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Concerns of southeastern Massachusetts elementary school principals regarding implementation of participative decision making in their schools.

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CONCERNS OF SOUTHEASTERN MASSACHUSETTS
ELEMENTARY SCHOOL PRINCIPALS REGARDING IMPLEMENTATION
OF PARTICIPATIVE DECISION MAKING IN THEIR SCHOOLS

A Dissertation Presented

by

SUSAN M. RANDALL

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

DOCTOR OF EDUCATION

September 1991

School of Education

CONCERNS OF SOUTHEASTERN MASSACHUSETTS
ELEMENTARY SCHOOL PRINCIPALS REGARDING IMPLEMENTATION
OF PARTICIPATIVE DECISION MAKING IN THEIR SCHOOLS

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Approved as to style and content by:

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Gretchen B. Rossman, Chair

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Bailey W. Jackson, Dean
School of Education

Dedication

This dissertation is lovingly and respectfully dedicated to my father, Dr. George Wellington Putman, as a tribute to his memory. As a medical doctor who developed and introduced new and revolutionary concepts to his field, I salute his dedication and honor him for his unforgettable example to me.
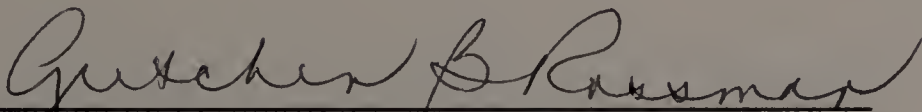
ACKNOWLEDGMENTS

ABSTRACT

CONCERNS OF SOUTHEASTERN MASSACHUSETTS

ELEMENTARY SCHOOL PRINCIPALS REGARDING

IMPLEMENTATION OF PARTICIPATIVE DECISION MAKING

IN THEIR SCHOOLS

SEPTEMBER 1991

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Participative decision making has been identified
as a crucial aspect of current American public school
restructure efforts. The calls for school improvement
through collective decision making by the educational
team (i.e., principals and teachers) have been
frequently referred to as an effort toward teacher
professionalization through empowerment. Given central
office support, principals have been cited as playing a
major role as potential change facilitators who can
enable or sabotage meaningful participative decision
making in their schools.

Subsequent to being identified by their school
superintendents as having initiated participative

decision making in their schools, this study

investigated a stratified random sample (based on the

Massachusetts Department of Education "kind of

community" descriptors) of seventy-three (73)

southeastern Massachusetts elementary school principals.

Their feelings (concerns) regarding participative

decision making in their schools were examined using the

central instrument from the Concerns-Based Adoption

Model (C-BAM): Stages of Concern Questionnaire (SoCQ).

It also contained a comment section to allow for further

clarification of feelings or concerns. Additionally, a

customized demographic survey was included as two basic

research questions were asked: (1) What are the

perceived stages of concerns of a stratified random

sample of southeastern Massachusetts elementary school

principals who have initiated participative decision

making within their schools? and (2) What are the

relationships among these elementary school principals'

selected demographic variables and intensity of concerns

toward participative decision making in their schools?

The SoCQ data analysis, noting relative intensity of concern, indicated the participants' highest intensity of concerns as follows: 53% in the "Awareness" stage; 16% in the "Personal" stage; 12% in the "Informational" stage; 8% in the "Management" stage; 11% in the "Consequence," "Collaboration," and "Refocusing" stages. Among conclusions from the data analysis, indications were that the majority of (mostly male) principals are non-users, or in a very early developmental stage. Further, number of years as principal at a school showed correlational significance.

The theoretical underpinnings of change, concerns theory, and the practice of participative decision making are included in the review of the literature. Concluding chapters provide a review of methodology, data analysis presentation, summary, recommendations and conclusions, and further research ideas.

Key Words: administration, participative decision making, principals' attitudes, teacher-principal relationships.

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CHAPTER 1

INTRODUCTION

Participative decision making has been identified
as a crucial aspect of the current second wave American
public school restructure efforts (e.g., Carnegie Task
Force, 1986; Carnegie Foundation, 1988; Chapter 727,
1988; Conley, 1988). The calls for school improvement
through collective decision making by the educational
team (i.e., principals and teachers) have been
frequently referred to as an effort toward teacher
professionalization through empowerment (Goodlad, 1984;
Barth, 1988; Conley, 1988; Darling-Hammond, 1988;
Devaney & Sykes, 1988; Futrell, 1988; Little, 1988;
Maeroff, 1988; McLaughlin & Yee, 1988; Price, 1988;
Shanker, 1988, 1990; Conley & Bacharach, 1990; Wise,
1990). For those espousing teacher empowerment tenets,
the assumption is made that through elevating teacher
status, increasing opportunities to share/attain
knowledge, and gaining access to power particularly

1

through participation in decision making (including problem solving and goal setting), schools have the potential for improving the learning environment for all involved (Maeroff, 1988).

Principals have been cited as playing a major role as potential change facilitators in their schools (e.g., Hall & Hord, 1984; Odden & Anderson, 1986; ASCD, 1987; Barth, 1988; Paine, 1990; Levine, 1991; Taylor & Levine, 1991). This study provides a baseline diagnosis of the perceived concerns and gives suggestions for prescriptive measures for a stratified random sample of elementary school principals regarding the implementation process of participative decision making in their southeastern Massachusetts schools.

Background

In comparison to the plethora of research studies done in organizational participative decision making, there appears to be less information regarding participative decision making in schools (Schmuck et al., 1977; Conway, 1984). It would make intuitive sense that the reason for this is due to the lack of extensive participative decision making practices in schools; the

research appears to confirm it (see, for example,
Stimson & Applebaum, 1986; Carnegie Foundation, 1988;
Paine, 1990).

Conley (1988) has suggested that if current reform
efforts in education are to be successful, they need to
focus in part on "management's recognition of teachers
as professional decision makers" (p. 402-403). Further
research by Conley and Bacharach (1990) has indicated
that the creation of a professional workplace in schools
is essential if school improvement is to be realized.
As part of a University of Massachusetts at Amherst
research project on the professionalization of teachers,
Paine (1990) investigated southeastern Massachusetts
principals' decision making behavior in their school as
it related to the fostering of teacher empowerment. Of
those principals who responded in this research effort,
the data analysis indicated that:

> * teacher involvement (total teacher control)
>   in the decision making process occurred in
>   approximately twenty-five percent (25%)
>   of the schools;

* fifty-four point nine percent (54.9%) of
these principals indicated that teachers
were partners regarding the development of
annual goal statement formulation;

* sixty-three percent (63%) of the principals
reported that they incorporated teacher
recommendations for the annual goal statement
but forty percent (40%) singlehandedly prepare
the statement;

* twenty-five percent (25%) reported joint
principal and teacher control of the hiring
process with the clarification that the central
office alone usually makes the selection
seldom involving teachers, but have a
degree of principal involvement;

* fifty percent (50%) of the principals
permit teacher involvement in budgetary
decisions regarding choice and/or prioritization,
but fifteen percent (15%) of the principals make
all of these final decisions alone;

* seventy-two percent (72%) of the principals
work with the teachers to select textbooks, but

forty-five percent (45%) make these final

selections alone;

* twenty-three point five percent (23.5%) of the

    principals report that they create the discipline

    code alone, while sixty percent (60%) make use

    of teachers' suggestions and forty-one percent

    (41%) involve teachers with the creation of the

    discipline guide; seventy-three percent (73%)

    reported the inclusion of teachers in the

    decision making process on important issues

    while sixty percent (60%) permit teacher control

    if in possession of expertise in designated

    areas;

* although the central office and principals are

    involved in the determination of teacher in-

    service programs, sixty-five percent (65%) of

    the principals reported that teachers'

    suggestions are sought in the process of

    program development (Paine, 1990, pp. 109-112).

Additionally, team governance was reported to be

most prevalent at the middle school level; high schools

and elementary schools were more "private" rather than

"public" with their collegial practices. Although

Paine's (1990) study has reported on the <u>behavior</u> of

southeastern Massachusetts' principals regarding

participative decision making practices in their

schools, this study's focus is on the <u>attitudes</u>

(concerns) of elementary school principals, another

integral part of the University of Massachusetts at

Amherst teacher empowerment research project.

Statement of the Problem

While a number of states initiated education reform

efforts prior to the publication of <u>A Nation at Risk:</u>

<u>The Imperative for Educational Reform</u> (1983), it appears

that this report has served as a catalyst for

introducing major revisions of the role teachers play in

an endeavor to improve education in our country. As

calls for change in more recent national (e.g., <u>A Nation</u>

<u>Prepared: Teachers for the 21st Century</u>, 1986;

<u>Tomorrow's Teachers</u>, 1986) and state (e.g., <u>Making</u>

<u>Teaching a Major Profession</u>, 1987; <u>Chapter 727 An</u>

<u>Act Enhancing the Teaching Profession and Recognizing</u>

<u>Educational Achievement</u>, 1988) educational reform

movements focus on participative decision making in

schools, effective implementation by administrators as
change facilitators has not been pervasively realized
(Carnegie Foundation, 1988; Conley, 1988; Conley et al.,
1989; Paine, 1990). Given central office support,
principals are acknowledged to have the power to
implement or sabotage meaningful participative decision
making within their schools. Studying principals'
concerns as they pertain to effective implementation,
according to concerns theory, has provided insights for
diagnosis and suggestions for prescriptive measures.

Purpose

The purpose of this study was to investigate the
perceptions of a stratified random sample of
southeastern Massachusetts elementary school principals
in order to determine their intensity of concern toward
the implementation of participative decision making
within their schools. Through the use of the "Stages of
Concern Questionnaire" (see Appendix F) and a customized
"Demographic Survey Instrument" (see Appendix H), these
basic research questions were asked:

What are the perceived stages of concern of

a stratified random sample of southeastern

Massachusetts elementary school principals
who have initiated participative decision
making within their schools?

What are the relationships among these elementary
school principals' selected demographic variables
and intensity of concerns toward participative
decision making in their schools?

The following null hypotheses, relating directly to
the above research questions, were tested:

1. There are no significant relationships among
    elementary school principals' ages and
    intensity of concerns toward participative
    decision making in their schools.

2. There are no significant relationships among
    elementary school principals' levels of
    education and intensity of concerns toward
    participative decision making in their schools.

3. There are no significant relationships among
    elementary school principals' number of years
    of experience as an administrator and intensity
    of concerns toward participative decision
    making in their schools.

4. There are no significant relationships among elementary school principals' number of years as principal at their present school and intensity of concerns toward participative decision making in their schools.

5. There are no significant relationships among elementary school principals' number of teachers on the staff at their schools and intensity of concerns toward participative decision making in their schools.

6. There are no significant relationships among elementary school principals' amount of training in participative decision making practices and intensity of concerns toward participative decision making in their schools.

7. There are no significant relationships among elementary school principals' number of years of administrative experience with participative decision making and intensity of concerns toward participative decision making in their schools.

Significance of the Study

The potential contributions of this study address the areas of policy, theory, and practice as described in the following:

Policy

As noted earlier, recent national and state reforms have called for the professionalism of teachers through empowerment. Policymakers have suggested that an integral part of the effort involves teachers in the decision making process in their schools. On a more local level, given central office support, the principal has been widely recognized as the key agent to set policy for change as he/she has the position power and formal authority to enable participative decision making in his/her school. Demeter (1951) stated:

> school principals are key figures in the
> process (of innovation). Where they are both
> aware of and sympathetic to an innovation, it
> tends to prosper. Where they are ignorant of
> its existence, or apathetic if not hostile, it
> tends to remain outside the bloodstream of the
> school (p. 15).

This study investigated southeastern Massachusetts elementary school principals' perceived intensity of concerns about participative decision making within their schools, thus providing a baseline diagnosis to monitor change implementation. Information obtained from the study has added to a body of knowledge that could provide insights to administrators (and others) in their efforts to establish meaningful policies and strategies for potentiating effective implementation of participative decision making in their schools. In addition, suggestions are presented for prescriptive measures (i.e., interventions) to increase the level of effective implementation of participative decision making within elementary schools in southeastern Massachussetts. Because participative decision making has been identified as holding promise for enhancing the learning for all involved in schools, and principals' perceived intensity of concerns are an important dimension in the change process, the significance of the study can be justified.

Theory

The stages of change commitment theory, in
conjunction with concerns theory, are addressed in the
review of the literature.

As a vehicle for studying educational change,
concerns theory was developed by a research team at
the University of Texas at Austin, Research and
Development Center for Teacher Education, in their work
on the Concerns-Based Adoption Model (Hall et al.,
1973). A central instrument resulting from the research
project was the Stages of Concern Questionnaire (SoCQ),
an assessment tool developed to provide information
about how individuals feel about an innovation (i.e.,
new programs, products, processes). The theoretical
framework to study educational change provides
assumptions about the change commitment process as it
relates to the stages of concern. Collection of data in
this study has been generated as a stratified random
sample of elementary school principals in southeastern
Massachusetts responded to the central instrument used:
Stages of Concern Questionnaire (SoCQ) and a Demographic
Survey Instrument (DSI). Validation of the concerns

theories' hypotheses, though not the primary intent of
this study, has also served a contributing role to
strengthen the C-BAM assumptions as the data were
analyzed.

Practice

The purpose of this study was to determine a
baseline diagnosis of a stratified random sample of
southeastern Massachusetts elementary school principals'
intensity of concerns regarding participative decision
making in their schools. Information about the practice
of participative decision making in southeastern
Massachusetts' elementary schools was obtained from the
superintendents' responses and demographic data that
were gathered in this study. Although the
intent of the study was to profile elementary school
principals' intensity of concerns about participative
decision making in their schools, the initial
investigation asked the school superintendents the
question about who is practicing it in southeastern
Massachusetts (see Appendix A).

Delimitations and Definitions

The change process has been described as having

three major components: initiation, implementation,

continuation/institutionalization (Fullan, 1982; Hall &

Hord, 1984; Organizational Development Resources, 1984;

ASCD, 1987). The focus of this study involved the

change process, specifically as it related to the

implementation cycle (a delimiter) of the

innovation--participative decision making.

Previous studies by Carnegie (1988) and Paine

(1990) focused on behavioral practices regarding

participative decision making. The Carnegie (1988)

study produced national and state information. Paine

(1990), provided findings based on her southeastern

Massachusetts behavioral study. Subsequently, this

baseline study has been designed to be regional (i.e.,

southeastern Massachusetts, a delimiter) in order to

more fully examine another component (attitudes/

concerns) of principals implementing participative

decision making in their elementary schools.

Additionally, financial considerations were a factor for

southeastern Massachusetts regionalization due to the

extent of telephone communication involved with
producing and insuring an adequate sample and response
follow-up contact.

The stipulative definition of "participative
decision making" in this study is: decisions of
consequence made by both the principal and teachers,
which impact the quality of life (academic, cultural,
emotional, physical, professional, social) within the
school. The Carnegie Foundation (1988) described these
three key areas: curriculum and instructional
materials; standards for students; and professional
standards and budget policies, thus considered as
"decisions of consequence."

It is acknowledged that principals and teachers,
among others, make up the potential components of the
practice of participative decision making in schools.
The principal is considered to be the "change
agent/facilitator." In this study, the term "teacher"
is meant to refer to those individuals (in addition to
the principal) who are Massachusetts certified or
certifiable and involved with the educational process of
children within the school. However, this investigation

has focused on the perceived intensity of concerns of
elementary school principals (a delimiter) using a
stratified random sample based on the Massachusetts
Department of Education seven descriptors regarding
"kind of community" (see Appendix I) and identification
by their superintendents as having initiated
participative decision making in their schools.

"Elementary" schools have been defined by Jeff
Neilhaus (Massachusetts Department of Education; Office
of Planning, Research and Evaluation) in a written
communication as including Kindergarten through grade
eight schools, but does not include typical middle
school or junior high school grade configurations such
as 6-8, 7-9, 5-8, 7&8, etc. He notes that of the total
number of 1,202 elementary schools in Massachusetts, 253
elementary schools are located in the southeastern
region (Neilhaus, 1990).

Rooted in "Concerns Theory," the Concerns-Based
Adoption Model (C-BAM) has been developed to understand
and describe innovation adoption and implementation by
describing the various concerns of individuals in a
change process. Hall et al. (1973) provide a

definition for "adoption," admittedly not embraced by

other theorists (e.g., Clark-Guba) because it "goes far

beyond the initial decision to adopt" (p. 5) as it

involves the many processes taken to integrate an

innovation into the functional structure of an

organization. Accordingly, the "implementation" phase

refers to the actual use of an innovation and becomes

involved with the evaluation process. The Stages of

Concern Questionnaire (SoCQ) was used as a diagnostic

tool to investigate respondents' feelings about the

innovation (Hall et al., 1973).

"Innovation" is described by Hall (1976) as a

"generic name given to the issue, object, problem, or

challenge, the thing that is the focus of the concerns"

(p. 5); "a program, practice, or process--new or

not--that is new to a person" (ASCD, 1987, p. 3).

Participative decision making is the innovation referred

to in this study.

"Concerns," as noted by Hall et al. (1986), are

defined as "the composite representation of the

feelings, preoccupation, thought, and consideration

given to a particular issue or task" (p. 5). Further,
an individuals' "perceptions" are described as that
which stimulate concerns, "not necessarily the reality
of the situation" (p. 5). A diagnosis of implementation
effectiveness, according to one's developmental stage,
was made by measuring principals' perceptions of their
stages of concern as they responded to questions on the
Concerns-Based Adoption Model instrument titled "Stages
of Concern Questionnaire," open-ended statement
responses, as well as the "Demographic Survey
Instrument."

Hall et al. (1973) have provided this Stages of
Concern Questionnaire (SoCQ) conceptualization of seven
hypothesized levels of concerns about an innovation:

    0 AWARENESS: Little concern about or
       involvement with the innovation.

    1 INFORMATIONAL: A general awareness of
       the innovation and interest in learning
       more detail about it is indicated. The
       person seems to be unworried about
       herself/himself in relation to the innovation.

She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.

2 PERSONAL: Individual is uncertain about the demands of the innovation, her/his inadequacy to meet those demands, and her/his role with the innovation. This includes analysis of her/his role in relation to the reward structure of the organization, decision making, and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.

3 MANAGEMENT: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

4   CONSEQUENCE: Attention focuses on impact

of the innovation on the client in her/his

immediate sphere of influence.   The focus

is on relevance of the innovation for the

clients, evaluation of client outcomes,

including performance and competencies, and

changes needed to increase client outcomes.

5   COLLABORATION: The focus is on coordination

and cooperation with others regarding use

of the innovation.

6   REFOCUSING: The focus is on exploration

of more universal benefits from the innovation,

including the possibility of major changes or

replacement with a more powerful alternative.

Individual has definite ideas about

alternatives to the proposed or existing form

of the innovation (Hall et al., 1986, p. 15).

In addition to the "Non-Concern" or "Irrevelant"

domain (which contains the "Awareness" Stage 0), the

above has been categorized into three domains of

concern: "Self" (Stages 1, 2), "Task" (Stage 3), and

"Impact" (Stages 4, 5, 6).   (Appendix G provides an

overview of the statements on the SoCQ arranged
according to stage.) The assumptions made in this model
are: As the individual has his/her early, more intense
self-related questions resolved and as he/she gets more
and more into using the innovation, the intensity of
innovation use (task) and client (impact) related
concerns increase. As knowledge about one's
developmental state is made known, personalized
interventions could be provided for relevant, current
concerns as well as the anticipation of possible future
concerns, according to this model (Hall, 1979; ASCD,
1987); thus, potentiating effective implementation.

Hall and George (1979) have noted that though group
profiles can be useful for research purposes, they
believe that the individual should be the target for
diagnosis, prescription, and intervention delivery for
optimal facilitation of the innovation adoption process.
They feel it does not mean that group targeted
interventions are inappropriate, but prefer to
accommodate the individual differences concerns with
their designated interventions.

It should be noted that the term "client" has been
a generic term used by the Concerns-Based Adoption Model
in their outgrowth project called Concerns-Based Tools
for Managing Change. Based at The Regional Laboratory
for Educational Improvement of the Northeast and Islands
in Andover, Massachusetts, those involved (e.g., Susan
Loucks-Horsley, Suzanne Stiegelbauer, Deborah Roody, and
Don Horsley) have developed adaptations to the C-BAM
tools for the specific purpose of enhancing their
application to aid not only schools, but any
organizational innovation and change.

Limitations of the Study

1. Although there was an opportunity for an
open-ended response (as well as a Demographic Survey
Instrument), the central instrument for data collection
in this study, Stages of Concern Questionnaire (SoCQ),
is a thirty-five item Likert scale, and therefore could
be considered a limitation due to its nature of a forced
choice response.

2. The "kind of community" stratification for the
randomized sample of at least seventy elementary school
principals, although providing evidence for regional

generalization, will not necessarily provide external validity.

    3. Although a randomization process was employed to control for numerous variables within and between the seven "kind of community" strata, subjects who participate do so according to their willingness to complete surveys. Further, insufficient sample sizes and, in some cases, identical independent variables (e.g., same gender, same age), prevented inferential correlational data analyses based on Pearson r.

    4. Respondents have completed the instruments independently, presenting the possibility of reduced serious or cautious response than if supervised.

<div align="center">

Summary

</div>

According to the research presented, effective change for school improvement is thought by many to be more likely realized as teachers are empowered, particularly in the area of meaningful participative decision making. This introductory chapter has provided an overview of the conceptual framework for the study which serves to present the theoretical (concerns and

change theories) and practical (participative
decision making) elements.

Chapter 2 presents a review of the literature
noting selected theoretical and related perspectives
including change theory, concerns theory, and
participative decision making practices. A
conceptualization of participatory decision making and
an overview of participative decision making studies are
included and summarized.

Chapter 3 discusses the research design and
methodology, which includes a description of the
selection process of the survey sample, instrumentation,
procedures and timetable, and data collection and
analysis procedures.

Chapter 4 presents an analysis of the data,
descriptively and inferentially. Stages of Concern
Questionnaire scores, relationships among independent
and dependent variables, and open-ended response
evaluation are included.

Chapter 5 summarizes the conclusions of the
research findings and makes recommendations, as well as
gives suggestions for further study.

CHAPTER 2

REVIEW OF THE LITERATURE

The problems of planning and implementing
educational change have been pervasive in the
literature. According to Hall and George (1979), the
role of individuals in the change process has not
received adequate attention. Thus, if educational
change is to be better understood, the personal side of
change must be addressed. This section describes a
framework for viewing the change commitment theory,
followed by an overview of concerns theory as developed
by the Concerns-Based Adoption Model project. Next, the
innovation under investigation, participative decision
making, is reviewed, preceeding a concluding summary of
the reviewed research.

Change Theory

Although it is acknowledged that demographic
trends, economic and social (Naisbitt, 1984; Hodgkinson,
1988), have had an undisputed impact on educational
reform for school improvement, it also should be noted
that many proposed plans for change have met with
failure during the implementation cycle of change

(Fullan, 1982; Rossman et al., 1988). According to the
research, if effective implementation of significant
change is to occur, proper assistance and specialized
training are needed. The change agent/facilitator, in
this case the principal, could benefit from an awareness
of the steps of the change process in order to
facilitate change. Change is a process that takes time
as stages of commitment climb the ladder from the
initiation (adoption/preparation) phase to the crucial
implementation (acceptance/utilization) phase to the
continuation (commitment/routinization/incorporation/
institutionalization/internalization) phase (Fullan,
1982). More closely examined, the three basic phases of
change commitment, as well as resistance factors and
impacts, are illustrated in Figure 2.1 and described in
the following:

1. Initiation phase: requires contact, or an
awareness, through oral and written communication,
leading to a decision about the direction of the change.
Resistance aspects involve unawareness and confusion,
unclear articulation of the change and poor

```
                                    _____  OUTCOMES
                              |                        |
                       _____| CONTINUATION
                  |                    |               |
                  | IMPLEMENTATION
         _____|          |         |               |

INITIATION                   |         |               |
     |

                             |         |               |

     |                       |         |               |


     C       U       L       T       U       R       A       L
              (Schools' inherent beliefs, values, standards)
              P       O       L       I       T       I       C       A       L
         (Use of power to shape programs, practice, processes)
                      T       E       C       H       N       I       C       A       L
         (Includes education and research and development)
```
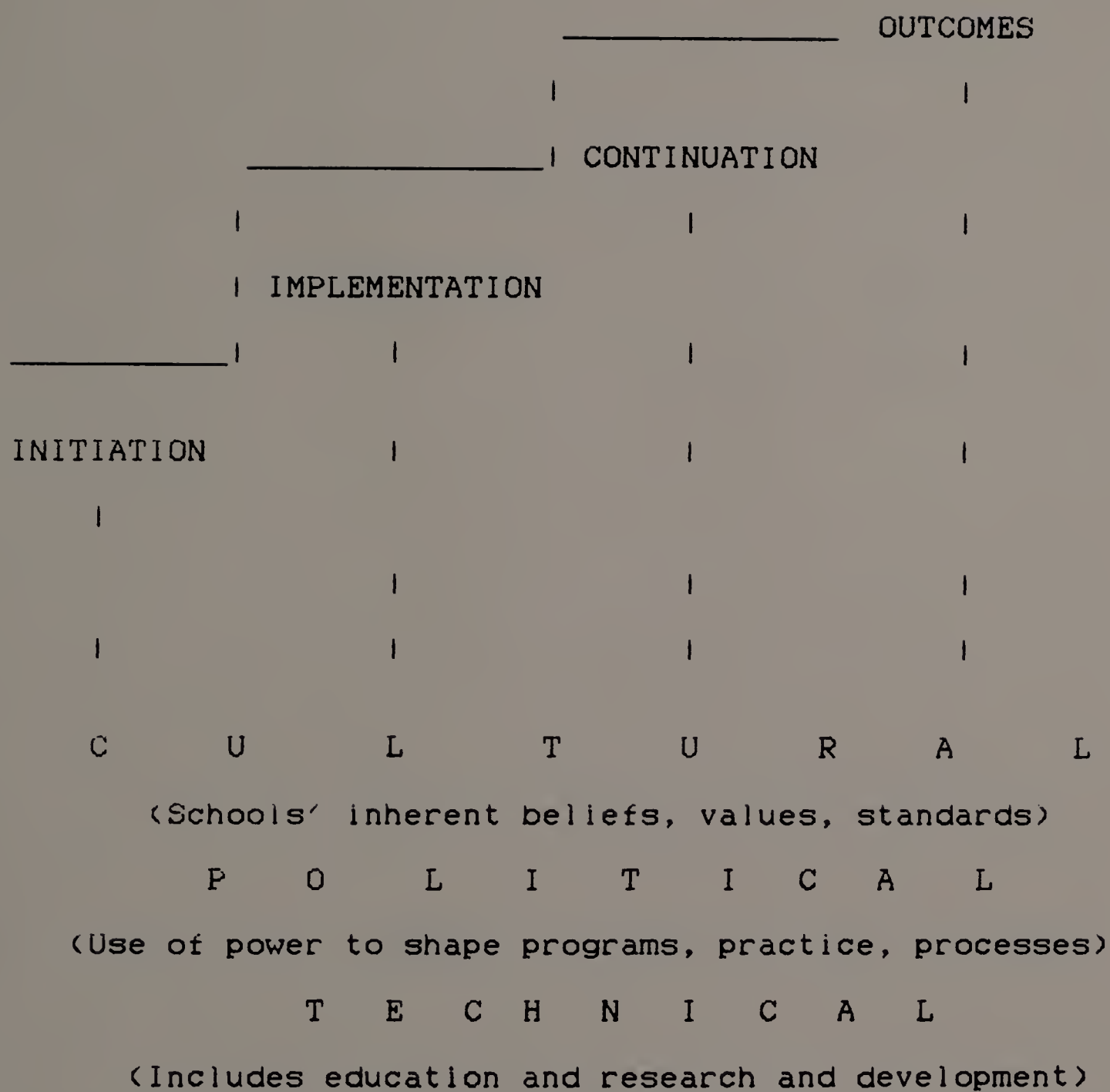
Figure 2.1
Illustration of the Evolving Process for Change
and Underlying Factors for Impact/Intervention:
A Framework

communication. Fullan (1982) has identified ten factors impacting this stage of change:

> *existence and quality of innovations
>
> *access to information
>
> *advocacy from central administration
>
> *teacher pressure/support
>
> *consultants and change agents
>
> *community pressure/support/apathy/
> opposition
>
> *availability of federal or other funds
>
> *new central legislation or policy
>
> *problem-solving incentives for adoption
>
> *bureaucratic incentives for adoption (p. 42)

2. Implementation phase: involves understanding the change and perceiving it in a positive manner as the utilization of the innovation begins. Resistance aspects involve negative perceptions of the change and/or making decisions not to support attempts for its installation. Fullan (1982) notes these four major factors for intervention affecting the implementation phase:

*Characteristics of the Change (need and
relevance of the change, clarity, complexity,
quality and practicality)

*Characteristics at the School District Level
(history of innovative attempts, adoption
process, central administrative support and
involvement, staff development/inservice and
participation, timeline and information
system/evaluation, board and community
characteristics)

*Characteristics at the School Level (the
principal, teacher-teacher relations,
teacher characteristics and orientations)

*Characteristics External to the Local
System (role of government, external
assistance) (p. 56)

3. Continuation phase: begins the installation of
change as the utilization process continues. The change
moves on toward adoption as the use of the change
continues to the point of institutionalization--becoming
a way of life in the institution. The ultimate point
for change commitment is reached when internalization

occurs as the change is embraced within the culture. At

this point, people believe in and advocate the change

as it is part of the internal system. The difference

between institutionalization and internalization is that

legislation can institutionalize but internalization

cannot be forced. Resistance during the commitment

phase involves aborting the change after initial and/or

extensive utilization of the change as negative

attitudes surface regarding the intended change benefits

(Fullan, 1982; Organizational Development Resources,

1983).

