technology, but also is the creator of symbols, ideologies, language, beliefs, rituals, and myths.

Deal and Kennedy confirmed Pettigrew's definition in noting that the manager must communicate key values in day-to-day interactions, forcing conflict in key values to surface for

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54 Peters and Waterman, 104.
resolution.  

Sarason further defined the relationship of the principal to the problem of change of two kinds: that change defined for all schools within the system and that change defined by the principal and/or others within their individual building.  

He noted that neither by previous experience nor formal training nor the processes of selection is the principal prepared for the requirements of leadership and the inevitable conflicts and problems that beset a leader.  

He further stated that the principal’s view of his/her role is determined by the degree to which he/she governs his/her course of actions rather than external factors.  

As a result, principals typically introduce change by telling teachers the proper way to act or teach instead of being clear as to where teachers are and having sensitivity to the process of unlearning and relearning.  

Nicholson and Tracy outlined the need for principals to have sufficient time and information regarding the change to internalize the adaptation in order to work effectively with teachers. He/she must demonstrate the technical skills in the knowledge and use of the innovation as well as the human

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55 Deal and Kennedy, 168.  
56 Sarason, 110.  
57 Ibid., 131.  
58 Ibid., 145.  
59 Ibid., 193.
relations skills in dealing with teacher concerns about how the innovation will affect them.  

Lewis described the role of change agents as problem selectors and risk takers. She defined the following skills for principals:

1. Understand and use the legitimate power of the position of the principal.

2. Build a cadre of influenced teachers through excitement, salesmanship, and proper asking and involvement.

3. Understand that teachers will want to know "what's in it for me?" as part of their concerns.

4. Provide time to build trust and commitment.

5. Care enough about the idea to support it through implementation and institutionalization.

6. Provide necessary resources. Give individuals a depth of understanding, not just a superficial knowledge base.

7. Identify and deal with the "blockers."  

Bailey pointed out that the more supportive the principal is perceived to be the higher the percentage of goals achieved in the change process. He defined the major emphasis of the principal's role in giving moral support to teachers and creating an organizational environment that supports and sustains innovation. He provided the following

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examples of principal behaviors that would support change efforts:

1. Participating in training sessions with staff instead of sending them.

2. Spending more time with staff involved in the innovation than those who are not attempting any change.

3. Finding resources for school improvement.

4. Providing recognition for those involved.

5. Planning special events for those involved in the innovation. 

The critical skill of problem solving was noted by Duttweiler and Hord. Highly effective principals used a deliberate problem solving process. Included in that process was the communication with those affected by the problem, participation in the problem solving process by those with a stake in the solution, and the collection of all relevant data to the problem. Effective principals also placed emphasis on clarification of the problem in order to respond appropriately. 

Duttweiler and Hord also provided a list of skills for effective principals that resulted from a synthesis of research studies:

1. ability to recognize patterns, perceptual objectivity, and analytical ability (Manasse, 1984)

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63 Duttweiler and Hord, 37-38.
2. sensitivity to the dynamics of power (Blumberg and Greenfield, 1980)

3. tendency to test the limits of interpersonal and organizational systems (Blumberg and Greenfield, 1980)

4. high degree of self-confidence and openness to others (Blumberg and Greenfield, 1980)

5. openness to change (Huff et al., 1982)

6. commitment to high standards (Huff et al., 1982)

7. analytic and intellectual skills to guide the staff in the process of identifying and analyzing problems (Manasse, 1982)

Definition to the cultural leadership of the principal was provided by Blendinger and Jones. They suggested that principals research the history of the school, writing about the significant events and the heroes and heroines that personify the school values. They defined these additional tasks in cultural leadership:

1. attending to and shaping the content of stories which convey purpose and meaning

2. establishing or reinstating existing rituals and ceremonies

3. actively communicating the school values to staff, students, parents, and community

The Role of the Superintendent in the Change Process

While must has been researched about leadership from top administrators or chief executive officers, little is written specifically about superintendents and their role in

64 Ibid., 42.

65 Blendinger and Jones, 24-25.
the change process. Previous literature noted the importance of support from the chief administrator must be committed and prepared to provide leadership for all staff in the change process.

It is fair to assume that many of the skills defined for principals in previous pages would also apply for superintendents. Therefore, the section dealing with leadership skills of principals in the change process would also apply to superintendents. Their leadership would more directly influence those building administrators under their leadership.

Prince defined the problem of tenure of the superintendent within a district as a problem with bringing about lasting reform. He documented that tenure has declined from an average of almost six years to less than three years over the last decade. This short time frame cannot provide sufficient opportunity for leadership for lasting reform. He further illustrated the problem as follows:

Leadership is the greatest problem in reform. Time and again superintendents set out to reform the schools and then flounder in their efforts. Sometimes they fail because powerful segments of the school or community are unwilling to make desired changes, but more often because they are being asked to do something for which they are poorly prepared. Divergent job demands, inadequate university and on-the-job training, and outside interference in the affairs of local schools are reasons superintendents give for their lack of success.

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66 Prince, 1.
Barriers

The literature not only defined the skills necessary to provide leadership for change but also outlined the barriers to change.

Kotter and Schlesinger described four common reasons people resist change: a desire not to lose something of value, a lack of understanding about the change and its influence on the individual, a belief that the change is not needed, and a low tolerance for change.\footnote{John P. Kotter and Leonard A. Schlesinger, "Choosing Strategies for Change," Harvard Business Review (March-April 1979): 107.}

Ten reasons for resistance to change were provided by Stanislao and Stanislao. These reasons are defined for those individuals within an organization that do not have control over the decision to implement a change:

1. Surprise - Insufficient time to evaluate the change before it occurs.
2. Lack of information about how the change will affect the employee's work situation.
3. Lack of training.
4. Lack of real understanding - Each part of the change process should be explained and adjustments made with employee input.
5. Loss of job status in cases where there is a reduction in importance of the job, skill required, or less responsibility.
6. Peer pressure not to participate.
7. Loss of security with what is familiar.
8. Loss of known work group when relationships are
altered.

9. Personality conflicts among employees.
10. Timing of the change effort.  

Three basic reasons for change suggested in the work of Johnson and Marcum are the absence of a change agent, a weak knowledge base, and the resistance of the culture of public schools. They also cited the failure of administrators or teachers to accept change, the failure to comprehend the fast pace of the change process, and the emotional upheaval involved in the change as barriers to successful implementation of an innovation.

The cultural barriers are defined by Deal and Kennedy. Those included the elimination of heroes or heroines that employees have revered and the destruction of those symbols, stories, and myths that have been associated with the important values of the culture. Culture itself is a barrier to change because it operates similarly to the brake on a car, resisting change. Parish, Eubanks, Aquila, and Walker added that any organizational culture that has unhealthy and non-productive norms and values will resist

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70 Deal and Kennedy, 158-159.
change, particularly if that culture is seen as arbitrary and unpredictable to its members.\textsuperscript{71} Sarason discussed three major barriers to understanding the school culture: undue reliance on the psychology of individuals, observers that are biased by their own structure, traditions, and ideology, and ignorance about how change occurs.\textsuperscript{72}

Six limitations to improvement efforts were outlined by Fullan:

1. Unsolvable problems - This may be related to inadequate resources or problems for which no adequate solutions exist.
3. Demographics - Little information about community variables, teacher differences, rural, suburban, and urban settings, large and small schools, and other factors.
4. Abstractions, misunderstanding, and incompleteness.
5. Transfer/sequencing - Can school improvement efforts in one setting be transferred to another and experience the same success?
6. Subtle combinations - Simple/complex paradox of change.\textsuperscript{73}

\textsuperscript{71} Parish, Eubanks, Aquila, and Walker, 392.
\textsuperscript{72} Sarason, 24.
\textsuperscript{73} Fullan, 396-399.
Prince acknowledged the lack of stable leadership among superintendents beyond three years as a barrier to change. He determined the time required to implement a major change effort at six to ten years. Therefore, the average tenure of three years is not conducive to long-term successful programs or school improvements efforts.\(^\text{74}\)

The instrumental value of schools was defined as a barrier by Timar and Kirp. This instrumental value, or what schools can do for society, makes reform subject to the social, economic, or political waves of the current climate. The authors pointed out that until education is appreciated for its intrinsic value that reform will not be successful.\(^\text{75}\)

The most serious mistake that is commonly made is to assume that after the introduction to the change is complete, training is conducted, and teachers return to their classrooms, that the change has been implemented. Hord, Rutherford, Huling-Austin, and Hall commented on the seriousness of this problem:

In school after school where changes have been introduced, research has shown that there are people who do not use the innovation at all, even months or years after the introduction. There are others who use only parts of an innovation, while still others try to use it but struggle. Since changes are introduced into organizations for the express purpose of bringing about improvement, who would expect improvement to occur if

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\(^{\text{74}}\) Prince, 73-74.

innovations are not used or are used ineffectively? Of course, no one would expect improvement under those conditions, but time after time organizations will seek to assess the effectiveness of an innovation without ever examining how it is being used. As a result, innovation after innovation judged in this way has been discarded (or deemphasized) because it did not produce the expected outcomes.

This quotation makes it clear that sustaining and maintaining an innovation after the initial introduction is a barrier to change.

