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**Teachers' preferences for participative decision-making**

**Carlson, Kristine J., Ph.D.**

**The University of Nebraska - Lincoln, 1992**

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TEACHERS' PREFERENCES FOR PARTICIPATIVE DECISION-MAKING

by

Kristine J. Carlson

A DISSERTATION

Presented to the Faculty of  
The Graduate College in the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Doctor of Philosophy

Major: Interdepartmental Area of  
Administration, Curriculum, and Instruction

Under the Supervision of  
Professor Marilyn L. Grady

Lincoln, Nebraska

May 1992


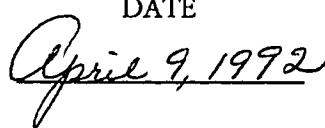
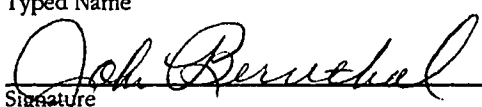
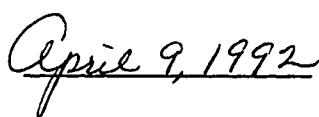
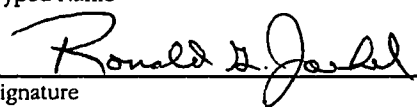
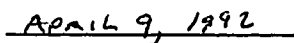
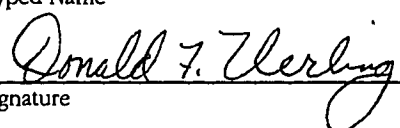
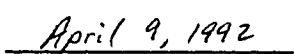
DISSERTATION TITLE

Teachers' Preferences for Participative Decision-Making

BY

Kristine J. Carlson

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For

**Lindsay Carlson**

May you reach your goals,

whatever they may be.

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## CHAPTER I

### Introduction

#### Context of the Problem

Participation in decision-making is often considered to be a form of restructuring, a means to reform, and a source of empowerment for teachers (David, 1989; Lieberman, 1988; Maeroff, 1988; Perelman, 1988; Whitaker & Moses, 1990). The National Governor's Association, the Education Commission of the States, the Carnegie Commission's Task Force on Teaching as a Profession, the National Association of Secondary School Principals, and the National Education Association, all acknowledge the need for an increase in teacher participation in decision-making to improve education and the profession of teaching (Barth, 1988; Conley, Schmidle, & Shedd; 1988; Darling-Hammond, 1988). Even though the call for more participation is strong, the "Report Card on School Reform" (Boyer, 1988) states that recent teacher participation in curriculum and instruction decisions has increased only slightly, and that morale is declining. Boyer (1988) calls for the empowerment of teachers to create a renewal of commitment in the teaching profession.

#### The Problem

Controversy exists regarding whether or not participation in decision-making empowers teachers and improves educational decisions. Research indicates that the effectiveness of participative decision-making varies



(Conway, 1984; Locke & Schweiger, 1979; Lowin, 1968). This variability appears to be related to several factors, including the situation, the procedure or process used, the amount of involvement, and the influence of the decision.

School administrators who attempt to implement participative decision-making are confronted with conflicting information when they turn to the literature for guidance. No specific method of participative decision-making has been empirically proven to be consistently successful. Research conclusions often contain reports of the presence of various factors that influence effectiveness, and the need to consider the group, the problem, and the desired results (Bacharach, Bamberger, Conley, & Bauer, 1990; Conway, 1984; Locke & Schweiger, 1979; Lowin, 1968).

How, then does an administrator implement an appropriate approach to participative decision-making? There is a clear need to determine teachers' preferences for participative decision-making. Situational factors that are essential for success in participative decision-making need to be identified to assist administrators. Since a number of variables can influence effectiveness, administrators are advised to identify areas of teachers' preferences prior to the implementation of participative decision-making.

Although a number of surveys have been used to identify real and ideal amounts of participation, situational use of

participation by administrators, teachers' satisfaction with participation, and preferences for group process approaches, no study has identified teachers' decision-making preferences prior to implementation of participative decision-making.

Identification of teachers' preferences would direct administrators as they utilized participative decision-making. A clear indication of teachers' preferences based on type of situation, amount of involvement, relevance, and expertise would be most useful. By utilizing teachers' preferences, interests, and areas of expertise, improved teacher satisfaction and better decisions could result.

#### Purpose

The purpose for conducting this study was to identify the preferences of teachers in selected senior high schools in Nebraska for participative decision-making. Specifically, the purpose for conducting this study was to determine the relationship between (a) the type of situation and the amount of participation teachers preferred, (b) relevance and the amount of participation teachers preferred, and (c) expertise and the amount of participation teachers preferred. The type of situation and amount of participation teachers preferred was also examined by school size.

Administrators will find this study useful because it will provide guidelines to use when implementing

participative decision-making. Administrators will be able to determine whether or not teachers desire participation, and if so, the amount of participation preferred.

Researchers studying participative decision-making will find this study useful because it will add to the theoretical information regarding decision-making models. Further research can be conducted on the effectiveness of decision-making when based on teachers' preferences.

#### Research Questions

The research questions addressed in this study were:

(1) To what extent is there a difference among types of situations and teachers' preferences for participation?

(2) To what extent is there a relationship between the perceived relevance of a situation and teachers' preferences for participation?

(3) To what extent is there a relationship between teachers' perceived expertise and teachers' preferences for participation?

(4) To what extent are there differences among teachers' perceptions of (a) high levels of both relevance and expertise (+R+E), (b) high levels of relevance and low levels of expertise (+R-E), (c) low levels of relevance and high levels of expertise (-R+E), and (d) low levels of both relevance and expertise (-R-E), and teachers' preferences for participation?

(5) To what extent does the size of the school effect

teachers' preferences for participation?

### Theoretical Framework

The theoretical framework for this study was derived from the decision-making model of Bridges (1967) and the situational decision-making model of Vroom and Yetton (1973).

#### Bridges Decision-Making Theory

Based on the decision-making model of Bridges (1967), the participation of others is most effective when the appropriate level of involvement is used. Bridges stated that individual teachers should be involved in decision-making in varying degrees, depending upon expertise and the relevance of the situation.

Bridges (1967) postulated the following four levels of involvement:

Level I. Expertise and relevance present. Teachers participate in parliamentary decision-making frequently and with a maximum extent of involvement.

Level II. Expertise absent, relevance present. Teachers participate occasionally and to a limited extent. The administrator makes the final decision.

Level III. Expertise present, relevance absent. Teachers have limited involvement, usually to generate alternatives and to consider consequences. The administrator makes the final decision.

Level IV. Expertise and relevance absent. Teachers

should not be involved.

Administrators using Bridges' model are required to use their judgement, based on known information and observations. This judgement is used to determine teachers' interests or the relevance of the topics and teachers' abilities or expertise to participate in the decision-making. Who better can make this determination of perceived relevance and expertise than teachers? If teachers have specific abilities and interests that can facilitate the making of specific decisions, then probably most teachers are capable of determining the presence or absence of their own skills and interests.

If the amount of involvement teachers prefer in decision-making is dependent upon relevance and expertise, and if teachers are capable of identifying their perceptions of their expertise and interest, then the amount of involvement wanted for specific situations should vary. If teachers do not possess expertise and if the situation is not relevant to them, then they should probably indicate a preference for no participation.

If teachers possess a high degree of expertise and the situation is highly relevant to them, they should indicate a preference for a high degree of participation. If teachers possess either relevance or expertise, but not both, they should indicate a preference for a moderate amount of participation.

### Vroom-Yetton Decision-Making Theory

The Vroom-Yetton situational decision-making model (1973) provides a typology of decision processes and situational variables. Leaders identify and evaluate situational variables, and based on the result of this evaluation decide on the most appropriate of the five decision-making processes. These five processes range from no involvement to total involvement of others. The situational variables administrators consider include the quality of the decision and information available; both related to teachers' expertise. Other situational variables administrators consider are the possibility of conflict, potential for acceptance, time-frame, and degree of trust; all related to relevance.

Administrators using this model are required to use their judgement to assess the situational variables, and in turn, to determine the appropriate amount of participation for teachers in the decision-making process. If situational variables exist, and if teachers are thought to be capable of participation in decision-making, then teachers should also be able to assess these situational variables and to assess their own skills and interests relative to specific decisions.