Related to the above, Havelock classifies change

literature into three schools of thought. Havelock's

1969 study of change in many fields, including

education, concluded that these groupings describe the

three principal models of dissemination and utilization

of knowledge: social interaction; research,

development, and diffusion; and problem-solving. He

used a linkage model that consisted of their most

important features to synthesize the three perspectives.

The Social Interaction Perspective is basically

concerned with spreading an existing innovation through

an organization from the change agent's viewpoint. The five stage process follows:

1. Awareness Stage: The individual, although exposed to an innovation, lacks information. Later stages need to be initiated here that will lead to innovation adoption or rejection.

2. Interest Stage: The individual demonstrates interest, and seeks additional interest and information about the innovation.

3. Evaluation Stage: The individual has applied innovation and makes decision regarding its value.

4. Trial Stage: The individual pilot tests innovation useability in order to use it within his/her own situation to determine feasibility of complete adoption.

5. Adoption Stage: The individual makes the decision to continue using the innovation based on the trial results (Rogers, 1962; Havelock, 1971).

Havelock's (1971) model for large scale planning using his Research, Development, and Diffusion Perspective is described as a perspective for change based on the conceptualization that describes the change

process as an activities continuum going from research to practice using a rational division of labor to carry out the activities as specified. This perspective is typical of a developer who creates, tests, and disseminates a solution to a target population he or she perceives as a problem.

The four major activities/phases described by Guba and Clark (1965) continue with similar philosophical underpinnings:

1. Research: advance/extend knowledge.

2. Development: through invention and design to provide new solutions that could develop an innovation for adoption.

3. Diffusion: includes dissemination and demonstration to provide awareness of the innovation.

4. Adoption: includes trial, installation, and institutionalization.

Havelock's (1971) Problem-Solver Perspective discusses the use of an outside change agent to direct the receiver in solving the specific problems in a change process. He notes that of the three schools of thought regarding the change process (i.e., social

interaction; research, development, and diffusion; and problem-solving), there were deficiencies. Using what he called "linkage," he developed a change model that need not require initial use of a specific innovation. Linkage models were developed to: emphasize the skill development of users as problem-solvers, involve external agents to establish collaborative relationships within the organizational structure or provide communication patterns pertinent (or not) to a specific innovation. In effect, linkage was considered responsible for expanding problem-solving capabilities by bringing outside resources as a solution to problems.

Similar to Havelock, Hall and Hord (1984) describe nine phases of the change process accordingly:

1. Research: The suggestion is made from qualitative and quantitative research findings that certain practices or materials (i.e., innovation), underused or unidentified in the past, will be more effective.

2. Development: To achieve a specific objective, new approaches or materials are created, packaged, and evaluated regarding the innovation.

3. Diffusion: Awareness and use of an innovation is naturally spread across a social system.

4. Dissemination: Encouragement for adopting an innovation through deliberate marketing procedures.

5. Adoption: Selection of an innovation and commitment to implementation as a result of the decision making process or, conversely, the decision point that leads to it.

6. Implementation: The early (initial) use of an innovation involving negotiation between the user system and the innovation to arrive at an amicable match.

7. Institutionalization: Routine use of the innovation in a state of equilibrium through incorporation.

8. Refinement: Maximize innovation outcomes at the local setting through a fine tuning process.

9. Abandonment: Discontinue use of innovation (Hall & Hord, 1984, p. 331).

Johnson (1976), in his study of the change process, resistance to change, the elementary school principal's role in the change process, and the task of an internal change agent, used Lewin's (1948) basic model for

change: unfreezing, moving, and refreezing.   It

supported Havelock's (1971) model ideology that all

individuals involved in the change process should

participate in collective decision making in order to

achieve an element of personal acceptance.

Change is said to be carried out by individuals,

who react in different ways as growth is realized in the

process according to operational aspects: how or what

it means to them and their educational practices;

changes required in behavior, beliefs, values regarding

self (and others).   As the focus of the facilitation

centers on individuals (and innovations and contexts),

interventions taken by facilitators should address the

following forces that can impact resistance to the

improvement efforts: technical, political, and cultural

(Tichy, 1983; Sergiovanni, 1984; Rossman et al., 1988).

The following is offered as a framework designed as

a vehicle to view critical elements involved in change

implementation in schools:

1.   Technical.   In order to ensure optimal

effectiveness, the leader/change agent makes provisions

for obtaining the necessary knowledge and technical

assistance (includes education, research and development) through planning, organization, coordination of programs, practices, and processes that will achieve the identified goals. The effective change facilitator would cover the following six points of innovation implementation intervention (known in the Concerns-Based Adoption Model as "Game Plan Components"):

*Developing supportive organizational arrangements (i.e., scheduling, staffing, restructuring roles, providing materials, space, equipment)

*Providing training (i.e., increase knowledge, hold workshops, model/demonstrate innovation)

*Consultation and reinforcement (i.e., encourage individuals, coach, share tips, facilitate change attempts, celebrate success)

*Monitoring (i.e., gather data; assess innovation knowledge, skills; analyze, interpret, evaluate, share data regarding outcomes)

*External communication (i.e., give

description of innovation to others, make

presentations, hold conferences with public

relations groups to gain support of

constituency)

*Dissemination (i.e., provide information

regarding innovation to encourage others,

mail brochures, provide demonstrations,

train others, market the innovation)

(Hall & Hord, 1984; ASCD, 1987, p. 75)

2. Political. The use of power helps shape new

programs, practices, or processes (i.e., innovations).

Politics has been defined by Brewer and DeLeon (1983) as

"a process by which emotional consensus is sought and

sustained" (p. 183). Elements of politics may involve

activities that include conflict, coalitions,

negotiations, and power struggles, but the emphasis here

is on building and maintaining morale. Although subject

to debate in the literature, this holds promise as

people participate in the school's decision making

practices. Through the support and encouragement of the

change agent, participation in decisions allows for

growth opportunities and a sense of ownership in the human organization of the school as its goals, mission, and vision are collaboratively/cooperatively articulated (Fullan, 1982; Lindelow et al., 1985).

3. Cultural. The school's uniqueness is determined by its inherent values, beliefs, and standards. Symbolism, legacy building, socializing new members, etc. are aspects of what defines one's own identifiable, unique culture. The way workers believe in the work of their school is closely tied to that school's cultural force (Sarason, 1982; Rossman et al., 1988). Leaders can play a key role in this "constructed reality" (Sergiovanni, 1984, p. 8). The term, "purposing," is used by Sergiovanni (1984, p. 8) to indicate clarity, commitment, and consensus pertaining to the basic purposes of the school. He also notes that the leader is responsible for communicating the importance of meaning and rallying support for a common cause or innovation through "stirring of the human consciousness, the integration and enhancing of meaning, the articulation of key cultural strands that identify the substance of a school, and the linking of persons

involved in the school's activities to them" (p. 8).

Successful schools have been identified as those

possessing "strong and functional cultures aligned with

a vision of excellence in schooling" (Sergiovanni, 1984,

p. 8).

Additional considerations to reduce ethical

dilemmas in an organization have been offered by

Blanchard and Peale (1988) through the use of the leader

asking three basic questions: Is it legal? Is it

balanced? How will it make me feel about myself? (p.

xiii). Although these ethical questions are not

all-inclusive, it does provide a basis for reflection.

Keeping this in mind, leaders introducing change need to

be prepared for resistance by understanding the

complexities involved with the change process

(initiation, implementation, continuation, outcomes) and

meet the perceived needs with interventions (political,

technical, cultural) for success accordingly.

As Becker (1979) has noted, individuals view the

need for change and related issues according to their

unique perspectives. Rather than experimenting with

innovations, most people feel more comfortable with the

status quo. Becker likens individuals' resistance to change to organizations. But, as Sexton (1975) pointed out, managers of change have the potential to achieve these three important objectives in conjunction with understanding how change works: knowledge of people's willingness to accept or reject change; apply that knowledge in order to take action to minimize resistance and maximize acceptance; and be proactive, rather than reactive, with resistance strategy development.

Concerns Theory

In order to comprehend the individual concerns of the elementary school principals who are involved in the process of implementing participative decision making in their schools, it is necessary to have an understanding of the origins of the centerpiece Stages of Concern Questionnaire (and Demographic Survey Instrument). Concerns Theory, as it applies to the Stages of Concern in this section, provides information regarding the Concerns-Based Adoption Model (C-BAM). Federally funded by the National Institute of Education, the studies were conducted by the Procedures for Adopting Educational Innovations Project at the University of Texas at Austin

Research and Development Center for Teacher Education
(R&DCTE). The model was developed as a result of the
authors' experiences in a variety of settings: colleges
and universities, public schools, and industry, for the
purpose of assisting others in the innovation adoption
process (Hall et al., 1973).

C-BAM was based on the pioneering 1960s research
developed by Dr. Frances Fuller (1969). As a counseling
psychologist, Fuller proposed a developmental
conceptualization of teachers' concerns based on her
series of student teacher group counseling sessions and
longitudinal in-depth interviews. Her study of concerns
revealed an identification of a developmental sequence
indicative of a dependable pattern that noted
prospective and inservice teacher concerns on a
continuum. The range of concerns included self, to task
concerns about teaching, to concerns
about impact on students (Hall et al., 1973).

> The concerns hypothesis makes this statement:
> When an individual encounters a new situation
> that requires interaction with others, his
> behavior is initially governed by concerns

about himself and the demands that the

situation makes upon him. As these self

concerns become resolved, the individual

moves to concerns focusing on the nature of

the task and on the quality of task performance.

Ultimately, the individual becomes concerned

about the impact he is making upon others and

strives to optimize his efforts for others (p. 6).

Fuller's three stages of concern included:

preteaching phase (non-concern); early teaching phase

(concerns with self); and late concerns (concerns with

pupils). Using these concerns for a proposed model for

personalized teacher education, the dynamics of

teachers' concerns and assessment, arousal, and

resolution were further pursued (Fuller, 1975).

Generalization of Fuller's developmental

conceptualization of concerns and their sequence to the

innovation adoption process has been hypothesized by

Hall, Wallace, and Dossett (1973), who indicated that

their experience supported "that the same or similar

concerns phenomena do indeed occur in the adoption

process" (p. 6). Further, they hold that the concerns

experienced are indicators of the needs of an adopter

and they can provide insights about diagnosis and

prescription for intervention. To that end, they note,

change agents aware of expressed self-concerns can take

the necessary action (i.e., initiating training or

consultation) to resolve self-concerns. Effective use

of an innovation becomes more likely as the person is

facilitated through the developmental sequence from

self, to task, to impact concerns (Hall et al., 1973, p.

6).

According to Hall et al. (1980), the development of

the Concerns-Based Adoption Model (C-BAM) was to provide

"a means to understand and describe innovation adoption

and implementation" (p. 3). The use of the term

"adoption," stipulated by the University of Texas at

Austin Research and Development Center for Teacher

Education C-BAM project, is admittedly unlike others in

the literature who have labeled it as a process of

deciding to use an innovation (e.g., Rogers & Shoemaker,

1971). Adoption, as defined by the R&DCTE project:

  goes far beyond the initial decision to adopt;

  it closely parallels the Clark-Guba phases of

trial, installation, and institutionalization.

Adoption, as it is used here, involves the

multitude of activities, decisions, and

evaluations that encompass the broad effort to

successfully integrate an innovation into the

functional structure of a formal organization

such as a school, a college, or an industrial

organization (Hall et al., 1973, p. 5).

Accordingly, the evolved "implementation" phase

becomes involved with the use of the innovation and the

evaluation process which is done as a diagnostic tool

investigates individuals' concerns about an innovation.

In this study, the Stages of Concern Questionnaire was

the major diagnostic tool. An overview of the basic

elements of the C-BAM will be reviewed in the following.

The two C-BAM instruments, Stages of Concern

Questionnaire (SoCQ) and Levels of Use Interview (LoU),

were developed to test two hypotheses. The hypotheses

asserted that innovation adoption is: (1) primarily an

individual process experience; and that it is (2)

developmental (Hall et al., 1973). The LoU aspect

looks at how a particular innovation is actually being

used, while the SoCQ looks at individuals' concerns

regarding the adoption of a specific innovation.

Hall and Loucks researched innovation

configurations (IC) extensively (see, for example, Hall

& Loucks, 1977; Hall, 1977; Hall & Loucks, 1978). The

term, innovation configurations, refers to what people

are actually doing when a particular innovation is used

or implemented. The research by Loucks and Hall

indicated that the implementation process may vary from

individual to individual. The researchers developed a

method to aid the conceptualization and monitoring

process of a particular innovation configuration as

people perceive and implement it over time (Hall &

Loucks, 1978).

In addition to the mentioned diagnostic tools, the

C-BAM developments further proposed that managers of

change could develop a prescription for interventions as

needed to facilitate the change effort. Known as

Taxonomy of Interventions, there have been six levels

identified:

1. Policy: rules or regulations that direct

procedures and actions of an organization.

2. Game Plan Components (GPC): the checklist of suggested change facilitator actions to support change cover six distinct categories for intervention: developing supportive organizational arrangements, training, consultation and reinforcement, monitoring, external communication, and dissemination.

3. Strategy: framework for action, translates the game plan design into concrete action.

4. Tactic: operationalizes the strategy to affect attitudes regarding innovation usage.

5. Incident: is a singular occurrence or event that usually covers small amounts of time and can be targeted at one or more individuals.

6. Theme: is a set of repeated actions that accumulate an effect to produce unexpected effects on an innovation. This is the only one of the six that is unplanned in nature (Hall, Zigarmi, & Hord, 1979).

The R&DCTE team was given the opportunity to study how schools could undertake improving in a successful manner. The assumptions of the research, as developed in the C-BAM are:

1. Change is a _process_, not an event.

2. Change is accomplished by _individuals_ first,
then institutions.

3. Change is a _highly personalized experience_.

4. Change involves developmental growth in both
feelings about and skills in using an innovation.

5. Change is best understood in _operational
terms_.

6. The _focus of facilitation should be on
individuals, innovations, and the context_ (ASCD, 1987,
pp. 5-7).

Concerns, as treated in this study, have been
described as "the composite representation of the
feelings, preoccupation, thought, and consideration
given to a particular issue or task" (Hall et al., 1986,
p. 5). This investigation's intent has been to diagnose
baseline (as it is a _process_, not an event) intensity of
concerns of _individuals_ (elementary school principals),
according to his/her perceptions (_highly
personalized experience_), noting a number of elements
(_feelings about and skills in using an innovation_) that
include personal, task, and impact dimensions

(operational terms) regarding the principal's role in
the implementation of participative decision making with
teachers in his/her school (focusing facilitation on
individuals, innovations, and context) using the Stages
of Concern Questionnaire. Susan Loucks-Horsley (1990)
has indicated that effective implementation of a change
process would be more likely as intensity of concerns
are recognized and reduced/resolved in the early
("Awareness," "Informational," "Personal," and
"Management") stages.

Participative Decision Making

This section provides information pertaining to the
multidimensional aspects of participative decision
making in education, as defined in the literature,
followed by an examination of studies related to
participative decision making in educational settings.

A Conceptualization of Participative Decision Making

Mohrman et al. (1978) made references to vertical and
horizontal illustrations of participatory decision
making. The vertical dimension has been described as
hierarchical in nature, determining who participates in
decision making according to the organization's

bureaucratic structure. Horizontal aspects have been
referred to as that which considers the content or
decision domains or dimensions.

Conway (1984) provided a conceptual framework for
further viewing the multidimensional aspects of
participative decision making. He noted that the
participative decision making term has two sets of
concepts associated with it: (1) participation (an
action or matter shared by two or more actors), and (2)
decision making (a process where a choice is determined
by one or more actors). He has identified internal
participative decision making as involving
"administrators with teachers and/or students," (p. 19);
external participative decision making "where
administrators participate with the citizenry of the
community" (p. 19). The latter would address issues
that would not be pertinent for this study and, thus,
will be excluded from further review.

The variations of participative decision making
noted in educational systems were further expanded in
Conway's (1984) research providing these descriptors
associated with the participative format: mandated

versus voluntary, formal versus informal, direct versus
indirect. He continues to elaborate on the qualities of
the participative decision making process noting these
three aspects:

1. Degree. The degree of participation
   is variously identified and measured.
   Typically the degree goes from no
   participation through those states
   where the subordinates are queried,
   consulted, or their decisions are
   vetoed or accepted to full participation
   as equals in the choice process.

2. Content. The content of decisions for
   participation by those internal to the
   system might be considered in three
   basic areas: (1) those concerned with
   the maintenance of the organization,
   (2) those of a personal nature, and (3)
   those associated with professional work.

3. Scope. The scope of participative
   decision making involves the participant

powers or the stage of the decision

process itself (Conway, 1984, p. 20).

Belasco and Alutto (1973) have identified three

conditions relative to the aspect of degree of

participative decision making: (1) deprivation (not

enough involvement), (2) saturation (overly

involved--but rarely found in the research data), and

(3) equilibrium.

Likert's (1967) view of the organization's

classification exemplifies a perspective regarding the

degree of participation. Based on Likert's "System

Four for Participative Management" model, the

classification of systems include: (1) exploitive,

authoritarian model; (2) benevolent, authoritarian

model; (3) consultative model; and (4) participative,

goal directed model. Accordingly, the principal

dictates the management style that would indicate the

level of involvement in decision making.

The terms "zone of indifference" (Barnard, 1968, p.

168) and "zone of acceptance" (Simon, 1965, p. 133) have

been used in reference to the content aspect of

participative decision making. Bridges (1967) extended

the discussion of Simon's (1965) model to an educational
perspective. Basically, the model by Simon (1965) asks
these two questions: (1) Is the issue relevant to
others in the organization? and (2) Do others in the
organization have expertise to deal with the issue? The
willingness of subordinates to accept the leader's
decision without their input is found if there is a
negative answer to both questions, the zone of
acceptance to omit the involvement of others in the
decision. Conversely, if both questions are answered in
the affirmative, active involvement in the decision
would be indicated.

According to Simon (1965) identifying participants'
zones is important due to the impact on their
satisfaction and, thus, the effectiveness of the
decisional process. Further, the test of relevancy and
the test of expertise must be carefully considered by
the leader of an organization trying to determine whom
to involve and when to involve them (Sharman, 1984).

The degree and scope of participative decision
making has been described by Lowell (1972) and Schmuck
et al. (1977) as involving participant powers at certain

stages in these modes: consensus (members share power equally), majority vote (overruling a minority), and centralist (decision made by the leader after consultation). The principal's leadership style is a major determiner of the extent or type of decisions made in his or her school.

Montello and Wimberly (1975) have discussed management systems in education. They described decision making as "deciding what is going to be done in order to attain goals; a part of planning" (Montello & Wimberly, 1975, p. 11). In education, the basic elements of planning, when combined with theories and strategies of change, facilitate the decision making process of an organization. Two types of planning--strategic (long term direction ensuring that the organization fulfills its objectives regarding missions, goals, change, development) and operational (to ensure that resources are being utilized in an optimal manner regarding operations, performance, results)--allow an organization to justify its existence, and maintain its right to continue to operate (Cunningham, 1982; Bennis & Nanus, 1985). Strategic planning has been described as

leadership directed to insure that an organization is "doing the right things" (Cunningham, 1982, p. 12). Operational planning has focused on the organization's ability of "doing things right" (Cunningham, 1982, p. 12). Strategic and operational planning are directed at external and internal organizational aspects, respectively, and involve decision making.

The effective leader considers all of the above variables when approaching implementation of an innovation such as participative decision making with teachers in his or her school. The next section reviews the research that describes the findings of a variety of studies involving various aspects of participative decision making in schools.

Overview of Studies

Although the admission is made that there have been studies to dispute the pervasive benefits of participative decision making in educational settings (for example, Oncken, 1971; Barrington & Marshall, 1975; Sorensen & Baum, 1977; Dachler & Wilpert, 1978; Conway, 1984; Imber & Duke, 1984; High & Achilles, 1986), the majority of research appears to (contingently)

defend the benefits of participation in decision

making (for example, Belasco & Alutto, 1973; Mohrman

et al., 1978; Locke & Schweiger, 1979; Likert & Likert,

1980; Cunningham, 1982; Lindelow et al., 1985; Rice,

1987; Conley et al., 1989; Crandall, 1989; Brandt, 1990;

Conley & Bacharach, 1990; David, 1990; Taylor & Levine,

1991). The following studies are presented to support

the contention that the empowerment of teachers, through

appropriate and meaningful participation in school

decision making practices, has shown to be beneficial to

the effectiveness of the organization. Leadership

styles, amount and extent of involvement, types of

decisions, and forms of participative decision making

are aspects covered in the proceeding studies.

A recent national survey, published by the Carnegie

Foundation for the Advancement of Teaching (1988), has

taken a close look at the interior of the teaching

profession. Considered the most comprehensive survey of

American teachers ever conducted (22,000 responded), the

questions focused on students, working conditions, and

participation in decision making. It was noted that

"one of the most important indicators of the condition

of teaching is the degree to which teachers participate
in key decisions affecting their work" (p. 79). The
decisional areas identified in the survey included:

*choosing textbooks and instructional

materials;

*shaping the curriculum;

*setting standards for student behavior;

*deciding whether students are tracked

into special classes;

*designing staff development and

in-service programs;

*setting promotion and retention policies;

*deciding school budgets;

*evaluating teacher performance;

*selecting new teachers; and

*selecting new administrators

(Carnegie, 1988).

Although the most heavily involved areas of decision
making were choosing textbooks and instructional
materials and shaping the curriculum, the level of
involvement decreased dramatically progressing down the
list of items. Paine's (1990) study on the behaviors of

southeastern Massachusetts principals regarding evidence

of teacher empowering decision making practices also

appears to confirm this as it indicated that seventy-two

percent (72%) of the principals work with teachers

regarding curriculum and instructional materials

decisions; in decisional matters of standards for

students and professional standards and budget policies,

the percentage of teacher involvement falls into a range

of sixty percent (60%) or less (pp. 109-112). It was

acknowledged, however, that sixty percent (60%) to

seventy-three percent (73%) of the responding principals

involved teachers in decisions of "important issues,"

according to the principals' perceptions of teacher

expertise (Paine, 1990, p. 112).

The 1988 Appalachia Educational Laboratory's study

of six elementary schools in Virginia focused on a

project of teacher involvement in the areas of school

policies and practices. Conclusions from the study

indicated that the areas of greatest accomplishments

involved communication and school climate. Both

teachers and administrators described an increase in

their own communication skills, as well as an increase

in teacher collaboration outside of project meetings.
Teachers and administrators felt a freedom to express
their opinion as a result of the perceived open
communication. A spirit of teamwork and increased
respect for all individuals' ideas lead to a sense of
pride and efforts at school improvement. A sense of
trust and shared value structures were also observed.
Other accomplishments included "the development and
articulation of a schoolwide policy and philosophy, an
increase in professional development opportunities for
teachers, a decrease in the turnover rate among
teachers, and a decline in student discipline problems"
(Appalachia Educational Laboratory, 1988, p. 19).

In an earlier study conducted by Phi Delta Kappa
(1980), it was discovered that teachers in high
achieving elementary schools were given consideration by
their administrators, involving the teachers in a
consistent pattern of decision making, confirming
(earlier) studies by Ellett and Walberg (1979), Rudder
(1979), and Wynn (1981). A positive relationship
between staff development and student achievement was
noted in the Ellett and Walberg (1979) investigation of

teacher and student perception of school climate, as was

indicated in the Rudder (1979) study, in coherence with

the observation research by Wynn (1981).

Poindexter (1983) reported a case study of a Los

Angeles elementary school that appears to supply

additional support for raising student achievement

through school-based programs. The entire school

represented minority groups with seventy-six percent

(76%) scoring below the 50th percentile on a nationally

normed test. Until the arrival of a new principal, who

appeared to transform the school, there had been a

negative academic and social reputation schoolwide. The

cooperative efforts of the principal and teachers

designed and put into place these improvement programs

to uplift the school environment: discipline

improvement, instruction management improvement, and

staff development. As the programs were implemented

significant increases in student achievement scores were

realized and classroom teaching methods took on more

sophistication and pride.

Rensis Likert, called the "father of participative

management" (Cunningham, 1982, p. 275), and Jane Likert

(1980) have summarized research related to how schools run more smoothly when participative leadership-- enabling participative decision making--is in place. According to the studies of twenty school districts in Michigan, the prevelance of Likert's System Four (participative, goal directed) model was a significant factor in schools never having a strike. Where there were work stoppages, Likert and Likert (1980) noted, teacher frustration was a major factor; "this frustration was measured by the differences between the expectations of being involved in decisions affecting them and their actual experience" (Likert & Likert, 1980, p. 55).

Further studies of sixty-seven schools in New York yielded these results: teachers were apt to be less militant the more they perceived their school administration as indicative of a System Four model (Likert & Likert, 1980). Another study of six school districts in California presented evidence to suggest that schools identifying with the System Four model increased the motivation of teachers and students, reduced the level of frustration with the decision

making process, improved communication within the school and noted a sense of pervasive confidence and trust among all involved (Likert & Likert, 1980).

The relationship between teacher involvement in decision making and loyalty to principals was studied by Johnson and Germinarro (1985). In an investigation of ten elementary schools and five secondary schools in New Jersey, the researchers found that the highest degree of loyalty to principals was exhibited by teachers who perceived that their principals provided them access to decision making in areas closely associated to areas of instruction. An earlier related study was reported by Devlin (1980). The study of 315 teachers suggested that when teachers hold the perception that the subject matter being considered is of importance to them, participatory decision making is related significantly to favorable job attitudes.