The review of change projects produced the following twelve barriers to innovation as summarized by Joyce:

1. An inadequate plan for implementation, including insufficient time for teachers to learn and internalize new skills.
2. District tendencies toward "quick-fix" solutions.
3. Lack of support from central office and lack of follow through.
4. Insufficient funding.
5. Management from the central office instead of building management teams.
6. Lack of technical assistance and staff development.
7. Lack of information regarding the limited knowledge of teachers and administrators about how to implement the change.
8. Teacher mobility and turnover.

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76 Hord, Rutherford, Huling-Austin, and Hall, 54.
9. Too many demands on teachers and administrators.

10. Failure to resolve conflicts between current project requirements and existing board policies and procedures.

11. Failure to understand adjustments for individual school sites due to differences.

12. Failure to define the university-school district relationship.\textsuperscript{77}

These barriers to change highlighted the complexity and degree of difficulty in implementing any innovation.

This review of research has attempted to define school culture and its variables, as well as the elements of the change process. It has investigated the roles of teachers and administrators in the change process, and the importance of culture in that process. Barriers to change were discussed to provide some insight into the complexity of the change process and perhaps some insight as to why schools have been able to resist reform for so long.

\textsuperscript{77}Joyce, 7.
CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to determine whether an organized set of principles or specific strategies were used prior to the introduction of change into the school culture. The study also analyzed the plans, strategies, problems, and pitfalls relative to school culture encountered during implementation. The study was designed to identify successful strategies that fostered the change process in major curricular projects so that other change agents, particularly superintendents, would be able to adopt those strategies as they provided leadership in changing school environments.

The following research questions were formulated prior to distribution of the questionnaire:

1. Prior to the significant curricular change, how did the superintendent or central office staff prepare the school culture for the change?

2. As change was implemented, did the superintendent utilize an implementation plan and what were the components of those plans that proved successful?

3. What specific strategies did the superintendent
employ to implement the change?

4. What were the pitfalls and problems related to school culture encountered during the change process?

A questionnaire was mailed to 198 Indiana public school superintendents, containing questions about strategies used to prepare for the change process, staff development or training, coaching, or problem-solving, monitoring the implementation, communicating the innovation, and making the innovation a lasting part of the school routine. One hundred fifty-nine responses were returned for a 53.4% survey completion rate.

This chapter is divided into five major sections. The first section concerns profile information about the respondents and the respective school corporation. It contains years as a superintendent, school corporation and student size, number of teachers, degree of superintendent, and classification of corporation as rural, suburban, or urban. It is entitled, "Major Characteristics of the Total Number of Respondents."

The second section, "Characteristics of 50 Respondents Selected for Further Study," profiles the same information categorized in the previous section.

"Classification of Major Curricular Changes," section three, defines those changes in curriculum defined as major by the respondents. These responses were grouped by content
area as well as type of project.

Section four, "Strategies and Plans Influencing the Successful Implementation of Change in Public Schools," outlines techniques used by superintendents to implement successful curricular change projects. These techniques were grouped according to preparation prior to the implementation of change, staff development and training, coaching and problem-solving, monitoring the innovation, communicating the innovation to others, and preparing the innovation for inclusion in the school routine as well as for replication in other classrooms.

The last section is "Problems and Pitfalls Identified with the Implementation of Change." Difficulties are cited by superintendents as they attempted change in their respective school districts.

Major Characteristics of the Total Number of Respondents

The respondents of the sample consisted of 159 Indiana public school superintendents or a central office respondent during the 1990-91 school year. The total population selected for study included 298 public school corporations. The response rate was 53.4 percent of the sample (Figure 1).
FIGURE 1: MAJOR CHARACTERISTICS OF TOTAL RESPONDENTS

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–5 yrs. - 92</td>
<td>&lt;100 - 52</td>
</tr>
<tr>
<td>6–10 yrs. - 37</td>
<td>100–200 - 67</td>
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<tr>
<td>11–15 yrs. - 19</td>
<td>201–300 - 16</td>
</tr>
<tr>
<td>16–20 yrs. - 8</td>
<td>301–400 - 11</td>
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<td>&gt;20 yrs. - 3</td>
<td>401–500 - 3</td>
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<td>&gt;500 - 10</td>
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</table>

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Classification of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1000 - 17</td>
<td>Suburban - 41</td>
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<td>1000–2000 - 52</td>
<td>Rural - 98</td>
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<td>2001–3000 - 38</td>
<td>Urban - 11</td>
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<tr>
<td>3001–4000 - 20</td>
<td>Urban/Suburban - 2</td>
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<tr>
<td>4001–6000 - 14</td>
<td>Suburban/Rural - 7</td>
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<tr>
<td>6001–8000 - 8</td>
<td></td>
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<td>8001–10,000 - 4</td>
<td></td>
</tr>
<tr>
<td>&gt;10,000 - 6</td>
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</tr>
</tbody>
</table>

Education of Superintendents

M.S. - 14
Ed.S. - 59
Ed.D. - 63
Ph.D. - 23

Distribution of the years of experience of the superintendent in the current position favored the beginning years in the position. Ninety-two or 57.9% of the respondents were in the first five years of the current position. The second group, with six to ten years of experience in the current position, numbered thirty-seven or 23.3% of the total. Eleven to fifteen years of experience involved nineteen or 11.9% of the group. Eight superintendents were listed in the sixteen to twenty-year category for 5% of the group while three respondents or 1.9% had more than twenty years of experience. The data clearly
demonstrated that the vast majority of respondents had ten years or less in their current position.

There is a generally held notion that new superintendents should not make any dramatic changes but wait several years until they understand the culture of the school district. However, this data challenges that notion by indicating that superintendents initiate change within the first five years of their tenure. This early initiation of change may be due to a desire to demonstrate leadership and build support among power bases by using the position of the superintendency to make immediate changes. The ego of those that become superintendents creates a desire to "leave one's mark" or showcase a talent that the previous superintendent may have been lacking. These early change efforts may be a response to national statistics that indicate the average length of employment of a superintendent is three years. Thus, any intended change must be implemented early in the superintendent’s employment in that district, according to that perception regarding length of employment.

The size of the school corporation found most respondents in smaller school corporations with less than 200 teachers and less than 3000 students. Fifty-two or 32.7% of superintendents had less than one hundred teachers in the district. Districts with 101-200 teachers numbered sixty-seven or 42.1% of the respondents. Sixteen or 10.1%
of the respondents were employed in districts with 201-300 teachers. The smallest percentage of respondents were in the final three categories, with eleven or 6.9% in corporations with 301-400 teachers, three or 1.9% of the respondents with corporations employing 401-500 teachers, and ten or 6.3% of superintendents in corporations with over 500 teachers. Corporations with less than one thousand students involved seventeen or 10.7% of the school corporations. Fifty-two or 32.7% of the respondents had districts with 1000-2000 students. The next largest group involved districts with 2000-3000 students which included thirty-eight or 23.9% of the responding districts. Twenty school corporations, comprising 12.6% of the group, listed student sizes of 3000-4000. The final four categories comprised 20% of the final total, with fourteen corporations or 8.8% at 4000-6000, eight respondents or 5% at 6000-8000, 2.5% or four superintendents in the 8000-10,000 category, and six or 3.8% of respondents with over ten thousand students.

Change efforts in Indiana school corporations were largely initiated in small school corporations of less than 200 teachers and 1000-3000 students. The ability of the superintendent to personally and directly impact a change effort is more evident in a smaller school corporation. The superintendent is usually more visible and able to work directly with principals and teachers. This personal
attention to the change effort gives it enthusiasm and communicates its importance to staff because of the amount of time committed by the superintendent. In larger school corporations, the superintendent is less visible at individual building sites and change strategies are more typically communicated through written memorandum. The personal style and enthusiasm of the superintendent has a lesser impact on influencing the school culture toward a change effort.

The fewer number of staff that require efforts to communicate and implement a change process, the less likely the communication strategies will be misdirected. Therefore, it would appear easier to successfully communicate change strategies and plans in a smaller district than in a larger district. Larger districts have more bureaucracy and more layers of management which do not always support change efforts. The superintendent of a smaller district can be more visible to communicate the change effort and encourage staff to make the effort. The energy of the superintendent in a larger district is more removed from the building level due to the sheer size of the district.

Respondents were from largely rural areas, which is reflective of the state’s school districts generally. Ninety-eight school corporations or 61.6% of the total group were from rural Indiana. The next largest group was the
suburban group with forty-one responses or 25.8% of the total. Urban school districts were represented by 6.9% or eleven respondents. Combinations such as urban/suburban (two or 1.3%) and suburban/rural (seven or 4.4%) completed the survey choices.

The education of the responding superintendents was split between the Ed.S. and the Ed.D. degrees. The largest group was the Ed.D. superintendents with sixty-three in number or 39.6% of the total. The Ed.S. degrees were held by fifty-nine superintendents or 37.1% of the group. The next largest group involved those with a Ph.D. degree, with twenty-three respondents or 14.5%. Fourteen members of the group or 8.8% of the total group held M.S. degrees. This last group would also reflect the more experienced superintendents since Indiana law now requires a minimum of an Ed.S. degree to hold a superintendency. The categories of information are contained in Figure 1.