If situational variables are present that result in a desire for involvement in certain types of situations, teachers should indicate a preference for a high degree of

participation for that type of situation. If teachers have an interest in the quality of a decision and the acceptance of a decision, they should indicate a preference for a high degree of participation. If teachers perceive themselves as lacking in interest or ability, they should indicate a preference for no involvement. If teachers possess skills or an interest relative to the situational variables, they should indicate a preference for a moderate amount of involvement in the decision-making process.

#### Discussion of Theories

These theories have been used in decision-making studies to examine participation, delegation, decision makers, receptivity to change, areas of interest, situational factors, satisfaction, and leadership styles (Conway, 1984; Duke, Showers, & Imber, 1980; Harrison, 1985; Imber, 1983; Leana, 1987; Locke & Schweiger, 1979; Lowin, 1968; Sorenson, 1985; Wangen, Sederberg, & Hendrix, 1982).

Travers (1958) suggested that a theory was a set of statements related to one another, that could be used to order and predict phenomena. Kerlinger (1964) provided this definition of theory: "Theory is a set of interrelated constructs (concepts), definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables..." (p. 11). Kerlinger's definition further stated that the purpose of these statements was to explain and predict phenomena. The

decision-making models of Bridges (1967) and Vroom-Yetton (1973) meet the standards set forth in these definitions and clearly meet the specifications to be considered theories.

In this study, these theories are appropriate because the independent variables of situation type, relevance, and expertise, should influence the dependent variable, the amount of participation that is desired. The study will help substantiate these theories and demonstrate the value of the use of the theoretical constructs to guide implementation of participative decision-making.

The underlying logic for this study can be summarized as follows:

1. If a teacher's preference to participate is contingent upon the content or type of situation, then the teacher will want to be more fully involved in the decision-making process for certain types of situations.
2. If a teacher perceives personal relevance related to a situation, then the teacher will want a moderate amount of involvement in the decision-making process.
3. If a teacher possesses expertise for a specific situation, then the teacher will want a moderate amount of involvement in the decision-making process.
4. If a teacher possesses both expertise and relevance, then the teacher will want a greater degree of involvement in the decision-making process.
5. If a teacher possesses neither relevance nor



expertise, then the teacher will want no involvement.

6. If a teacher has specific preferences then the teacher should be able to state these preferences situationally for areas of expertise, areas of relevance, and for the amount and extent of involvement.

7. Therefore, elements from the decision-making theories (relevance, expertise, and situation type), will be used to analyze teachers' preferences in decision-making.

#### Definitions

Participative decision-making. A shared decision-making process that involves teachers, the result of which affects two or more individuals or classrooms (Imber, Neidt, & Reyes, 1990).

Type of situation. The topic of the situation; decision-making occurs for the topics of business, personnel, student relations, community relations, and curriculum and instruction (Conley, Schmidle, & Shedd, 1988; Duke, 1984; Sorenson, 1985).

Process. The amount and extent of involvement teachers prefer in decision-making. The amount and extent of involvement that is used can range from no involvement to total involvement (Vroom & Jago, 1988).

Relevance. A high personal stake (Hoy & Miskel, 1987).

Expertise. Qualification to make useful contributions to the decision-making process; possessing experience and competence (Hoy & Miskel, 1987).

Empowerment. When teachers are enabled to act on behalf of the school in a purposeful and meaningful manner.

Delimitations and Limitations

The delimitations of this study included the following:

1. This study was confined to the survey of senior high school teachers from the ten largest public school districts in Nebraska who were listed in the Nebraska State Department of Education's 1990-91 Nebraska Education Directory.
2. Survey questions in this study were confined to five types of situations; business, personnel, students, community, and curriculum and instruction.
3. Survey responses were confined to choices of five decision-making processes.
4. Subjects in this study included only senior high school teachers who were regular education classroom teachers. Special education teachers, speech-language pathologists, head teachers, counselors, English as a Second Language teachers, occupational therapists, physical therapists, administrators, teachers of the gifted, ROTC teachers, and psychologists in high schools were not included. Teachers from alternative schools, magnet schools, or vocational schools were not included.

The limitations of this study included the following:

1. The results of this study may not be generalizable to teachers in Nebraska who teach in smaller districts or to

teachers in other states.

2. The results of this study may not be generalizable to other types of situations or to situations not easily categorized such as discipline issues and purchasing of instructional supplies.

3. This study will be subject to weakness inherent in the option of only five decision-making processes. Other processes could be formulated.

4. The results of this study may not be applicable to senior high special education teachers, speech-language pathologists, head teachers, counselors, English as a Second Language teachers, occupational therapists, physical therapists, administrators, teachers of the gifted, ROTC teachers, psychologists, or teachers from alternative schools, magnet schools, or vocational schools.

#### Significance of the Study

This study is significant because it adds to the participative decision-making literature base, and it adds to the scholarly research in this area. Specifically, this study adds to the literature and research base by providing information about the decision-making theories of Vroom and Yetton (1973) and Bridges (1967).

This study provides a framework for future research. Teachers' participation preferences and the extent of their participation can be better understood. This understanding could lead to future research that could be conducted to

determine satisfaction and effectiveness of decisions that are based on these preferences. Additional research in the business sector and with students could also be conducted.

This research is also significant in that it could assist educational practitioners. Administrators would be able to utilize participative decision-making more appropriately, based on additional research. Empirical data could help guide the inclusion of teachers for preferred types of situations, and for preferred amounts of participation. Expectations of administrators and teachers would be more clearly understood.

Teachers could experience empowerment as they participate in the decision-making process according to their preferences and interests. Participative decision-making could become a more effective vehicle to promote collegiality and school climate. Appropriate use of participative decision-making could also result in an improvement of the quality of decisions. Better decisions could result in an improvement of the school organization and student learning with the assumption that improved student learning is the primary purpose of the schools.

## CHAPTER II

### Review of the Literature

#### Introduction

School organizations are comprised of dynamic, interrelated elements. Hoy and Miskel (1983) stated that these elements included factors from the environment, and the internal elements of bureaucracy, work group norms, formal goals, and individuals' needs and motives. These factors are manifested in behaviors, and the outcomes of these behaviors are observed as goal achievement, integration, adaptation, and latency. Internal and external feedback allow the system to respond and adjust based on the outcomes, the needs of the environment, and the needs of the organization. Hoy and Miskel indicated that the school organization must be flexible and dynamic to be effective.

Decision-making in school organizations must also be dynamic and flexible. An administrator must decide when a unilateral decision is indicated, and when participative decision-making is indicated. When an administrator implements participative decision-making, a variety of factors need to be considered, including levels of involvement, individuals' expertise, the situations, and their relevance to teachers.

This review will focus on participative decision-making (PDM). Specifically, the concept of PDM will be addressed by providing a definition and description. The usefulness

of PDM will be discussed, and examples of its use in business and in education will be provided. Research regarding the factors involved in PDM will be reviewed, and research relative to the interactions of these factors will be presented.

#### The Concept and Uses of Participative Decision-making

Participative decision-making is a shared decision that effects two or more teachers or classrooms (Imber, Neidt, & Reyes, 1990). Approaches to shared decision-making can differ in at least three ways. Teachers may participate in decision-making in varying degrees, the topics of the situations vary, and, based on a teacher's expertise and the relevance of the decision, interest in involvement will differ.

Participation may occur early in the process as teachers identify and frame concerns or goals. Teachers may be presented with a specific issue and asked to provide input or to generate alternatives. A number of alternatives may be presented to teachers, who are then asked to choose the most preferred alternative. Or, a problem may be presented, choices generated and examined, and a decision made by the group.

Imber (1983) discussed ethical and practical considerations for the use of participative decision-making. The ethical reason for using PDM was that democracy in the workplace was an individual's right. Practical

considerations included improved student and teacher outcomes.

One of the more extreme arguments against the use of participative decision-making was presented by Locke and Schweiger (1979). They stated that forced use of PDM was immoral because it negated the rights of individuals. They also stated that voluntary participation did not ensure democracy because the most able individuals participated and had greatest influence.