A case study reported by Martin and Saif (1984) noted the key to successful reform as a broad-based, systematic decision making project lead by teachers. Former approaches found commonly in curriculum development had been haphazard, tending to produce only

superficial change. However, the approach that gives teachers a professional stake in its results were found to generate fundamental and lasting reforms. It was also noted that over-involvement of individuals in decision making has been claimed (as indicated by past researchers) as resulting in a decrease in job satisfaction.

Studies done by Belasco and Alutto (1973) have concentrated on teachers' actual and desired degree of participation in decision making as it impacted teacher satisfaction. Three conditions were identified: (1) deprivation (not enough involvement); (2) saturation (overly involved--but rarely found in research data); and (3) equilibrium (neither too little nor too much). The data suggested that those considered to be in a state of equilibrium were most satisfied; those experiencing deprivation and saturation were less satisfied. Thus, simply increasing teachers' participation in the area of decision making would not increase the level of satisfaction, rather, the right amount of participation should be taken into

consideration, according to the study (Belasco & Alutto, 1973).

A synthesis of three studies by Thierbach (1985), covering kindergarten through grade 12, tested the curvilinear relationship between teacher involvement in decision making and job satisfaction. According to the results, a point of saturation had not been reached, indicating that the administrators would have an element of latitude in which to increase teacher participation in decision making before evidence of job dissatisfaction appeared.

An analysis of 42 elementary and 45 secondary schools in New York was done by Conley et al. (1989). The data suggested that improving the design of teachers' jobs, as well as the managerial structures of the schools, are critical in enhancing the motivation and retention of teachers. They make the statement that, "If we are going to be concerned with the impact of reform efforts on the satisfaction of teachers with their careers, we should proceed cautiously, being specific and strategic about the changes we make" (p. 76).

In addition to the amount of participation in
decision making, teachers have expressed interest in the
type of decisions in which they are involved. Studies
by Mohrman et al. (1978) described two domain types
regarding education-related decisions: technical
(teaching or instructional process) and managerial
(relating to the support function). According to the
authors, "by empirically distinguishing between
participation in managerial decisions and technical
decisions, it was illustrated that participation in
these domains was differentially associated with job
satisfaction and role ambiguity. Specifically,
satisfaction and role ambiguity felt by teachers are
associated only with their participation in technical
decisions" (Mohrman et al., 1978, p. 25).

A previous study by Robinson (1976) reported on the
investigation of 30 principals and 675 teachers from a
large suburban Vancouver, British Columbia school
district. The inquiry involved elementary and secondary
schools. Analysis of the data indicated that preferred
levels of teacher participation in decision making are
greater than actual levels of decision making. Although

the desire teachers expressed for involvement varied
with the decisional area, the suggestion was made by the
author that the data analysis indicated greater teacher
satisfaction and organizational productivity could be
realized as more collegial decision making systems were
introduced in schools.

The role of collegial decision making was studied
by Huberman and Miles (1982) regarding the adoption of
innovations in schools. The purpose of their study was
to determine the extent of program implementation and
the effects the innovations had on the schools. In the
sample, in terms of outcomes attainment and relative
smoothness of project implementation, it was found that
75% of the schools had the most successful projects
where school level practitioners were the prime
participants in the adoption process.

The forms of participative decision making process
described by Lowell (1972) were consensus, majority
vote, and centralist. His study revealed teachers'
need to be offered the right forms of participation. He
found the highest level of satisfaction for group
solutions was with consensus group members. The

communication was considered more open and the
involvement of all members as equals was a highly valued
aspect. Satisfaction was expressed from members working
in centralist groups apparently because the group leader
chose to share power with the group to collaborate on a
solution through informal approval by group members.
The centralist method was similar to consensus in that
the group members have the perception that through their
freedom to participate, they are helping to move toward
a solution (Lowell, 1972).

The least successful of the three forms of
participatory decision making, majority-vote, revealed
member dissatisfaction due to the undesired solutions
reached by the group and their unfavorable perceptions
of their process of decision making. The majority-vote
group had a competitive atmosphere and poor
communication because of ineffective group function
techniques (Lowell, 1972).

Research results presented by Kunz and Hoy (1976)
indicated support for the proposition that strong
leaders who demonstrated as being high in initiating

structures were likely to have teachers possessing a
broad zone of acceptance.

According to research studies on school-based
management and related practices, these conclusions have
been presented by David (1990):

*School faculties make different

decisions about elements of staffing,

schedules, and curriculum when they are

given actual control over their budgets

and relief from restrictions.

*Teachers report increased job

satisfaction and feelings of

professionalism when the extra time

and energy demanded by planning and

decision making are balanced by real

authority; conversely, marginal authority

coupled with requirements for site councils,

plans, and reports results in frustration.

*The leadership, culture, and support of the

district have a far greater impact on the

success of school-based management than

its operational details (p. 50).

David (1990) has stated that "implementing school-based management involves a lot of pieces and takes a long time, from five to ten years; it is premature to pass final judgment on districts in the early stages" (p. 50). Because change takes time, research continues to be collected as many other restructuring projects (which include teacher participative decision making as a integral component) are in progress. Examples of major efforts include:

*American Federation of Teachers.

Centers for Restructuring are examining

the traditional schools' assumptions and

assist reform initiatives of local members.

*Association for Supervision and Curriculum

Development.

Consortium on Restructuring.

The 18 schools selected will develop a

restructured organization and curriculum.

*National Education Association.

Mastery in Learning Project.

The program was intended to develop a   '

national network of 26 schools modeling

ways to empower teachers. The school-

based improvement effort has sought to

help administrators and teachers

become professional collaborators,

changing the way decisions are made in

schools.

*National Governors' Association.

Restructuring Schools Project.

Assists states interested in redesigning

their school systems as per the NGA

recommendations in Time for Results:

The Governors' 1991 Report on Education

and the Carnegie Task Force report,

A Nation Prepared. Known as

"Carnegie Schools," the more famous

include these schools: Cincinnati, OH;

Dade County, FL; Hammond, IN; Toledo, OH;

Rochester, NY; Scarsdale, NY; and

Cerritos, CA ("Showing the Way," 1988;

"Shared Leadership," 1989).

*Harvard's Graduate School of Education

has developed a vehicle for discussing

and disseminating successful projects
involved with shared decision making
through the Teachers' Network ("What's
New," 1990).

According to the research reviewed, effective
school leaders should take into consideration the
various forms of participation in decision making.
After considering such variables as situational
leadership styles, "who should be involved, their
optimum level of involvement, what will be decided, and
how it will be decided" (Lindelow et al., 1985, p. 168),
leaders should then communicate to the group the design
of decision-making process. "When used in this way,
participative decision making can be one of the most
effective techniques a leader can use to motivate others
to strive willingly for group goals" (Lindelow et al.,
1985, p. 168).

Summary of the Reviewed Research

As our history has indicated, the very basis of the American Revolution ideology involved this motto: No taxation without representation (Newell, 1978, p. 138). Yet in many American schools, according to the research presented (for example, the 1988 survey by the Carnegie Foundation for the Advancement of Teaching; Paine, 1990), this aspect of representation in the area of participative decision making (PDM) has not been widespread.

Although meaningful participative decision making practice, according to the noted literature findings, appears to be a highly desirable goal for the professionalization and empowerment of teachers, there is research that indicates barriers involved with attempts for its adoption and implementation. PDM has multidimensional aspects to be considered and caution must be taken as other factors hindering the goal of teacher empowerment involve two major categories to be addressed: teacher resistance and administrative resistance.

Teacher Resistance

Overcoming the crisis of confidence in a group of
people who have been demoralized is a challenge noted by
Maeroff (1988). There has been a reticence toward
empowerment because, as Little et al. (1984) noted,
teachers have been reluctant to assert themselves on
matters of (e.g.) curriculum and instruction. Their
advice on such matters has not been highly prized,
therefore teachers have not been perceived by themselves
and others as equipped to assume expanded
responsibilities for the school (save their given number
of student charges). It is interesting to note that the
morale of teachers surveyed by the Carnegie Foundation
(1988) has not shown any signs of improvement since
1983, when the school reform movement gained momentum.

Although the major teacher organizations (National
Education Association and American Federation of
Teachers) sanctioned the second wave empowerment
movement, local unions have often presented constraints,
hindering progress. Change will necessarily disrupt the
status quo, as concessions are sought in the process.
Local bargaining units have taken a toll on advancing

the profession as a lack of long term vision has been replaced with myopic "rights" and "benefits."

Concerns have surfaced on the part of teachers regarding the sincerity of administrators who are serious about empowering their teachers. Kent (1986) has indicated that teachers are concerned that their administrators merely give "lip service" to the idea. Wood (1984) states:

> ...frequently the attitudes and values espoused by superordinates are very different from the behaviors, structures, and processes they actually use in the decision making or problem solving enterprises. Many tend to embrace and wholeheartedly endorse the idea of participation; however, they experience a great deal of difficulty behaving in ways which encourage their subordinates to participate actively in the decision-making process (p. 57-58).

Teachers must have clout if they are going to have accountability, according to Patterson et al. (1986).

As teachers enter into the decision making process,
authority to implement the decisions in which they have
participated is crucial. Otherwise, the exercise will
be one of futility, keeping the war of the teachers
against bureaucracy ongoing.

Cultural factors within a school have the potential
to hold back efforts for professionalization if the
shared beliefs and values are not in congruence (Rossman
et al., 1988). Fear of empowerment found in the
attitudes of teachers need to be addressed. Teachers
will necessarily be expected to accept responsibilities
that transcend their immediate classroom as they are
brought into their school's decision making process
(Kent, 1985; Rodriguez, 1986). Showers (1985) has
indicated that although the process may be uncomfortable
at first, teachers must be willing to trade their
longheld isolationism for more meaningful collegial
relationships. Thus, the organizational culture is a
major force to be considered in any attempt for planned
change.

Administrative Resistance

School committees and superintendents averse to the promotion of teacher empowerment ideals may place the principal into a forced state of resistance. Thus, the support of the central office is a major consideration to be reckoned with if teacher empowerment is to be successful.

Rogers and Shoemaker (1971) have indicated that innovativeness is an individual personality characteristic. Based on a normally distributed construct, they identify innovator-adopter categories accordingly: innovators (2.5 percent of total population), early adopters (13.5 percent), early majority (34 percent), late majority (34 percent), and laggards (16 percent). Participative decision making, as an innovation (i.e., new ideas or new practices), can be subject to risk at the adoption phase by administrators who are resistant to change, falling into the laggard category.

An autocratic leadership style runs counter to teacher empowerment. Further, administrators viewing

their own "power" as a limited quantity are reluctant to
relinquish or share it. Many are unable to visualize
the positive overall impact of empowering and enabling
teachers through participative decision making (Kouzes,
1987). The Carnegie (1988) survey noted that the more
distant the administrator is from the teacher, the less
favorably he or she is rated.

As administrators infantilize their teachers (seen
most frequently in elementary schools), they treat them
as though they are not mature enough to make decisions
(Damerell, 1985; Maeroff, 1988). However, policies for
participation not cooperatively developed by teachers
and administrators run the risk of communicating a
unilateral position (as is often the case in many
"participative" decision making committee operations in
schools), rather than a shared ideology.

It is suggested by Morphet, Jesser, and Ludha
(1972) that educational changes will occur with or
without planning. Ideally, they contend, desirable
educational changes must be made to happen.
Anticipative administrators who adjust for problems can
facilitate the process for needed change as they prepare

and enable, through the implementation of appropriate

procedures, those seeking decision making roles. Tanner

and Williams (1981) contend "that an administrative-

planning position is an ideal place to maximize power to

effect change and to minimize the practice for the sake

of planning" (p. 23).

Planned change, such as teacher empowerment,

requires multidimensional leadership skills for an

optimal outcome to be realized. If a leader

(specifically, the building principal) does not exhibit

proficiencies in cultural, political, technical

(including educational), and ethical areas, as well as

the change process itself, the possibility for success

is unlikely (for example, Sergiovanni, 1984).

Fear of competition and conflict, lack of trust,

and misgivings about abilities are mutually found in

teachers and administrators, coupled with concerns about

budgetary restrictions. Strategies for developing

teachers for professionalization will, therefore,

necessarily require skill and commitment as principals

are viewed as the instrumental facilitator (Barth,

1988). Timar (1989) contends that principals and

teachers need to be "trained and socialized to assume
different responsibilities" (p. 275), in order for
restructuring to succeed. Principals can facilitate the
process by preparing staffs for opportunity and
commitment to change.

The strategies for principal-led change have been
previously outlined in this chapter as a framework for
viewing planned change. The structure encompassed these
aspects: cultural, technical (including educational),
political, and ethical and the leader progresses through
the change process from initiation to implementation to
continuation/institutionalization to the realized
outcome/internalization.

Due to the multidimensional nature of participative
decision making, leaders would be well advised to
consider all elements (i.e., format, degree, content,
scope), as presented in an earlier section, in order to
maximize the potential benefits to their particular
organization. In light of the current educational
research regarding second wave calls for restructuring,
effective change for school improvement will be more
likely realized as teachers are empowered, particularly

in the area of meaningful participative decision making.
The calls of second wave educational reform have
targeted teachers as a crucial factor, as their voice is
sought in the collectively articulated mission, goals,
objectives, purpose, etc., of the school.

Teachers have been given a charge of responsibility
for what has been considered a challenging role in
today's society. They do not, however, enjoy the
respect or the authority to carry out the expectations
of the job. Maeroff (1988) has regarded the teachers'
role as an all-important aspect for school improvement,
particularly as they are empowered. He notes the reason
accordingly:

> Unless teachers are treated with humaneness
> and dignity, the education of children
> cannot fulfill its potential. In part,
> taking greater regard of teachers and what
> they have to say means enhancing their role.
> Knowledgeable teachers who act as
> professionals can improve the education of
> their students (p. xiii).

But knowledgeable teachers require methods for attaining

and sharing knowledge in order to be equipped for

professional roles, such as participative decision

making.

Chall (1986) noted that during the 1920s and 1930s,

teachers were actively involved in the research process

as they collaborated with colleges and universities.

This scholarly characterization began to diminish during

the 1940s and 1950s. University-based emphasis came in

the 1960s and 1970s as the teachers' role became one of

a consumer of knowledge presented by the institutions of

higher education. Isolation gradually replaced

collaboration as teachers went behind their closed

classroom doors.

As we review the 1980s and look to the approaching

1990s, there appears to be a need to address the lack of

the teachers' intellectual growth, especially if

teachers are to become partners in responsible, informed

decision making. As teaching becomes more complex in

our "Information Age" (Naisbitt, 1984), so too are the

frustrations, according to the respondents in the

Carnegie (1988) survey. There is a feeling of

powerlessness and isolation as decisions are being made

without their input regarding teacher evaluation, staff

development, school budgets, student promotion and

retention policies, and teacher and administrator

selection. Although it was noted that a majority of

teachers surveyed participated in textbook and

curriculum decisions, policies involving staff and

students were areas where teachers felt a need for

greater involvement (Carnegie, 1988). Paine's (1990)

research noted the lack of pervasive teacher involvement

in any other areas of decision making, according to her

study of a sample of southeastern Massachusetts

principals.

The call of the second wave of educational

restructuring has been made for teachers to assume a

role of professionalism. Maeroff (1988) notes that:

> Change is in the air. A Nation at Risk
>
> opened a door to reform that long had
>
> been jammed shut. The report of the
>
> Holmes Group showed that there were
>
> leading educators who believed that the
>
> time was right to embark on a fresh road

for preparing teachers who would expect
no less than other professionals to
share power in the workplace. The
report of the Carnegie Forum's Task
Force provided--if not a blueprint--
at least a starting point for discussions
about how to professionalize teaching
(p. xiv).

An injection of new life into teaching has been
proposed in the tenets of teacher empowerment as an
awareness of the professional deprivations of the past
is being replaced with a hope to satisfy previously
unmet needs. Both of the major teacher organizations,
the National Educational Association and the American
Federation of Teachers, have spoken out in favor of
professionally developing the role of teachers,
acknowledging that working conditions will have to
change (Futrell, 1988; Shanker, 1988, 1990; Wise, 1990).
Part of the change process is to enhance teachers
professionally, including considerations of skills,
abilities, and practices. University affiliation has
been given attention as a way of augmenting needs on a

mutual basis as skill, knowledge, and practices are
shared. As teachers gain confidence in a workplace that
will strengthen and highlight their role as a competent
teacher, the potential for positive collegial
atmospheres enhancing the school climate could prevail.
Toward that end, teacher isolation could be replaced
with teacher autonomy as these areas are expanded:
subject matter knowledge, systematic knowledge of
teaching, and reflective practical experience (Holmes
Group, 1986).

Maeroff (1988) notes that the crisis of confidence
(i.e., confidence pertaining to how teachers feel about
themselves, as well as the perceptions of how others
view them) prevalent in many teachers today can be
overcome through the confidence of knowing. This would
occur through methods that would introduce new insights
and information, allow for knowledge utilization and
encouragement, develop collegial/contagious enthusiasm,
and assist implementation processes for continuous
knowledge renewal. In the Carnegie (1988) survey, the
most favorable rating, an astounding ninety-one percent

(91%), involved the teachers' belief that meetings with other teachers to share problems, ideas, and materials, were most useful. Accordingly, as teachers collaborate and present themselves in a more informed manner, participation in decision making will more likely be realized within the school's culture, as teachers collectively embrace a shared vision.

According to the Carnegie (1988) survey, Massachusetts' responses to questions regarding decision making were closely aligned to the national average. However, efforts for enhancing the teachers' role as a professional (particularly regarding decision making participation) have gained momentum in Massachusetts in the wake of reports by the Carnegie Foundation (A Nation Prepared: Teachers for the 21st Century, 1986) and the Holmes Group (Tomorrow's Teachers, 1986).

Passage of Chapter 727 An Act Enhancing the Teaching Profession and Recognizing Educational Achievement, came in January 1988 as Massachusetts became a forerunner in the challenge to improve schools through the "introduced programs that would empower those most involved in school decisions--teachers,

parents, and administrators--enjoining them to use their talent, energy and expertise to design and implement programs that would lead to school improvement, namely student achievement and teacher professionalism" (Leading the Way, 1987, p. 7).

As school reform becomes more of an issue, there will be an increased need to package and market one's school. Although competition and conflict arise under such circumstances, the enthusiasm and vitality appear to be necessary in the process of change. Perhaps a transfer of the "Pygmallion effect" (Borg & Gall, 1983, p. 218) can carry to elevated teacher status as teachers are viewed in a more enhanced professional manner. Principals seeking effective school improvements are increasingly coming to realize: What better way to do this than to present one's organization as being collectively led by a group of professional individuals, knowledgeable and dedicated to the pursuit of an optimal educational environment for all involved.

This research was designed to investigate concerns of elementary school principals, identified as having initiated participative decision making in their

schools, in order to provide interesting insights that could contribute to an understanding about the meaning of implementing effective educational change. The elementary school has been of special interest due to numerous observations of principals infantilizing their elementary school teachers (Damerell, 1985; Maeroff, 1988).

Further, studies of individual schools perceived as having successfully implemented the innovation of participatory decision making could provide valuable information to others exploring PDM implementation. While it is clear that this kind of a change takes place one school at a time, and there are no set rules for PDM implementation, valuable cognitive and affective information could be gleaned as procedures (and problems) are investigated and reported. As the data have been collected, analyzed, and summarized, the additional information (to an ever-growing research knowledge base) could provide insights for school leaders developing strategies for professional development within their own organization.

CHAPTER 3

RESEARCH DESIGN AND METHODS

This chapter describes the study's research
design and methodology. The process used for sample
selection, instrumentation (including reliability and
validity), as well as procedures and timetable are
covered. The closing section provides a discussion
about the data collection and analysis procedures.

Research Design

Gay (1981) has stated the "description of the
design indicates the basic structure of the study. The
nature of the hypothesis, the variables involved, and
the constraints of the 'real world'--all contribute to
the design to be used" (p. 69). This study is primarily
descriptive in structure, with an inferential component,
designed to answer these questions: (1) What are the
perceived stages of concerns of a stratified random
sample of southeastern Massachusetts elementary school
principals toward participative decision making in their
schools? and (2) What are the significant relationships
among these elementary school principals' selected

demographic variables and intensity of concerns toward
participative decision making in their schools.

The purpose was to investigate, through the use of
the Stages of Concern Questionnaire (SoCQ) and the
Demographic Survey Instrument (DSI), the attitudes
(intensity of concerns) of these elementary school
principals toward participative decision making in their
schools. The principals were randomly selected, based
on a stratification of the seven Massachusetts
Department of Education "kind of community" descriptors,
upon being identified by their school superintendents
(see Appendix A) as having initiated participative
decision making in their schools.

The Stages of Concern Questionnaire (SoCQ) contains
thirty-five (35) items that quantitatively describe
various concerns an individual has toward change.
Respondents were asked to rate each of the items using a
seven (in addition to zero) point Likert forced choice
scale, to determine their level of intensity of
concerns. The range of the scale extends from zero (no
concern) to seven (high concern). Patton (1987) noted
that qualitative data consists of (among other things)

"direct quotations from people about their experiences, attitudes, beliefs, and thoughts" (p. 22). An open-ended question was provided at the conclusion of the SoCQ to allow for additional insights regarding principals' concerns not addressed in the SoCQ.

The Demographic Survey Instrument (DSI) provided a vehicle for obtaining further information about subjects that was used in examining relationships (as well as descriptive data) among these elementary school principals' perceived intensity of concerns toward participative decision making and these selected variables: age, level of education, number of years of experience as an administrator, number of years as principal at present school, number of teachers on staff, amount of training, and use of participative decision making practices.

Sprinthall (1987) suggests these four questions as critical to the determination of the research design:

1. What scale of measurement has been used?

2. Which hypothesis has been tested?

3. If the hypothesis of difference has been
   tested, are the samples independent or
   correlated?

4. How many sets of measures are involved
   (p. 373, 374)?

In responding to the above, and subsequent to
consultations with the SoCQ statistician Dr. Archie
George (1991), the following answers are offered:

1. The scale of measurement used in this study
included interval data. Scores from the SoCQ raw data
were converted to percentiles (derived scores).

2. The hypothesis of association was tested using
the Pearson r, based on .05 level of significance.

3. The hypothesis of difference was not tested.

4. Descriptive statistics provided mean, range,
and standard deviation and inferential statistics
provided better than chance predictions including, e.g.,
Pearson r. Interval data was employed to test the
hypothesis of association using the Pearson r.

Methodolgy

Participative decision making has been identified
in this study as meaningful decisions of consequence
made by the principal and teachers (Massachusetts'
certified or certifiable) together which impact the
quality of life (academic, cultural, emotional,
physical, professional, social) in their school.
Carnegie (1988) has indicated these areas of teacher
involvement in decision making that will be considered
as "meaningful": curriculum and instructional
materials, standards for students, professional
standards and budget policies. The study sought to
investigate the perceived intensity of concerns of a
stratified random sample of southeastern Massachusetts
elementary school principals (see Appendix B) by
answering the following questions through the use of the
"Stages of Concern Questionnaire" (Appendix F) and the
"Demographic Survey Instrument" (Appendix H):

1. What are the perceived intensity of concerns
    of these elementary school principals toward
    participative decision making within their
    schools?

2. Are there significant relationships among these elementary school principals' ages and their intensity of concerns toward participative decision making in their schools?

3. Are there significant relationships among these elementary school principals' levels of education and their intensity of concerns toward participative decision making in their schools?

4. Are there significant relationships among these elementary school principals' number of years of experience as an administrator and their intensity of concerns toward participative decision making in their schools?

5. Are there significant relationships among these elementary school principals' number of years as principal at their present school and their intensity of concerns toward participative decision making in their schools?

6. Are there significant relationships among these elementary principals' number of teachers on the staff at their schools and their intensity

of concerns toward participative decision
making in their schools?

7. Are there significant relationships among these
    elementary school principals' amount of
    training in participative decision making
    practices and their intensity of concerns
    toward participative decision making in their
    schools?

8. Are there significant relationships among these
    elementary school principals' number of years
    of administrative experience with participative
    decision making and their intensity of concerns
    toward participative decision making in their
    schools?

Description of the Sample

Borg and Gall (1983) state that "stratified
sampling procedures assures the research worker that the
sample will be representative of the population in terms
of certain critical factors that have been used as a
basis for stratification, and also assures him of
adequate cases for subgroup analysis" (p. 249).
Additionally, they note, the randomization process can

be used to control for variables not otherwise addressed
in sampling bias considerations (Borg & Gall, 1983).

This study's intent was to identify the perceived
intensity of concerns of a stratified random sample of
southeastern Massachusetts elementary school principals
regarding participative decision making in their
schools. The stratification process has been based on
the Massachusetts Department of Education "kind of
community" descriptors. In <u>A New Classification
Scheme for Communities in Massachusetts</u> (1985), the
351 communities are described according to the following
seven "kind of community," KOC I- VII categories:

   I.   Urbanized Centers: Manufacturing and
        commercial centers; densely populated;
        culturally diverse.

   II. Economically Developed Suburbs: Suburbs
        with high levels of economic activity,
        social complexity; and relatively high
        income levels.

   III. Growth Communities: Rapidly expanding
        communities in transition.

IV. Residential Suburbs: Affluent communities
with low levels of economic activity.

V. Rural Economic Centers: Historic manufacturing
and commercial communities; moderate levels of
economic activity.

VI. Small Rural Communities: Small towns;
sparsely populated; economically undeveloped.

VII. Resort/Retirement and Artistic: Communities
with high property values; relatively low
income levels, and enclaves of retirees,
artists, vacationers, and academicians (p. 2).

(Note: Vocational-technical schools are described
in an eighth "kind of community," but due to its
irrelevance, will be omitted from consideration.)
(Burbank, 1991, p. 11)

Designed to be used as an "analytic tool", this
1985 community classification scheme reflects a more
current range of Massachusetts community characteristics
than its earlier four category predecessor. Demographic
and socio-economic attributes provided the basis on
which this statistically constructed tool had been
developed based on data obtained from the 1980 census.

The fifteen community attributes are further defined in Appendix I.

This "kind of community" categorization has been described as a "tool which can be used for research, analysis, reporting, and staff training" as well as to "improve sampling procedure for research and evaluation," and "assist in identifying local and statewide trends and in selecting appropriate courses of action" (p. 4).

A preliminary screening process involving correspondence with all southeastern Massachusetts school superintendents (Appendix A), served to identify the school districts that have initiated participative decision making in their elementary schools. Of the districts that responded positively, further research was continued through an investigation of a stratified random sample of at least seventy (70) principals to complete the "Stages of Concern Questionnaire" and the "Demographic Survey Instrument".

In keeping with the guidelines of the "central limit theorem," which is defined by Sprinthall (1987) as "the theoretical statement that when the sample means

are selected randomly from a single population, the
means will distribute as an approximation of the normal
distribution, even if the population deviates from
normality" (p. 416).   A sample size is considered
"relatively large (at least 30)," according to the
theorem assumption, thus a sample size of at least
seventy (70) would be considered satisfactory
(Sprinthall, 1987, p. 416).   The latest version of the
Massachusetts Department of Education's School
Directory, 1990, was used as a resource to develop the
sample of seventy-three (73) out of a population of one
hundred ninety-three (193).

Instrumentation

Each of the seventy-three (73) subjects in this
study were asked to respond to these two instruments:
Stages of Concern Questionnaire (SoCQ) and Demographic
Survey Instrument (DSI) (Appendices F,H).   Based on the
C-BAM Demographic Survey Instrument, the one used in
this study was constructed for the purpose of collecting
and analyzing information about a number of variables

(Hall et al., 1986, p. 63). Included in this study was
an investigation of the relationships among elementary
school principals' selected demographic variables (i.e.,
age, level of education, number of years of experience
as an administrator, number of years as principal at
present school, amount of training in participative
decision making, and number of years of administrative
experience using participative decision making) and
their perceived intensity of concerns toward
participative decision making in their schools.