Responses from Initial Questionnaire

The initial questionnaire asked superintendents to mark the presence of certain factors in the implementation of a major curricular change. The results are summarized in Figure 2.
FIGURE 2: RESPONSES FROM INITIAL QUESTIONNAIRE (N=159)

<table>
<thead>
<tr>
<th>Response</th>
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<tr>
<td>Mission/vision</td>
<td>107</td>
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<tr>
<td>Implementation plan</td>
<td>128</td>
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<tr>
<td>Successful change effort</td>
<td>133</td>
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</table>

If yes, indicators

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<tr>
<td>Use of content</td>
<td>81</td>
</tr>
<tr>
<td>Use of instructional strategies</td>
<td>76</td>
</tr>
<tr>
<td>Shared purpose</td>
<td>65</td>
</tr>
<tr>
<td>Distinctive practices/rituals</td>
<td>31</td>
</tr>
<tr>
<td>Rituals of celebration</td>
<td>34</td>
</tr>
<tr>
<td>Heroes and heroines</td>
<td>20</td>
</tr>
<tr>
<td>System to train new staff</td>
<td>41</td>
</tr>
<tr>
<td>Improved classroom management</td>
<td>36</td>
</tr>
<tr>
<td>Collaboration/collegiality</td>
<td>60</td>
</tr>
<tr>
<td>Slogans/missions</td>
<td>35</td>
</tr>
<tr>
<td>Legends/stories</td>
<td>13</td>
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<tr>
<td>System of continuous improvements</td>
<td>48</td>
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Key factors to success

<table>
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<td>Clear expectations</td>
<td>85</td>
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<tr>
<td>Problem-solving</td>
<td>42</td>
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<td>Adequate resources</td>
<td>89</td>
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<tr>
<td>Parent/community support</td>
<td>65</td>
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<tr>
<td>Confidence of teachers</td>
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<tr>
<td>Distractions</td>
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</tr>
<tr>
<td>Sufficient support</td>
<td>79</td>
</tr>
<tr>
<td>Sufficient followup</td>
<td>59</td>
</tr>
<tr>
<td>Sufficient time</td>
<td>53</td>
</tr>
<tr>
<td>Principal ownership</td>
<td>80</td>
</tr>
<tr>
<td>Supportive central office</td>
<td>87</td>
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</table>

Problems

<table>
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<td>Unsolvable problems</td>
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</tr>
<tr>
<td>Narrow goals</td>
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</tr>
<tr>
<td>Inadequate resources</td>
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</tr>
<tr>
<td>Demographics</td>
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<tr>
<td>Misunderstandings</td>
<td>11</td>
</tr>
<tr>
<td>Teacher concerns</td>
<td>8</td>
</tr>
<tr>
<td>Too many changes</td>
<td>7</td>
</tr>
<tr>
<td>Lack of support</td>
<td>4</td>
</tr>
<tr>
<td>Lack of followup</td>
<td>4</td>
</tr>
<tr>
<td>Lack of ownership</td>
<td>7</td>
</tr>
<tr>
<td>Change in central office</td>
<td>2</td>
</tr>
</tbody>
</table>

The results demonstrate an awareness among many superintendents regarding the use of a mission or vision
statement, an implementation plan, and the perception that the curricular change was successful. However, indicators of success that are related to culture, such as distinctive practices/rituals, rituals of celebration, heroes/heroines, slogans, and legends/stories are not embraced by the majority of respondents, demonstrating a lack of awareness of cultural variables. Cultural variables are often quoted in the literature as key to a successful change effort. These responses may also have been a result of a lack of familiarity with the terminology.

The tally of remaining indicators provides no consensus about key variables to successful change efforts. As a result, superintendents that participated in the survey may lack knowledge about key strategies such as continual training, collegiality, and a shared purpose that are cited in the literature on culture and change. Administrative training programs spend more time on budgets and facilities than the implementation of change in the school culture. These key strategies are highly dependent on an individual's ability to communicate and establish rapport with others. Some superintendents that lack good communication skills would avoid these strategies. In some cases, there may be no perceived reward for the superintendent to implement a change effort. Change creates turmoil and most school boards value tranquility. School boards generally lack a thorough understanding of complex curricular issues that are
involved in a change effort. Therefore, they may not value the pursuit of the change with all the resulting clamor.

Clear expectations, adequate resources, sufficient support of teachers, ownership of principals, and support from central office staff are key factors cited by approximately one-half of the superintendents. This fact also highlights that the remaining half of the superintendents in the survey did not mark these elements as key factors, indicating a lack of knowledge base about the complexity of change, resistance to the uncertainty and risk involved in change, or their inability to make the connection between key factors cited above and the individual change efforts.

The most startling result comes from responses regarding barriers to success. Responses reflect a lack of barriers in almost every category. This result could mean that the respondents were not aware of any problems or found the categories too limiting for their responses. They might view their problems as minor in nature and of little consequence to note. However, it is impossible to believe that out of 159 respondents that participated in major curricular change that few experienced problems. The literature would conflict with these findings, because the literature describes the resistance to change by members of an organization. In fact, this resistance has contributed to the maintenance of the status quo and has resulted in the
maintenance of the traditional structure of schooling for many decades.

**Characteristics of Fifty Respondents That Implemented Major Curricular Change**

The fifty respondents were selected from the 159 total responses to the original questionnaire. These respondents were chosen on the basis of the major curricular change implemented in their respective districts. Major curricular change involves several areas of consideration. Change must include an adjustment in the belief system of an organization, the use of new teaching strategies or alterations in the delivery system for instruction, or the use of new curricular materials. These changes represented current topics in the literature as well as a sampling of all areas, including teaching/learning methodology, curriculum projects that are current, technology, and projects requiring structural change in the school district. They represented school superintendents or central office personnel in Indiana public school corporations during the 1990-91 school year. Information was gathered through personal telephone interviews with each respondent. Each respondent had completed the original questionnaire. This information is summarized in Figure 3.
FIGURE 3: CHARACTERISTICS OF FIFTY RESPONDENTS SELECTED FOR FURTHER INTERVIEWS

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 yrs.</td>
<td>22</td>
</tr>
<tr>
<td>6-10 yrs.</td>
<td>15</td>
</tr>
<tr>
<td>11-15 yrs.</td>
<td>10</td>
</tr>
<tr>
<td>16-20 yrs.</td>
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<tr>
<td>&gt;20 yrs.</td>
<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Classification of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1000</td>
<td>Suburban - 11</td>
</tr>
<tr>
<td>1000-2000</td>
<td>Rural - 33</td>
</tr>
<tr>
<td>2001-3000</td>
<td>Urban - 5</td>
</tr>
<tr>
<td>3001-4000</td>
<td>Urban/Suburban - 1</td>
</tr>
<tr>
<td>4001-6000</td>
<td></td>
</tr>
<tr>
<td>6001-8000</td>
<td></td>
</tr>
<tr>
<td>8001-10,000</td>
<td></td>
</tr>
<tr>
<td>&gt;10,000</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education of Superintendents</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.S. - 4</td>
</tr>
<tr>
<td>Ed.S. - 13</td>
</tr>
<tr>
<td>Ed.D. - 29</td>
</tr>
<tr>
<td>Ph.D. - 4</td>
</tr>
</tbody>
</table>

Distribution of the years of experience of respondents covered a wide range. The range was divided into intervals of five years beginning at year one and continuing to those with over twenty years of experience as superintendents or central office personnel. The largest percentage of respondents, 44 percent, was in the one to five year category. Fifteen percent of the respondents were in the six to ten years category. Those superintendents or central office personnel with eleven to fifteen years of experience made up twenty percent of the respondents. Of the fifty respondents, only four percent came from the category of
sixteen to twenty years of experience and two percent from the over twenty years of experience group.

The range of the number of teachers within the school district extended from less than one hundred teachers to over five hundred teachers. Twenty-eight percent of the school corporations had less than one hundred teachers while forty percent had between one hundred and two hundred teachers. The category of two hundred to three hundred teachers had fourteen percent of the districts. Of the fifty respondents, ten percent were in the three hundred to four hundred range. There were no respondents from the four hundred to five hundred category but eight percent from the over five hundred group.

The number of students within the school corporation brought the largest response of thirty-four percent from the one thousand to two thousand group. Only four percent of the fifty respondents had less than one thousand students. The next largest category was in the two thousand to three thousand students with twenty-eight percent of the school corporations in this group. Ten percent of the respondents came from the three thousand to four thousand student group while fourteen percent were grouped in the four thousand to six thousand student category. The data for the fifty selected respondents are listed in Figure 3.

The categories of years of experience and size of the district as defined by number of teachers and students are
generally represented by the distributions reflected in the group of initial respondents. The general profile of the superintendents who responded to the initial questionnaire had less than five years in the current position and represented a district with less than 200 teachers and 1000-3000 students. This profile is matched in the general distribution of respondents interviewed for further study.