Higher quality decisions and improved teacher satisfaction are the two primary reasons for using PDM. Advocates hypothesize that better decisions will be realized if those closest to the work are involved in the decision-making. In addition, individuals involved in the decision-making process will try harder to make the decision work; in turn, outcomes will improve to an even greater degree. Participation merely for the sake of a democratic environment will also affect performance. As workers are more satisfied and involved, work quality will improve.

Conley, Schmidle, and Shedd (1988) stated that PDM was needed to promote collegiality and to avoid isolation and duplication of efforts. Teachers who did not interact with other professionals became stagnant, whereas collegiality provided opportunities to renew and to discover effective teaching practices. Teachers who collaborated were able to share achievements, win recognition, and provide a framework

for others to use and to refine.

Brady (1989) advocated the use of PDM, stating that participation improved job satisfaction which, in turn, improved life satisfaction. Brady acknowledged that people could like their job and not work any harder, but indicated that this was the exception. Brady suggested that participation resulted in more ambitious and better quality decisions that were carried out more efficiently and resulted in higher productivity. In order for this to occur, participants must have correctly felt they were involved in a way that counted. Expectations had to be clarified so all felt meaningfully involved.

A modified job characteristics model was presented by Frase and Sorenson (1992). In this model, the authors suggested that characteristics of a job had psychological effects that included meaningfulness of work, responsibility for work outcomes, knowledge of the results of work activities, and affiliation with a social unit. These psychological effects resulted in personal and work outcomes. These outcomes included high quality performance, high job satisfaction, low absenteeism and turnover rates, and high intrinsic work motivation. Participation in decision-making was considered to be a job dimension that produced psychological effects that resulted in positive personal and work outcomes.

Whitaker and Moses (1990) discussed teacher empowerment



as a key to restructuring. They defined empowerment as increasing teachers' participation in decision-making. The authors indicated that school improvement would not occur until teachers were able to improve morale and working conditions, through more power in decision-making. Whitaker and Moses firmly stated that improvement would not happen through legislation. They presented five reasons for the necessity of PDM: creation of a sense of ownership, encouragement of teacher enfranchisement, prevention of mindless bureaucracy, inspiration for growth and renewal, and stimulation of collaboration.

Participative decision-making is considered a means to restructuring and a method to use in the process of reform. Kanpol (1990) stated that effective school leadership and a healthier climate would result from teacher empowerment. Kanpol described empowerment as providing a voice for teachers in decision-making. The author stated that this could only happen through open and honest communication between principal and teachers. Kanpol cautioned against deskilling teachers by not including them.

Information in the literature and research states that a number of factors must exist for participative decision-making to be successful. Imber, Neidt, and Reyes (1990) stated that teachers must perceive PDM as meaningful, satisfying, and worthy of the time invested; and that administrators must be committed to PDM in order for PDM to

be effective. Hartman (1989) pointed out the need for the principal to keep the total school's needs as the driving force.

Other factors may also influence the effectiveness of teacher participation. Crockenberg and Clark (1979) attributed much of the success of the San Jose Teacher Involvement Project to the training, release time, and secretarial support provided. In addition, the authors pointed out that training should be specific to the group's needs, teachers should be involved from the beginning, the project should be implemented at an appropriate pace, and that authority should be clearly specified by formal mechanisms.

Conley, Schmidle, and Shedd (1988) emphasized the need for PDM to be perceived as something administrators received rather than something they gave. Singer (1974) pointed out that teachers recognized psuedoparticipation and cautioned administrators to avoid abuse of PDM.

Whitaker and Moses (1990) stated that principals would have to release some power and break out of traditional systems in order for PDM to be effective. Teachers would need to change as well -- they must become willing to accept increased responsibilities. Time and training would be necessary for teachers and administrators to learn to work together.

The process of PDM must also be initiated, maintained,

and renewed to ensure success. Richardson (1985) studied four companies over a period of six years and found common patterns in participation programs' life cycles. The stages of this life cycle included: (a) arousing management's interest; (b) courting supervision; (c) courting the workforce; (d) consummating union involvement; (e) a romantic interlude; (f) complacency; and (g) renewal or failure. Success or failure could be experienced at any of the stages.

Even though successes with PDM are reported, the research on the outcomes of PDM is inconsistent. Locke and Schweiger (1979) suggested that much of the research may even be biased. Conway (1984), Locke et al. (1979), Lowin (1968), and Singer (1974), provided reviews of some of the literature regarding PDM. All found teacher satisfaction as a fairly consistent outcome of PDM. Each of the authors recognized the complexity of PDM and the existence of variables that may interact to influence the effectiveness of PDM. The conclusion of each review was the same; more research was needed to examine these variables.

#### Models of Participation Used in Business and in Education

Participative decision-making is not a new concept. Teacher involvement was discussed by Dewey in 1897, and by the president of the National Education Association in 1907 (Crockenberg et al., 1979); employee involvement has been widely addressed since 1948 (Singer, 1974). Businesses use

PDM more frequently than educational institutions.

Participative plans include Mayo's "first inquiry" (Mayo, 1924), the Hawthorne Studies (Roethlisberger & Dickson, 1956), McCormick's multiple management (McCormick, 1938), the Scanlon plan (Frost, Wakeley, & Ruh, 1974), Lewin's group decision experiments (Lewin, 1952), the Harwood-Weldon studies (Marrow, Bowers, & Seashore, 1967), and Likert System 4 (Likert, 1967). Imber (1983) discussed the creation of autonomous work groups in Israel, Yugoslavia, China, and Cuba.

A study of employee participation in the development of a pay plan, conducted by Jenkins and Lawler (1981), indicated an increase in employee relationships and the development of a better pay plan. The president of a company was criticized for using an inequitable pay plan. An employee committee was established to develop a new pay plan. Results of this plan indicated an increase in employee satisfaction and trust along with a decrease in turnovers. The authors found PDM to be a viable and beneficial approach.

Perceptions of managers, assistant managers, and nonmanagerial employees were studied by Abdel-Halim (1983) to determine the effectiveness of PDM as a means of equalizing power. Questionnaires probed 252 individuals' perceptions of power, PDM, desired participation, and abilities, in 40 stores. Data analysis suggested that

greater use of PDM resulted in a greater perception of power equalization. Managers were cautioned to use PDM when situations, desires, and abilities were appropriate for use. Gradual involvement was recommended.

Corning Glass Works' managers indicated positive results when they listened to and interacted with workers ("Middle Managers," 1985). Some resistance from middle level managers who were unwilling to relinquish some control was reported. Training and commitment from top level management helped to overcome this difficulty.

Bourdon (1980) explained a model for an Employee Participation Plan using production performance teams. All employees rotated among teams on a staggered basis in order to provide some continuity. Issues were identified, prioritized, and addressed. The success of this approach was attributed to the extensive training provided for team leaders, administrative commitment, and immediate response and follow through on the part of the administration. Issues were identified and resolved earlier, employees were more satisfied, communication was improved, and production was more efficient and of higher quality when workers were involved.

Kanter and Buck (1985) emphasized the need for departments within organizations to engage in participative planning studies. The authors helped with the study of the Employee Relations Department of the Defense Systems

Division of Honeywell. The functioning of the department was examined for a number of reasons, including the assurance that participative management was used. Their investigation of a participative planning process demonstrated that input from employees results in changes in mission, organizational design, and communication.

Many businesses use Quality Circles (Katzen, 1989) where 3 to 12 volunteers meet for approximately one hour each week to solve problems and develop solutions to present to management. Although the scope of issues this group can address is limited, members set their own agendas. Some workers state that Quality Circles circumvent unions. Often workers find it difficult to meet at a common time, and some criticize the delayed responses from management. Quality Circles may lack clear and ongoing purposes. Even with these potential problems, Quality Circles are often successful.

Considering the possible benefits of PDM, a number of attempts with PDM in education would be expected. Despite reported successes of PDM, the need for teacher empowerment, and a variety of plans and models, PDM is not widely used (Rice, 1987). Critics state that the time and resources needed do not warrant the use of PDM in education until more consistent results are reflected in the research (Conway, 1984; Locke et al. 1979; Lowin, 1968; Singer, 1974).