The "Stages of Concern Questionnaire" is a
thirty-five item forced choice Likert scale instrument
"developed to assess an individuals' seven hypothesized
Stages of Concern About the Innovation" (Hall et al.,
1986, p. iii). The instrument usually takes fifteen
minutes to complete. The seven stages include:
awareness, informational, personal, management,
consequence, collaboration, and refocusing. Contact has
been maintained with Drs. Archie George, Shirley Hord,
and Susan Loucks-Horsley (former staff members of the
University of Texas at Austin Research and Development
Center for Teacher Education C-BAM project) and Don

Horsley, (on the staff at The Regional Laboratory for Educational Improvement of the Northeast and Islands; Andover, Massachusetts). The nature of the consultation has involved confirmation of the validity of the SoCQ instrument, and/or data analysis procedures for this study, to specifically and appropriately measure the concerns of principals who have initiated participative decision making in their schools.

The SoCQ is a quantitative instrument that provides for a qualitative component as it concludes with an open-ended question for clarification of principals' concerns that may not have been addressed in the questionnaire by asking the question: When you think about participative decision making, what are you concerned about (Hall & Hord, 1984, p. 66)? Rossman and Wilson (1984) suggest that both quantitative and qualitative approaches in a single research project can be "fruitfully" used in the analysis process to "provide richness or detail to quantitative findings" (p. 6). With this additional information obtained from the Open-Ended Concern Statement a more enhanced observation of prinicpals' concerns was made possible.

Additionally, the Demographic Survey Instrument (DSI) used in this study closely followed the framework as described in the C-BAM (Hall et al., 1986), using quantitative and qualitative data analyses. Insightful information provided by the DSI, allowed for more specificity in the recommendations in Chapter 5.

Reliability and Validity of the Stages of Concern Questionnaire

Gay (1981) defines "reliability" as "the degree to which a test consistently measures whatever it measures" (p. 435) and "validity" as "the degree to which a test measures what it is intended to measure" (p. 438). The SoCQ has been described as "validated over a three year period, preceded by ten years of measurement development and research by Frances Fuller and others" (Hall et al., 1986, p. 9). This extensive study of individuals involved in "change" was conducted at the University of Texas at Austin's Research and Development Center for Teacher Education (R&DCTE) "to conceptualize and facilitate educational change" (Hall et al., 1986, p. 111). The development of the SoCQ was to provide a vehicle for assessing the seven hypothesized Stages of Concerns About the Innovation: awareness,

informational, personal, management, consequence,
collaboration, and refocusing. This subsection on the
SoCQ reliability and validity describes the reports
conducted for confirmation.

The development of the SoCQ began in the Fall of
1973 as an early exploration was made to assess
individuals' concerns about a specific innovation.
Open-ended concerns statements and forced ranking
instruments were the composition of the first pilot
project. These other instruments were included in the
initial investigations: various open-ended formats,
adjective checklists, Likert scales, and interviewing
procedures (Hall et al., 1986, p. 9).

Two strategies for the measurement of the Stages of
Concern evolved by 1974. A "quick-scoring
pencil-and-paper questionnaire" (SoCQ) became the
primary strategy in the instrument development process
(Hall et al., 1986, p. 9). Newlove and Hall (1976)
introduced the second strategy: an open-ended clinical
instrument that makes use of an objective scoring
procedure for classifying individual responses. This
study made use of both elements for data analysis.

Potential item identification was the first major
step in the development of the SoCQ. As the R&DCTE
project staff members wrote items they felt would be
indicators of an individuals' concern at a certain
stage, Hall et al. (1973) provided guideline definitions
from the original C-BAM paper. Ten people sorted the
resulting five hundred forty-four (544) items into eight
groups. As these groups corresponded to the seven
Stages of Concern and another category identified as
"unacceptable," the results of the Q-sort, as agreed
upon by at least six of the judges, indicated that at
least four hundred items were related to a given Stage
of Concern. As editing was done for redundancy, it was
agreed that items would be reworded into complete
statements (Hall et al., 1986, pp. 9,10).

A pilot instrument of one hundred ninety-five (195)
items was sent to these two stratified sample
populations based on years of experience involved with
an innovation: teachers teaming in elementary schools
and college faculty using instructional modules. The
results from the three hundred fifty-nine (359)
responses to the questionnaire initiated the

construction of subscales. Factor analysis with item
correlation gave the indication "that seven factors
explain over sixty percent (60%) of the common variance
among the one hundred ninety-five (195) items and that
the hypothesized scales correspond to the factor scales"
(Hall et al., 1986, p. 10).

Of those who completed the one hundred ninety-five
(195) item SoC measure, some were selected to be
interviewed in order to further investigate innovation
concerns. Agreement was reached through a judging
process that subjectively correlated how each person
should be classified according to that person's one
hundred ninety-five (195) item measure (Hall et al.,
1986, p. 10).

In September of 1974, a thirty-five (35) item
questionnaire was prepared from a selection process
based on the factors of the one hundred ninety-five
(195) item questionnaire and administered to one hundred
seventy-one (171) elementary school and higher education
faculty members. In order to establish test-retest
reliability, the same form was again administered one
week later. Table 3.1 shows the computations of the

test-retest correlations based on the one hundred
thirty-two (132) mailed responses (Hall et al., 1986,
pp. 10, 11).

Table 3.1

Test-Retest Correlations on the Stages of Concern
Questionnaire, N = 132

	Stage						
	0	1	2	3	4	5	6
Pearson r	.65	.86	.82	.81	.76	.84	.71

The stage score correlations in Table 3.1 ranged
from .65 to .86. Four correlations were above .80.

The selection of the items that represented each
stage on the questionnaire was done in such a manner
that high internal reliability was considered very
likely. High internal reliability was assured as a
result of the establishment of necessary conditions for
an item to be included: reponses to it correlate more

highly with responses to other items that measured the same stage as opposed to items on other scales. The alpha coefficients of internal consistency for each of the seven Stages of Concern scale are noted in Table 3.2. Using a generalized version of the Kuder-Richardson Formula 20 for dichotomous items (Cronbach, 1951), "these coefficients reflect the degree of reliability among items on a scale in terms of overlapping variance" (Hall et al., 1986, p. 11). Coefficient computations of these data from an eight hundred thirty (830) stratified sample of teachers and professors were based on Program TESTAT on the VSTAT library (Veldman, 1967), on the basis of their first questionnaire exposure responses in the fall of 1974 (Hall et al., 1986, p. 11).

Table 3.2

Coefficients of Internal Reliability for the Stages of
Concern Questionnaire, N = 830

	Stage						
	0	1	2	3	4	5	6
Alphas	.64	.78	.83	.75	.76	.82	.71

The estimate of internal consistency (alpha
coefficients) in Table 3.2 range from .64 to .83. Six
of the seven coefficients were above .70.

A number of studies for validity were conducted as
further subsequent testing was done over the next two
years: eleven (11) different educational innovations
were examined using the thirty-five (35) item SoCQ in
cross-sectional and longitudinal studies. Comparisons
of the SoCQ data were made through extensive respondent
interviewing procedures using expert judge ratings of
Open-Ended Concern Statements. Interview tapes were

rated regarding concerns and contrasted with SoCQ data.
Individuals were asked to respond to the stage
definitions of the "Stages of Concern", indicating their
relative intensity of concern, using "Level of Use"
interview tapes for analysis to determine concerns.
Interpretations and predictions made about what
respondents would reflect in an interview were
comparable to the SoCQ data as procedures for refinement
of data interpretation continue. This conclusion has
been made by Hall et al. (1986): the SoCQ accurately
measures Stages of Concerns About the Innovation. In
fact, the SoCQ appears to do an even better job than
other measures and clinical judgments (p. 10).

Hall et al., 1986, contend that the reliability of
the SoCQ scores defining the measures of Stages of
Concern could be more readily demonstrated than the
validity aspect. As suggested by concerns theory,
Cronbach and Meehl (1955) were noted to have outlined a
strategy for demonstrating questionnaire scores that
relate to one another and other variables. Accordingly,
an investigation of the validity of SoCQ scores made use

of intercorrelation matrices, judgments of concerns
using data collected from interviews, and the
confirmation of expectations regarding group differences
and changes over time.

An analysis of the one hundred ninety-five (195)
item pilot checklist done in May 1974 indicated that the
questionnaire might measure concerns as conceptualized.
This prototype instrument covered Stages 1 through 6.
Each of these six subscales, Q-sorted by the R&DCTE
staff, consisted of between 14 and 68 items. Two
analyses provided evidence for the validity of these
stages as separate constructs that were related in a
developmental manner. The data analysis from the
completed one hundred ninety-five (195) item
questionnaire by three hundred fifty-nine (359)
respondents indicated that eighty-three percent (83%) of
the items correlated to a higher degree with the stage
to which they had been assigned than with the total
score on the instrument. Further, "seventy-two percent
(72%) correlated more highly with the stage to which
they had been assigned than with any other stage" (Hall
et al., 1986, p. 12).

A scale of zero through seven was used for each
item response. Respondents indicating a high response
use this description: "very true of me now."
Computations of scores were completed by addition of the
responses for items in each scale. The total score
consists of the sum of the scale scores. As the
correlational evidence indicated, items on a particular
scale tended to be responded to similarly, the inference
held was that the items in each scale measured a notion
that was distinct from notions measured by other scales.
Table 3.3 summarizes how the scales (each measuring one
stage) intercorrelate (Hall et al., 1986, p.12,13).

Guttman (1954, 1957) applied the term simplex to
this type of pattern: using a correlation matrix
computed on the basis of the aforementioned data, the
correlations near the diagonal were higher than those
more removed from it. As the simplex pattern in a
matrix corresponds to a set of objectives holding
degrees of similarity and dissimilarity with one another
in such a way that they form a line arrangement. Each
object will hold similarities to the object closest to

it, as opposed to objects farther away on the line. Thus, it was noted that "the scales of the pilot questionnaire indicated an order consistent with the hypothesized order of the Stages of Concern" (Hall et al., 1986, p. 12).

Table 3.3

Intercorrelation of 195-Item Stages of Concern
Questionnaire Scales

		Stages					
		1	2	3	4	5	6
	1	1.0	.68	.47	.21	.21	.19
	2		1.0	.78	.43	.37	.43
	3			1.0	.60	.51	.59
Stages	4				1.0	.82	.80
	5					1.0	.77
	6						1.0

Wolf (1984), in his work on validating the

Concerns-Based Adoption Model instruments, has

summarized three studies for SoCQ validity noting this

about the first:

> The intercorrelation studies were done on
> the same data that provided data for the
> reliability studies. Items in each stage
> correlated with each other to a much higher
> degree than they correlated with either the
> total score of the instrument or with items
> representing the other stages. In addition,
> scores from the 1974 study were converted to
> percentiles and a composite table prepared
> which represents the average percentiles for
> those individuals who peaked on a given
> stage. Analysis of those percentiles show
> expected patterns of concern. For example,
> scores adjacent to the highest concern tend
> to be higher than those further away which
> adds weight to the developmental nature of
> concerns. The fact that Stage 6 concerns
> tend to be higher than others for people
> with high Stage 0,1, and 2 concerns is
> consistent with the notion that people with

higher non-user concerns would naturally be
more interested in something else (renewal)
than they would be in the innovation's
impact on children (p. 76).

The nature of the second study regarding validity
involved a comparison study of data collected from
interview ratings of Stages of Concern and the SoCQ. Out
of the several hundred people who completed the 1976
questionnaire, twenty-eight (28) respondents were
randomly selected to be interviewed by three members of
the R&DCTE staff. Table 3.4 notes the r values as
correlations between SoCQ scores and interviewer ratings
peak concern scores (Hall et al., 1986, p. 18). George
(1977) has indicated that this validation study is
viewed as problematic because ideally, the highest r
values would occur in the diagonal high left to low
right, with the highest positive correlations occurring
at 0/0, 1/1, 2/2, 3/3, etc. Wolf (1984) states:

All the previous work by George has a
circularity to it in that reliability and
validity depend on criteria and conditions
already established by the Center. Thus,

the factors in the analysis may have been
determined by the Q-sort, in turn pre-
determined by the existence of seven posited
factors. The internal reliability (KR-20)
scores are guaranteed by the factor analysis
as were the r values on item analyses for the
intercorrelational validity studies. Even
the rigorous interview study was done by
Center staff members with the predetermined
set that posits the seven Stages of Concern
(p. 78).

Table 3.4
**Correlation of Peak Stage Estimates and Rank Order
of Stages of Concern Percentile Scores**

Quantitative			Peak SoC				
Ratings	0	1	2	3	4	5	6
0	.27	.34	-.11	.02	.22	.22	-.13
1	.15	.47	.47	-.09	-.11	-.50	-.45
2	.03	.38	.42	-.21	-.10	-.24	-.34
3	-.25	-.08	.00	.30	-.04	.02	.09
4	-.05	-.22	-.26	-.01	.13	.08	.33
5	-.20	-.48	.20	-.03	.31	.54	.15
6	-.20	-.20	.16	-.15	.24	.17	.31

$N = 65$ critical $r = .25$ $p \leq .05$ _____

                        $= .32$ $p \leq .01$ _____

In the third validation study, using two groups of teachers involved in the implementation of innovations that were different from those used during the instrument's development, new data were gathered using the SoCQ. One group of teachers in the study had more experience with an innovation than another comparable group. The second study took a look at one group of teachers over a period of time. The administration of the SoCQ was done before and after workshop training and repeated after the teachers put the innovation into use. The validity of the SoCQ would be confirmed as differences in the profiles of the two groups are noted in the first study. Stages 0, 1, 2, and 4 showed lower concerns than non-participants; this would be an expectation, given their relative degree of innovation familiarity. The second study expectations were also realized as the Non-User (Stages 0, 1, 2) and Management (Stage 3) concerns decreased over time (Wolf, 1984, p. 80).

Although there have been impressive studies regarding correlation statistics and reliability during the mid-1970s, the more recent series of studies on

validity have been conducted using the instrument in new

situations. The newer studies have provided a measure

of increased confidence that the seven hypothesized

stages of concern, consistent in the theories developed

by the R&DCTE about innovations concerns, are measured

by the SoCQ (Wolf, 1984, p. 80; Hall et al., 1986, p.

20; ASCD, 1987, p. 35).

Procedures and Timelines

Procedures used to conduct this study have included

a review (manual and computer) of the literature

regarding change theory, concerns theory according to

the Concerns-Based Adoption Model research project by

the University of Texas at Austin Research and

Development Center for Teacher Education (R&DCTE), and

participative decision making. Additional related

literature was explored, but not limited to, these

areas: organizational theory and development, business

concepts, and social psychological considerations.

A letter of request was issued for the use of the

proposed major research instrument, the SoCQ (Appendix

C). My request was approved by the University of Texas

at Austin and documentation for SoCQ use has been made,
as indicated in the letter to me from the University
(see Appendix D). In addition, contact has been
maintained with Dr. Susan Loucks-Horsley (among other
R&DCTE original members) regarding elements of this
study's SoCQ instrument (and data analysis) that
specifically regard principals' intensity of concerns
toward participative decision making in their schools.

A preliminary determination of school systems that
have initiated participative decision making in their
elementary schools was indicated as contacted
southeastern Massachusetts school superintendents
provided feedback to my letter of request. The
definition for participative decision making
used in this study was: meaningful decisions of
consequence (i.e., regarding curriculum and
instructional materials, standards for students,
professional standards and budget policies) made by the
principal and teachers together, that impact the quality
of life (academically, culturally, emotionally,
physically, professionally, socially) in the school. As
appropriate permission was granted, contact was made

with the principal subjects who agreed to take part in
the study by completing the SoCQ and DSI. Data
collection and analysis procedures are detailed in the
following section.

Data Collection and Analysis

Upon approval by the University of Massachusetts at
Amherst Human Subject Review Committee (note Form 7B in
Appendix E), further investigation was made of a
stratified random sample of elementary school principals
using the SoCQ and DSI. To insure willingness of timely
completion and return of material, prior contact was
made with principals. The packet mailed to each subject
included a cover letter, the SoCQ, and DSI (see
Appendices A, B, F). A due date (no more than two weeks
from when correspondence was initiated) was requested
and a prestamped envelope was provided for the return
mailing. Although identity of respondents was
protected, and personally assured, there was a
procedure for follow up (i.e., return address on
envelopes that would be immediately destroyed to protect
identity) in order to increase the probability of a
statistically favorable outcome for data analysis.

Quantitative analysis of the SoCQ was completed
with the consultation of Dr. Archie George (SoCQ
statistician) and University of Massachusetts
statistician John Murphy. Using Minitab, the data were
computer compiled and processed in order to test the
hypothesis of association employing the Pearson r
product moment correlation coefficient, based on .05
level of significance.

Sprinthall (1987) defines "Pearson r" in this way:

Statistical technique introduced by
Karl Pearson for showing the degree
of relationship between two variables.
Also called the product-moment
correlation coefficient, it is used
to test the hypothesis of association,
that is, whether or not there is a
relationship between two sets of
measurements. Computed correlation
values range from +1.00 (perfect
positive correlation) through zero to
-1.00 (perfect negative correlation).
The farther the Pearson r is from zero,

whether in a positive or negative

direction, the stronger is the

relationship between the two variables.

The Pearson r can be used for making

better than chance predictions, but

should not be used alone for isolating

causal factors (p. 422).

Minitab has been described by Schaefer and Anderson

(1989) as "an interactive statistical software package

for organizing, analyzing, and reporting statistical

data" (p. iv). The Pearson r product moment correlation

coefficients were calculated according to Minitab's

guidelines for same.

The scoring technique for the Stages of Concern

Questionnaire was completed according to Measuring

Stages of Concern About the Innovation: A Manual for

Use of the SoC Questionnaire, (Hall et al., 1986)

guidelines (see Appendix M for further explanation).

Dependent variables in this study were the ratings

produced from the sum of the SoCQ items as they fell

into the appropriate column, according to principals'

stage of concern (as noted in Appendix K). The

independent variables in this study consisted of the DSI
variables: age, level of education, number of years of
experience as an administrator, number of years as
principal at present school, number of teachers on
staff, amount of training in participative decision
making practices, number of years of administrative
experience with participative decision making.

In addition to assuming the respondents were
capable and would answer the research instruments
honestly, these assumptions were also made about the
data collection process:

* questions that were asked were understood by
  respondents who would hold to a basic meaning;
  and

* quantitative techniques would provide results
  for evaluation as answers were converted to
  numerical scores (Zimbardo & Ebbesen, 1970).

The next chapter provides data presentation and
analysis. Descriptive and inferential analyses are
included in the following section.

CHAPTER 4

ANALYSIS OF THE DATA

Analysis of the data is presented in this chapter
as major findings of the study are described. The
Stages of Concern Questionnaire (SoCQ), including an
open-ended response option, and the Demographic Survey
Instrument (DSI) were the means by which the data were
gathered (see Appendices F and H). The findings of this
study are presented in two parts. Descriptive analyses
of the independent variables are reported in the next
section, which includes a qualitative presentation of
open-ended response findings, followed by an inferential
analysis of the data based on the quantitative analysis
of the hypotheses involved in this particular study.

This study's research questions sought answers to
the following:

1. What are the perceived stages of concern of
    a stratified random sample of southeastern
    Massachusetts elementary school principals
    who have initiated participative decision
    making within their schools?

2. Are there significant relationships among
   these elementary school principals' ages and
   their intensity of concerns toward
   participative decision making in their
   schools?

3. Are there significant relationships among
   these elementary school principals' levels of
   education and their intensity of concerns
   toward participative decision making in
   their schools?

4. Are there significant relationships among
   these elementary school principals' number of
   years of experience as an administrator
   and their intensity of concerns toward
   participative decision making in their
   schools?

5. Are there significant relationships among
   these elementary school principals' number of
   years as principal at their present schools
   and their intensity of concerns toward
   participative decision making in their
   schools?

6. Are there significant relationships among
    these elementary school principals' number of
    teachers on the staff at their schools
    and their intensity of concerns toward
    participative decision making in their
    schools?

7. Are there significant relationships among
    these elementary school principals' amount of
    training in participative decision making
    and their intensity of concerns toward
    participative decision making in their
    schools?

8. Are there significant relationships among
    these elementary school principals' number of
    years of administrative experience with
    participative decision making and their
    intensity of concerns toward participative
    decision making in their schools?

Aggregate and cell (i.e., kind of community)
treatment was made of the data using frequency
distribution of the characteristics of the surveyed
participants. A section for Tables 4.1 through 4.19 is

provided at the end of this chapter; references are made
to them consecutively throughout the following.

Descriptive Analysis of the Data

The intent of this research project was to examine
the attitudes of elementary school principals who have
initiated participative decision making in their
schools.   In order to determine a stratified random
sample, based on the Massachusetts Department of
Education "kind of community" (KOC I-VII) strata, all
sixty-four southeastern Massachusetts school
superintendents (some covered multiple towns) were
polled (see Appendices A and I).   Table 4.1 describes
the distribution of superintendent responses as thus:
overall forty-eight (48--44 males, 4 females), or
seventy-five percent (75%), indicated that their
systems' elementary schools had initiated participatory
decision making; fourteen (14--12 males, 2 females), or
twenty-two percent (22%), indicated it had not been
initiated; two (2--both males), or three percent (3%),
refused to supply a response.   Gender distribution was
also noted: out of sixty-four (64) superintendents

polled, fifty-eight (58) were male and six (6) were female with proportionately similar responses.

Subsequently, a stratified random sample was produced. Listed according to their kind of community (KOC I-VII) descriptors, tables regarding the frequency distribution of the characteristics of the survey participants are presented in Tables 4.2 through 4.10 and briefly described overall in the following list of independent variables:

Gender: fifty-two (52), or seventy-one percent (71%), "male;" twenty-one (21), or twenty-nine percent (29%), "female."

Age: none categorized in the "20-29" years range; four (4), or five percent (5%), in the "30-39" years range; thirty-five (35), or forty-eight percent (48%), in the "40-49" years range; twenty-seven (27), or thirty-seven percent (37%), in the "50-59" years range; seven (7), or ten percent (10%), in the "60-69" years range; none categorized in the "70+" years range.

Level of education: none categorized in the "B.S./B.A." level; ten (10), or fourteen percent (14%), in the "Master's" level; thirty (30), or forty-one

percent (41%), in the "M+30" level; fourteen (14), or

nineteen percent (19%), in the "C.A.G.S." level;

twelve (12), or sixteen percent (16%), in the "M+60"

level; two (2), or three percent (3%), in the "M+90"

level; five (5), or seven percent (7%), in the

"Ed.D./Ph.D." level.

Years experience as administrator: two (2), or

three percent (3%), in "less than one year;" five (5),

or seven percent (7%), in "1-2 years;" five (5), or

seven percent (7%), in "3-5" years; eight (8), or eleven

percent (11%), in "6-9" years; thirty-five (35), or

forty-eight percent (48%), in "10-20" years; eighteen

(18), or twenty-four percent (24%), in "21+" years.

Years as principal at present school: seven (7),

or ten percent (10%), "less than one year;" eleven (11),

or fifteen percent (15%), "1-2" years; eighteen (18), or

twenty-four percent (24%), "3-5" years; fourteen (14),

or nineteen percent (19%), "6-9" years; sixteen (16), or

twenty-two percent (22%), "10-20" years; seven (7), or

ten percent (10%), "21+" years.

Number of teachers at school: two (2), or three

percent (3%), "less than 10" teachers; eighteen (18), or

twenty-four percent (24%), "10-19" teachers; twenty-four
(24), or thirty-three percent (33%), "20-29" teachers;
thirteen (13), or eighteen percent (18%), "30-39"
teachers; ten (10), or fourteen percent (14%), "40-49"
teachers; six (6), or eight percent (8%), "50+"
teachers.

Amount of PDM training: thirty-five (35), or
forty-eight percent (48%), "no training;" thirteen (13),
or eighteen percent (18%), "1 inservice/workshop;" nine
(9), or twelve percent (12%), "2 inservice/workshops;"
six (6), or eight percent (8%), "3 inservice/workshops;"
ten (10), or fourteen percent (14%), "other."

Number of years using PDM administratively:
twenty-one (21), or twenty-nine percent (29%), "less
than 1 year;" eleven (11), or fifteen percent (15%),
"1-2" years; sixteen (16), or twenty-two percent (22%),
"3-5" years; four (4), or five percent (5%), "6-9"
years; thirteen (13), or eighteen percent (18%), "10-20"
years; eight (8), or eleven percent (11%), "21+" years.

Given the responses, it was noted that the modes
within each of the independent variables were:

Gender: Male (71%)

Age: 40-49 (48%)

Level of education: M+30 (41%)

Years experience as administrator: 10-20 (48%)

Years as principal at present school: 3-5 (24%)

(with "10-20" years a close second at 22% and

"6-9" years running third at 19%)

Number of teachers at school: 20-29 (33%)

Amount of PDM training: no training (48%)

Number of years using PDM administratively: less

than 1 (29%)

The Demographic Survey Instrument was the vehicle

for obtaining the above information. Assigned numbers

were given to each item for further, inferential data

analysis (see Appendix J), as discussed later in this

chapter.

Open-Ended Concern Statement Response Evaluation

It has been suggested that the use of the

open-ended question at the conclusion of the SoCQ could

lead to guided thinking (i.e., tracking) for a response

that would not have otherwise been a factor if given a

blank sheet of paper for recording one's statements of

concerns. Another identified "flaw" of the Open-Ended
Concern Statement has been that the responses focus on a
limited number of stages, whereas the SoCQ provides a
more structured overview (ASCD, 1987). Although the
admission is made that the evaluation procedures for the
open-ended statements on the SoCQ do not possess the
psychometrically rigorous qualities of the SoCQ itself,
it has been described as beneficial in a number of ways
(Newlove & Hall, 1976). However, as Newlove and Hall
(1976) suggest, the "compiling of clinical impressions
from the concerns statements of a group will develop a
richer picture than will an attempt to learn in depth
about one individual" (p. 2); "holistic" reviews further
aid the process. Thus, the evaluation of the open-ended
statements, in conjunction with the major instrument
focus for analysis (i.e., SoCQ), provide for a more
enhanced study than would have been otherwise available,
noted restrictions notwithstanding.

When reading through concern statements, the
evaluator asks these general questions about the domain:
Are the concerns general or unrelated to the innovation
("Non-Concern" or "Awareness" Stage)? Or, are they

"Self" domain (i.e., "Informational" and "Personal"
stages); "Task" domain (i.e., "Management" stage), or
"Impact" domain (i.e., "Consequence," "Collaboration,"
and "Refocusing" stage) oriented? A quantitative (see
Table 4.11), as well as qualitative look can be
developed and scored according to the SoC using numbers
(1 through 8, accordingly) for "content units" (Newlove
& Hall, 1976, p. 29). It was recommended, however, that
in the case of numerical averaging caution should be
used as it could be misleading and even meaningless if
the scores cannot be decisive regarding the appropriate
stage of concern (Newlove & Hall, 1976).

A total number of ninety-one (91) concern
statements were analyzed (see Appendix N). The stage of
concern domain that was most frequently cited by
respondents was categorized in the "Task" domain. The
other three domains were similar in numbers of concern:
"Impact" followed with "Self" closely behind, and,
finally, "Non-Concern." It is significant to note that,
proportionately, more than twice as many concerns were
indicated to be in the "Task" domain, compared to each
of the other three domains. There was, however, no

observed significance of the responses relating to any

particular demographic aspect such as gender, as the

participants' responses showed no remarkable demographic

patterns upon analysis.