Classification of Major Curricular Changes for All Respondents

It is important to discuss the major curricular changes cited by 104 school corporations (Figure 5) as well as the 34 changes listed that could be characterized as insignificant (Figure 4). The remaining twenty-one school corporations that responded indicated that no significant curricular change had occurred within the last five years.
FIGURE 4: CLASSIFICATION OF INSIGNIFICANT CURRICULAR CHANGES BY THIRTY-FOUR RESPONDENTS

**Structural Changes**

- Move sixth grade to middle school
- Development of mission statement and goals

**Student Activities**

- Student newspaper
- Channel One (technology - current events program) - {2}

**Curricular Programs Inserted into Curriculum**

- Chapter I/Learning Disabilities program
- Freshman English class for at-risk students
- Advanced placement classes
- Interactive course work
- Summer gifted and talented programs - {3}
- Elementary computer classes - {2}
- Elementary math program

**Curricular Programs Involving Slight Modifications**

- K-12 AIDS curriculum units - {2}
- Review of existing graduation requirements and existing course offerings - {9}
- Development of new reading guides to correspond with new basal series
- Revised science and math curriculum

**Building Construction**

- New elementary schools - {3}

**Extracurricular**

- Academic competition

Figure 4 lists six categories that were used to organize the projects cited in the initial questionnaire but determined in the study to be insignificant as major curricular changes. These projects included building construction, extracurricular activities, student activities inserted into the school, minor structural changes,
curricular programs that could be inserted into the existing program without any modifications, and K-12 curriculum work that involved slight modifications. These thirty-four response were not considered for further study.

The fifty school corporations selected for further study provided more in-depth projects that not only involved significant curricular changes but also changes in teaching/learning methodology, technology, and projects requiring structural changes. These classifications are listed in Figure 5.

FIGURE 5: CLASSIFICATION OF MAJOR CURRICULAR CHANGES OF FIFTY SELECTED SCHOOL CORPORATIONS

Teaching/Learning Methodology

Cooperative learning - {6}
Mastery learning - {3}
Whole language - {2}
TESA - {2}
Goal setting - staff evaluation - {2}
Staff development of many areas, including TESA, cooperative learning, learning styles, etc. - {2}

Curriculum Projects

Thematic, interdisciplinary units - {3}
Growing Healthy - health curriculum program - {2}
Substance abuse curriculum
Elementary science program - Hands-On Science
Reading/language arts project
Early Prevention of School Failure
Workforce development
Vocational home economics - day care
Industrial technology
Gifted and talented in regular program
K-12 Social studies revision
FIGURE 5 (continued)

Technology

Project 2008 - technology applications
IBM Writing to Read - (4)
Computer-assisted instruction projects, including units and integrated learning systems (6)

Structural Changes

Annual school improvement goals based on effective schools research
Departmentalized fifth grades
Site-based decision-making - (2)
Teacher advisement program
Middle school concept - (2)
Strategic planning

Strategies and Plans Influencing the Successful Completion of Change in Public Schools

The telephone interviews conducted with the fifty corporations identified for further study attempted to provide more specific information regarding specific plans or strategies employed by superintendents in their change efforts, and pitfalls and problems encountered. Respondents were probed further about preparation of school culture for the change effort and specific components of the implementation plan that contributed to the successful implementation of the project. Responses from the initial questionnaire were compared with the second responses from the telephone interview using the McNemar Test for Correlated Proportions. The McNemar Test determined significant differences on ten items at .05 level of significance. All items are summarized in Figure 6.
FIGURE 6: RELATIONSHIP OF RESPONSES AS ANALYZED BY THE McNEMAR TEST

<table>
<thead>
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<th>Item</th>
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<td>8</td>
<td>9</td>
<td>0.24</td>
</tr>
<tr>
<td>10,14</td>
<td>5</td>
<td>11</td>
<td>1.50</td>
</tr>
<tr>
<td>9B,15</td>
<td>13</td>
<td>6</td>
<td>1.61</td>
</tr>
<tr>
<td>11,15</td>
<td>0</td>
<td>18</td>
<td>4.24**</td>
</tr>
<tr>
<td>11,16</td>
<td>3</td>
<td>11</td>
<td>2.14**</td>
</tr>
<tr>
<td>8A,17</td>
<td>2</td>
<td>8</td>
<td>1.90</td>
</tr>
<tr>
<td>8M,17</td>
<td>1</td>
<td>20</td>
<td>4.15**</td>
</tr>
<tr>
<td>9C,18</td>
<td>9</td>
<td>9</td>
<td>0.00</td>
</tr>
<tr>
<td>11C,18</td>
<td>0</td>
<td>39</td>
<td>6.24**</td>
</tr>
</tbody>
</table>

**indicates that there is a significant difference between the responses on the questionnaire and the responses in the interviews for this item. The level of significance is .05.

F (1,0) = yes on questionnaire, no on interview
F (0,1) = no on questionnaire, yes on interview

It is important to note difficulties in interpreting reasons for inconsistencies in answers given on the initial questionnaire versus the followup telephone interviews.
Twelve respondents answered negatively regarding use of problem-solving techniques but outlined follow-through strategies in the telephone interview. For example, one response indicated coaching by teachers or principals. During the coaching process, it is probable that the participants discussed problems and alternate solutions. Problem-solving techniques are follow-through strategies. Therefore, the inconsistency could have been a different interpretation of follow-through strategies or the use of different definitions for these terms. Eighteen responses listed no problems with the implementation of the major curricular change but identified problems in the interview. When asked about barriers to success, eleven respondents did not mark this choice but listed the principal's lack of commitment as a problem situation not anticipated in the planning process in the interview. The lack of commitment of the principal would be viewed as a barrier to success. No indicators of success were listed in twenty initial questionnaires but positive results of the implementation were articulated in the interview. For example, one superintendent cited greater collaboration and collegiality among staff as a positive result. Another respondent listed the professional stimulation felt by teachers, who became project trainers. These were positive results but were byproducts of the actual curricular goals.

One logical conclusion for this inconsistency is the
lack of intensity during the completion of the questionnaire by the respondent. Superintendents receive survey instruments from graduate students on a weekly basis. Time demands on the superintendency result in many surveys not completed or compiled in a hurried fashion.

Another reason for the inconsistency is the different interpretation by individuals of terminology. For example, the study shows a vast array of projects determined by individual superintendents to be "major curricular change" efforts but, after comparison to and analysis of certain criteria, are found to be insignificant. A third possibility is the respondent, after verbal probing in the interview, thought of a response not considered during the completion of the initial questionnaire.

While inconsistency in responses was one consideration, the relationship between practices and culture was not well established among superintendents. Twelve respondents did not indicate any distinctive practices or rituals in the initial questionnaire. However, they did indicate a positive response when asked if they addressed the culture of the school while structuring the curricular change. It is the conclusion of the study that there was a lack of understanding among respondents regarding the connection between practices and rituals that defined the method of conducting business within a school and the culture of the school.
Another problem area revolved around agreement about the adequacy of resources. Ten respondents did not mark the item indicating that resources were adequate for the project. However, these same ten corporations listed the use of paid school time and release time for staff for training as sufficient in the interview. If paid school time and release time for staff was provided, then resources were adequate. Eighteen superintendents did not mark the item indicating that teachers had sufficient time to plan and practice the new change effort but again listed paid school time and release time as adequate for the project. In both cases, the difference may be due to the definition of "adequate." While these schools had some time and money available, it may not have been at a level desired by participants. The presence of a staff development plan to implement the curricular change was noted by seventeen respondents during the interview but not noted as sufficient time for teachers to plan and practice the new change effort in the initial questionnaire. Lastly, thirty-nine respondents did not mark problems with adequate resources but noted problems with adequate funding in the interview. These responses appear inconsistent but were partly a result of clarification of resources defined in the interview. There is an initial mindset in considering resources as financial only. However, further probing clarified resources as financial, human, and time. The lack of
consistency in responses regarding resources may have been due to the differences between an adequacy in what was offered by the corporation versus what was viewed as adequate by the superintendent for long-term needs.

For example, fourteen superintendents cited grant funds as sources for initial teacher training. One superintendent commented, "Once grant funds run out, there is no money in the general fund." Another school corporation that served as a pilot site for a state project indicated that there was "insufficient funding even for a pilot site." Therefore, use of grant funds as a source for teacher training became a burden on the general fund when monies were needed beyond the grant cycle for teacher training. With school general funds under stress nationally because of a faltering economy and reduced revenue from states to local school corporations, finding dollars for teacher training after grant funds were depleted became an even greater challenge.

Another difference in adequacy of resources may have been the staff development provided versus the time to practice the skill learned in the staff development sessions. Sixteen school corporations cited ongoing, multiple year staff development plans. Thirteen respondents trained lead teachers in order to have "resident experts" to provide continual training. These responses dealt with initial training and training for new or newly interested staff as well as coaching or followup training. However,
the time needed to internalize a new skill in the classroom routine extends far beyond the initial training. Therefore, superintendents may have begun the change project with an amount budgeted for training without a realization of the length of time over several budget years needed to accomplish this goal. One superintendent commented that "there was never enough time and money to train everyone." The reverse side of that problem was cited by another school leader who indicated that "release time became a problem with so many out." Thus, if the district can commit sufficient funds for training, it is never enough or parents object when teachers are absent from the classroom for staff development training. Schools and the public are limited in their thinking regarding extension of the school year for professional development activities as essential elements rather than "add-ons" or voluntary efforts. If teachers are not spending their time working directly with students, the public (parents, community, administration) deem professional development activities as non-essential or acceptable as long as resources are plentiful. Industry considers this investment in personnel essential to their survival while education considers this investment as an additional opportunity, if funds are available.