Schmuck and Schmuck (1990) interviewed superintendents,

principals, board members, teachers, students, and citizens in rural America in search of participation. They found that some superintendents participated in shared decision-making with principals with positive results. However, they found little interaction between administrators and teachers, little collaboration among teachers, and little cooperative learning occurring in the classrooms.

Conley, Schmidle, and Shedd (1988) pointed out that departments, faculty meetings, ad hoc committees, and team teaching were traditional forums for PDM. More recent forums included Quality Circles, peer assistance with appraisal, and career ladders. The authors questioned whether the more recent forums were indeed different or the same methods with different labels.

As businesses experience success with worker participation, schools are beginning to implement PDM (Crockenberg et al., 1979). Hansen (1990) borrowed a PDM model from the business sector as he advocated the use of the Quality Circle approach to address three factors needed for effective schools -- inclusion of teachers, the principal as an instructional leader, and site-based management.

Hansen (1990) stated that Quality Circle concepts and techniques must be learned thoroughly. A Quality Circle becomes a group with a mission, an ability to identify and solve issues, and an existing line for implementation.

According to Hansen, effective schools resulted from effective leadership; and effective leaders addressed the inclusion of teachers in a site-based management approach.

Hartman (1989) described and analyzed a participative approach to budgetary decision-making in a particular secondary school categorized as an effective high school. Hartman's case study described the process used by department heads who were given a lump sum of money (\$250,000) and asked to prepare the budget for the total school. The researcher described the third year of participation in budgetary decision-making by the department heads, but it was the first year in which there was a budget reduction. The \$250,000 reflected a \$64,000 cut in budget from the previous year.

Department heads worked with teachers to determine needs. Each department's needs, as well as the administrations' budgetary needs, were presented and discussed. The administrator's role was to remind the group of the district's goals and foci. Since consensus had to be reached, the abilities of chairs influenced the decisions reached, and weak chairs were ultimately replaced. This process helped to develop a school-wide perspective, and chairs were able to share in this perspective. For example, some expensive requests were granted if more students benefitted or in return for a smaller cut in future years. The author recommended a phasing-in process over several



years for PDM.

The actual behavior of participants is another variable to be considered in models of PDM. Just as data have been collected on decision-making behaviors of teachers in the classroom, Hawthorne (1990) recognized the need to identify decision-making behaviors of teachers as they participated in group curriculum decision-making. Hawthorne made 15 observations of teachers in the process of curriculum decision-making. Results indicated that teachers' decision-making behaviors in this context could be examined, and suggestions could be derived to improve decision-making abilities.

Hawthorne (1990) noted a discrepancy within PDM groups regarding teachers' perceptions of whether or not a decision was reached and the nature of that decision. Perceptions of teachers regarding decisions that were made varied from individual to individual. Discussion within the group tended to focus on less relevant points with little regard for content of material, vision, or the total curriculum picture. Teachers wanted curriculum that fit what they already did. Hawthorne suggested a study to determine whether or not feedback and training about the process of curriculum decision-making improved the quality of decisions that were made.

Tjosvold (1985) also studied the dynamics within group participation, reasoning that the dynamics of participation

influenced the effectiveness of PDM. Tjosvold stated that conflicting research results about the effectiveness of PDM might be explained by the lack of consideration given to the dynamics of the group. Tjosvold studied 64 subjects in groups of four, to determine the effects of role and context on expectations, interactions, attitude toward participation, and decisions. He found that subjects in the subordinate-competitive condition were less comfortable than subjects in the subordinate-cooperative, superior-competitive, or the superior-cooperative conditions. Cooperative conditions were the most satisfying and resulted in more effective decisions. Superiors had higher levels of trust than subordinates. The author concluded that interactions during decision-making influenced satisfaction.

Research exists in a variety of areas of PDM including goal formation, communication and group process, individual differences, job satisfaction and perceived power. Results from studies in each of these areas are presented. The complexity and interactions of these areas should become more evident as research from a multi-domain perspective is considered.

Latham, Steele, and Saari (1982) studied the effects of participation and goal difficulty on performance. A total of 86 college students were assigned to one of four conditions. Students were timed on calculations in order to obtain premeasure scores. Students in the participative

condition were asked to set goals for the number of calculations they could do in subsequent trials. Students in the other groups were randomly assigned a goal, assigned a goal identical to one chosen by a subject in the participative groups, or assigned a goal chosen by a matched equal in the participative group.

The researchers found that individuals who were assigned goals, performed better than individuals who choose their own goals. They concluded that participation did not improve performance. However, choosing one's own goal for a task unrelated to one's profession does not seem to be equivalent to active participation with another professional about issues that will effect those individuals. A better conclusion by these authors could have been that students' performance in a research project would improve if given a specific relatively high goal to accomplish.

Chang and Lorenzi (1983) also studied performance and active participation in goal setting. Fifty-six male undergraduate students participated in a building activity using an erector set. Subjects were given one of two tasks considered to be boring or interesting. Some were assigned a specified amount of time to complete the task and others were asked to participate in their own goal setting.

Results indicated that participation in goal setting did not effect performance or motivation consistently. The task itself influenced the effectiveness of participation.

That is, if individuals were engaged in an interesting task, participative goal setting was indicated. If the task was relatively boring, assigned goal setting was indicated due to less intrinsic motivation.

Harrison (1985) studied the interactions of participative work groups to determine if there was a greater amount and accuracy of information exchanged, and to determine if there was a qualitative difference in the interactions. Data collected from 264 social service employees suggested that superiors perceived that they communicated more frequently with subordinates using PDM, but they did not perceive a qualitative difference in the interactions.

In contrast, subordinates did not report an increase in communication, suggesting that supervisors may have been generous in their interaction estimates or that expectations may have varied. Harrison (1985) pointed out the difficulty of establishing a successful model of PDM if expectations varied. Harrison emphasized the need for supervisors to be sincere, to consider formal and informal models of participation, and to develop a shared understanding of the amount and quality of interactions that would occur. If participation, process, and extent of participation were controlled by superiors, these parameters should be discussed and clarified.

As group processes are examined, it is evident that

individual as well as group differences interact during participative decision-making.

#### Characteristics of Participants

Bridges (1967) submitted that participation of others was most effective when the appropriate level of involvement was used. Bridges postulated four levels of involvement based on the abilities and interests of participants. These levels of involvement were:

Level I. Teachers who had a personal stake in the decision and were capable of contributing because they possessed expertise were included in the early stages of the decision-making process.

Level II. Teachers who had a personal stake but not expertise were included occasionally and to a limited extent.

Level III. Teachers who possessed expertise and did not have a personal stake in the decision were also included to a limited extent, usually generating alternatives and considering consequences.

Level IV. No involvement of teachers was required. Teachers were not involved when expertise was lacking and when the decision was not relevant to them.

Bridges' decision-making model was the basis for a study conducted by Schneider (1984). Actual and desired amounts of involvement for decisions and related expertise and relevance (independent variables) and job satisfaction

(dependent variable) were analyzed for 266 teachers. Results were consistent with Bridges' theory. Teachers who were involved with decisions considered to be relevant and in which they had expertise expressed greater job satisfaction. The author concluded that in order to promote higher levels of job satisfaction administrators should communicate frequently to discover and include teachers who express interest and feel that they have expertise relative to a decision.

Steers (1977) examined preferences for PDM based on individual personality differences using 103 subjects. The second purpose of this study was to examine whether the situation or individual differences influenced the use of PDM.

Responses to questionnaires regarding personality, gender, and how decisions were made indicated that females were more participative than males. Males and females high in succorance were less likely involved in PDM. Males who were achievement oriented and/or impulsive were more likely to engage in participation. Females who were nurturing were less likely to be involved in PDM. Results indicated that situational factors influenced the use of PDM more than personality characteristics. That is, factors such as importance of consensus and location of information more likely determined the use of PDM than personality differences.

In light of these results, it is interesting to note that questionnaires completed by 513 teachers in 26 schools, and interviews of 44 of those teachers in six of the schools, indicated that men (62%) were more involved than women (38%) in PDM (Chapman, 1988). Interviews suggested that even at the building level women had more difficulty entering mens' "knowing group" or "circle of exclusion."