The following provides a representation of typical

concern statements noting the above "Non-Concern" (or

"Irrevelant"), "Self," "Task," and "Impact" domains:

"Non-Concern":   I do not have any real concerns

about PDM at this time.

Honestly, I don't think about PDM.

I do not think about PDM.

Respect for fellow professionals,

different points of view, and

problem sharing pose no concern...

"Self":   I think I am most concerned about

the fact that I don't understand it

as much as I probably should.

I need to know more.

...That my authority as a building

principal will be diminished, but

my overall responsibility and

accountability will not be.

How will PDM affect my present
school responsibilities?

I am concerned about those times
when one final decision has to
be made and the responsibility
for that decision.

"Task": The time constraints in order to
implement PDM could be
overwhelming.

I think teachers misunderstand what
PDM is.

How do we get teachers and other
staff to support this effort?

Main problem--union has made every
effort to place members of the
executive board on each committee
so union position can be protected.

Staff involvement: Who, when and
to what degree.

The lack of funding may make any
change efforts impossible.

"Impact": How to keep PDM ongoing even though
I may not be administrating this
building within a year or so.
"Ownership" in the building and a
sense of responsibility beyond the
immediate classroom.
Many people are willing to make
decisions but not everyone wants
to accept responsibility for these
decisions.
While process can be slow, outcomes
are more meaningful as individuals
have ownership.
In my experience, hard feelings
have been caused.

In addition to apathy, the common thread themes
discerned from the respondents' stated concerns in the
Open-Ended Concern Statement included: time,
accountability/responsibility, motivation, threats to
power, support, and lack of understanding and funding.
Having this additional input allows for a more balanced
and insightful approach in analyzing the data. Further,

there are implications for interventions, which are
discussed in the next chapter.

Inferential Analysis of the Data

This section covers the results of the statistical
tests and analysis of the data as they relate to the
research hypotheses. The data are organized into the
following parts for review: the Stages of Concern
Questionnaire scores (dependent variables); and
relationships among the independent (demographic survey
items) and dependent (SoCQ scores) variables.

Stages of Concern Questionnaire Scores

The Stages of Concern fall into these seven
categories: (1) Stage 0--Awareness, (2) Stage 1--
Informational, (3) Stage 2--Personal, (4) Stage 3--
Management, (5) Stage 4--Consequence, (6) Stage 5--
Collaboration, and (7) Stage 6--Refocusing. Stage 0, the
Awareness stage, is a "Non-Concern" (or "Irrevelevant")
domain concern. Stages 1 and 2, the Informational and
Personal categories respectively, are described as
"Self" domain concerns; Stage 3, the Management
category, is considered a "Task" domain concern; and

Stages 4, 5, and 6--Consequence, Collaboration, and

Refocusing categories--are "Impact" domain concerns

(Hall et al., 1986). (See Appendix M for SoCQ scoring

procedures.)

As the centerpiece of this study, the Stages of

Concern Questionnaire (SoCQ) used a seven-point (in

addition to zero) Likert scale. It was suggested by the

SoCQ authors (Hall et al., 1986) that, in addition to a

complete profile examination, a detailed interpretation

of SoC data can be developed by examining the first and

second high SoCQ scores, as noted in Table 4.12.

The initial research question posed:

What are the perceived stages of concern

of a stratified random sample of

southeastern Massachusetts elementary

school principals who have initiated

participative decision making within

their schools?

has been answered in this data presentation. According

to the overall results of first high relative intensity

SoCQ scores include: thirty-nine (39), or fifty-three

percent (53%), of the participants' highest intensity of
concern fall into the Stage 0 ("Awareness" stage or
"Non-Concern" domain) category; next is Stage 2
("Personal") with twelve (12), or sixteen percent (16%),
followed by Stage 1 ("Informational"), with nine (9), or
twelve percent (12%). The aforementioned two stages
fall into the "Self" domain. Stage 3 ("Management")
concerns are highest for six (6), or eight percent (8%),
of the respondents ("Task" domain), and the "Impact"
domain holds highest concerns for: three (3), or four
percent (4%), in the "Collaboration" Stage 5; three (3),
or four percent (4%), in the "Refocusing" Stage 6; and
two (2), or two percent (2%), in the "Consequence" Stage
4.

Second high SoCQ scores (as noted in Table 4.12)
indicate that the majority of concerns fall into Stages
1 ("Informational") and 2 ("Personal") with thirty-eight
percent (38%) and twenty-two percent (22%),
respectively. Stages 0 ("Awareness") and 3
("Management") hold tie scores at nine percent (9%),
followed by Stage 5 ("Collaboration") with eleven

percent (11%), Stage 6 ("Refocusing") with four percent
(4%), and one percent (1%) in Stage 4 ("Consequence").
Both first and second high SoCQ scores hold a majority
in Stages 0 through 2.

The Stages of Concern Questionnaire and
Demographic Survey Instrument scores have been processed
according to raw scores and (SoCQ) derived scores, as
well as assigned (DSI) numbers (see Appendices K, L, M)
and have been used to further generate inferential
statistics as described in the next section.

Relationship Among the Independent and Dependent Variables

In this study, the criteria for rejecting the null
hypothesis was considered when four (4) or more of the
stages of concern (dependent variable) showed a
significant relationship to the independent variable.
Aggregate scores were considered and the selected level
of significance for testing the hypothesis was 0.05 with
.231 critical value for the Pearson r coefficient (based
on n = 73; n - 2 = 71).

Establishing the criterion for the acceptance or rejection of the null hypothesis was based on consultations with statisticians Dr. Archie George and John Murphy (among others). It was decided, on a logical basis, that when four or more of the stages of concern (dependent variable) showed a significant relationship to a particular demographic (independent) variable, the null hypothesis would be rejected. Because four (or more, out of seven) stages provided a majority, it was considered a rational approach for establishing the acceptance/rejection criterion. Numerous precedents have been set in this manner and other dissertations .(e.g., Mallory, 1986) were noted in the research literature as doing likewise.

The following will provide a restatement of the hypotheses in the null form, followed by presentation of the findings of significance using the Pearson r statistical analysis technique, and, as indicated in the case of rejection of the null hypothesis, interpretation of the results.

Hypothesis 1: There are no significant relationships among these elementary school

> principals' ages and their intensity of
> concerns toward participative decision
> making in their schools.

The null hypothesis is accepted on the basis that
only one stage of concern, "Refocusing" indicates a
level of significance: r = -.243 (see Table 4.13).

> Hypothesis 2: There are no significant
> relationships among these elementary school
> principals' levels of education and their
> intensity of concerns toward participative
> decision making in their schools.

The null hypothesis, based on the statistical
findings that no stage of concern shows significance,
is accepted (see Table 4.14).

> Hypothesis 3: There are no significant
> relationships among these elementary school
> principals' number of years of experience
> as an administrator and their intensity of
> concerns toward participative decision
> making in their schools.

Although the null hypothesis is accepted, based on
the criteria in this study, it is noteworthy that three
(3) areas indicate levels of significance: "Personal":
r = -.262, "Management": r = -.237, "Refocusing":
r = -.384 (see Table 4.15).

> Hypothesis 4: There are no significant
> relationships among these elementary school
> principals' number of years as principal at
> their present schools and their intensity of
> concerns toward participative decision
> making in their schools.

The null hypothesis is rejected on the basis of
four (4) stages of concern indicating levels of
significance accordingly: "Informational": r = -.249,
"Consequence": r = -.287, "Collaboration": r = -.247,
"Refocusing": r = -.406 (see Table 4.16).

The interpretation of the statistical findings note
this as a negative relationship. Therefore suggesting,
as the number of years as principal at a site increases,
their intensity of concerns toward participative
decision making decrease in the "Self" and "Impact"

domains. (Alternate hypotheses and further discussion
are addressed in Chapter 5.)

> Hypothesis 5: There are no significant
> relationships among these elementary school
> principals' number of teachers on the staff
> at their schools and their intensity of
> concerns toward participative decision
> making in their schools.

The null hypothesis is accepted as only one stage
of concern, "Awareness," indicates a level of
significance: $r = -.253$ (see Table 4.17).

> Hypothesis 6: There are no significant
> relationships among these elementary school
> principals' amount of training in
> participative decision making practices and
> their intensity of concerns toward
> participative decision making in their
> schools.

Again, the null hypothesis is accepted as only one
stage of concern, "Awareness," indicates a level of
significance: $r = -.317$ (see Table 4.18).

Hypothesis 7: There are no significant

relationships among these elementary school

principals' and their number of years of

administrative experience with

participative decision making and their

intensity of concerns toward participative

decision making in their schools.

In keeping with the criteria for rejecting the null

hypothesis, this is narrowly accepted on the basis that

only three (3) areas of concern show significance:

"Awareness": r = -.313, "Informational": r = -.267,

"Management": r = -.242 (see Table 4.19).

Summary

This chapter has served to provide an analysis of

the data through the presentation of descriptive and

inferential statistics. According to the forty-six (46)

principals who responded to the Open-Ended Concern

Statement, approximately half expressed concerns that

fall into the "Task" domain. Lesser stated concerns

are almost evenly divided in a slightly descending order

in the "Impact," "Self," and "Non-Concern" domains. Use

of the Stages of Concern Questionnaire (with the

Open-Ended Concern Statement component and Demographic

Survey Instrument) provided indications about the

relative intensity of concerns and demographics.

According to the aggregrate SoCQ scores, intensity of

concerns are highest in the "Non-Concern" domain

("Awareness" stage) and "Self" domain ("Informational"

stage and "Personal" stage) areas. Additionally, the

"number of years as a principal at one's school,"

appears to hold the greatest amount of significance,

according to the analysis presented. Further discussion

about these qualitative and quantitative findings,

including conclusions, recommendations (i.e.,

interventions), and suggestions for related research,

continues in the following final chapter.

Table 4.1

Superintendents' Response Distribution Indicating

Elementary Schools' Initiation of PDM in System

Listed According to Kind of Community (KOC I-VII)

Classification and Gender (M/F)

KOC (n) M/F	Superintendents' Response		
	Yes (%) M/F	No (%) M/F	Refused (%) M/F
I (8) 8/0	6 (75%) 6/0	2 (25%) 2/0	0 (0%) 0/0
II (10) 10/0	9 (90%) 9/0	1 (10%) 1/0	0 (0%) 0/0
III (22) 19/3	13 (59%) 12/1	8 (36%) 6/2	1 (5%) 1/0
IV (10) 9/1	9 (90%) 8/1	1 (10%) 1/0	0 (0%) 0/0
V (8) 7/1	5 (63%) 4/1	2 (25%) 2/0	1 (12%) 1/0
VI (2) 2/0	2 (100%) 2/0	0 (0%) 0/0	0 (0%) 0/0
VII (4) 3/1	4 (100%) 3/1	0 (0%) 0/0	0 (0%) 0/0
Total (64) 58/6	48 (75%) 44/4	14 (22%) 12/2	2 (3%) 2/0

Table 4.2

Frequency Distribution of Stratified Random Sample

Listed According to Kind of Community (KOC I-VII)

Classification

	Random Sample from KOC Strata					
	Eligible	%	Least	Actual	Male	Female
	n		n	n	n/%	n/%
KOC						
I	57	29	20	20	13/65	7/35
II	38	20	14	15	11/73	4/27
III	42	22	15	17	13/77	4/23
IV	26	14	10	10	4/40	6/60
V	16	8	6	6	6/100	0/0
VI	4	2	2	2	2/100	0/0
VII	10	5	3	3	3/100	0/0
Total	193	100	70	73	52/71	21/29

Table 4.3

Gender Distribution of Participants Listed According
to Kind of Community (KOC I-VII) Classification

Kind of Community (n)	Gender			
	Male (1)		Female (2)	
	n	%	n	%
I (n=20)	13	65	7	35
II (n=15)	11	73	4	27
III (n=17)	13	77	4	23
IV (n=10)	4	40	6	60
V (n=6)	6	100	0	0
VI (n=2)	2	100	0	0
VII (n=3)	3	100	0	0
Total (n=73)	52	71	21	29

Table 4.4

Age Distribution of Participants Listed According
to Kind of Community (KOC I-VII) Classification

KOC (n)	Age:					
	(1)	(2)	(3)	(4)	(5)	(6)
	20-29	30-39	40-49	50-59	60-69	70+
	n/%	n/%	n/%	n/%	n/%	n/%
I (n=20)	0/0	1/5	9/45	8/40	2/10	0/0
II (n=15)	0/0	1/7	5/33	6/40	3/20	0/0
III (n=17)	0/0	2/12	9/53	5/29	1/6	0/0
IV (n=10)	0/0	0/0	6/60	4/40	0/0	0/0
V (n=6)	0/0	0/0	2/33	3/60	1/17	0/0
VI (n=2)	0/0	0/0	2/100	0/0	0/0	0/0
VII (n=3)	0/0	0/0	2/67	1/33	0/0	0/0
Total (n=73)	0/0	4/5	35/48	27/37	7/10	0/0

Table 4.5

Level of Education Distribution of Participants

Listed According to Kind of Community (KOC I-VII)

Classification

	Level of Education:						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	BS/BA	Master's	M+30	CAGS	M+60	M+90	EdD/PhD
KOC (n)	n/%	n/%	n/%	n/%	n/%	n/%	n/%
I (n=20)	0/0	1/5	12/60	1/5	2/10	1/5	3/15
II (n=15)	0/0	2/13	7/47	2/13	3/20	0/0	1/7
III (n=17)	0/0	6/35	3/18	6/35	2/12	0/0	0/0
IV (n=10)	0/0	0/0	3/30	3/30	2/10	1/10	1/10
V (n=6)	0/0	1/17	3/50	0/0	2/33	0/0	0/0
VI (n=2)	0/0	0/0	1/50	1/50	0/0	0/0	0/0
VII (n=3)	0/0	0/0	1/33	1/33	1/33	0/0	0/0
Total (n=73)	0/0	10/14	30/41	14/19	12/16	2/3	5/7

Table 4.6

Years of Administrative Experience Distribution of
Participants Listed According to Kind of Community
(KOC I-VII) Classification

		Years of Administrative Experience					
		(1)	(2)	(3)	(4)	(5)	(6)
		<1	1-2	3-5	6-9	10-20	21+
KOC (n)		n/%	n/%	n/%	n/%	n/%	n/%
I	(n=20)	0/0	1/5	2/10	3/15	11/55	3/15
II	(n=15)	2/13	4/27	0/0	0/0	5/33	4/27
III	(n=17)	0/0	0/0	0/0	3/18	9/53	5/29
IV	(n=10)	0/0	0/0	2/20	1/10	5/50	2/20
V	(n=6)	0/0	0/0	0/0	1/17	3/50	2/33
VI	(n=2)	0/0	0/0	0/0	0/0	0/0	2/100
VII	(n=3)	0/0	0/0	1/33	0/0	2/67	0/0
Total	(n=73)	2/3	5/7	5/7	8/11	35/48	18/24

Table 4.7

Years as Principal at Present School Distribution
of Participants Listed According to Kind of Community
(KOC I-VII) Classification

		Years as Principal at Present School					
		(1)	(2)	(3)	(4)	(5)	(6)
		<1	1-2	3-5	6-9	10-20	21+
KOC	(n)	n/%	n/%	n/%	n/%	n/%	n/%
I	(n=20)	2/10	1/5	6/30	4/20	7/35	0/0
II	(n=15)	3/20	4/27	2/13	1/7	2/13	3/20
III	(n=17)	1/6	3/18	5/29	5/29	2/12	1/6
IV	(n=10)	1/10	2/20	2/20	2/20	2/20	1/10
V	(n=6)	0/0	0/0	1/17	2/33	2/33	1/17
VI	(n=2)	0/0	0/0	0/0	0/0	1/50	1/50
VII	(n=3)	0/0	1/33	2/67	0/0	0/0	0/0
Total	(n=73)	7/10	11/15	18/24	14/19	16/22	7/10

Table 4.8

Number of Teachers Distribution at Present School of
Participants Listed According to Kind of Community
(KOC I-VII) Classification

		Number of Teachers at Present School					
		(1)	(2)	(3)	(4)	(5)	(6)
		<10	10-19	20-29	30-39	40-49	50+
KOC (n)		n/%	n/%	n/%	n/%	n/%	n/%
I	(n=20)	2/10	7/35	6/30	2/10	0/0	3/15
II	(n=15)	0/0	5/33	8/53	1/7	1/7	0/0
III	(n=17)	0/0	1/6	3/18	7/41	4/23	2/12
IV	(n=10)	0/0	3/30	3/30	0/0	3/30	1/10
V	(n=6)	0/0	1/17	4/67	0/0	1/17	0/0
VI	(n=2)	0/0	0/0	0/0	1/50	1/50	0/0
VII	(n=3)	0/0	1/33	0/0	2/67	0/0	0/0
Total	(n=73)	2/3	18/24	24/33	13/18	10/14	6/8

Table 4.9

Amount of PDM Training Distribution of Participants
Listed According to Kind of Community (KOC I-VII)
Classification

		Amount of PDM Training				
		(1)	(2)	(3)	(4)	(5)
		no training	1 ins/ wkshp	2 ins/ wkshp	3 ins/ wkshp	other
KOC (n)		n/%	n/%	n/%	n/%	n/%
I	(n=20)	9/45	3/15	3/15	2/10	3/15
II	(n=15)	7/47	2/13	1/7	2/13	3/20
III	(n=17)	7/41	5/29	2/12	0/0	3/18
IV	(n=10)	7/70	1/10	1/10	1/10	0/0
V	(n=6)	4/67	1/17	1/17	0/0	0/0
VI	(n=2)	0/0	0/0	1/50	1/50	0/0
VII	(n=3)	1/33	1/33	0/0	0/0	1/33
Total	(n=73)	35/48	13/18	9/12	6/8	10/14

Table 4.10

Years of Administrative Experience Using PDM
Distribution of Participants Listed According
to Kind of Community (KOC I-VII) Classification

		Years of PDM Administrative Experience					
		(1)	(2)	(3)	(4)	(5)	(6)
		<1	1-2	3-5	6-9	10-20	21+
KOC (n)		n/%	n/%	n/%	n/%	n/%	n/%
I	(n=20)	5/25	4/20	4/20	0/0	5/25	2/10
II	(n=15)	7/47	4/27	1/7	0/0	1/7	2/13
III	(n=17)	3/18	1/6	5/29	3/18	3/18	2/12
IV	(n=10)	2/20	1/10	3/30	0/0	3/30	1/10
V	(n=6)	3/50	0/0	1/17	1/17	1/17	0/0
VI	(n=2)	0/0	0/0	1/50	0/0	0/0	1/50
VII	(n=3)	1/33	1/33	1/33	0/0	0/0	0/0
Total	(n=73)	21/29	11/15	16/22	4/5	13/18	8/11

Table 4.11

Participants' Open-Ended Response Distribution

Listed According to Stages of Concern Domain

and Kind of Community (KOC I-VII) Classification

	Stages of Concern Domain			
	(0)	(1)	(2)	(3)
	Non-Concern	Self	Task	Impact
KOC (n)	n/%	n/%	n/%	n/%
I (n=18)	4/22	3/17	7/39	4/22
II (n=24)	6/25	4/17	9/37	5/21
III (n=21)	3/14	6/29	7/33	5/24
IV (n=15)	4/26	1/7	10/67	0/0
V (n=6)	1/17	0/0	3/50	2/33
VI (n=4)	0/0	0/0	2/50	2/50
VII (n=3)	1/33	0/0	2/67	0/0
Total (n=91)	19/21	14/15	40/44	18/20

Table 4.12

Frequency Distribution of First and Second
High Stages of Concern Questionnaire Scores
Listed According to Kind of Community (KOC I-VII)
Classification

	Stages of Concern						
	0	1	2	3	4	5	6
KOC	Number of First/Second High Scores *						
I	13/2	2/3	1/9	1/3	1/0	2/1	0/2
II	8/3	2/4	4/5	0/0	0/0	1/3	1/0
III	8/2	4/3	3/11	1/1	1/0	0/2	0/0
IV	3/1	1/5	3/3	2/1	0/1	0/1	2/0
V	4/1	0/1	1/3	1/2	0/0	0/0	0/1
VI	1/1	0/0	0/0	1/0	0/0	0/1	0/0
VII	2/0	0/0	0/1	0/2	0/0	1/0	0/0
Total	39/9	9/16	12/28	6/9	2/1	4/8	3/3
%	53/12	12/22	16/38	8/12	2/1	3/11	4/4

* includes tie scores

Table 4.13

<u>Relationship Among Participants' Ages and</u>

<u>Intensity of Concerns</u>

<u>Stages of Concern</u>	<u>r</u>
Awareness	.169
Informational	.107
Personal	-.024
Management	-.081
Consequence	-.174
Collaboration	-.088
Refocusing	-.243 *

Number: Participants = 73
* Critical value of r for the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n - 2 = 71)

Table 4.14

Relationship Among Participants' Levels of Education

and Intensity of Concerns

Stages of Concern	r
Awareness	-.209
Informational	-.057
Personal	-.079
Management	.024
Consequence	.179
Collaboration	.133
Refocusing	.085

Number: Participants = 73
* Critical value of r for the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n - 2 = 71)

Table 4.15

Relationship Among Participants' Years of

Administrative Experience and Intensity of Concerns

Stages of Concern	r
Awareness	-.031
Informational	-.174
Personal	-.262 *
Management	-.237 *
Consequence	-.164
Collaboration	-.201
Refocusing	-.384 *

Number: Participants = 73
* Critical value of r for the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n - 2 = 71)

Table 4.16

Relationship Among Participants' Years as Principal at
Present School and Intensity of Concerns

Stages of Concern	r
Awareness	.039
Informational	-.249 *
Personal	-.223
Management	-.206
Consequence	-.287 *
Collaboration	-.247 *
Refocusing	-.406 *

Number: Participants = 73
* Critical value of r for the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n - 2 = 71)

Table 4.17

Relationship Among Partipants' Numbers of Teachers

at Present School and Intensity of Concerns

Stages of Concern	r
Awareness	-.253 *
Informational	-.150
Personal	-.160
Management	-.064
Consequence	-.008
Collaboration	-.007
Refocusing	-.186

Number: Participants = 73
* Critical value of r for the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n- 2 = 71)

Table 4.18

Relationship Among Participants' Amount of PDM

Training and Intensity of Concerns

Stages of Concern	r
Awareness	-.317 *
Informational	-.055
Personal	-.019
Management	.020
Consequence	.170
Collaboration	.156
Refocusing	.117

Number: Participants = 73
* Critical value of the Pearson r correlation
  coefficient at the .05 level is .231
  (based on n - 2 = 71)

Table 4.19

Relationship Among Participants' Administrative

Experiences Using PDM and Intensity of Concerns

Stages of Concern	r
Awareness	-.313 *
Informational	-.267 *
Personal	-.204
Management	-.242 *
Consequence	.026
Collaboration	-.003
Refocusing	-.076

Number: Participants = 73
* Critical value of r for the Pearson r correlation
   coefficient at the .05 level is .231
   (based on n - 2 = 71)

CHAPTER 5

SUMMARY AND CONCLUSIONS

This closing chapter reviews the data analysis and
presents a summary of the research and findings,
followed by conclusions, recommendations (i.e.,
interventions) and, finally, suggestions for further
study. Basically, these four questions are answered in
the following:

1. What did I do?

2. What did I learn?

3. What does it mean?

4. What am I going to do about my findings?

Summary of the Findings

The answer to the first question (i.e., What did I
do?) is this: I did a baseline study to assess the
concerns of a stratified random sample of southeastern
Massachusetts elementary school principals who,
according to their superintendent of schools, initiated
participative decision making in their schools.

What did I learn? According to the findings,
derived from the analysis of the data, they are as
follows:

1. The perceived intensity of concerns of a
stratified random sample of southeastern Massachusetts
elementary school principals who have initiated
participative decision making in their schools have
their first high SoCQ scores for relative intensity of
concern distributed accordingly: 53% in the "Awareness"
stage (or "Non-Concern" domain); 16% in the "Personal"
stage (in the "Self" domain); 12% in the "Informational"
stage (also in the "Self" domain); 8% in the
"Management" stage (in the "Task" domain). The final
three areas of intensity of concerns of first high SoCQ
scores fall under the "Impact" domain with
"Collaboration" stage at 5%, "Refocusing" stage at 4%,
and, finally, "Consequence" stage at 2%. As in the case
of first high SoCQ scores, second high SoCQ scores show
a majority of concerns in Stages 0 through 2, indicating
that most of the participants in the study are in
developmentally early (or non-use) stages of PDM
implementation.

Analysis of the responses to the Open-Ended Concern
Statement indicate that the most frequently cited
concern, by approximately half of the respondents, fall

into the "Task" domain; the other half of concerns are
almost evenly distributed (in descending order) among
"Impact," "Self," and "Non-Concern" domains. There is
no observed significance of the open-ended responses
relating to any particular demographic item as the
analyzed principals' responses show no remarkable
demographic patterns.

Based on inferential analysis (i.e., Pearson r
product moment correlation coefficients), the findings
continue to be described in the following:

2. There are no significant relationships among
these elementary school principals' ages and their
intensity of concerns toward participative decision
making in their schools.

3. There are no significant relationships among
these elementary school principals' levels of education
and their intensity of concerns toward participative
decision making in their schools.

4. There are no significant relationships among
these elementary school principals' number of years
experience as an administrator and their intensity of

concerns toward participative decision making in their
schools.

   5. There are significant relationships among these
elementary school principals' number of years as
principal at their present schools and their intensity
of concerns toward participative decision making in
their schools.

   6. There are no significant relationships among
these elementary school principals' number of teachers
at their schools and their intensity of concerns toward
participative decision making in their schools.

   7. There are no significant relationships among
these elementary school principals' amount of training
in participative decision making practices and their
intensity of concerns toward participative decision
making in their schools.

   8. There are no significant relationships among
these elementary school principals' number of years of
administrative experience with participative decision
making and their intensity of concerns toward
participative decision making in their schools.

Conclusions and Recommendations

What does it mean? This investigation of
principals' perceived relative intensity of concerns
regarding participative decision making in their schools
has provided some insightful information for those
interested in facilitating participative decision making
in their schools. A review of the Stages of Concern
about the innovation will provide a basis for reference
and understanding of the findings. The seven stages
(i.e., Stages 0 through 6) are described by Hall et al.,
1973, 1986 as follows:

Stage 0: Awareness--Little concern about or
involvement with the innovation is indicated.

Stage 1: Informational--A general awareness of
the innovation and interest in learning more
detail about it is indicated. The person seems
to be unworried about herself/himself in relation
to the innovation. She/he is interested in
substantive aspects of the innovation in a selfless
manner such as general characteristics, effects,
and requirements for use.

Stage 2:   Personal--Individual is uncertain about
the demands of the innovation, her/his inadequacy
to meet those demands, and her/his role with the
innovation. This includes analysis of her/his
role in relation to the reward structure of the
organization, decision making, and consideration
of potential conflicts with existing structures or
personal commitment. Financial or status
implications of the program for self and colleagues
may also be reflected.

Stage 3:   Management--Attention is focused on the
processes and tasks of using the innovation and the
best use of the information and resources. Issues
related to efficiency, organizing, managing,
scheduling, and time demands are utmost.

Stage 4:   Consequence--Attention focuses on
impact of the innovation on clients in her/his
immediate sphere of influence. The focus is on
relevance of the innovation for clients, evaluation
of client outcomes, including performance and
competencies, and changes needed to increase client
outcomes.

Stage 5: Collaboration--The focus is on
coordination and cooperation with others regarding
use of the innovation.