The last inconsistency dealt with clear expectations of the staff versus communication of the curricular change to staff. Eleven respondents in the questionnaire did not list
clear expectations of teachers and staff as one of the key characteristics to the success of the curricular change. However, they responded in the interviews positively to the effectiveness of the communication of the curricular change to staff. The largest effort to communicate the curricular change came from teachers sharing information with other teachers. A contrasting picture came from three superintendents who cited the development of a special document that listed the professional expectations of teachers. While respondents acknowledged the need to communicate by their answers, there may have been different interpretations of what should be shared and with whom it should be communicated. The implementation of a curricular change generally involves materials; thus, teachers relate to expectations dealing with use of materials. Those expectations rarely deal with professional behavior, such as the responsibility to demonstrate lifelong learning or target the further development of a technical skill. Therefore, the feedback regarding a successful change effort would not target the communication of professional expectations but the communication of how to use materials or a teaching strategy. This is a major reason why change efforts targeting materials rarely result in a significant change in teacher behavior. A teacher may use new materials but approach instruction in the same, perhaps ineffective, manner. Superintendents become frustrated when, after
implementing a curricular change, the routine is disbanded after several years. This is because the teaching behavior never changed.

This inconsistency may have been a lack of understanding about the difference in talking about the anticipated change project and the definition of clear expectations for staff as part of the implementation strategy.

While these inconsistencies in responses were present, the interview information collected regarding strategies and plans used during the implementation of change provided valuable insights into the change process, both successful and unsuccessful. This interview information was a more complete source of specific behaviors and strategies than the original questionnaire. Therefore, the analysis focuses on interview responses.

Figure 7 lists the strategies to prepare the culture for change.

FIGURE 7: STRATEGIES TO PREPARE THE CULTURE FOR CHANGE

Inservice sessions or use of professional literature or research
Use of motivated/interested staff
Needed to make changes
Business pressured for changes
Specific plan
State or superintendent mandate
Do not know

The first area identified strategies used to prepare the school culture, or the patterns of thought, behavior,
and artifacts that symbolize and give meaning to the workplace. The first two categories were cited largely by small rural school corporations. These smaller school corporations do not typically have sufficient funds for staff development. They are also hampered by a lack of central office staff to identify resources and organize training. Therefore, staff development is left to the efforts of the principal since the superintendent already wears many "hats." Fourteen of the respondents used an inservice activity or the introduction of professional literature or research on the topic to prepare for the change. The use of motivated staff as beginning, willing volunteers was used by twelve schools. In twelve cases, the preparation involved a simple declaration that a change was needed. Four responses stated that the business community provided some pressure for change while four other corporations had a plan for approaching the change effort. Two school cultures were prepared by state or superintendent mandates while two remaining respondents did not use any specific strategies for preparing the culture for change.

These responses raise important concerns about the level of understanding by superintendents of culture and its relationship to change. Of those strategies noted, inservice or professional literature could give meaning to the change effort through the culture. However, the use of those staff who are willing to attempt the change opens the
door to the possibility of a change but falls short of addressing the manner in which all members of the organization "conduct its business." The culture must give meaning to curricular change through messages, documents, and symbols and its expectations of the staff to value participation in this change process. The fact that twelve responses indicated changes were made because someone determined that they needed to be made gives no indication that values or beliefs were used to influence others regarding the need for a change.

Plans and strategies for follow-through actions were analyzed in Figure 8.

FIGURE 8: FOLLOW-THROUGH STRATEGIES

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No strategies</td>
<td>10</td>
</tr>
<tr>
<td>Coaching models/weekly or monthly visits with teacher core group</td>
<td>9</td>
</tr>
<tr>
<td>Use of teacher trainers within district</td>
<td>9</td>
</tr>
<tr>
<td>Consistent training cycle</td>
<td>9</td>
</tr>
<tr>
<td>Principal worked closely with teachers</td>
<td>6</td>
</tr>
<tr>
<td>Use of goal-setting or planning</td>
<td>3</td>
</tr>
<tr>
<td>Limited follow-through, more needed</td>
<td>3</td>
</tr>
<tr>
<td>Equipment made available and accessible</td>
<td>1</td>
</tr>
</tbody>
</table>

Three strategies were primarily cited by 27 respondents or fifty-four percent of the sample: use of a coaching model, including weekly or monthly visits with a core group of teachers, use of corporation teacher trainers within the district, and consistent training cycles to address new or newly motivated individuals. Principals as key coaches in working with staff were cited by six superintendents. Planning or goal setting was cited as a follow-through
strategy in three responses. Three respondents indicated they felt their follow-through was not as much as needed. A single response indicated that equipment was made available and accessible to staff. Ten school corporations, or 20 percent of the sample, listed no follow-through strategies used in implementing change.

While slightly more than half of the superintendents understood the need for some form of continual training cycle, it also meant the remaining half of superintendents had a limited follow-through plan or none at all. Sarason's research demonstrated the need to anticipate problems and prepare strategies to deal with these issues. Fullan's research stressed the institutionalization of the change effort as the final stage. The institutionalization of the change is what modifies the culture of the organization. Changing the culture through the institutionalization of the change cannot happen without consistent follow-through strategies. Superintendents have some understanding of these strategies, but did not specify knowledge of the progressive stages of a change project and the efforts needed to insure the integration into the culture.

After reviewing strategies used in preparing the culture for change and follow-through strategies, it was important to review specific implementation plans, use of paid or release time for teachers, and use of reward systems to motivation participation (see Figure 9).
FIGURE 9: USE OF IMPLEMENTATION PLANS, PAID OR RELEASE TIME FOR TEACHERS, AND REWARD SYSTEMS

<table>
<thead>
<tr>
<th>Implementation plans</th>
<th>41</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid or release time for teachers</td>
<td>36</td>
</tr>
<tr>
<td>Payment of conference expenses</td>
<td>2</td>
</tr>
<tr>
<td>Common planning time for teachers</td>
<td>1</td>
</tr>
<tr>
<td>Reward systems</td>
<td></td>
</tr>
<tr>
<td>Recognition through media, parents</td>
<td>12</td>
</tr>
<tr>
<td>Professional development/stimulation</td>
<td>9</td>
</tr>
<tr>
<td>Computer at home</td>
<td>3</td>
</tr>
<tr>
<td>Participation in an innovative program</td>
<td>3</td>
</tr>
<tr>
<td>Enthusiasm of students</td>
<td>3</td>
</tr>
<tr>
<td>Increased self-esteem of individual</td>
<td>3</td>
</tr>
<tr>
<td>Recognition of teaching service</td>
<td>2</td>
</tr>
<tr>
<td>Fellowship of other teachers</td>
<td>2</td>
</tr>
<tr>
<td>Performance-based incentive awards</td>
<td>1</td>
</tr>
<tr>
<td>Attendance at conferences</td>
<td>1</td>
</tr>
<tr>
<td>Celebration dinners</td>
<td>1</td>
</tr>
</tbody>
</table>

Forty-one respondents or 82 percent had specific implementation plans that were typically multiple-year documents and prepared by a team of school people. One person was generally responsible for the implementation of the plan but training and some type of ongoing activity characterized the implementation plans. While the vast majority of superintendents had implementation plans, they emphasized training but ignored other aspects such as problem-solving, intentional monitoring of the change effort, dealing with power structures, and criteria to evaluate outcomes in the change process. This emphasis on training suggests the notion that if staff are trained, the change effort will be implemented. Thus, the cultural and political aspects that present challenges to any attempt to change the direction of the organization are not formally addressed in implementation plans.
Paid or release time for teachers during training was provided by thirty-six respondents or 72 percent with two providing payment of conference expenses and one school providing a common planning time for teacher teams. Eleven schools responded with no paid or release time for teachers. The use of paid or release time acknowledged an understanding by superintendents that when the training was conducted, such training communicated the importance of the activity to the organization. However, nearly one-fourth of those interviewed failed to realize the negative message communicated to their cultures when no time or payment was provided.

Reward systems as incentives and rewards for teacher participation included recognition through media or parent groups (12), professional development or stimulation (9), use of computer at home (3), excitement of participating in an innovative program (3), increased self-esteem of teachers in project (3), recognition of years of teaching service (2), performance-based incentive awards (1), attendance at conferences (1), and celebration dinners (1). This listing of rewards indicated a variety of reward systems but little consensus on what worked most effectively. As a result, the relationship between rewards and the internalization of the innovation as part of the culture was not well defined.

Another strategy involved addressing internal or external power structures as part of the change process
While each individual response listed one or more power structures that they addressed as part of the change effort, the overwhelming number of responses centered around the teachers' union or association (20) or 40 percent and parent/community groups (15) or 30 percent. Seven schools cited the school board of trustees while seven respondents listed teachers as power structures to be addressed. Industry or business groups were noted in five cases. Principals (3) and state organizations (1) completed the list cited in the followup interviews of internal and external power structures found in Figure 10.

This network of cultural players can serve to keep the existing culture alive or precipitate a change in its direction. These players form the communication network throughout the organization. Since the initial surveys indicated few problems with the implementation, there was a certain naivete that characterized power structure responses. Implementation plans did not specifically address power structures as an element to initially consider. However, most superintendents involved members of
these power structures in the initial training and decision-making about the project. It is not apparent that those power brokers initiated the changes. They were rarely involved in the maintenance and refinement of the change process. The members of those power structures lacked the same knowledge base about the change process and school culture as the administrative staff.

Support systems to assist in the change efforts were strategies also used by respondents. Figure 11 summarizes these support system strategies.