Chapman (1988) found that in spite of this inequity, PDM helped to increase staff morale, confidence, trust, and improved professional growth, communication, and commitment. Further findings indicated that teachers most involved in participation were in their 30's, perceived they had true influence, and perceived that the needs of teacher union members to make the workplace seem more democratic were met through PDM. Teachers whose principals did not engage in PDM became cynical, resentful, and discontented.

Thirty-one teachers in Alberta, Canada participated in in-depth interviews after working on a curriculum committee in an effort to study teachers' interest and lack of interest in PDM (Young, 1988). The author considered six factors related to teacher interest. Results suggested that self assurance, pragmatism, and professionalism resulted in satisfaction with participation. Inversely, teachers low in those areas did not demonstrate satisfaction with participation. Teachers with high levels of self assurance, professionalism, and pragmatism were most satisfied with

involvement in PDM. Demands of teaching, competing interests, and poor perceptions of committee work lessened satisfaction with participation.

A questionnaire survey of 427 teachers was conducted by Belasco and Alutto (1972). They wanted to identify teachers' decisional states of deprivation, saturation, or equilibrium to determine if levels of satisfaction were distributed differentially and associated with various organizational outcomes. Variables included satisfaction, decisional participation, trust, job tension, role conflict, authoritarianism, perceptions of administrative influence, and attitudes.

Teachers deprived of PDM had low satisfaction levels and more job stress. Teachers who were more satisfied tended to be older, female, and elementary school teachers. Decision saturation was the most satisfying for teachers. Satisfaction levels did not affect trust or role conflict.

Riley (1984) studied levels and areas of teacher involvement and actual, desired, and deprived amounts of involvement. Results from questionnaires administered to 589 teachers in Iowa suggested that teachers made most decisions at the classroom level. As the amount of participation increased, so did the desire for even more participation for instructional decisions.

Riley (1984) identified other findings. Teachers who felt deprived attended more union meetings. Number of years



teaching did not affect desire for participation. Teachers with master's degrees or higher desired more participation at the building and district levels. More males than females participated at the building and district level. Teachers in smaller districts participated more than teachers in larger districts. More senior high than elementary teachers participated at the building level. Further research was recommended to determine more avenues of participation for teachers.

#### Amount of Involvement

Vroom and Jago (1988) presented five levels of shared decision-making, ranging from least amount of participation to full participation in the Vroom-Yetton Model of Situational Participation (Vroom & Yetton, 1973). Administrators were directed to use one of the five levels or decision-making processes depending upon various factors. This model is presented to demonstrate the recognized complexity of a number of variables involved in PDM. Effective results appear to depend upon various factors.

In the first level, the leader makes the decision based on the information available at the time. The second level is characterized by the gathering of information by the manager. The manager asks subordinates for input. However, information regarding the nature of the problem is not shared, nor is there participation in defining the problem.

The third level of involvement requires the sharing of

the problem with specific teachers individually. Teachers provide ideas and suggestions, but the final decision is made by the administrator.

The fourth level of involvement includes a group meeting where the problem is presented, ideas discussed, and suggestions shared. Again, the administrator determines the final decision.

The fifth level offers the most interaction. The problem is shared with a group which generates and discusses alternatives. The decision is supported by the entire group.

There are seven rules incorporated in this model. The first is the leader information rule which directs the leader to involve others if the leader does not have adequate information. The second rule is the goal congruence rule, which directs the leader to consider whether or not the group will follow the decision and to consider the importance of the decision. The third rule involves interacting with subordinates and directs the leader to do so if the problem is unstructured. The fourth rule directs the leader to include others if the group will not accept an autocratic decision.

The fifth rule is the conflict rule, which instructs the leader to make an autocratic decision if conflict will result from interactions among subordinates. The sixth rule is the fairness rule, which directs the leader to include

others if the importance of the decision is minimal, but compliance is necessary. The seventh rule is the acceptance priority rule which requires the leader to involve others if there is high commitment, if subordinates will not respond to autocratic direction, and if acceptance is important.

Crockenberg and Clark (1979) used five levels of involvement to describe teacher participation. The first level involved providing suggestions or recommendations to the administrator. The second level involved the sharing of information from the administrator with the teachers. In the third level, the administrator consulted with teachers before making a decision; and in the fourth level, the administrator presented decisions to teachers for alterations, rejection, or approval. The fifth level provided teachers with authorization. Teachers initiated and conducted decision-making with suggestions from the principal.

Crockenberg and Clark (1979) found that teachers in the San Jose Teacher Involvement Project preferred involvement in the first, second, and third levels. A few teachers preferred the fifth level of involvement. According to the researchers the preferred level depended upon the issue, the impact of the issue, and the willingness of teachers to assume responsibility.

Thompson, Mannix, and Bazerman (1988) examined processes of decision groups by comparing majority and

unanimity rule, and by studying the use of agendas to order the introduction, discussion, and voting on specific issues. Subjects consisted of 72 graduate students placed in four different group. Results indicated that unanimous decision rulings were more satisfying than majority rule. Resources were more evenly distributed without agendas, since participants had the opportunity to negotiate. Consensus and even distribution were recommended for most decision-making groups.

In contrast, Miller, Jackson, Mueller, and Schersching (1987) found that majority rule was perceived as being more fair than unanimity rule or dictatorial decision-making. The 270 male subjects in this study were placed in groups of five (four-person majority and a lone deviate), and decisions were reached in these groups by majority rule, unanimity, or dictatorial methods.

Miller, Jackson, Mueller, and Schersching (1987) found that subjects were most satisfied when decisions were representative of most of the group members' preferences. Fulfillment of self interest through decisions and perceptions of fairness interacted. Participants were most satisfied when they got their own way and when their way was also the group's preference. The next level of satisfaction resulted when participants got their own way even if it was not reflective of the group's preference. The least amount of satisfaction resulted when individuals did not get their

way and the decision reached went against the group's preference. Majority members tended to reject lone deviates, especially when the deviate imposed a decision that was unrepresentative.

Schweiger, Sandberg, and Ragan (1986) provided a comparative analysis of dialectical inquiry, devil's advocacy, and consensus approaches to decision-making. Dialectical inquiry involved the presentation of two plans that were compared and discussed with one of the plans ultimately chosen. The devil's advocacy approach was described as the presentation of one plan with a discussion of merits and weaknesses. The consensus method involved each member presenting a plan with one of the plans selected.

Results of this semester-long study of 120 M.B.A. students using one of the three processes suggested that dialectical inquiry resulted in higher quality recommendations and assumptions regarding the decision. Dialectical inquiry and devil's advocacy were more effective than consensus. However, subjects were more satisfied when consensus was used. Consensus resulted in the desire for further participation, satisfaction within groups, and satisfaction with the decisions that were reached. The authors recommended matching the approach with the group and the purpose.

Participation may occur at various stages of the

problem solving process. Several processes may be used in the implementation of PDM. Participation in decision-making varies not only in amount, type, and stage of involvement, but also in the types of decisions that are involved.

#### Types of Decisions

Hartman (1989) described five types of decisions -- staffing, budgeting, curriculum, scheduling, and evaluating decisions. Imber and Duke (1984) offered a typology for decision-making that included the categories of curriculum and instruction, personnel, facilities, student conduct, scheduling, extra-school relationships, and priorities and goals; budgetary considerations were included in each category. Sorenson (1985) proposed the categories of curriculum and instruction, personnel, business, operations, students, and community, for use in delineating decision-making categories.

Conley, Schmidle, and Shedd (1988) discussed strategic and operational types of decisions. Strategic decisions included those decisions that concerned overall goals related to direction, organization, resources, and evaluation. Operational decisions involved specific tasks or procedures. The authors suggested the use of PDM in strategic areas if workers dealt directly with clients [students] and the use of PDM in operational areas for employees involved with the technical aspects of work [texts and instruction].

Conley et al. (1988) also provided four content areas of decision-making -- instruction, supervision, counseling, and school management. The authors stated that teachers were already active in all of these at the classroom level, but needed greater involvement at the school and district level, where decisions definitely influenced the classroom.