Stage 6: Refocusing--The focus is on exploration
of more universal benefits from the innovation,
including the possibility of major changes or
replacement with a more powerful alternative.
Individual has definite ideas about alternatives
to the proposed or existing form of the innovation
(Hall et al., 1973; Hall et al., 1986, p. 7).

Conclusions drawn from qualitative and quantitative
analyses in this study are further discussed as follows:

Although seventy-five percent (75%) of all
school superintendents in southeastern Massachusetts
indicated their systems' elementary schools have
initiated participative decision making, the results
of the descriptive statistical analysis, based on the
Stages of Concern Questionnaire participant responses,
indicate that fifty-three percent (53%) have their
highest intensity of concerns in the "Non-Concern"
domain, or "Awareness" stage (Stage 0), suggesting (as

the second high SoCQ scores confirmed) most are either
non-user or very early users of the innovation. As an
interesting encounter related to the possibility that
superintendent and principal communication may be a
factor, one principal stated to me that she was
"surprised to learn that the superintendent even knew
what kind of decision making practices were going on" in
her school.

Unlike the clarity of interpretation of all other
stages, interpretation of Stage 0 scores can suggest a
number of things. High scores at Stage 0 indicate
"that the individual has low concerns, knowledge,
attention, or interest in regarding the innovation"
(Hall et al., 1986, p. 46). It was noted that the
person may have low concern about one or more of
these (Hall et al., 1986). Conversely, low Stage 0
scores could indicate high concerns about the
innovation. Thus, other stages of concern need to be
more widely reviewed in order to assess specific areas
of concern because of this reverse polarity (i.e., Stage
0 could be marked high by both experienced "Users" and
inexperienced "Non-users"). If the first high SoCQ

scores fall in Stages 0 through 2, the determination
about whether a person is a "User" or "Non-user" can be
made as second high SoCQ scores are examined. If second
high scores fall into Stages 0 through 2, it would
indicate the person is a "Non-user" (or early "User");
if second high scores fall into Stages 3 through 6, the
indication would be that the person is a "User."

Further review of the Stages of Concern
Questionnaire scores indicates that the respondents'
highest scores regarding intensity of concern fall next
into the "Personal," or "Stage 2" level, followed by
"Informational," or "Stage 1." According to Hall et al.
(1986), the interpretation of the data suggest that they
are "Non-Users," as the guideline for "Users" show low
Stage 0 scores while Stages 3 through 6 will be
relatively high. They noted that Stage 0 scores for
"established users who are no longer particularly
concerned about the innovation begins to climb" (Hall et
al., 1986, p. 48). Because experienced users tend to
have a number of other things aside from the innovation
that more greatly concern them, reflected by high Stage
0 scores (i.e., 60th, 70th and even 80th percentiles).

Stage 1 and 2 scores, however, are relatively low with

Stages 3 through 6 containing their second highest score

(Hall et al., 1986, p. 49). The majority of

participants in this study hold lowest SoCQ scores in

Stages 3 through 6, confirming early (or non-use) stage

of development.

When reviewing the plotted SoC graphs, Susan

Loucks-Horsley (1991) has suggested looking at how it

"sits" (i.e., high, low, middle, etc.). After extensive

review of individual responses, plotted on a graph, the

majority of the participants are found to sit high on

the left, indicating they are in the very early

developmental stage of innovation use or, possibly,

non-users. The concerns theory hypothesizes that "as

individuals move from unawareness and non-use of an

innovation into beginning use and more highly

sophisticated use, their concerns develop from being

most intense at Stages 0, 1, and 2, to most intense at

Stage 3, and ultimately to most intense at Stages 4, 5,

and 6. Particularly if the innovation is a positive one

and there is support for its implementation, an

individual's concern profile plotted over time should

have the form of a progressive wave motion from left to
right" (Hall et al., 1986, p. 34).

Although the "Impact" level appears to be the
optimum mode of operation in education, the research
appears to confirm that when one is confronted with a
"new" innovation (as the majority of participants have
indicated in the Demographic Survey Instrument), almost
everyone will indicate an intensity of concern in the
"Personal" and "Informational" stage. Hall (1976) has
stated "it is important to recognize that self concerns
are a fully legitimate part of change. The
recommendations are that, rather than indicting people
for having self concerns, the role of the adoption
agents and policy/decision-makers should be to aid in
the resolution of self concerns and to facilitate
arousal of task- and impact-related concerns. When
planning for innovation implementation, managers of
change need to anticipate self concerns and initiate
actions to accommodate and resolve them at the outset of
the innovative effort" (p. 22).

As Rogers and Shoemaker (1971) referred to
individual personality characteristics in adopting

innovations (i.e., "innovators," "early adoptors," "early majority," "late majority," " laggards"), participative decision making, as an innovation, can be subject to risk at the adoption phase by "laggard" administrators who are resistant to change. The "crime," as Hall (1976) puts it, "is not having self concerns, but in others not accepting their legitimacy and constructively addressing their resolution" (p. 22).

Quantitatively, only one null hypothesis is rejected in this study. Using aggregate kind of community analysis, a negative correlation was found among "number of years as principal at present school" and intensity of concerns. An inverse relationship was evident, noting that as one's years at the present site increased, a decrease was found in these Stages of Concern: "Informational," "Consequence," "Collaboration," and "Refocusing." Referring to the previously described stages by Hall et al. (1986), concerns about the innovation in the areas of attaining information ("Informational" stage) or the innovation's potential impact ("Consequence," "Collaboration," "Refocusing" stages) appear to be reduced the longer the

individual is principal at a particular school. The
explanation could be that familiarity with one's
environment appears to increase the level of comfort,
reducing one's perceived need for change. Perhaps as
one stays as principal in one place long enough, he or
she worries less about his or her role, personally or
organizationally, as it relates to an innovation as
would a principal in less familiar or experienced
circumstances.

Suggestions of alternate hypotheses could include
these considerations: In schools where progress has
been historically perceived as going satisfactorily
under the principal's long-term leadership, central
office support for change may be reluctant. Further,
change agent or facilitation projects could be hesitant
to disturb an autocratic leadership style if the school
is deemed to be operating without problems.
Additionally, perceived constraints regarding teachers
(i.e., attitudes indicating an unwillingness to be
involved, teacher union resistance, comfort with status
quo, lack of motivation for professionalism/empowerment,
etc.), as well as principals (i.e., reluctance to share

power, lack of skills to effect change, infantilizing

staff, etc.) could factor into a principal's decision to

forsake implementation of participative decision making,

as he or she continues to operate at a site on a "status

quo" basis.

Due to their undisputed impact on educational

reform and school improvement efforts, Hodgkinson (1988)

and Naisbitt (1984) have suggested that demographic

trends must be addressed. As reflections are made

regarding the findings in this study, these demographic

issues are more closely examined: most superintendents

are male (91%) and most principals are male (71%).

These other modes were noted in the following

categories: the principal respondents are mostly (48%)

in the 40-49 year old category; 41% hold Master's plus

30 level of education; 48% have 10-20 years of

experience as an administrator, but 29% indicate using

PDM administratively for less than one year; 24% have

been at their current school for 3-5 years (with 22%

having 10-20 years experience as a close second and 19%

having 6-9 years running third); 33% fall into the 20-29

teachers (at school) category.

Recent studies have indicated that Massachusetts
teachers are: mostly female (in grades pre-kindergarten
through three they comprise 95%; in grades four through
six they comprise 75%); have a median age of 43; are
"experienced" (as are Massachusetts administrators); and
are less satisfied with their teaching careers than
their nationwide counterparts (Burbank, 1991, p. 8-11;
Hartman & Price, 1991). Level of education for all
educational personnel (administrators and teachers)
indicated in the 1990 Massachusetts survey show that 2%
of the males, and 1% of the females hold doctorates; 5%
of the males, and 2% of the females hold Certified
Advanced Graduate Studies certificates; 24% of the
males, and 14% of the females have reached the master's
plus 30 category (Burbank, 1991; Hartman & Price, 1991,
p. 8-11).

The descriptive implications of the research appear
to indicate gender, age, and level of education as key
factors in the implementation of participative decision
making in schools, although inferentially only one null
hypothesis is rejected. Patton (1987) suggests that
when "considering relationships between program

processes and observed outcomes, or other possible causal relationships that may help explain patterns in the data collected... speculations on causal relationships are entirely appropriate--as long as they are clearly labeled as speculative" (p. 278) In speculating, some conclusions that appear to transcend the study's qualitative (i.e., Open-Ended Concern Statement response evaluation) and quantitative (i.e., acceptance/rejection of the null hypothesis based on the Pearson r product moment correlation coefficient) analyses are herewith offered.

Some speculations that could be made from the study's implications are that in a male dominated culture (i.e., administrators, both superintendents and principals), the probability of expanding decision making roles to the lesser educated teachers (most of whom have been traditionally females) of the paternalistic organizational structure appears dubious. Further, entrenched educational personnel (administrators and teachers) appear less likely to change unless the change can be considered beneficial to individuals on both personal and organizational levels.

As an antidote to this apparent inequality, administrators and policy-makers should seriously consider broadening opportunities to include a more equitable gender organizational representation.

Apathy could be another consideration in the implementation process. Some representative comments made by respondents to the Open-Ended Concern Statement were: "At this point, I have no interest in PDM," "I do not think about PDM," and "Honestly, I do not think about PDM." Additionally, upon conclusion of this study, all principal participants were given the option of having their personal profile mailed to them. Only thirty-four (34) out of seventy-three (73) participants expressed an interest in getting further, personal information about the study. It was noteworthy that of the thirty-four (34), twenty-seven (27) were participants who chose to take the time to make comments for the Open-Ended Concern Statement.

The research has suggested that if participative decision making is to be implemented effectively, there is a need for interventions to recognize and address the early stage concerns. Processes for intervention

should be considered in the technical, political, cultural, and ethical aspects of the organization. Use of suggested Taxonomy of Interventions, according to the Concerns-Based Adoption Model, cover six general areas: Policy, Game Plan Components, Strategy, Tactic, Incident, and Theme. These interventions, previously discussed in Chapter 2, have been described as facilitators of the change effort by providing prescriptive measures for resolving concerns (Hall, Zigarmi, & Hord, 1979). (All of the "Interventions" are planned, except for "Theme.") They are described accordingly:

1. Policy--includes rules or regulations that direct, and actions of, an organization.

2. Game Plan Components (GPC)--provides a checklist for supportive change facilitation actions covering six distinct categories for intervention: developing supportive organizational arrangements, training, consultation and reinforcement, monitoring, external communication, and dissemination.

3. Strategy--uses a framework for action and translates the game plan design into concrete action.

4.   Tactic--operationalizes the strategy to affect attitudes regarding utilization of the innovation.

5.   Incident--is a singular occurrence or event that usually cover small amounts of time and can be targeted at one or more individuals.

6.   Theme--is a set of repeated actions that accumulate an effect to produce unexpected effects on an innovation.

According to this baseline diagnosis of a statified random sample of southeastern Massachusetts elementary school principals, stage concern areas of "Awareness," "Informational," and "Personal" are the most pressing for resolution.   It was significant that forty-eight percent (48%) of the respondents indicated "no training" regarding participative decision making practices, indicating an early developmental stage and suggesting that education in that area should be addressed.   As administrators (superintendents and principals) take steps to deal with personalized resolution of these current early stages of concern, while anticipating possible future concerns as indicated in this research, effective implementation of participative decision

making could be more likely realized according to the
C-BAM (Hall, 1979; ASCD, 1987).

Open-Ended Concern Statement responses included
these issues: time (e.g., "Time constraints in order to
implement PDM could be overwhelming"), threats to power/
accountability/responsibility (e.g., "My authority as a
building principal will be diminished, but my overall
responsibility and accountability will not be"), lack of
understanding (e.g., "I need to know more"), funding
(e.g., "The lack of funding may make any change efforts
impossible"), motivation (e.g., "Some teachers would
rather have administrators decide for them"), support
(e.g., " How do we get teachers and others to support
this effort?"), union resistance (e.g., "Main
problem--union has made every effort to place members of
the executive board on every committee so union position
can be protected. That doesn't necessarily coincide
with the needs of children or the educational system."),
and apathy (e.g., "Honestly, I don't think about PDM").
In order to set a course for intervention as it relates
specifically to this study's findings on the
implementation of participative decision making, the

Hall and Hord (1984) Game Plan Components are used as a
framework accordingly:

Game Plan Component 1: Develop supportive
organizational arrangements--for participative decision
making by making provisions (including creative funding)
for training of principals and teachers through
workshops and/or college courses with release time as
needed. Additionally, central office support actively
lends itself to adoption of the innovation through
informal and formal policies, making provisions for
accountability and responsibility factors. To respond
to administrator reticence (i.e., threats to power,
etc.) and teacher resistance (i.e., union demands),
policies involving roles and responsibilities need to be
developed to assure principals' administrative and
teachers' (individual, as well as collective)
professional positions. Collaborate with other school
systems to produce pilot programs that would serve the
purpose of motivating and challenging administrators and
teachers to culturally embrace the organizational and
personal benefits involved with PDM. Effective internal

and external communication is a vital part of the process.

Game Plan Component 2: Training--principals and teachers receive training in change and participative decision making procedures. A selected number could further train others as members become educated in how to work with one another using participative decision making group process techniques. Counteract apathy with education and enthusiasm.

Game Plan Component 3: Providing consultation and reinforcement--by making those equipped with participative decision making expertise available for school visits. Frequent "comfort and caring" visits to every school in a system implementing PDM has been considered an effective reinforcement technique.

Game Plan Component 4: Monitoring and evaluation--should be carried out periodically to assess and discuss concerns by all involved in the change effort. The SoCQ could be used for that purpose to provide a baseline of concerns and subsequent development. Meeting with others involved in PDM, to share experiences and data, is considered a helpful

aspect of the change process. Summative data are not collected until substantial time (e.g., three to five years) has elapsed. It should be remembered: change is not an event; it's a process.

Game Plan Component 5: External communication --could be provided through the use of monthly implementation progress reports to (e.g.) other regions or school systems interested in PDM implementation. Further, the administrators (superintendents and/or principals) could provide teacher feedback regarding PDM activities and accomplishments through a community media route (e.g., newletters, cable television or radio) (based on Hall & Hord, 1984, p. 202-203).

Because participative decision making has appeared, from the findings, to be in a very early developmental, or non-use stage, action to assist the change process has been indicated. Unless change facilitators (principals, in particular, along with superintendent and central office support) take steps to address the resolution/arousal of concerns as previously described, PDM implementation could be in jeopardy. Central office support is crucial in change efforts such as PDM, as

Cohen (1991) revealed the progress of a Rand study of five major school districts. Over the past two years, she noted, the school districts working best with school-based management (involving PDM) were the ones where the "entire system adopts decentralization, shifting power from a central office to local schools" (Cohen, 1991, p. 57).

As knowledge about one's developmental state is made known, personalized interventions could be provided for relevant current concerns as well as the anticipation of possible future concerns, according to this model, thus potentiating effective implementation (Hall, 1979; ASCD, 1987). Further, if a planned change effort is to be successful, the Concerns-Based Adoption Model makes these assumptions that should be considered:

It should be remembered that change is a process, not an event. Individuals first accomplish change, then institutions. Because of the highly personal nature of change, interventions need to accommodate the individual, innovation, and the context (ASCD, 1987, p. 5-7).

Change efforts will more likely succeed as these previously described interventions include technical, political, cultural, and ethical considerations. Increased knowledge, enthusiasm and a sense of personal and organizational purpose and meaning could replace apathy. Rather than biding time on the job and collecting paychecks, a professional renewal could become a reality as individuals are provided opportunities to be motivated and challenged to participate more equitably in organizational decisions.

Although not the intent of the study, it appears from the results that the assumptions of concerns theory have been validated. This statement is made, not based on my stated hypotheses, but according to the indications of the plotted SoCQ scores that were illustrative of early (or non-user) developmental stages, which data gathered from the Demographic Survey Instrument appeared to support. This appearance of validation is based on the developmental conceptualization assumptions of the Concerns-Based Adoption Model which indicate that as one is in an early (or non-use) developmental stage, the relative intensity

of concerns will be found in Stages 0 through 2, as was noted in this study.

What am I going to do about my findings? Mailings have been provided to all principal participants regarding the study's (aggregate) findings, suggestions for interventions that address effective innovation implementation, resources for support, and, for those requesting it, a personal profile of relative intensity of concerns plotted on a graph. Likewise, all southeastern Massachusetts school superintendents were provided with the aforementioned information as noted in Appendix O and described above.

Suggestions for Further Study

A number of other studies could be very useful as a follow-up to this research regarding principals' perceived stages of concern toward the implementation of participative decision making in their schools and are suggested in the following:

1. Since this study focused on elementary schools in southeastern Massachusetts, follow-up studies could be expanded to other regions of Massachusetts, and, in other levels (i.e., middle schools or high schools).

2. Further investigations of principals' attitudes
regarding participative decision making could be
conducted through the use of personal in-depth
interviews.

3. This study focused on the use of the Stages of
Concern Questionnaire (with a Demographic Survey
Instrument component), one of three Concerns-Based
Adoption Model instruments, as the vehicle for obtaining
data. Additional studies could make use of the Levels
of Use and/or the Innovation Configuration instruments
in an examination of participative decision making in
schools.

4. Since the purpose of this study was to provide
a baseline diagnosis of principals' concerns, a
replicate study could be done one or two years hence, to
confirm validity of the Concerns-Based Adoption Model
developmental assumptions.

5. Because teacher resistance and central office
support could be critical to successful implementation
regarding participative decision making, a study of
teachers' and/or school superintendents' concerns could
provide additional insights.

6.   The implications of this study noted that the gender of the superintendents, principals, and teachers could provide important considerations in the implementation of PDM, suggesting the need for further examination.

APPENDICES

APPENDIX A:

LETTER TO SCHOOL SUPERINTENDENTS

AND RESPONSE FORM

46 Furnace Street
P.O. Box 339
Marshfield, MA   02050
XXXX XX, 199X

Dear Superintendent,

Your help is being sought for a University of
Massachusetts at Amherst research project associated
with a study involving elementary schools in
southeastern Massachusetts. Would you please take a
moment to fill out the enclosed self-addressed stamped
postcard to indicate, with one simple check mark,
whether your school system has initiated (it doesn't
matter how recently) participative decision making
within its elementary schools. The definition of
"participative decision making" in this research refers
to meaningful decisions of consequence (i.e., curriculum
and materials, standards for students, and professional
standards and budget policies) made by the principal and
teachers together, which impact the quality of life in
their school.

The mentioned focus of this research will deal with
elementary schools. As these schools are identified by
you as having initiated participative decision making, a
follow-up questionnaire will be sent to a stratified
random sample of principals in order to identify and
analyze areas of principals' concerns. It will be
understood that principal participation will be
voluntary and confidentiality will be assured to all
those responding. Additionally, I will provide group
data analysis to those who express an interest in the
information.

If you would like additional information, please feel
free to call me at (617)837-0025. Thank you very much
for your assistance.

Sincerely,

Susan M. Randall

SUPERINTENDENT POSTCARD REPLY FORM

FROM:

Please indicate your response by checking the
appropriate line:

_____YES, participative decision making
has been initiated in the elementary
schools in my system.

_____NO, participative decision making
has not been initiated in the elementary
schools in my system.

APPENDIX B:

LETTER TO PRINCIPALS

46 Furnace Street
P.O. Box 339
Marshfield, MA 02050
March 11, 1991

Dear Principal,

A few months ago, I made contact with your
superintendent of schools for the purpose of
investigating whether or not your school system would be
eligible for further study if it was indicated that your
system's elementary schools had initiated participatory
(i.e., principals and teachers) decision making.
Because your superintendent has identified your district
as one that has initiated participative decision making
(it doesn't matter how recently), I am seeking your
assistance in this University of Massachusetts at
Amherst investigation. Although I have become
acquainted with a number of you in my role as a
Bridgewater State College student teacher supervisor, I
want to make the clarification that this research
project is in conjunction with the University of
Massachusetts at Amherst.

As I described it to your superintendent, a stratified
random sample of elementary school principals would be
developed according to the responses from all of the
southeastern Massachusetts superintendents. You were
among a minimun of seventy (70) principals chosen for
this advanced research effort. As you know, our sources
of collecting and analyzing vital information in
education rests with the good will of people who
respond, and your help as one of our best sources of
information in this endeavor is crucial if efforts to
improve our profession are to be realized.

This current effort is focusing on the process of change
in education. Participative decision making (PDM) is
the particular change innovation under investigation.
The definition of participative decision making in this
study refers to: meaningful decisions of consequence
made by the principal and his or her Massachusetts

certified or certifiable teachers together, which impact
the quality of life (academically, culturally,
emotionally, physically, professionally, socially) of
the school. The "meaningful decisions of consequence"
refer to these areas: curriculum and instructional
materials, standards for students, and professional
standards and budget policies.

The enclosed questionnaire seeks to measure your present
concerns about participatory decision making within your
school. It also contains sections for an open-ended
response as well as a Demographic Survey Instrument. In
keeping with appropriate sampling procedures, the only
coding process for the questionnaire will be a return
envelope address label for the purpose of identifying
and following up non-responses. To ensure
confidentiality of individuals' responses that are to be
filled out anonymously, envelopes will be promptly
destroyed upon receipt. Data analysis will be made and
presented according to group responses. If an
individual specifically requests a confidential analysis
of his or her _personal_ results, arrangements will be
made accordingly as indicated on the form.

Kindly return the questionnaire in the enclosed
pre-stamped envelope by March 22, 1991. As you respond
to these research questions you will be making a
contribution to education by increasing our level of
krowledge and understanding in the area of participative
decision making. Not only will this information expand
our knowledge base, it also holds promise to be of
benefit to you in your role as an administrator. Your
willingness to take a few minutes of your time to take
part in this study will be greatly appreciated.

Sincerely,

Susan M. Randall

P.S. Please feel free to call me at 617-837-0025 if you
have any questions.

RE: CONCERNS QUESTIONNAIRE

The purpose of this questionnaire is to determine what you are thinking about regarding your responsibilities with a particular innovation (i.e., program, practice, process). This particular study is investigating the practice of participative decision making (PDM).

The items were developed from typical responses of people whose familiarity with an innovation ranged from no knowledge at all to many years experience with it. Therefore, many of the items may appear to be of little or no relevance to you at this time. For the completely irrelevant items, please circle "0" on the scale. Other items will represent concerns that you do have, in varying degrees of intensity, and should be marked higher on the scale. For example:

This statement is very true
of me at this time................0 1 2 3 4 5 6 ⑦

This statement is somewhat
true of me now....................0 1 2 3 ④ 5 6 7

This statement is not at all
true of me at this time...........0 ① 2 3 4 5 6 7

This statement seems irrevelant
to me.............................⓪ 1 2 3 4 5 6 7

Please respond to the following items in terms of your present concerns, or how you feel about your involvement with PARTICIPATIVE DECISION MAKING (PDM). The definition of PARTICIPATIVE DECISION MAKING in this study refers to meaningful decisions of consequence made by the principal and Massachusetts certified or certifiable teachers together, which impact the quality of life (academic, cultural, emotional, physical, professional, social) in their school. Meaningful decisions of consequence will be considered as those that include curriculum and instructional materials, standards for students, and professional standards and budget policies.

Thank you for taking time to complete this task.

APPENDIX C:

LETTER OF REQUEST FOR USE OF

STAGES OF CONCERN QUESTIONNAIRE

TO UNIVERSITY OF TEXAS AT AUSTIN

46 Furnace Street
P.O. Box 339
Marshfield, MA   02050
May 14, 1990

Ms. Rosalind Lee
Administrator Associate
University of Texas at Austin
Office of the Dean
Education Building 210
Austin, TX   78712

Dear Ms. Lee,

Would you please advise me about how I could get written
permission to use an instrument associated with the
Concerns-Based Adoption Model (Hall et al.:   Procedures
for Adopting Educational Innovations/C-BAM Project;
University of Texas at Austin; Copyright 1974) called
the "Stages of Concern Questionnaire" for a doctoral
study associated with the University of Massachusetts at
Amherst? Your help in this matter will be greatly
appreciated.

Sincerely,

Susan M. Randall

APPENDIX D:

LETTER OF APPROVAL FOR USE OF

STAGES OF CONCERN QUESTIONNAIRE

FROM UNIVERSITY OF TEXAS AT AUSTIN

May 22, 1990

Susan M. Randall
46 Furnace Street
P.O. Box 339
Marshfield, MA 02050

Dear Ms. Randall:

In reference to your letter regarding use of the "Stages of Concern Questionnaire," make sure you completely reference that all materials were developed at The University of Texas Research and Development Center. This is somewhat of an awkward situation since the Center no longer exists, but I see no problem with you using this in your study as long as it is referenced properly.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Rosalind Lee
Administrative Associate

/rl

APPENDIX E:

UNIVERSITY OF MASSACHUSETTS AT AMHERST

HUMAN SUBJECTS REVIEW QUESTIONNAIRE FORM 7-B

.

DOCTORAL FORM D-7B

HUMAN SUBJECTS REVIEW QUESTIONNAIRE

Susan M. Randall   STUDENT NO: 7451740
   Student's name

Please answer the following questions:

1. How will human participants be used?

    Human participants will be asked to respond to a

    questionnaire.

2. How have you ensured that the rights and welfare of

    the human participants will be adequately protected.

    The questionnaire is to be completed anonymously, on

    a voluntary basis. Although the respondents will be

    informed that there will be no coding device in

    order to protect the identity of individuals, there

    will be an address label on return envelopes to

    allow for follow-up of nonresponses to secure data

    in keeping with appropriate sampling procedures.

    To ensure confidentiality of responsive individuals,

    envelopes will be promptly destroyed.

3. How will you provide information about your research
   methodology to the participants involved?
   A summary of group analyses will be provided to all
   school administrators to whom a questionnaire was
   distributed. Further, participants will have the
   option of being provided with an individual data
   analysis and a confidential response will be
   provided accordingly.

4. How will you obtain the informed voluntary consent
   of the human participants or their legal
   guardians? (Criteria for and samples of content
   of consent forms are available from the Division
   representative to the Human Subjects Review
   Committee.) Please attach a copy of your consent
   form.
   Upon return of responses from school
   superintendents, those containing affirmative
   responses to whether or not participative
   decision making has been initiated in their
   systems' elementary schools will become eligible
   for the stratified random sample selection. A
   telephone call will be made to those

southeastern Massachusetts elementary school
principals identified from the stratified random
sample to determine their willingness to respond
to a questionnaire regarding participative
decision making in their schools. Participants
will further demonstrate consent by actually
filling out and returning the questionnaire.
(Sample of letters to the school superintendents
and principals, as well as the questionnaire, are
attached.)

5. How will you protect the identity and/or
    confidentiality of your participants?
    The participants' identity and/or confidentiality
    will be protected because the study will contain
    no coding device to identify individuals, who will
    be asked to fill out the questionnaire
    anonymously. Assurances will be given that no
    attempt will be made to identify or report on any
    individual participating in the study as group
    data analysis will be presented.

Attach an abstract of your proposal.