FIGURE 11: SUPPORT SYSTEMS - STRATEGIES

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentional process for sharing strategies among teachers and principal</td>
<td>17</td>
</tr>
<tr>
<td>Principals</td>
<td>6</td>
</tr>
<tr>
<td>Use of teacher trainers</td>
<td>5</td>
</tr>
<tr>
<td>Support from central office staff</td>
<td>3</td>
</tr>
<tr>
<td>Decentralization of power to buildings</td>
<td>2</td>
</tr>
</tbody>
</table>

The most often cited system involved an intentional process, such as teacher teams meeting on a regular schedule for sharing strategies among teacher and principals. Principals, singularly as a support system, were cited by six school corporations. Remaining responses included the use of teacher trainers (5), support from central office personnel (3), and decentralization of power, such as budgets and schedules, to individual buildings (2). While 64 percent of the superintendents indicated activities designed to support the innovation, it is not clear as to the depth of these activities in dealing with implementation
problems and stages. Did teachers and principals share strategies as success stories or did they share strategies for dealing with problems that surfaced in the implementation? The latter situation requires a greater knowledge and skill level than the former situation. There is a need to refine and define the intricacies of support systems because of their crucial link to successful implementation.

In addition to support systems, the communication of the change effort to others was an important strategy as defined in Figure 12.

**FIGURE 12: COMMUNICATION OF CHANGE**

- Teachers sharing with other teachers: 23
- Principals: 7
- Presentations at parent meetings: 5
- School board presentations: 3
- Document created outlining professional expectations of teachers: 3
- Parent booklet or survey: 2
- Employee newsletter: 1
- Local press: 1

As Figure 12 lists, the effort to communicate the major curricular change took many forms. The method most commonly used was teachers sharing the change efforts with other teachers. Communicating the change through principals was the next cited example (7) followed by presentations at parent meetings (5). Other strategies included school board presentations (3), outline of professional expectations of teachers (3), parent booklet or survey (2), employee newsletter (1), and local press (1).
In communicating the change, the most effective and regular form is teachers sharing with teachers. Teachers will ask questions of peers that are seldom asked of a principal. The key is the intentional sharing of information, not change encounters. However, the communication of change by principals, presentations, or documents may inform the public but do not significantly impact the school culture in terms of teaching behavior. Presentations and documents can be forgotten after they are viewed or read. They can serve as artifacts of the culture if part of a changing routine but are meaningless symbols if forced to stand alone. More variety of activities requiring active participation of the principal and staff seems to be warranted.

Figure 13 defines the various roles of the building principal in the change effort and as a member of the school culture.

FIGURE 13: ROLE OF BUILDING PRINCIPAL

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive</td>
<td>9</td>
</tr>
<tr>
<td>Catalyst - took initiative</td>
<td>8</td>
</tr>
<tr>
<td>Conducted followup inservice</td>
<td>6</td>
</tr>
<tr>
<td>Supportive but passive</td>
<td>5</td>
</tr>
<tr>
<td>Certified significant changes in instruction</td>
<td>4</td>
</tr>
<tr>
<td>Participated in training with teachers</td>
<td>4</td>
</tr>
<tr>
<td>No ownership by principal</td>
<td>4</td>
</tr>
<tr>
<td>Part of planning team - liaison with parents</td>
<td>3</td>
</tr>
<tr>
<td>and staff</td>
<td></td>
</tr>
<tr>
<td>Hired with intent to provide leadership to new</td>
<td>1</td>
</tr>
<tr>
<td>project</td>
<td></td>
</tr>
<tr>
<td>Coaching</td>
<td>1</td>
</tr>
<tr>
<td>Selected teachers to be involved in project</td>
<td>1</td>
</tr>
<tr>
<td>Depended on skill of individual principal</td>
<td>1</td>
</tr>
</tbody>
</table>
Definition of the role of the building principal contained less consensus than the strategies used to communicate the curricular change. Nine respondents indicated that principals were supportive but could not elaborate specific actions. Eight school corporations cited the principal as the catalyst that initiated the change effort, taking a personal interest and investing in a personal knowledge base about the topic. In six cases, the principal’s role was conducting the followup inservice after the initial training was completed. Four respondents indicated that the principal’s role was limited to participating in the training while four schools cited the principal’s role as certifying significant changes in the delivery of services through classroom observations. Remaining responses listed no ownership of principal (4), principal on planning team as liaison between parents and staff (3), principal hired with intent to work with project (1), principal used coaching techniques (1), principal selected teachers to be involved (1), the principal’s role depended on his/her skill (1), and supportive but passive (5).

The interview responses describing the role of the principal in the change process lack consensus. While some superintendents may have characterized an appropriate role for the principal as supportive or a training participant, the literature is clear about the pivotal role of the
principal. He/she cannot be an effective change agent as one of the group members but as a conflict manager, coach, information specialist, observer, cheerleader, planner, and trouble-shooter. The information from the interviews requires further probing about specific behaviors of the principal as an influential leader. The listing gleaned from interviews does not reflect the complexity of change in the school culture. It is surprising that fifty of the superintendents interviewed overlooked the influence of their own building principals.

The manner of obtaining the principal’s commitment to the change effort is an additional strategy to be considered beyond the role of the principal. Figure 14 lists the methods used to obtain the principal’s commitment to the project.

FIGURE 14: METHODS USED TO OBTAIN COMMITMENT OF PRINCIPAL

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participated in training with teachers from beginning of project</td>
<td>14</td>
</tr>
<tr>
<td>Initiated project</td>
<td>13</td>
</tr>
<tr>
<td>Interest level of principal varied</td>
<td>9</td>
</tr>
<tr>
<td>Provided acting principal when principal was absent due to project</td>
<td>1</td>
</tr>
<tr>
<td>Participated in performance-based evaluation - principal lost money</td>
<td>1</td>
</tr>
<tr>
<td>for not participating</td>
<td></td>
</tr>
</tbody>
</table>

Most cited were two areas, the participation of principals with teachers in the initial training (14) and the principal as the initiator of the change effort (13). Nine respondents indicated varying levels of interest among principals within their school corporations. One response
indicated that the school had an acting principal when the principal was absent due to the project activities while another single response described a performance-based evaluation process, docking a principal's salary if not cooperative.

The ownership of the change effort by the principal is key to the success of the project. He/she can be influential with other teachers, making the change effort part of the school routine. All responses, except initiation by the principal, describing methods used to obtain the principal's commitment to the innovation suggest a shallow effort. Participation in training is key, but only if the principal demonstrates leadership in follow-through strategies and problem-solving beyond the training. The initiation of a change by the principal indicates ownership but lacks further information about leadership strategies in later changes of the innovation. These behaviors are excellent initial strategies but insufficient to maintain momentum, especially if they are not tied integrally to the school culture.

Figure 15 summarizes the staff development plans for school corporations involved in major curricular change projects.
Ongoing staff development plan for several years 16
Lead teachers within the school corporation who
train other teachers 13
Initial training only 7
Principals conducted followup training 2

The initial staff development plan and the additional
training provided after the initial step were key variables
in the change process. Sixteen respondents or 32 percent
had ongoing staff development plans that spanned several
years. Thirteen school corporations, or 26 percent, trained
teachers within the school corporation to become in-house
teacher trainers. Seven corporations, or 14 percent, did
not provide any training beyond the initial training. Two
respondents or four percent indicated that principals
provided followup training for teachers. It is significant
that almost two-thirds of the interviewed districts saw the
need for continual training to change existing behaviors and
routines, explore alternatives, and overcome habit and
tradition. This continual plan for training acknowledges
that change does not result from one-shot inservice sessions
but needs on-going, long-term nurturing and support.
However, 38 percent of the responses listed initial training
only or failed to address this area, indicating an absence
of value for on-going training as a key component to
changing the culture of the organization.

Respondents were asked to list positive changes as a
result of the change effort. Twenty responses focused on
enhanced benefits for teachers, ranging in attitude to increased skill levels. Increased parent support was cited by seven school corporations. Student benefits were noted by six respondents.

The adequacy of funding of projects was a key issue as if affected the success of the project. Fourteen schools indicated that funding was inadequate. Sixteen school corporations indicated that funding was adequate, with fourteen involved in the receipt of grant monies while two utilized cost sharing methods. When funding was cited as a problem, respondents listed funding needs for equipment, training, staff, materials, facilities, and time. These funding needs are essential if the school culture is to be influenced.

Funding continues to be an issue despite the fact that any change effort must have sufficient time and money to be successful. As state and local revenues continue their current pattern of decline, resources will not be available to the extent needed to support an innovation. Fewer efforts to initiate change projects may result or it may doom future innovation because of inadequate support. As a result, the existing school culture, which has resisted change efforts, will continue to dominate schooling patterns. The method of doing business within schools, the inadequacy of which has been discussed in many reform documents, will continue to ignore the needs of some
students and diminish the effectiveness of the school.

In reviewing questionnaire and interview information regarding preparation of the innovation for replication, no information was cited to indicate intention on the part of the respondent to use a model for replication throughout the district. Respondents were either using a model already established, such as IBM's Write to Read or Jostens' computerized integrated learning system, or had a plan to expand the implementation to other schools within the district without any concern for modifications based on the initial implementation. There seemed to be an assumption that use of the model in other schools would be a natural conclusion. However, the research indicates that changing the school culture is a highly individual process, based on the particular school players and the manner of doing business in that particular school. The use of a model or program would not result in substantive changes in the school culture but would be characterized as "tinkering" with it.