Indeed, teachers typically participate more in certain areas of decision-making than in other areas. The influence teachers exert in specific areas is acknowledged by superintendents. Shelton, Beach, and Chissom (1989) conducted a study of 172 superintendents in 11 southeastern states to determine the perceived political factors that influenced superintendents' administration in the areas of instruction, finance, staff personnel, and pupil personnel.

Results indicated superintendents were most influenced by board members in all four areas. The next highest influences for all areas except finance came from principals and central administration staff. Collective bargaining and special interest groups had the least amount of influence on superintendents' decision-making. Although not the highest, teachers did have a high level of influence on instruction and pupil personnel decisions.

A comprehensive list of 13 discrete areas of decision-making was offered by Crockenberg and Clark (1979). These areas included school budget and expenditures, in-service training and faculty meetings, principal/teacher relations,

certified support personnel, parent/teacher relationships, teacher personnel policies, student personnel services, evaluation, curriculum content and philosophy, instructional materials, instructional methods and grouping, school procedures, and school priorities. Of these possible areas of involvement, Crockenberg and Clark reported that teachers were more concerned with instructional than administrative areas. However, as teachers realized the relationship between the budget and what occurred in their classrooms, their interest in participating in budget decisions increased.

Teachers might participate in decision-making in any one of these areas or levels, at various stages of the decision-making process, and to differing degrees from input to consensus. However, Hartman (1989) pointed out that PDM was potentially time consuming, difficult to manage, and fraught with conflict.

#### Interacting Variables

Many of the studies suggest an increase in teacher satisfaction through the use of PDM. Closer examination of data regarding teacher satisfaction and participation emphasizes the need to consider a variety of variables and their interactions. Contemporary leadership theory advocates the use of contingency leadership (Hoy & Miskel, 1987). The contingency model of leadership classifies leadership as a social transaction. Moderating variables



between the leader, the followers, and the desired results are present and need to be identified. Vroom and Yetton (1973) utilized this philosophy in the Vroom-Yetton Model of Situational Participation.

Arney (1988) studied the interactions of complexity, high and low centralization, and high and low formalization of organizations in conjunction with an individual's locus of control and perceived role ambiguity. Results indicated that, in conditions of low formalization, persons who were externally oriented were more stressed than those who were internally oriented.

Externals experienced more stress than internals under low complexity levels. Externals were more stressed than internals when there was a high degree of role ambiguity. Results suggested that teachers would react differently to participation in decision-making, depending upon the combination of formalization, complexity, ambiguity, and the individual teacher's locus of control. The author also stated that conflicting research results could be accounted for by the fact that person-environment fit was not controlled in the studies.

Richardson (1985) confirmed the variability of the use of participative decision-making. He stated that possible benefits were realized only if the correct approach for a particular work place was used. Richardson indicated that the correct approach could be determined by considering the

degree of involvement employees sought.

Bacharach, Bamberger, Conley, and Bauer (1990) used a multi-domain approach to demonstrate the usefulness of such an approach and to identify four decision domains. Their study incorporated 842 elementary and 689 secondary teachers. Subjects responded to a questionnaire designed to measure decision participation, attitudes, job satisfaction, role ambiguity, role conflict, and organizational goal commitment.

A factor analysis provided a map of organizational decisions divided into four organizational control domains - - operational-organizational (accountability), operational-personal (teachers' knowledge, skills, abilities, and resources), strategic-organizational (long-term goals and budget), and strategic-personal (human resource allocation). Decision deprivation varied across decision domains. Teachers perceived the most deprivation in decision-making in the operational-organizational domain, and a significant amount of deprivation in the strategic-organizational domain.

Correlational data suggested differences between elementary and secondary teachers relative to decisional deprivation. Elementary teachers reported dissatisfaction and role ambiguity in conjunction with deprivation in the operational-personal domain. These teachers also expressed less goal commitment associated with deprivation in the

operational-organizational domains.

Secondary teachers reported dissatisfaction with deprivation in the strategic-organizational and the operational-personal domains. Deprivation in the operational-organizational domain was also associated with less goal commitment for this group.

Role conflict was associated with deprivation in all domains for both elementary and secondary teachers with the exception of the strategic-personal domain. Bacharach, Bamberger, Conley, and Bauer (1990) recommended the use of multi-domain approaches in research to increase the validity and explanatory value of the studies. Practitioners should identify areas of deprivation and target those areas for improvement. Opportunities should be structured for use of PDM in an effort to improve specific areas of need.

Lipham, Dunstan, and Rankin (1981) conducted a longitudinal study of job satisfaction, the amount of involvement in decision-making, and the principal's leadership. Surveys were used to collect data from 231 teachers in four schools. Results indicated that leadership and PDM were significantly correlated with job satisfaction. Although principals were perceived as being supportive, they were not perceived as facilitating participation; and teachers indicated a desire for more participation.

Imber, Neidt, and Reyes (1990) surveyed 174 secondary school teachers to assess factors associated with teacher

satisfaction with participation in decision-making. Teachers were asked to state their level of satisfaction toward PDM in general, and toward a specific example of PDM by responding to 56 items of a questionnaire.

Two stepwise regression analyses were used to determine general satisfaction and specific satisfaction with PDM. Results varied for general and specific incidents of PDM. General PDM satisfaction levels were statistically significant for expected rewards, involvement as perceived by others, overall satisfaction with teaching, and the effect of the decision on the school. Specific PDM satisfaction levels were statistically significant for benefit to self, influence of self (as opposed to committee influence), implementation of the decision, and benefit to the school.

The level of influence was perceived to be more important than the amount of involvement. Expected rewards were more important than unexpected rewards. Rewards for self were most valued and included personal satisfaction, an increase in student learning, and general school improvement. Teachers did not want to be involved in PDM from the beginning because of boredom, the time involved, and the cost.

The researchers recommended that, from the outset, administrators should discuss potential benefits, levels of authority, influence, and power. Realistic expectations may

raise satisfaction levels. In addition, opportunities should be provided for all participants to express opinions. The process of decision-making is as important as the decision that is made. Decisions must be implemented if they are attained through PDM.

Dalton, Barnes, and Zalesnik (1968) similarly reported that acceptance of PDM involved an individual's perceptions of possible increases in his or her own influence or base of power. Individuals who experienced increased power or influence liked structural changes, even if the overall functioning was not perceived as improved. Job satisfaction decreased for those who did not perceive increased influence.

Dickson (1981) considered PDM to be a function of organizational control over employees rather than a process for employee influence. In his study of 31 organizations, Dickson found that the imposed framework for PDM limited the issues that could be addressed. He stated that PDM occurred more frequently in formal organizations because they provided the framework for participation to occur. Participation was most frequently used in large organizations when central authority was perceived to be limited.

Employee satisfaction with this process was attributed to the opportunity to express one's views, an appreciation of the process, and interaction with colleagues. Dickson

stated that participation was a function of feelings of control for workers and for administrators. Participation was a vehicle by which employees understood decisions and had an opportunity to influence administration.

In a study by Imber and Duke (1984), over 250 decisions were monitored and over 100 teachers interviewed in a variety of schools to determine, among other things, teachers' interest in PDM. Results indicated that teachers who were the most interested in participation had experienced influence in the past. The researchers determined that an innovative organization was not sufficient to ensure success in PDM. Teachers had to be given a meaningful role. Imber and Duke also found that informal means of participation were often more rewarding than formal structures, which could actually impede an individual's influence.

They summarized that teachers were involved in decision-making to a great extent for specific areas of decision-making, but had quite limited participation in all areas. Teacher influence was not proportionate with teacher involvement. Teachers were not satisfied with involvement unless they were influential.

Mohrman, Cooke, and Mohrman (1978) indicated that decision domains or categories were an important influence in PDM. The authors used a multi-dimensional approach to measure satisfaction, role stress, and perceived and desired

participation in various domains (or types of decisions). A contingency fit of individuals and domains was considered by looking at actual and desired participation with a variety of decision types.

According to responses from questionnaires completed by 460 teachers, an increase in satisfaction and a reduction in role ambiguity occurred when teachers participated in technical (curriculum and instructional) decisions. The multi-dimensional approach proved to be useful in determining benefits of PDM more precisely and with more accurate information. If domains were collapsed, this difference would not be noted.