APPENDIX F:

STAGES OF CONCERN QUESTIONNAIRE

STAGES OF CONCERN QUESTIONNAIRE

0	1	2	3	4	5	6	7

Irrele-	Not true	Somewhat true of		Very true of	
vant	me now	me now		me now	

1. I am concerned about teachers'
   attitudes toward PDM.........0 1 2 3 4 5 6 7

2. I now know of some other
   approaches that might work
   even better than PDM.........0 1 2 3 4 5 6 7

3. I don't even know what
   PDM is........................0 1 2 3 4 5 6 7

4. I am concerned about not having
   enough time to organize myself
   each day......................0 1 2 3 4 5 6 7

5. I would like to help other
   administrators in their use of
   PDM...........................0 1 2 3 4 5 6 7

6. I have a very limited knowledge
   about PDM.....................0 1 2 3 4 5 6 7

7. I would like to know the effect
   of reorganization on my
   professional status..........0 1 2 3 4 5 6 7

8. I am concerned about conflict
   between my interests and my
   responsibilities..............0 1 2 3 4 5 6 7

9. I am concerned about revising
   my use of PDM.................0 1 2 3 4 5 6 7

10. I would like to develop working
relationships with both our
administrators and outside
administrators using PDM.....0 1 2 3 4 5 6 7

11. I am concerned about how PDM
affects teachers.............0 1 2 3 4 5 6 7

12. I am not concerned about
PDM....·.....................0 1 2 3 4 5 6 7

13. I would like to know who will
make the decisions in the PDM
system.......................0 1 2 3 4 5 6 7

14. I would like to discuss the
possibility of using PDM.....0 1 2 3 4 5 6 7

15. I would like to know what
resources are available if we
decide to adopt PDM..........0 1· 2 3 4 5 6 7

16. I am concerned about my
inability to manage all that
PDM requires.................0 1 2 3 4 5 6 7

17. I would like to know how my
administration is supposed to
change.......................0 1 2 3 4 5 6 7

18. I would like to familiarize
other persons with the progress
of PDM.......................0 1 2 3 4 5 6 7

19. I am concerned about evaluating
the impact of PDM on
teachers.....................0 1 2 3 4 5 6 7

20. I would like to revise the
approach we are taking to
PDM..........................0 1 2 3 4 5 6 7

21. I am completely occupied with
other things.................0 1 2 3 4 5 6 7

22. I would like to modify our use
    of PDM based on the experiences
    of our teachers...............0 1 2 3 4 5 6 7

23. Although I don't know about PDM,
    I am concerned about things in
    this area.....................0 1 2 3 4 5 6 7

24. I would like to excite my
    teachers about their part
    in PDM........................0 1 2 3 4 5 6 7

25. I am concerned about time spent
    working with nonacademic
    problems related to PDM......0 1 2 3 4 5 6 7

26. I would like to know what the
    use of PDM will require of me
    in the immediate future......0 1 2 3 4 5 6 7

27. I would like to coordinate my
    effort with others to maximize
    PDM's effects.................0 1 2 3 4 5 6 7

28. I would like to have more
    information on time and energy
    commitments required by PDM..0 1 2 3 4 5 6 7

29. I would like to know what other
    administrators are doing in this
    area of PDM...................0 1 2 3 4 5 6 7

30. At this time, I am not
    interested in learning about
    PDM...........................0 1 2 3 4 5 6 7

31. I would like to determine how
    to supplement, enhance, or
    replace PDM...................0 1 2 3 4 5 6 7

32. I would like to use feedback
    from teachers to change PDM..0 1 2 3 4 5 6 7

33. I would like to know how my
     role will change when I use
     PDM........................0 1 2 3 4 5 6 7

34. Coordination of tasks and people
     is taking too much of my
     time........................0 1 2 3 4 5 6 7

35. I would like to know how PDM
     is better than what we have
     now.........................0 1 2 3 4 5 6 7

36. When you think about PDM, what are you concerned
     about? (Please be frank and use complete
     sentences.)

APPENDIX G:

STATEMENTS ON THE STAGES OF CONCERN

QUESTIONNAIRE ARRANGED ACCORDING TO STAGE

STATEMENTS ON THE STAGES OF CONCERN QUESTIONNAIRE
ARRANGED ACCORDING TO STAGE

Item Number	Statement

STAGE 0
(AWARENESS)

3	I don't even know what PDM is.
12	I am not concerned about PDM.
21	I am completely occupied with other things.
23	Although I don't know about PDM, I am concerned about things in this area.
30	At this time, I am not interested in learning about PDM.

STAGE 1
(INFORMATIONAL)

6	I have a very limited knowledge about PDM.
14	I would like to discuss the possibility of using PDM.
15	I would like to know what resources are available if we decide to adopt PDM.
26	I would like to know what the use of PDM will require of me in the immediate future.
35	I would like to know how PDM is better than what we have now.

STAGE 2
(PERSONAL)

7	I would like to know the effect of reorganization on my professional status.
13	I would like to know who will make the decisions in the PDM system.
17	I would like to know how my administration is supposed to change.
28	I would like to have more information on time and energy commitments required by PDM.

33   I would like to know how my role will change
        when I use PDM.

STAGE 3
(MANAGEMENT)

4   I am concerned about not having enough time
        to organize myself each day.
8   I am concerned about conflict between
        interests and my responsibilities.
16   I am concerned about my inability to manage
        all that PDM requires.
25   I am concerned about time spent working with
        nonacademic problems related to PDM.
34   Coordination of tasks and people is taking
        too much of my time.

STAGE 4
(CONSEQUENCE)

1   I am concerned about teachers' attitudes
        toward PDM.
11   I am concerned about how PDM affects teachers.
19   I am concerned about evaluating the impact of
        PDM on teachers.
24   I would like to excite my teachers about
        their part in PDM.
32   I would like to use feedback from teachers
        to change PDM.

STAGE 5
(COLLABORATION)

5   I would like to help other administrators in
        their use of PDM.
10   I would like to develop working relationships
        with both our administrators and outside
        administrators using PDM.
18   I would like to familiarize other persons with
        the progress of PDM.

27   I would like to coordinate my effort with
        others to maximize PDM's effects.
29   I would like to know what other administrators
        are doing in this area of PDM.

                    STAGE 6
                  (REFOCUSING)

2   I now know of some other approaches that might
        work even better than PDM.
9   I am concerned about revising my use of PDM.
20   I would like to revise the approach we are
        taking to PDM.
22   I would like to modify our use of PDM based
        on the experiences of our teachers.
31   I would like to determine how to supplement,
        enhance, or replace PDM.

APPENDIX H:

DEMOGRAPHIC SURVEY INSTRUMENT

DEMOGRAPHIC SURVEY INSTRUMENT

Please place an (X) before the response which best describes you.

1. Gender:
    _____ Male
    _____ Female

2. Age:
    _____ 20-29
    _____ 30-39
    _____ 40-49
    _____ 50-59
    _____ 60-69
    _____ 70+

3. Level of education (highest degree earned):
    _____ B.S./B.A.
    _____ Master's
    _____ M+30
    _____ C.A.G.S.
    _____ M+60
    _____ M+90
    _____ Ed.D./Ph.D.

4. Number of years of experience as an administrator:
    _____ less than 1
    _____ 1-2
    _____ 3-5
    _____ 6-9
    _____ 10-20
    _____ 21+

5. Number of years as principal at present school:
    _____ less than 1
    _____ 1-2
    _____ 3-5
    _____ 6-9
    _____ 10-20
    _____ 21+

6. Number of teachers at your school:
   _____ less than 10
   _____ 10-19
   _____ 20-29
   _____ 30-39
   _____ 40-49
   _____ 50+

7. Amount of training in participative decision making practices:
   _____ no training
   _____ 1 inservice/training workshop
   _____ 2 inservice/training workshops
   _____ 3 inservice/training workshops
   _____ other _____
                          (respondent supplied)

8. Number of years of administrative experience with participative decision making:
   _____ less than 1
   _____ 1-2
   _____ 3-5
   _____ 6-9
   _____ 10-20
   _____ 21+

If you are interested in receiving your individual results of this questionnaire as it compares with the average scores of all the other respondents who have taken part in this research project, I would be happy to provide you with the information. Again, this study has been designed to provide group data analysis. No attempt will be made to identify individuals and your particular profile will be kept confidential, for your personal review only, as you indicate here:

   _____ Yes, I am requesting a personal profile.

THANK YOU.

APPENDIX I:

KIND OF COMMUNITY CLASSIFICATION

MASSACHUSETTS DEPARTMENT OF EDUCATION

KIND OF COMMUNITY (KOC I-VII) ATTRIBUTES

Designed to be used as an "analytic tool", this
1985 community classification scheme reflects a more
current range of Massachusetts community characteristics
than its earlier four category predecessor. Demographic
and socio-economic attributes provided the basis on
which this statistically constructed tool had been
developed based on data obtained from the 1980 census.
The fifteen community attributes are defined below:

1. Equalized Property Valuation Per Capita: 1984
    equalized property valuation divided by 1980
    population.

2. Percentage High Income: Percentage of total
    households whose income exceeded $50,000 in
    1979.

3. Percentage Low Income: Percentage of total
    households whose income was less than $10,000
    in 1979.

4. Percentage With Some College: Percentage of
    all adults aged 25 and over on January 1, 1980

who had completed at least one year of college
education.

5. Manufacturing Activity Index: Composite index
of two attributes: a) percentage of total
valuation derived from industrial property, and
b) jobs in manufacturing, communication,
electric, gas, sanitary services, and
transportation; divided by land square miles.

6. Commercial Activity Index: Composite index of
two attributes: a) percentage of total
valuation derived from commercial property in
1984 and b) jobs in wholesale and retail trade,
finance, insurance, real estate and all other
services in 1982; divided by land square miles.

7. Residential Index: Percentage of total
valuation derived from residential property in
1984.

8. Unemployment Rate: Average percentage of the
labor force not employed during 1983.

9. Percentage Who Rent: Percentage of the
population living in rented housing units.

10. Housing Age: Percentage of occupied housing
     units built before 1940.

11. Percentage Minority: Non-white percentage plus
     Hispanic white percentage.

12. Percentage Foreign Language: Percentage of the
     population aged five and above who speak a
     language other than English at home, even if
     English is the primary language.

13. Percentage School Age: Percentage of the
     population aged 5-17 years.

14. Population Change: Percentage increase or
     decrease in population between 1970 and 1980.

15. Population Density: Total persons in 1980
     divided by land square miles (pp. 3,4).

APPENDIX J:

INDEPENDENT VARIABLES FROM THE

DEMOGRAPHIC SURVEY INSTRUMENT LISTED

ACCORDING TO CATEGORIES AND

ASSIGNED VALUES (N)

.

INDEPENDENT VARIABLES FROM THE

DEMOGRAPHIC SURVEY INSTRUMENT LISTED ACCORDING TO

CATEGORIES AND ASSIGNED VALUES (n)

1.
Gender:
Male (1)
Female (2)

2.
Age:
20-29 (1)
30-39 (2)
40-49 (3)
50-59 (4)
60-69 (5)
70+   (6)

3.
Level of Education:
B.S./B.A. (1)
Master's (2)
M+30   (3)
C.A.G.S. (4)
M+60   (5)
M+90   (6)
Ed.D./Ph.D. (7)

4.
Years experience
as administrator:
less than 1 (1)
1-2   (2)
3-5   (3)
6-9   (4)
10-20   (5)
21+   (6)

5.
Years as principal at
present school:
less than 1 (1)
1-2   (2)
3-5   (3)
6-9   (4)
10-20   (5)
21+   (6)

6.
Number of teachers
at school:
less than 10 (1)
10-19   (2)
20-29   (3)
30-39   (4)
40-49   (5)
50+   (6)

7.
Amount of PDM training:
no training   (1)
1 inservice/workshop   (2)
2 inservice/workshops   (3)
3 inservice/workshops   (4)
other   (5)

8.
Number of years of using
PDM administratively:
less than 1 (1)
1-2   (2)
3-5   (3)
6-9   (4)
10-20   (5)
21+   (6)

APPENDIX K:

STAGES OF CONCERN QUESTIONNAIRE RAW SCORES

WITH DEMOGRAPHIC SURVEY INSTRUMENT SCORES

STAGES OF CONCERN QUESTIONNAIRE RAW SCORES* WITH
DEMOGRAPHIC SURVEY INSTRUMENT SCORES (ASSIGNED VALUES)

| | Stages of Concerns | | | | | | |
| | Raw Scores | | | | | | |
Case	0	1	2	3	4	5	6
1.48	1.0	4.2	3.4	3.6	5.2	5.0	4.4
1.44	1.6	3.2	2.2	2.6	5.6	5.6	3.2
1.39	2.6	2.4	2.6	2.0	4.0	2.4	2.2
1.17	3.2	3.8	4.6	4.8	4.6	3.2	3.6
1.50	3.8	4.4	4.0	5.0	3.6	3.0	1.8
1.19	3.0	3.8	4.0	2.0	1.2	2.0	0.8
1.10	0.8	1.2	2.0	1.2	1.4	3.4	1.8
1.53	2.6	3.0	3.0	3.6	3.2	2.8	2.8
1.01	2.0	2.2	2.8	3.2	5.0	3.2	4.0
1.29	2.2	2.8	3.2	2.2	2.6	2.2	2.0
1.04	1.2	4.4	5.0	3.6	3.8	6.2	2.0
1.51	2.6	4.2	5.0	4.0	5.2	4.2	2.6
1.11	3.4	4.6	5.0	3.8	5.0	5.0	3.6
1.47	2.2	3.4	2.6	2.4	3.4	3.0	3.0

1.46	0.8	4.6	4.8	2.8	7.0	4.6	2.6
1.40	1.0	3.0	3.0	2.4	4.8	3.6	1.4
1.16	4.0	6.2	6.8	5.4	3.6	3.0	1.6
1.45	0.8	1.4	1.2	1.8	6.6	5.6	3.2
1.30	2.2	4.0	3.6	3.6	5.0	4.8	3.2
1.43	1.0	4.2	6.2	6.0	6.8	6.2	5.4
2.12	2.2	4.4	5.4	3.4	4.8	3.4	4.8
2.13	3.4	3.8	5.2	4.4	1.6	1.2	1.0
2.20	1.6	3.2	2.8	1.2	4.2	5.6	1.4
2.17	3.0	4.6	4.5	3.2	4.2	4.0	3.4
2.05	2.8	4.2	4.4	2.8	3.8	3.0	2.4
2.03	1.6	3.2	4.0	1.8	3.0	4.2	1.4
2.24	2.4	2.2	1.8	1.6	2.6	1.6	2.8
2.31	0.6	3.8	3.8	3.8	3.8	5.4	4.0
2.08	1.0	4.2	4.2	2.6	3.0	3.0	2.4
2.23	1.4	4.4	5.4	2.6	5.8	5.8	3.6
2.22	2.2	1.0	2.2	1.6	1.4	1.4	1.6
2.02	3.2	5.0	5.6	3.2	3.6	3.6	3.4
2.29	2.8	6.6	2.2	0.8	3.0	2.8	1.6
2.19	2.6	2.8	3.2	2.0	5.4	5.2	3.4
2.33	0.0	4.4	3.2	1.6	4.0	3.8	2.4
3.21	3.2	5.8	4.4	1.6	5.0	4.8	1.8

3.24	2.2	6.4	6.4	3.0	5.8	6.2	3.6
3.20	1.8	3.0	3.2	2.4	3.0	2.0	2.6
3.02	2.8	4.0	4.6	4.4	3.2	3.2	0.8
3.25	1.2	5.2	4.8	2.4	5.8	6.0	2.8
3.44	2.0	5.4	5.8	1.8	6.2	5.4	3.2
3.31	0.8	3.4	3.2	1.0	6.6	5.6	3.2
3.08	3.2	4.2	5.0	2.2	5.6	3.2	1.6
3.27	1.8	3.0	3.4	1.8	4.0	2.6	1.2
3.30	1.8	3.2	3.2	2.4	1.4	1.6	0.6
3.13	1.4	0.0	0.0	1.8	0.4	0.2	0.0
3.39	3.6	6.2	7.0	4.4	4.0	4.6	1.8
3.34	1.2	3.0	4.4	3.2	4.8	4.2	3.6
3.33	1.8	1.4	2.8	1.2	2.8	1.0	2.0
3.35	1.8	4.2	4.6	2.2	5.6	3.6	3.4
3.38	2.2	4.8	6.0	5.8	2.4	2.0	1.8
3.32	3.6	4.0	5.4	4.4	4.6	4.6	3.8
4.15	1.8	5.6	5.2	3.2	5.6	4.4	2.6
4.21	1.4	3.6	5.6	4.8	6.2	4.0	5.2
4.09	0.6	2.0	2.4	3.6	4.6	4.0	4.2
4.08	3.4	3.6	3.4	2.8	2.0	1.8	1.0
4.04	1.0	4.4	7.0	3.4	6.4	5.6	1.6
4.14	1.6	3.0	3.0	1.8	2.2	3.0	3.4

4.22	1.8	4.4	5.2	2.4	3.4	2.8	3.8
4.13	1.8	1.8	1.0	1.0	2.6	1.8	1.4
4.03	0.2	0.6	0.8	3.2	2.2	2.2	2.0
4.10	1.0	4.7	3.2	3.4	5.0	4.4	5.2
5.04	1.2	1.6	1.2	1.0	2.0	2.4	1.6
5.03	3.2	2.6	2.6	2.8	2.0	2.2	2.0
5.09	3.2	1.4	2.4	1.2	1.4	1.2	1.2
5.13	3.6	1.4	4.6	6.2	5.6	2.8	6.0
5.07	1.8	4.0	4.2	3.2	3.0	3.8	2.4
5.15	0.6	0.8	2.2	2.2	3.6	1.8	1.6
6.03	1.0	1.6	2.2	3.2	4.0	2.2	1.8
6.04	0.6	0.4	0.8	0.8	1.0	2.6	1.0
7.02	1.6	4.0	2.4	4.0	5.4	6.0	4.2
7.08	4.4	4.4	5.6	2.4	0.0	0.8	0.0
7.05	1.4	2.4	2.4	2.8	2.8	3.2	2.4

*Divided by five

Demographic Survey Instrument Scores

Case	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.48	2	4	7	4	3	3	5	3
1.44	1	5	6	6	5	3	3	2
1.39	1	5	3	5	3	2	2	5
1.17	1	3	3	5	5	6	1	1
1.50	1	4	3	5	5	3	1	1
1.19	2	3	3	5	4	2	1	1
1.10	1	4	2	6	5	2	1	6
1.53	1	3	7	5	3	6	3	5
1.01	1	3	5	4	3	3	3	3
1.29	2	4	3	5	5	1	1	5
1.04	2	4	3	5	4	6	5	3
1.51	1	3	4	5	1	2	1	1
1.11	2	4	3	2	2	1	4	2
1.47	1	3	3	3	3	4	1	1
1.46	2	4	3	6	4	2	4	6
1.40	1	3	3	5	4	4	2	5
1.16	1	4	3	5	5	2	1	5

1.45	1	2	7	4	3	3	1	2
1.30	1	3	3	5	5	3	2	3
1.43	2	3	5	3	1	2	5	2
2.12	1	2	2	2	1	3	2	1
2.13	1	4	5	5	5	3	4	1
2.20	2	3	5	5	2	5	4	3
2.17	2	3	4	1	1	3	1	1
2.05	2	4	3	5	3	2	1	1
2.03	2	5	2	6	6	2	1	5
2.24	1	4	3	6	6	2	5	6
2.31	1	3	4	2	2	2	5	2
2.08	1	4	3	2	2	3	1	2
2.23	1	3	7	2	2	3	5	2
2.22	1	5	3	6	6	3	1	6
2.02	1	3	3	1	1	4	1	1
2.29	1	5	3	6	3	3	1	1
2.19	1	4	3	5	5	2	2	1
2.33	1	4	5	5	4	3	3	2
3.21	1	3	2	5	4	4	1	1
3.24	1	4	4	6	6	4	2	6
3.20	1	5	4	6	4	4	5	3
3.02	1	3	2	4	2	3	1	1

3.25	1	3	2	4	3	5	2	4
3.44	1	3	2	5	1	5	3	5
3.31	1	4	3	6	3	3	1	6
3.08	1	4	4	6	5	4	2	3
3.27	1	3	5	5	2	5	2	3
3.30	2	3	4	5	3	6	1	1
3.13	1	3	4	5	2	6	5	5
3.39	1	4	2	5	5	4	1	5
3.34	2	3	2	5	4	5	2	4
3.33	2	2	3	5	4	4	3	4
3.35	2	2	5	4	3	3	5	3
3.38	1	4	3	6	4	4	1	2
3.32	1	3	4	5	3	2	1	3
4.15	2	4	7	5	3	3	4	5
4.21	2	3	5	4	3	3	3	3
4.09	1	3	4	3	2	5	1	2
4.08	2	4	4	5	5	2	1	1
4.04	1	4	6	5	5	6	2	3
4.14	2	3	3	5	4	2	1	5
4.22	2	3	3	3	1	2	1	1
4.13	1	4	3	6	6	5	1	6
4.03	1	3	5	5	4	5	1	5

4.10	2	3	4	6	2	3	1	3
5.04	1	5	5	6	6	5	1	1
5.03	1	4	3	5	4	3	1	4
5.09	1	3	5	4	4	3	1	1
5.13	1	4	2	5	3	3	1	3
5.07	1	4	3	6	5	2	2	1
5.15	1	3	3	5	5	3	3	5
6.03	1	3	4	6	5	5	4	3
6.04	1	3	3	6	6	4	3	6
7.02	1	3	4	5	2	4	1	3
7.08	1	4	5	5	3	2	2	1
7.05	1	3	3	3	3	4	5	2

APPENDIX L:

STAGES OF CONCERN QUESTIONNAIRE

DERIVED SCORES AND PERCENTAGES

STAGES OF CONCERN QUESTIONNAIRE
DERIVED SCORES / PERCENTAGES

	Stages of Concern						
	0	1	2	3	4	5	6
Case							
1.48	5/53	21/75	17/63	18/69	26/59	25/68	22/73
1.44	8/72	16/60	11/45	13/47	28/66	28/80	16/47
1.39	13/89	12/48	13/52	10/34	20/30	12/19	11/26
1.17	16/94	19/69	23/80	24/88	23/43	16/31	18/57
1.50	19/97	22/80	20/72	25/90	18/24	15/28	9/20
1.19	15/93	19/69	20/72	10/34	6/3	10/14	4/6
1.10	4/46	6/30	10/41	6/18	7/4	17/36	9/20
1.53	13/89	15/57	15/57	18/69	16/19	14/25	14/38
1.01	10/81	11/45	14/55	16/60	25/54	16/31	20/65
1.29	11/84	14/54	16/59	11/39	13/11	11/16	10/22
1.04	6/60	22/80	25/85	18/69	19/27	31/91	10/22
1.51	13/89	21/75	25/85	20/77	26/59	21/52	13/34
1.11	17/95	23/84	25/85	19/73	25/54	25/68	18/57
1.47	11/84	17/63	13/52	12/43	17/21	15/28	15/42
1.46	4/46	23/84	24/83	14/52	35/96	23/59	13/34

1.40	5/53	15/57	15/57	12/43	24/48	18/40	7/14
1.16	20/98	31/98	34/97	27/94	18/24	15/28	8/17
1.45	4/45	7/34	6/28	9/30	33/90	28/80	16/47
1.30	11/84	20/72	18/67	18/69	25/54	24/64	16/47
1.43	5/53	21/75	31/95	30/97	34/92	31/91	27/90
2.19	11/84	22/80	27/89	17/65	24/48	17/36	24/81
2.13	17/95	19/69	26/87	22/83	8/5	6/7	5/9
2.20	8/72	16/60	14/55	6/18	21/33	28/80	7/14
2.17	15/93	23/84	23/80	16/60	21/33	20/48	17/52
2.05	14/91	21/75	22/78	14/52	19/27	15/28	12/30
2.03	8/72	16/60	20/72	9/30	15/16	21/52	7/14
2.24	12/86	11/45	9/35	8/27	13/11	8/10	14/38
2.31	3/37	19/69	19/70	19/73	19/27	27/76	20/96
2.08	5/53	21/75	21/76	13/47	15/16	15/28	12/30
2.23	7/66	22/80	27/89	13/47	29/71	29/84	18/57
2.22	11/84	5/27	11/45	8/27	7/4	7/9	8/17
2.02	16/94	25/90	28/91	16/60	18/24	18/40	17/52
2.29	14/91	33/99	11/45	4/11	15/16	14/25	8/17
2.19	13/89	14/54	16/59	10/34	27/63	26/72	17/52
2.33	0/10	22/80	16/59	8/27	20/30	19/44	12/30
3.21	16/94	29/96	22/78	8/27	25/54	24/64	9/20
3.24	11/84	32/99	32/96	15/56	29/71	31/82	18/57

3.20	9/77	15/57	11/45	12/43	15/16	10/14	13/34
3.02	14/91	20/72	23/80	22/78	16/19	16/31	4/6
3.25	6/60	26/91	24/83	12/43	29/71	30/88	14/38
3.44	10/81	27/93	29/92	9/30	31/82	27/76	16/47
3.31	4/46	17/63	16/59	5/15	33/90	28/80	16/47
3.08	16/94	21/75	25/85	11/39	28/66	16/31	8/17
3.27	9/77	15/57	17/63	9/30	20/30	13/22	6/11
3.30	9/77	16/60	16/59	12/43	7/4	8/10	3/5
3.13	7/66	0/5	0/5	9/30	2/1	1/2	0/1
3.39	18/96	31/98	35/99	22/83	20/30	23/59	9/20
3.34	6/60	15/57	22/78	16/60	24/48	21/52	18/57
3.33	9/77	7/34	14/55	6/18	14/13	5/5	10/22
3.35	9/77	21/75	23/80	11/39	28/66	18/40	17/52
3.38	11/84	24/80	30/94	29/97	12/9	10/14	9/20
3.32	18/96	20/72	27/92	22/83	23/43	23/59	19/60
4.15	9/77	28/95	26/87	16/60	28/66	22/55	13/34
4.21	7/66	18/66	28/91	24/88	31/82	20/48	26/87
4.09	3/39	10/43	12/48	18/69	23/43	20/48	21/69
4.08	17/95	18/66	17/63	14/52	10/7	9/12	5/9
4.04	5/53	22/80	35/99	17/65	32/86	28/80	8/17
4.14	8/72	15/57	15/57	9/30	11/8	15/28	17/52
4.22	9/77	22/80	26/87	12/43	17/21	14/25	19/60

4.13	9/77	9/40	5/25	5/15	13/11	9/12	7/14
4.03	1/23	3/19	4/21	15/56	11/8	11/16	10/22
4.10	5/53	23/84	16/59	17/65	25/54	22/55	26/87
5.04	6/60	8/37	6/28	5/15	10/7	12/19	8/11
5.03	16/94	13/51	13/52	14/52	10/7	11/16	10/22
5.09	16/94	7/34	12/48	6/18	7/4	6/7	6/11
5.13	18/96	7/34	23/80	31/98	28/66	14/25	30/96
5.07	9/77	20/72	21/76	16/60	15/16	19/44	12/30
5.15	3/37	4/23	11/45	11/39	18/24	9/12	8/17
6.03	5/53	8/37	11/45	16/60	20/30	11/16	9/20
6.04	3/37	2/16	4/21	4/11	5/3	13/22	5/9
7.02	8/72	20/72	12/48	20/77	27/63	30/88	21/69
7.08	22/99	22/80	28/91	12/43	0/1	4/4	0/1
7.05	7/66	12/48	12/48	14/52	14/13	16/31	12/30

APPENDIX M:

STAGES OF CONCERN QUESTIONNAIRE

QUICK SCORING DEVICE

EXPLANATION AND EXAMPLE

SoCQ QUICK SCORING DEVICE EXPLANATION

As noted on the following page that provides an example from ASCD's TAKING CHARGE OF CHANGE (1987, p. 50-51), the procedure for scoring the Stages of Concern Questionnaire is as described:

The left and right margins are designed for recording the respondents' choice on the SoCQ Likert scale (0-7). Box B breaks the responses down in their assigned category (as described in Appendix G) according to their appropriate stages (0-6). The columns are added and recorded in Box C. Box D is then referred to for the appropriate stage percentile (from the conversion table) that is then transferred to Box E and plotted on the graph in Box F.