Problems and Pitfalls Identified with the Implementation of Change

As things change, they also remain the same. This is, in part, due to the efforts of groups to resist the change and preserve what has been the manner of conducting business (culture) prior to the introduction of the change. Data collected regarding problems revolved around teachers, the
teachers' union, principals, parents, school board members, and other organizational problems.

Problems with other teachers comprised the largest number of responses. Problems were listed as follows:

Lack of understanding; fear of change by other staff (9)
Required lots of work; several requested transfer (1)
Trainer was so good that teachers felt they could not meet expectations (1)
Pressure on those implementing to "not do well" (1)
Difficult to move away from textbooks (1)
Lots of hand holding during initial training (1)
Uncomfortable with decision-making role (1)
Training insufficient (1)
Quality of training depends on teacher teams (1)

These problems represented blocks to success implementation, and raised questions about the involvement of teachers in the initial decision-making prior to the adoption of the major curricular change. If a representative group of teachers had been involved in the initial stages, there were others in the cultural network that opposed the change in order to maintain the status quo. The motivation of these cultural players may have been fear of the change effort due to lack of confidence in an individual's ability to learn new behaviors. Another motivation may have been resentment of recognition and attention given to teachers who participated in the initial effort. One respondent shared, "Other staff lacked understanding of the process and procedures in the initial effort. One respondent shared, "Other staff lacked understanding of the process and procedures in change
efforts," while another cited the pressures on those implementing to fail. Lack of support or frustration with initial attempts may have generated negative responses. "Change requires lots of work so two teachers will ask for reassignment," shared a superintendent. In any case, problems with other teachers has been cited in the literature as a social force with which to deal. The key to negating these influences is the role of principal in guiding teacher efforts, providing reassurance and assistance, celebrating and recognizing each small step of success, and creating a school culture that values the intended behavior. This complexity has produced short-term successes that are abandoned after a period of time or has resulted in change efforts that are less significant in terms of impact on student achievement.

Actions by the teachers' union (or association) were cited as problems. These actions included the following situations:

- Union opposed to any change (4)
- Teacher contract limited amount of staff development as part of teacher meetings (1)
- Union picketed visitations by other schools when no settlement was reached on contract (1)
- Any money for project was envy of union since there was no contract (1)
- Fear of teacher visits with TESA and coding of visits (1)
- Union resisted the movement of all kindergarten to one building (1)
- Union wanted extra compensation for teachers that participated (1)
- Union objected to extra work involved (1)

These pitfalls presented by the teachers' union were
listed as problems for the implementation of change. Did the union have a key decision-making role in the innovation? Were they courted as a power structure critical to the project's success? Did the administration/teacher/group/parents lay any groundwork about the change and its positive effects on students? Was the role created for the union superficial? Did other collective bargaining issues conflict with the change effort? Once again the complexity of the change effort tends to be underestimated. Efforts to involve the teachers' union were cited by many superintendents. However, when doors are opened for collaborative efforts, there is an assumption that all parties are trained in this new role. This is seldom the case. These new roles challenge the established authority of the principal and central office staff. As one superintendent noted, "Sharing power is hard to do."

Sharing power is not a part of the established culture in most school corporations. When it is introduced in the context of site-based management, it is typical for the union to attempt to control the sharing of power through the negotiations process.

The role of the principal was noted as a problem area in some responses. Eleven respondents cited the principal as unresponsive to suggestions from teachers, weak ownership of project, resistant to change, and inconsistent levels of involvement among principals within the same school.
district. Specific principal behaviors that foster change are not well-defined. Sharing power is not always welcomed by a principal. Weak ownership results from other forces that initiate the change. Training of the principal for this new role is seldom provided. The principal is expected to know how to implement change but his/her model was probably a principal who fostered the status quo, another example of the importance of culture and ritual.

While most responses about problems with people focused on teachers, unions, or principals, only one response listed a fundamentalist group of parents as barriers to change. This type of resistance is very strong in many sections of the United States and it poses a conflict between cultures. The one respondent who is faced with this issue has a major problem.

Another small group cited as problems was the school board of trustees. Two respondents identified pitfalls related to board member interference. Change efforts usually create some turmoil which is generally not valued by a majority of school board members. This school governance is part of the established culture and a part of the resistance to change. Those members that do not understand the change process, its implementation problems, or its eventual benefits will be part of the cultural players that maintain the existing structure and fight any efforts to change it.
The remaining problem areas revolved around organizational factors. Lack of time (10) and inadequate financial resources (9) were most commonly noted. Time and money are essential to any change effort that is successful in changing the culture of the school. Additional pitfalls focused on lack of flexibility with state laws on time requirements (1), need for additional personnel for staff development (1), scheduling (2), and inadequate secondary software (2). State time requirements and scheduling are part of the existing culture and serve as barriers to change.
CHAPTER IV

SUMMARY, RECOMMENDATIONS, CONCLUSIONS AND SUGGESTIONS FOR FURTHER STUDY

The purpose of this study was to determine whether an organized set of principles or specific strategies were used prior to the introduction of change into the school culture. A second purpose was to analyze the plans, strategies, problems, and pitfalls relative to school culture encountered during implementation. A brief summary, recommendations, and suggestions for further study are presented in the sections which follow.

Summary

The study was generated to determine how Indiana public school superintendents implemented change efforts in the school culture. Specifically, plans and strategies to implement the change were analyzed as well as pitfalls and problems encountered. Research questions were as follows:

1. Prior to the significant curricular change, how did the superintendent or central office staff prepare the school culture for the change?

2. As change was implemented, did the superintendent utilize an implementation plan and what were the
components of those plans that proved successful?

3. What specific strategies did the superintendent employ to implement the change?

4. What were the pitfalls and problems related to school culture encountered during the change process?

Selected literature was reviewed as it related to the involvement of school culture in the change process. The literature supported a connection between educational practice and the school culture in which these practices are part of the daily routine. Deal, Parish, Sarason, Fullan, and others emphasized that change efforts must impact the attitudes and beliefs of schooling beyond add-on programs or additional graduation requirements. Fullan, Hord, Sarason, and others described the elements of the change process as well as the roles of teachers and administrators in that process. Barriers to change provided a history as to why schools have resisted significant change.

A questionnaire was designed to elicit responses from the Indiana public school superintendents concerning major curricular change efforts, strategies and plans influencing the successful implementation of change, and problems and pitfalls identified with the implementation of change. Years of experience in the current position, size of the school corporation, classification of school corporations, and the educational level of the superintendent were
analyzed to gain a profile of those superintendents with successful change efforts.

Fifty school corporations were selected on the nature of the major curricular change cited. The study consisted of telephone interviews with fifty public school superintendents employed during the 1990-91 school year who responded to the questionnaire. Data regarding years of experience, size of the school corporation, classification of the school corporation, and the educational level of the superintendent were compiled.

The major curricular changes cited by 159 Indiana public school superintendents were classified by structural changes, student activities, curricular programs, building construction, and extracurricular projects. Those corporations selected for further study included change efforts on teaching/learning methodology, curriculum projects, technology, and structural changes.

Responses to the open-ended questions on the telephone interview were separated into two major categories: strategies and plans influencing the successful completion of change in public schools and problems and pitfalls identified with the implementation of change. Responses from the initial questionnaire were compared with the second responses from the telephone interview for purposes of consistency and differences. Data from the fifty interviewed respondents were reported by number in each
section.

Conclusions

The following conclusions were drawn from the review of the literature and analysis of data:

1. There was a lack of awareness of cultural variables related to the change process. Indiana public school superintendents did not cite distinctive practices/rituals, rituals of celebration, heroes/heroines, slogans, or legends/stories as key variables in the change process.

2. Indiana public school superintendents have implemented projects that, based on perception, represented major curricular changes. Of the change efforts noted by the fifty respondents, all strategies represented dealing with a part of the system but ignoring the total structure of curriculum, instructional practices, and organization. These changes do not represent long-lasting systemic change.

3. There is a conflict of information regarding sufficient time to implement change and the actual length of service of superintendents in present positions that have been perceived to have implemented change. The literature discusses preparation of the culture, introduction of the change, and support structures to maintain the change which involves considerably more time than the five years or less in current positions represented by the 44 percent of the superintendents actively involved in change. The relatively short tenure of the superintendents that indicated that they
had successful change efforts, in conflict with the research that says more time is needed, results in the conclusion that the change implemented by these superintendents is superficial in nature and lacks adequate measures to determine the effects of the change efforts.

4. There was a lack of understanding regarding how culture is related to changes in educational practices. There were few clear rituals, beliefs, traditions, or "ways of doing business" that were related to the change process in the strategies for successful change. While efforts were made to select motivated staff and influence the culture with appropriate information, there was little indication of support structures or placing the practice into the routine of schooling to support the change efforts.

5. The role of the building principal was determined to be pivotal which was supported in the literature. However, the many skills associated with a change agent were not clearly defined beyond participation in training and support and encouragement of teachers.

6. Implementation plans, used by most superintendents, included important elements such as ongoing teacher training and mission or vision statements. However, these plans did not address typical cultural variables or maintenance of the effort beyond the initiation point. There was little understanding of preparation of school culture for a change effort.
7. Successful strategies employed by Indiana superintendents included a broad variety of approaches, but there was no consensus regarding priorities.