A study by Cooper and Wood (1974) involved 40 laboratory groups of three, in various stages of partial participation in decision-making (generation, evaluation, or choice) and complete participation. Participants expressed greater satisfaction in the choice only phase than in the generation only or evaluation only phases. Participants in decision-making were most satisfied when participation was complete. The authors stated that greater influence or power was experienced when participation in the decision-making process was complete, or at least when the participation involved choosing an alternative. Again, the situational parameters of PDM were apparent.

Duke, Showers, and Imber (1980) interviewed 50 teachers in five schools in the San Francisco Bay Area. These

subjects were selected based on existing opportunities for PDM. Results from the interviews suggested that benefits of PDM (feelings of self-efficacy, ownership, and workplace democracy), outweighed the costs of PDM (increase in time demands, possible loss of autonomy, risk of collegial disfavor, subversion of collective bargaining, and threats to career advancement).

However, teachers were still reluctant to participate, or were dissatisfied when they did because of a perceived lack of influence. Teachers interviewed in this study reported that PDM was often used to create an illusion of participation. The authors pointed out that the greatest benefits of PDM can only be realized through genuine participation and influence.

Spector (1986) conducted a meta-analysis of studies relative to autonomy and participative decision-making. Relationships between perceived control variables and employee outcome variables were considered. A total of 101 samples were taken from 88 studies that measured participation or autonomy. Results suggested that individuals who perceived more control were more satisfied with their job. Other outcome variables positively influenced by perceived control were commitment, involvement, motivation, performance, health, attendance, and conflict. Spector observed discrepancies among studies even when the same instruments were used. Meta-analyses can



help discover patterns in the search for information about PDM.

### Relevance and Expertise

The roles of perceived relevance and expertise have been studied by individuals in several fields, including marketing, business, education, sociology, psychology, and government. Relevance and expertise are found to affect consumer interest, job commitment, involvement, and decision-making.

In the area of marketing, Laczniak and Muehling (1991) found importance in the relevance of a message to consumers and their attention to the message. Celsi and Olson (1988) found a person's involvement with an action or concept was determined by perceived personal relevance. When relevant knowledge was activated, a motivational state that drove the individual was the result.

Swasy and Munch (1985) discussed the concept of increased processing of messages by manipulating the level of personal relevance. Biel and Bridgwater (1990) also found that relevance was an important factor involved with the appeal of commercials to consumers. Roser (1990) stated that messages that had perceived relevance effected attitudes and behavior.

The stakeholder approach to evaluation was suggested by Lawrence (1989) for use in multilateral agencies (such as the World Bank) and bilateral programs (such as the U.S.

Foreign Assistance Program). The stakeholder approach to evaluation of programs and projects was proposed to increase the probability that recommendations made as a result of the evaluation were implemented. Evaluating and addressing issues that were relevant to stakeholders facilitated the utilization of findings from evaluations.

Personal relevance versus ideology in the context of developing political opinions was explored by the sociologist, Taylor (1983). Regardless of a person's educational level or political involvement, a person held stable opinions for issues which were of personal relevance, rather than for issues which promoted a specific ideology.

Psychologists studied the role of relevance in arguments and persuasion. The number of arguments presented increased persuasion by enhancing issue-relevant thinking (Petty & Cacioppo, 1984). Forgas (1989) postulated that a person's emotional state and the relevance of a situation effects decisions and the consequences of the decisions.

Teachers in a study by Clark and Bergstrom (1983) responded most favorably to feedback that was novel, credible, and related to student learning. Relevant feedback was described as feedback that related to a teacher's personal goals.

Research results pertaining to relevance in the business sector were reported by Moore (1985). The author found a significant relationship between perceived relevance

of a job and job satisfaction.

Blau (1988) discussed six factors that effected career commitment. One of these factors was perceived expertise. Botan and Hunt (1988) studied the perceptions of 40 individuals regarding expertise in public relations prior to and after attending a public relations class. They found that women felt they possessed less expertise than men prior to the class. Upon completion of the class, both men and women stated that they possessed an increase in expertise. No difference occurred in perceived expertise between men and women upon completion of the class.

Use of computers with a language arts program was studied by Harvey, Kell, and Drexler (1990). The authors found that perceived expertise was highly correlated with the quality of implementation of the program.

Johnson and Christian (1990) examined students' expected grade, expected amount of learning, and the perceptions of the teacher's expertise. Teachers were rated more highly based on students' perceptions of teacher expertise than on the expectation of a high grade.

Responses from members of the American Association for Counseling and Development concerning the roles of women and men in research and publication were analyzed by Nicoloff and Forrest (1988). Even with higher education levels and higher ratings of career importance, women did not write or publish as much as men. Less support, less confidence, and

a perceived lack of expertise by women were found.

#### Summary

Participative decision-making is identified as a useful tool in the development of a more democratic work environment where workers' input and knowledge are valued. Collegiality and the growth of individuals and of the group may also be achieved by implementing PDM. Interactions can improve communication among and professional development of teachers. Empowered teachers manifest a healthier work climate and a sense of ownership. Most importantly, the research indicates that PDM can increase productivity and improve student outcomes as a result of higher quality decisions being reached.

Expectations should be clear to all participants and the amount of participation and resulting influence should be identified at the outset. A shared understanding will result in more meaningful participation. The school's needs should be maintained as the overall goal. Implementation of PDM should be gradual and training should be provided at every stage. The process of PDM should be renewed and re-evaluated over a period of time.

Research findings relative to PDM include satisfaction with participation, the effects of goal setting, group dynamics, individual differences, and interacting variables. Satisfaction studies typically include measures of levels of satisfaction after participation has occurred; satisfaction

levels vary. The effects of goal difficulty appear to be situational. Preferences for majority rule, consensus, and dictatorial approaches differ. Descriptions of individual differences vary. Research results also vary for perceived influence, stress, attitudes, commitment, leadership, rewards, previous experience, the size and structure of the organization and satisfaction with PDM.

These studies address PDM after it has occurred. The research does not indicate a single best approach to PDM. How then, will an administrator develop and use an appropriate model for PDM? The most apparent answer is to determine teachers' preferences for PDM prior to implementation.

## CHAPTER III

## Methods

Sample PopulationPopulation

The survey population for this study included all 1,638 certified senior high school regular education staff members from the ten largest public school districts in Nebraska. This population was obtained from the Nebraska Department of Education's 1990-91 Nebraska Education Directory. The ten largest public school districts in Nebraska included a total of 21 high schools with faculties ranging in size from 49 to 124 regular education staff members. This population was selected to obtain a sample that was similar, in that all members had access to a central office, all members had access to support staff, and all members lived in or near a city with a population of over 20,000.

Riley (1984) suggested that school size may influence teachers' desire to participate in decision-making. The 21 buildings that comprised this population were stratified by size in order to include the variable of school size. Group A included buildings with 89-124 regular education staff members. Group B included buildings with 49-76 regular education staff members. This division in school size was close to the school size mean for all 21 schools ( $\bar{M} = 78$ ), as shown in Table 1.

Table 1

Total Population of Regular Education Teachers from Larger Senior High Schools (Group A) and  
Smaller Senior High Schools (Group B) in Nebraska's 10 Largest School Districts

School	Number of Regular Education Teachers	
Group A		
School 1		124
School 2		115
School 3		101
School 4		101
School 5		100
School 6		98
School 7		89
Group B		
School 8		76
School 9		75
School 10		74
School 11		72
School 12		70
School 13		70
School 14		69
School 15		68
School 16		63
School 17		62
School 18		58
School 19		54
School 20		50
School 21		49
Total	1,638	$\bar{M} = 78$

### Sampling

After stratifying the population by size of faculty, the use of a stratified random sampling method recommended by Fink and Kosecoff (1985) allowed for the random selection of subjects. A number was assigned to each individual listed in the Nebraska Education Directory who met the criteria (secondary regular education teacher in selected high schools) for membership in the population.

The procedure used to select subjects was the same for Group A and for Group B. Use of a Hewlett Packard Stat/Math 21S calculator provided the random numbers. Teachers whose number matched the random numbers became subjects for this study. The population was over-sampled to allow for ten replacement subjects for each group, if needed. Selection of replacement subjects during a single selection process assisted in the avoidance of selection bias (Fink & Kosecoff, 1985).