SoCQ Quick Scoring Device

A

Date: _9-18-78_

Site: _Austin_ SSN _0001_

Innovation: _Bilingual Education_

B

	0	1	2	3	4	5	6
	3 _0_	6 _1_	7 _5_	4 _4_	1 _3_	2 _2_	
	12 _1_	14 _5_	13 _4_	8 _6_	11 _5_	5 _5_	9 _6_
	21 _1_	15 _5_	17 _6_	16 _5_	19 _4_	10 _6_	20 _5_
	23 _2_	28 _6_	20 _5_	25 _6_	24 _4_	18 _6_	22 _6_
	30 _1_	35 _4_	33 _6_	34 _5_	32 _6_	27 _6_	31 _6_
						29	

C

0	1	2	3	4	5	6
_5_	_21_	_26_	_26_	_22_	_31_	_25_

E

0	1	2	3	4	5	6
_53_	_25_	_87_	_92_	_38_	_91_	_84_

D

Five Item Raw Scale Score Total	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
			Percentiles for				
0	10	5	5	2	1	1	1
1	23	12	12	5	1	2	2
2	29	16	14	7	1	3	3
3	37	19	17	9	2	3	5
4	46	23	21	11	2	4	6
5	(53)	27	25	15	3	5	9
6	60	30	28	18	3	7	11
7	66	34	31	23	4	9	14
8	72	37	35	27	5	10	17
9	77	40	39	30	5	12	20
10	81	43	41	34	7	14	22
11	84	45	45	39	8	16	28
12	86	48	48	43	9	19	30
13	89	51	52	47	11	22	34
14	91	54	55	52	13	25	38
15	93	57	57	56	16	28	42
16	94	60	59	60	19	31	47
17	95	63	63	65	21	36	52
18	96	66	67	69	24	40	57
19	97	69	70	73	27	44	60
20	98	72	72	77	30	48	63
21	98	(75)	76	80	(33)	52	66
22	99	80	78	83	(38)	55	73
23	99	84	80	85	43	59	77
24	99	88	83	88	48	64	81
25	99	90	85	(90)	54	68	(84)
26	99	91	(87)	(92)	59	72	87
27	99	93	89	94	63	76	90
28	99	95	91	95	66	80	92
29	99	96	92	97	71	84	94
30	99	97	94	97	76	88	96
31	99	98	95	98	82	(91)	97
32	99	99	96	98	86	93	98
33	99	99	97	99	90	95	99
34	99	99	97	99	92	97	99
35	99	99	99	99	96	98	99

F

RELATIVE INTENSITY vs SoC STAGES

(AWARENESS, INFORMATIONAL, PERSONAL, MANAGEMENT, CONSEQUENCE, COLLABORATION, REFOCUSING)

An Instrument developed by the Procedures for Adopting Educational Innovations/CBAM Project, R&D Center for Teacher Education, The University of Texas at Austin, 1974 (Gene E. Hall, Archie A. George and William L. Rutherford. _Measuring Stages of Concern about the Innovation: A Manual for Use of the SoC Questionnaire._ Austin, TX: Research and Development Center for Teacher Education, The University of Texas at Austin, 1977).

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____ 15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____ 29 _____ 30 _____ 31 _____ 32 _____ 33 _____ 34 _____ 35 _____

APPENDIX N:

PARTICIPANTS′ OPEN-ENDED CONCERN STATEMENT

RESPONSE EVALUATION ACCORDING TO CONCERN DOMAIN

PARTICIPANTS' OPEN-ENDED CONCERN STATEMENT
RESPONSE EVALUATION ACCORDING TO CONCERN DOMAIN

CASE	STATEMENT	SoC DOMAIN (STAGE)
1.48	There needs to be a clarification concerning the limitations of PDM.	SELF (INFORMATIONAL)
1.44	How to keep PDM ongoing even though I may not be administrating this building within a year or so.	IMPACT (REFOCUSING)
1.39	The time constraints in order to implement PDM could be overwhelming.	TASK (MANAGEMENT)
1.17	I think I am most concerned about the fact that I don't understand it as much as I probably should.	SELF (INFORMATIONAL)
	Although some schools consciously use the process, I would say that in our school the teachers participate in decision making but not in any formal process or procedures.	NON-CONCERN (AWARENESS)
1.10	I feel that your interpretation of PDM might be distorted by this instrument.	SELF (INFORMATIONAL)
	I have always used PDM as a principal, but it is different with different people at different times in different circumstances.	IMPACT (COLLABORATION)

1.53 Time is a problem.   TASK
                 (MANAGEMENT)

1.01 My experience has been that when
     given decision making authority and
     the responsibilities which accompany
     it, most teachers shy away from PDM. TASK
                 (MANAGEMENT)

     I think teachers misunderstand what
     PDM is.   TASK
                 (MANAGEMENT)

1.04 I'm in favor of PDM.   NON-CONCERN
                 (AWARENESS)

     We began to try to do something with
     PDM when our staff was considering
     applying for a Carnegie Grant. TASK
                 (MANAGEMENT)

     I need to know more.   SELF
               (INFORMATIONAL)

1.16 That my authority as a building
     principal will be diminished, but
     my overall responsibility and
     accountability will not be.   SELF
                (PERSONAL)

1.45 I think PDM is essential to any
     school who wants to be truly
     effective.   IMPACT
               (CONSEQUENCE)

1.30 The time it takes to implement the
     cooperation of the staff, contractual
     obligations and curriculum
     expectations.   TASK
                 (MANAGEMENT)

1.43 More commitment from the teachers
     a plus.   TASK
                 (MANAGEMENT)

"Ownership" in the building and a
sense of responsibility beyond the
immediate classroom.   IMPACT
                                (CONSEQUENCE)

2.12   My greatest concern about PDM is
        how do you coordinate a system like
        this at the building level when the
        school system is reluctant to fully
        participate.   TASK
                                        (MANAGEMENT)

2.20   I do not have any real concerns at
        this time.   NON-CONCERN
                                        (AWARENESS)

        I have been using PDM for a few weeks;
        it works.   IMPACT
                                        (CONSEQUENCE)

2.03   Presently, I have little resource
        information relative to PDM.   SELF
                                    (INFORMATIONAL)

        How will this process be conveyed
        to the parents and community?   TASK
                                        (MANAGEMENT)

        What procedures will be followed
        to train staff for familiarity with
        PDM techniques administrators might
        use to motivate staff to participate
        in the process?   TASK
                                        (MANAGEMENT)

2.31   I think it's very important that the
        time, training, energy, and resources
        be provided to implement any decision
        making model.   TASK
                                        (MANAGEMENT)

        I am concerned that it may not
        happen.   TASK
                                        (MANAGEMENT)

2.08   At this point, the use of the phrase
        PDM is new to me.   SELF
                                            (INFORMATIONAL)

        I believe I understand the concept
        and have used it, but I am not sure
        of its full meaning, especially
        based on these questions.   SELF
                                            (INFORMATIONAL)

        I have been involved with some of
        the points mentioned here with
        teachers, but I am wondering if this
        is a new approach or procedure of
        the '90s--a movement for restructuring
        education.   SELF
                                            (INFORMATIONAL)

2.23   Many people are willing to make
        decisions but not everyone wants to
        accept responsibility for these
        decisions.   IMPACT
                                            (CONSEQUENCE)

2.22   This questionnaire was answered
        based on my participative
        administrative philosophy.   NON-CONCERN
                                            (AWARENESS)

        I am NOT familiar with
        implementation or a specific PDM
        program.   SELF
                                            (INFORMATIONAL)

        I am familiar with the "ownership"
        goals, brainstorming, and collective
        input toward good decision making.   IMPACT
                                            (CONSEQUENCE)

        Respect for fellow professionals,
        different points of view, and
        problem sharing pose no concern to
        me.   NON-CONCERN
                                            (AWARENESS)

2.29 The bottom line of all systems is
that the buck stops at the
principal's desk.   SELF
           (PERSONAL)

It has been my experience most
group decisions required/encouraged
by teachers end up on the principal's
desk because many do not relish the
responsibility which accompanies
the making of the decision. TASK
           (MANAGEMENT)

Many of my answers are "0" as I
am unfamiliar with the process. SELF
        (INFORMATIONAL)

2.19 Staff involvement: Who, when
and to what degree.   TASK
           (MANAGEMENT)

2.33 I am trying to use elements of
PDM at certain grade levels in which
the teachers are working towards
the development of whole language
instruction and integrated learning. TASK
           (MANAGEMENT)

PDM has worked well with those
teachers.   IMPACT
        (COLLABORATION)

We are also slowly trying to move
into SBM in which PDM plays a major
role.   IMPACT
        (REFOCUSING)

The schools of the future will be
using PDM, if they have not already. IMPACT
        (REFOCUSING)

3.21 How do we get teachers and all other
staff to support this effort? TASK
           (MANAGEMENT)

3.24   How PDM will affect my present
        school responsibilities.   SELF
                                                (PERSONAL)

        About the role of teachers in PDM.   TASK
                                                (MANAGEMENT)

        How it will affect the students in
        the school.   IMPACT
                                                (CONSEQUENCE)

3.25   School culture/climate issues are
        central to this concept.   TASK
                                                (MANAGEMENT)

        I'm interested in learning more
        about the effect of PDM.   SELF
                                                (INFORMATIONAL)

3.44   I am concerned about those times
        when one final decision has to be
        made and the responsibility for
        that decision.   SELF
                                                (PERSONAL)

3.08   The biggest concern lies with the
        impact that shared decisions have
        on the morale of the staff.   IMPACT
                                                (COLLABORATION)

        In my experience, hard feelings
        have been caused.   IMPACT
                                                (COLLABORATION)

3.13   I have no problems with this
        concept--fairly successful in its
        application.   IMPACT
                                                (CONSEQUENCE)

3.39   Use of time effectively; training
        time needed; lack of funds for
        in-service workshops.   TASK
                                                (MANAGEMENT)

3.34   Teachers neglecting their
        instructional responsibilities by
        getting overly involved in decision
        making.   TASK
                                            (MANAGEMENT)

3.33   We employ PDM in budget construction,
        expenditure of funds (budget, Home
        and School, SIC), student placement,
        grade level configurations,
        assignments.   NON-CONCERN
                                            (AWARENESS)

        Know, however, that it is my firm
        belief that as long as I (principal)
        will be held accountable, I reserve
        the right to modify, override, etc.   SELF
                                            (PERSONAL)

        In these instances, those individuals
        participating in process know my
        feelings at onset.   TASK
                                            , (MANAGEMENT)

3.35   Perspectives of people influence
        their decisions.   IMPACT
                                          (COLLABORATION)

        Not all have (or are willing to
        have) a global perspective.   IMPACT
                                          (COLLABORATION)

        Responsibility for decision is a
        concern.   SELF
                                            (PERSONAL)

3.32   I think that PDM is a part of
        every successful administrator's
        "repertoire."   NON-CONCERN
                                            (AWARENESS)

        A good administrator should not
        worry about "losing" his authority. NON-CONCERN
                                            (AWARENESS)

He or she will actually enhance his
or her authority by involving staff
in decision making.   IMPACT
                                  (CONSEQUENCE)

4.15   It's important to state that
          although I do not use PDM as a
          formal process, I involve my faculty
          in the decision making process as
          much as possible.   NON-CONCERN
                                     (AWARENESS)

          I _believe_ in faculty
          participation.   IMPACT
                                  (COLLABORATION)

          I'm interested in more specific
          information about PDM as a strategy
          to implement my administrative
          philosophy.   SELF
                                 (INFORMATIONAL)

4.21   My major concern about this is in
          terms of teacher commitment and
          involvement.   TASK
                                    (MANAGEMENT)

          Some of my experiences force me
          to question the degree to which
          teachers want to be involved in
          making "hard" (or unpopular)
          decisions.   TASK
                                    (MANAGEMENT)

4.09   Time constraints--major obstacle.   TASK
                                    (MANAGEMENT)

4.08   Honestly, I don't think about PDM. NON-CONCERN
                                     (AWARENESS)

          I am concerned about the economy and
          its effect on class size and the
          elimination of staff.   TASK
                                    (MANAGEMENT)

I'm also concerned about time.   TASK
                                              (MANAGEMENT)

There doesn't seem to be enough
hours in the day to do all that's
required of educators.   TASK
                                              (MANAGEMENT)

4.14   Is it too structured?   TASK
                                              (MANAGEMENT)

Are there too many cooks in some
cases?   TASK
                                              (MANAGEMENT)

4.22   Since this may be a new approach to
            school management, I am concerned
            about new roles for all staff and
            how decisions are reached.   TASK
                                              (MANAGEMENT)

Often there is no leadership when
everyone is chief and all decisions
are democratic.   TASK
                                              (MANAGEMENT)

Where are the data to support the
program?   SELF
                                              (INFORMATIONAL)

5.09   At this point in time, I have no
            interest in PDM.   NON-CONCERN
                                              (AWARENESS)

5.13   With the numbers of teachers in
            danger of losing their job and the
            decisions that go along with riffing,
            I have a problem continuing with PDM. IMPACT
                                              (REFOCUSING)

In times like these, normally
sensitive, caring people have become
cannibalistic.   IMPACT
                                              (COLLABORATION)

5.15	Some teachers would rather have administrators "decide" for them.	TASK (MANAGEMENT)
	Teachers are overwhelmed with the "crisis in financing education."	TASK (MANAGEMENT)
	Most are very discouraged with the lack of priorities on the part of society and government.	TASK (MANAGEMENT)
6.04	In 20 years as an administrator, I always try to utilize faculty in shared decision making.	TASK (MANAGEMENT)
	While process can be slow, outcomes are more meaningful as individuals have ownership.	IMPACT (CONSEQUENCE)
	Main problem--union has made every effort to place members of the executive board on each committee so union position can be protected.	TASK (MANAGEMENT)
	That doesn't necessarily coincide with the needs of children or the educational system.	IMPACT (CONSEQUENCE)
7.02	I am concerned about process to gain teacher commitment to PDM.	TASK (MANAGEMENT)
7.08	I do not think about PDM.	NON-CONCERN (AWARENESS)
7.05	The lack of funding may make any change efforts impossible.	TASK (MANAGEMENT)

APPENDIX O:

FOLLOW-UP RESPONSES

TO

PRINCIPALS AND SUPERINTENDENTS

.

June 1991

Dear Principal,

First of all I want to thank you for taking the time to complete the Concerns Questionnaire regarding participative decision making (PDM) in your school. Now that all the data are in and analyzed, I would like to take this opportunity to provide you with this follow-up. (For those of you who have requested a personal profile, the attached provides you with your results plotted on a graph.)

As a background regarding the instrument used, the Stages of Concern Questionnaire was developed in the 1970s by the Procedures for Adopting Educational Innovations/C-BAM Project at the Research and Development Center for Teacher Education; University of Texas at Austin. Scores from the Concerns Questionnaire measure relative intensity of concern regarding the innovation (in this case PDM) in the following seven areas, described by Hall et al. (1973) as follows:

     1. Awareness--Little concern about or involvement with the innovation is indicated.

     2. Informational--A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/ herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.

     3. Personal--Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role in relation to the reward structure of the organization, decision making and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.

     4. Management--Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

     5. Consequence--Attention focuses on impact of the innovation on clients in his/her immediate sphere of influence. The focus is on relevance of the innovation for clients, evaluation of client outcomes, including performance and competencies, and changes needed to increase client outcomes.

6. Collaboration--The focus is on coordination and cooperation with others regarding use of the innovation.

7. Refocusing--The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.

What was the highest relative intensity of concern for southeastern Massachusetts elementary school principals? Based on this study of the stratified random sample, of which you were a part, the following was indicated:

* 53% held highest intensity of concern in the "Awareness," 16% in the "Personal," and 12% in the "Informational" stages
* 8% held highest intensity of concern in the "Task" domain, or "Management" stage
* 11% held highest intensity of concern in the "Impact" domain, or "Consequence," "Collaboration," and "Refocusing" stages
* 42% of the open-ended responses were found to be high in the areas of the "Task" ("Management") domain; 24% noted "Impact" ("Consequence," "Collaboration," and "Refocusing") domain; 21% in the "Self" domain; and 13% in the "Awareness" (or "Non-concern") domain.

The Demographic Survey Instrument noted the modes within these variables accordingly:

Gender: Male--71%
Age: 40-49--48%
Level of Education: M+30--41%
Years of Experience as Administrator: 10-20--48%
Years as Principal at Present School: 3-5--24% (with "10-20" a close second at 22%; and "6-9" with 19%)
Number of Teachers at School: 20-29--33%
Amount of PDM Training: No Training--48%
Number of Years using PDM Administratively: less than one year--29%

If you have any further questions about this study, I'll be happy to answer them for you (617-837-0025). I wish you a relaxing and enjoyable summer vacation and thank you again for your assistance in this research project.

Sincerely,

Susan M. Randall

AS YOU HAVE REQUESTED, THIS IS YOUR
PERSONAL PROFILE, NOTING YOUR
RELATIVE INTENSITY OF CONCERNS,
PLOTTED ON THE STAGES OF CONCERN
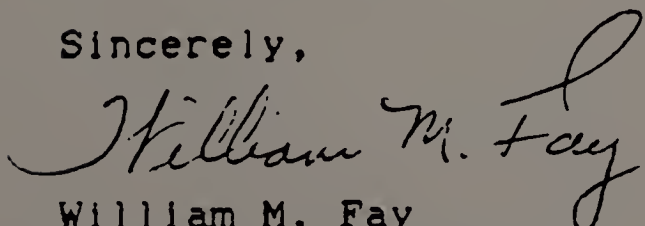GRAPH:
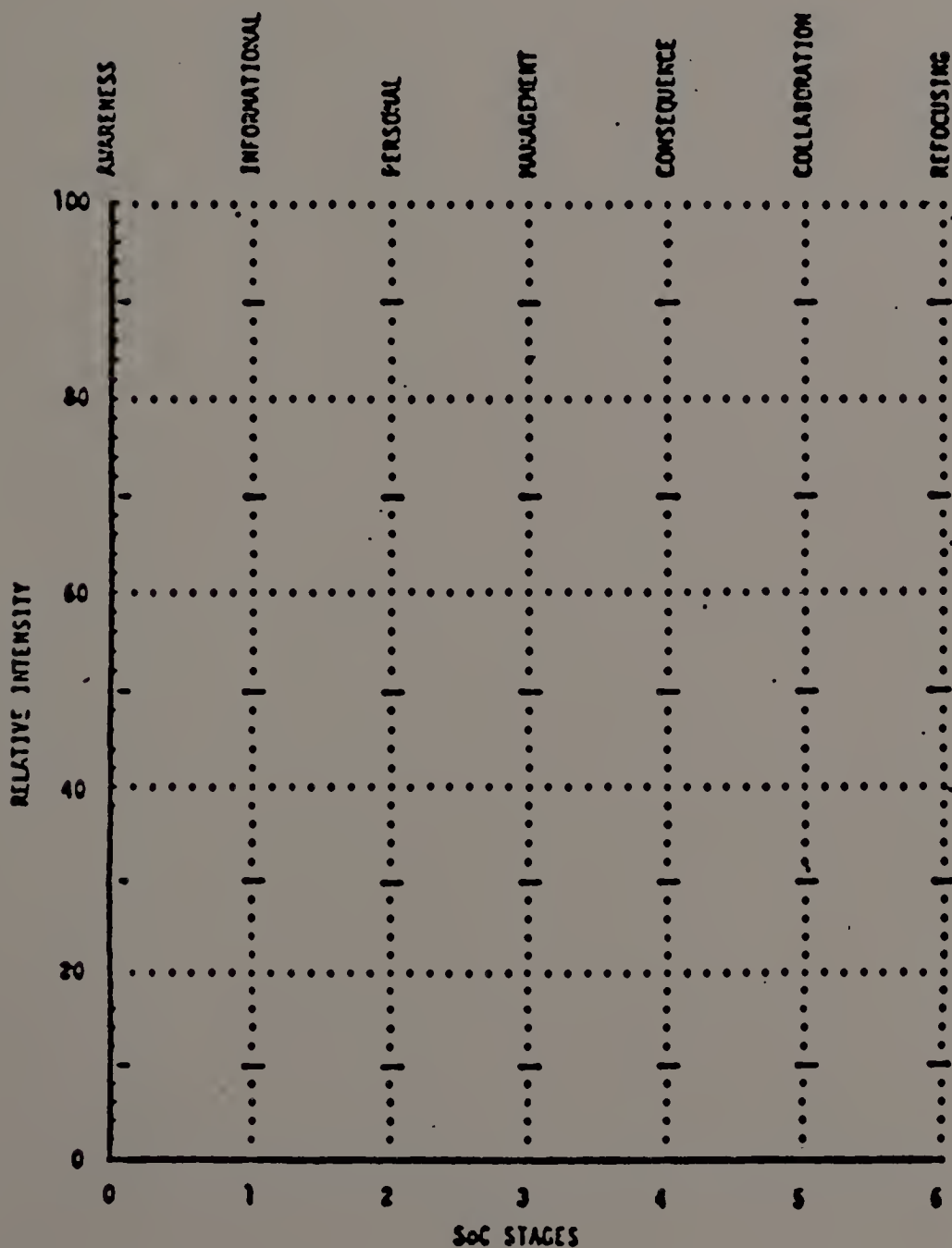
June 1991

Dear Superintendent,

Over the past several months, there have been a number of
University of Massachusetts at Amherst research projects
conducted in southeastern Massachusetts. As a follow-up to
two of the studies regarding cooperative learning and
participative decision making in the elementary schools, the
attached will provide you with aggregate data analyses.
Additionally, there are suggestions for appropriate
interventions that have the potential to facilitate the
effective implementation of an innovation. (Again, the
innovations referred to in these two studies are cooperative
learning and participative decision making.)
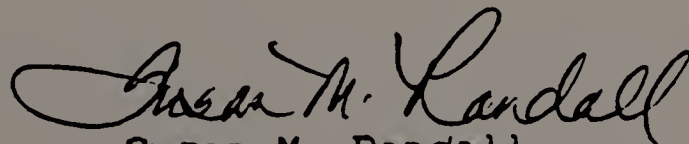
As you may recall, our initial contact with you was for the
purpose of seeking your identification of elementary schools
in your system that have initiated these innovations.
Subsequent to that, a stratified random sample was
determined and questionnaires were distributed to principals
and, in the case of cooperative learning, teachers were
included. The purpose of this letter is to share with you
the aggregate results of these studies (regardless of
whether or not you indicated the innovations had been
initiated), in order to enlighten you about what has been
discovered in our research findings about southeastern
Massachusetts. All research participants have been likewise
informed, and confidentiality has been assured and
maintained throughout the process.

Thank you for your willingness to help us gather valuable
information about innovations that could help policy makers,
and others, improve public schools in southeastern
Massachusetts. It is our hope that this information will be
helpful to you as you seek to continue making informed
decisions that will ultimately benefit all involved in your
school system.

Sincerely,

William M. Fay
Cooperative Learning
Researcher
(617-337-7579)

Susan M. Randall
Participative Decision
Making Researcher
(617-837-0025)

INFORMATION ABOUT THE INSTRUMENTS

As a background regarding the main instrument used in the studies, the Stages of Concern Questionnaire (SoCQ) was developed by the Procedures for Adopting Educational Innovations/C-BAM Project at the Research and Development Center for Teacher Education; University of Texas at Austin. Scores from the questionnaire measure relative intensity of concern regarding the innovation in the following seven areas, described by Hall et al. (1973) as follows:

1.   Awareness--Little concern about or involvement with the innovation is indicated.

2.   Informational--A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.

3.   Personal--Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role in relation to the reward structure of the organization, decision making and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.

4.   Management--Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

5.   Consequence--Attention focuses on impact of the innovation on clients in his/her immediate sphere of influence. The focus is on relevance of the innovation for clients, evaluation of client outcomes, including performance and competencies, and changes needed to increase client outcomes.

6.   Collaboration--The focus is on coordination and cooperation with others regarding use of the innovation.

7.   Refocusing--The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.

The SoCQ provides leaders with valuable information that should be linked to action as they encourage/assist/direct innovation users to move toward the higher developmental levels (see proceeding "SUGGESTIONS...").

The Demographic Survey Instrument was used in conjunction with the Stages of Concern Questionnaire in order to provide a more enhanced profile using descriptive and inferential data analyses. Research findings are attached.

RESEARCH FINDINGS FROM THE
PARTICIPATIVE DECISION MAKING STUDY

According to the responses from superintendents, it was indicated that 75% had participative decision making (PDM) initiated in their systems' elementary schools; 25% had not initiated PDM. What was the highest relative intensity of concern for southeastern Massachusetts elementary school principals regarding implementation of participative decision making in their schools? The study indicated the following:

* 53% held highest intensity of concern in the "Awareness," 16% in the "Personal," and 12% in the "Informational" stages

* 8% held highest intensity of concern in the "Task" domain, or "Management" stage

* 11% held highest intensity of concern in the "Impact" domain, or "Consequence," "Collaboration," and "Refocusing" stages

This study gave the opportunity for principals to provide a response to an open-ended question--When you think about participative decision making, what are you concerned about? This was the analysis of those responding:

* 42% of the open-ended responses were found to be high in the areas of the "Task" ("Management") domain; 24% noted "Impact" (Consequence," "Collaboration," and "Refocusing,") domain; 21% in the "Self" domain; and 13% in the "Awareness" (or "Non-concern") domain.

The Demographic Survey Instrument noted the most frequently occurring variables accordingly:

Gender: Male (71%)
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Years of Experience as Administrator: 10-20 (48%)
Years as Principal at Present School: 3-5 (24%)
[with 10-20 a close second at 22% and 6-9 at 19%]
Number of Teachers at School: 20-29 (33%)
Amount of PDM Training: No training (48%)
Number of Years Using PDM Administratively: less than one year (29%)

If you have any further questions about this study, I'll be happy to answer them for you (617-837-0025). I wish you a relaxing and enjoyable summer and thank you again for your assistance in this research project.

SUGGESTIONS FOR ADDRESSING EFFECTIVE
IMPLEMENTATION OF AN INNOVATION

The research has suggested that if an innovation (i.e., cooperative learning or participative decision making) is to be implemented effectively, there needs to be an intervention to recognize and address early stage concerns. Processes for intervention should be considered in the cultural, political, and technical (including educational) aspects of the organization. The "Taxonomy of Interventions," according to the creators of the Stages of Concern Questionnaire, cover six areas to facilitate the change effort with these suggestions for prescriptive measures regarding concerns resolution/arousal:

1. Policy--includes rules or regulations that direct, and actions of, an organization.

2. Game Plan Components--provides a checklist for supportive change facilitation actions covering six distinct categories for intervention: developing supportive organizational arrangements, training, consultation and reinforcement, monitoring, external communication, and dissemination.

3. Strategy--uses a framework for action and translates the game plan design into concrete action.

4. Tactic--operationalizes the strategy to affect attitudes regarding utilization of the innovation.

5. Incident--is a singular occurrence or event that usually covers small amounts of time and can be targeted at one or more individuals.

6. Theme--is a set of repeated actions that accumulate an effect to produce unexpected effects on an innovation (Hall, Zigarmi, & Hord, 1979).

The assumptions regarding change indicate:
> It should be remembered that change is a process, not an event. Individuals first accomplish change, then institutions. Because of the highly personal nature of change, interventions need to accommodate the individual, innovation, and the context (ASCD, 1987, P. 5-7).

For further information about managing change contact: The Regional Laboratory for Educational Improvement of the Northeast and Islands; 300 Brickstone Square; Suite 900; Andover, MA 01810.

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