8. Indepth interviews uncovered problems associated with social and cultural forces that blocked change: teachers' unions, other teachers, principals, distinctive practices, rituals, beliefs, values, cultural network, rituals of celebration, heroes/heroines, slogans, legends/stories, and school board members. Other problems were insufficient time and inadequate resources.

**Recommendations**

On completion of the study, the following recommendations are made:

1. Universities and colleges should develop courses required for certification for the administrative certificate that focus on the change process. The course needs to describe the preparation necessary for effective change, qualify significant change efforts beyond add-on programs or surface planning efforts, and teach conflict resolution and support strategies for helping others adapt to change. The most significant issue that must be stressed is the time commitment necessary for effective change.

2. Superintendents and building principals must have an understanding, through the training or through support efforts of the Department of Education, that change is a systemic process that involves curriculum, instructional
practices, and organizational structures. Long-lasting change cannot be accomplished by working with a part of the system.

3. Culture, as it relates to schools, must be as clearly defined and referenced in the professional literature as it is in business publications. The culture of the organization and methods to influence that culture must become commonplace considerations for educators when implementing change.

4. Agencies, such as the Department of Education, should provide leadership on change efforts that affect the total system to influence student outcomes.

5. A coalition of administrators and representatives of teachers' unions must design strategies to prepare and involve teachers for decision-making roles and evolve a new role of involvement for the building principal and central office staff.

6. The identification of successful strategies that influence the school culture and promote successful change efforts must be identified from case studies. An attempt to simplify this information from complex change studies must be made in order to communicate clearly and effectively with change agents.

Suggestions for Further Study

1. Successful systemic change efforts in school districts, especially the culture element, need to be
studied and critical elements identified. Professional literature tends to report such change efforts but rarely provides an indepth study for analysis.

2. State departments of education need to study the support role of state agencies in assisting local districts in change efforts, specifically as they relate to school culture and change strategies.

3. The management of the politics of school reform must be defined for further study. Methods to positively influence all cultural players in the change effort must be identified in the literature.

4. Existing change efforts must be studied more extensively for their effect on student outcomes before widespread implementation is recommended. The link between the change in curriculum, instruction, or organization must related to student outcomes, in light of the school’s culture and in light of broader societal needs.

5. Shared decision-making with its inherent problems must be reviewed as it relates to school culture and the change process. The role of new cultural players in the decision-making process, such as teacher unions and parents, must be studied. The preparation of those new players for their new roles must also be defined. Most of all, the school culture and how decision-making influences culture and the change process must be reviewed and strategies defined to address those issues.
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APPENDICES
TO: Indiana Superintendents

FROM: Charles E. Fields

DATE: November 7, 1990

SUBJECT: Research Endorsement

The IAPSS is supporting a survey being conducted by Peggy Chnupa Ondrovich, currently superintendent of the LaPorte Community School Corporation, as part of her requirements for a doctorate at Loyola University of Chicago.

The purpose of this survey is to assess the strategies used by Indiana superintendents to implement change within their public school settings. The benefit to superintendents and IAPSS would involve the identification of successful strategies that promote the change process that could be shared by all.

The Executive Committee of the IAPSS officially voted to support this survey on October 7, 1990.

IAPSS encourages you to respond to this study to help make the data as meaningful as possible.

Dear Colleague,

This study is important to our efforts, as superintendents, to effect change. I need your help in completing this survey. A summary of results will be shared with Indiana Association of Public School Superintendents.

Sincerely,

Peggy Ondrovich
The Perceptions of Superintendents of the Change Process in Indiana

PART I - DEMOGRAPHIC INFORMATION

Instructions: Please complete the following demographic questions by placing an X by the appropriate response or providing the requested information.

1. What is your current position?
   Superintendent { } Central Office Administrator { }

2. How many years have you been in your present position?
   __________

3. Gender: Male { } Female { }

4. How many teachers are under your supervision?___________

5. How many students are in your school corporation?___________

6. How many school buildings comprise your school corporation?
   _____elementary schools
   _____middle/junior high schools
   _____high schools

7. Classification of school corporation:
   Urban { }
   Suburban { }
   Rural { }

8. Educational background of superintendent:
   M.S. { }
   Ed.S. { }
   Ed.D. { }
   Ph.D. { }

9. Teachers' Union Affiliation:
   Indiana State Teachers' Association { }
   American Federation of Teachers { }
   Other___________________________{ }

PART II - SHORT ANSWER/NARRATIVE

Instructions: Please complete the following short answer/narrative portion of the questionnaire. All answers will be confidential and there will be no reporting by individual school corporation.
1. Cite a recent example of a major curricular change in which your school corporation has participated. (Major curricular change would be defined as a new instructional program, instructional strategies such as cooperative learning or Hunter’s steps of the instructional process, or a new mission or vision statement.) Please list it under the appropriate category. Please focus your discussion on one major curricular change.

Curriculum/Subjects

Staff Utilization/Teachers

Organization/Students

Scheduling/Time

Procedures/Methods

Facilities

Other

2. Were you directly responsible for instituting this change? Yes { } No { } If no, who was responsible?

3. When was the change introduced?

4. Is the change still being implemented? Yes { } No { }

5. How many staff members were directly involved in the implementation?
6. Was there a mission or vision statement developed as part of the change process? Yes { } No { } If yes, who developed the mission or vision statement?

7. Was an implementation plan, identifying goals, persons responsible, timelines, and method of evaluation, developed? Yes { } No { } 

8. Was the curricular change implemented successfully? Yes { } No { } If yes, what were the indicators that announced a successful implementation? Cite some specific examples. Use all appropriate categories. 

_____ Use of new content as confirmed by observations of teachers 

_____ Use of instructional strategies by more than half of teachers as confirmed by observations 

_____ Shared purpose or consensus among staff on "how we do things around here." 

_____ Distinctive practices or rituals 

_____ Rituals of celebration as teachers/staff demonstrate curricular change 

_____ Heroes or heroines that embody the curricular change or the core values of the organization 

_____ System of indoctrinating new teachers/staff 

_____ Improved classroom management 

_____ Collaboration/collegiality among staff 

_____ Slogans/vision or mission statements
If the curricular change was implemented successfully, what do you think were the key factors that contributed to the positive change? Cite specific examples. List all areas that apply to your situation.

___ Clear expectations of teachers/staff__

___ Use of problem-solving techniques to help teachers through each stage of the innovation__

___ Adequate resources for project__

___ Parent/community support__

___ Development of confidence of teachers in using the curricular change__

___ No distractions of other projects during the implementation of this curricular change__

___ Sufficient support and assistance to teachers while attempting the change__

___ Sufficient followup after initial training of teachers/staff__

___ Sufficient time for teachers to plan and practice new skills__

___ Ownership by building principals__

___ Stable and supportive central office leadership__
If successful, what factors were barriers during the implementation but addressed successfully?

If no, what were the barriers to success? Cite specific examples. Use all appropriate categories.

- Other

- Unsolvable problems

- Nature or narrowness of goals

- Problems with inadequate resources

- Demographics (community variables, teacher population, urban/suburban settings)

- Misunderstandings or incompleteness

- Concerns about the effect of the change on the teacher

- Too many other changes going on at the same time

- Lack of support and assistance in implementing the change

- Lack of followup after the initial training of staff

- Too little time for teachers to plan and learn new skills

- Lack of ownership by building principals

- Change in central office leadership

- Other
What indicators would determine if the project has experienced partial success?

Thank you for your assistance. It is greatly appreciated.

PART III - IN-DEPTH INTERVIEW QUESTIONS

Instructions: Please complete the narrative portion of the questionnaire. If the question is not applicable to your situation, please indicate rather than leave blank.

All answers will be confidential and there will be no reporting by individual school corporation.

1. What strategies did you employ to prepare the school culture for the curricular change?

2. What follow-through strategies did you employ to monitor the change?

3. Every school has an established culture. How did you address the culture in the structuring of the curricular change?

4. What was the specific implementation plan for the curricular change?
5. How much paid school time was committed to the implementation?

Time outside the school day (unpaid)?

6. Was there a reward system for those teachers who attempted the curricular change?
Yes, what was the reward system?

7. What internal or external power structures did you address as part of the change process?

8. What support systems did you design to sustain the efforts of teachers involved in the change?

9. How did you communicate the curricular change to staff?

10. What was the role of the building principal?
How was that role established?

11. How did you obtain the principal’s commitment to the curricular change?
12. What was the staff development plan to implement the curricular change?

13. After the initial inservice, what additional training was provided, if any?

14. What were some of the problems encountered?

15. How were these problems identified?

16. Did any situations occur that you did not anticipate in the planning process?

17. What were some of the positive results of the implementation of this curricular change?

18. Was funding adequate? If not, why was the change implemented without adequate funding?
APPROVAL SHEET

The dissertation submitted by Peggy Chnupa Ondrovich has been read and approved by the following committee:

Dr. Melvin P. Heller, Director
Professor, Educational Leadership and Policy Studies, Loyola

Dr. Edward Rancic
Assistant Professor, Educational Leadership and Policy Studies, Loyola

Dr. L. Arthur Safer
Associate Professor, Educational Leadership and Policy Studies, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

Date: November 23, 1992

Director's Signature: [Signature]