### Sample Size

The statistical procedures for this study influenced the formula used to establish the sample size that was needed. The statistical procedures considered were the  $t$ -test and the analysis of variance (ANOVA). Those procedures required the greatest number of subjects according to the formula presented by Cohen (1988) that is described below.

The power of a statistical test is the probability that the test will correctly identify differences if differences



exist. The power of a test can be effected by size of the sample. The determination of sample size occurred with the use of Cohen's (1988) procedure for determining sample size with consideration of power.

Cohen (1988) recommended an estimated power effect size of .5 as a moderate effect size. An estimate of power of 80 requires 80% of the alternative distribution in a  $t$ -test to be in the critical region. An estimate of power of 80 is generally accepted. The selection of an alpha level of .01, rather than .05, facilitates reliability.

Using the  $t$ -test power test (Cohen, 1988), with an estimated effect size of .5, an estimate of power of 80, and alpha of .01, the  $t$ -test required 84 subjects per cell. This number was multiplied by 4 (to account for 4 cells in the ANOVA) for a product of 336.

Using this procedure, the sample size for this study was 336 subjects (168 from Group A and 168 from Group B). In anticipation of a 70% return rate, the number of subjects selected and surveys distributed was 482 (241 from Group A and 241 from Group B).

#### Subjects Who Did Not Respond

An analysis of characteristics of individuals who did not respond was conducted. These characteristics included school size, teaching assignment, and years of teaching.

### Approval

The University of Nebraska Medical Center's Institutional Review Board approved this study (see Appendix A). Contact with the central office of each of the ten school districts provided directions for obtaining permission.

Specific procedures for obtaining permission to conduct this study varied among the school districts. Procedures included verbal approval from the central office, completion of request forms, letters of explanation to the central office, letters of request to principals, verbal approval from principals, and personal visits with principals (see Appendix B for a sample letter).

The completion of required procedures for each district resulted in permission to distribute the survey questionnaire to the sample population in the 21 senior high schools. All responses were confidential, no building was identified, and results were analyzed in aggregate.

### Mailing

Each subject in the sample population received a survey questionnaire (see Appendix C), a cover letter (see Appendix D), and a self-addressed postage-paid return envelope. Subjects received the surveys at their schools via the U.S. mail. Subjects were asked to return the survey questionnaire within two weeks. At the end of two weeks, subjects who had not returned the survey, received a second

mailing of the questionnaire and a second cover letter (see Appendix E).

### Research Design

The design for this study was a cross-sectional survey research design. Babbie (1973) reported that survey research can be used to describe, explain, and to explore populations. Survey research provides a viable, cost-effective means to measure phenomena, compare groups, gain insight, describe phenomena, identify treatment effects, probe hypotheses, predict, discover patterns and relationships, and create, support, or not support theories (Babbie, 1973; Borg & Gall, 1983, Fink & Kosecoff, 1985).

The survey research method was advantageous for this study because it was a viable, economical procedure to reach a large sample and ensure a reliable measure of teachers' preferences. The survey method provided a valid means to identify and categorize preferences. The use of the survey design helped to provide information about the Vroom-Yetton (Vroom & Jago, 1988; Vroom & Yetton, 1973) and the Bridges (1967) decision-making models incorporated in this study.

### Instrumentation

The researcher designed a questionnaire to measure teachers' preferences for participative decision-making (see Appendix C). The questionnaire consisted of six pages - five pages contained the situations and one page contained instructions, definitions, an example, and the decision-

making processes.

Each item in the survey questionnaire represented a specific situation. Each item in the questionnaire was referred to as a situation. For example, Item #1 was referred to as Situation #1. The survey contained five situations for each type of decision category. Decision categories were business, personnel, community, student, and curriculum and instruction issues.

#### Situations

Situations reflected realistic occurrences that required a decision. The contents for these items were obtained from related survey research in participative decision-making, practicing administrators, university professors in educational administration, and suggestions and clarifications acquired through two pilot studies. For example, Situation #1 read, "Minimum competencies must be developed for students in your building. These competencies will define the skills necessary to complete requirements and continue to the next level, for each area of instruction."

#### Types of Situations

Types of situations from the participative decision-making inventory were categorized into one of five types; personnel, business, community, students, and curriculum and instruction. These five situation types were similar to situation types used in other participative decision-making

studies (Conley, Schmidle, & Shedd, 1988; Duke, 1984; Sorenson, 1985).

Five situations comprised each of the categories. For example, the situations that comprised the category of curriculum and instruction required decisions regarding the establishment of minimum competencies, use of computers in the classroom, selection of a new instructional program, implementation of an instructional program, and selection of curriculum content.

The items were distributed throughout the survey with five consecutive situations containing one question from each category. For example, situations #1-5 included items pertaining to personnel, business, community, student, and curriculum and instruction. Situations #6-10 also included a situation from each category.

#### Panel of Experts

Three panels of four experts in the field of educational administration examined each situation on the participative decision-making inventory. Experts placed each situation into one of the categories of business, personnel, community, students, or curriculum and instruction. Correct categorization of the items by three out of four panel members was required to achieve content validity for each item.

Three main drafts of the survey instrument were generated and this process was repeated for each draft.

Certain situations that could be assigned to more than one category were eliminated from the study. For example, the purchasing of new textbooks could be classified as either a business issue or a curriculum and instruction issue. Situations that could not be categorized consistently and accurately were replaced. The situation type of "operations" was included in the first draft of the survey, but was dropped because it could not be defined clearly enough. All experts were in agreement for each of the categories for the final survey instrument. Face validity was acceptable.

#### Responses

The choice of options for the situations provided in the survey questionnaire required the respondents to select one of five decision-making processes. These processes were derived from the Vroom-Yetton decision-making model (Vroom & Jago, 1988; Vroom & Yetton, 1973). Since this inventory was designed to identify teachers' preferences, the processes were modified to reflect a teacher's perspective, rather than an administrator's perspective. For example, from the administrator's perspective, process #1 stated "You solve the problem using information available to you." This process implies no participation on the part of the teacher. For the purpose of this study, the process was stated from the teachers' perspective, "I do not want to be involved in this decision."

Teachers were asked to identify a preferred decision-making process to reflect amount of desired involvement for each situation using a scale ranging from no involvement to total involvement. The decision-making processes used for this study are provided in Table 2.

The instrument was designed to include two other responses for each item -- relevance and expertise. Relevance was defined as a personal stake, and expertise was defined as having experience and training. These components were derived from the Bridges' decision-making model (Bridges, 1967). Teachers were asked to indicate the presence or absence of relevance and the presence or absence of expertise for each situation.

After reading a situation contained in the survey, respondents completed the blank next to "Process # \_\_\_\_" immediately below each situation, with the number 1, 2, 3, 4, or 5. This number indicated the corresponding decision-making process, and in turn, the amount of participation the respondent wanted for that situation. The subject also checked "Yes \_\_\_\_" or "No \_\_\_\_" for relevance and for expertise. These responses indicated whether or not the subject perceived each situation to be relevant and whether or not the subject had perceived expertise for each situation presented.

Table 2

Decision-Making Processes Provided for Respondents to  
Indicate the Amount of Involvement Preferred

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- Process #1. I do not want to be involved in this decision.
- Process #2. I have useful information I want to contribute regarding this situation, on an individual basis. However, I do not want to evaluate or generate alternatives.
- Process #3. I want to be consulted about this situation on an individual basis. I want to offer ideas and suggestions. However, I do not want to make the decision.
- Process #4. I want to be included in an advisory group. This group should offer collective ideas and suggestions. This group should not make the decision.
- Process #5. I want to be included in a group that generates and evaluates alternatives and attempts to reach consensus. The solution supported by the group should be accepted and implemented.
- 

Note. These decision-making processes were modified from the decision making-processes of Vroom-Yetton (1973).



### Classification of Data

Classification of data is provided in Table 3.

Responses for relevance and for expertise provided ordinal data scales. The data is considered ordinal rather than nominal because the presence of relevance or expertise indicates a greater amount than the absence of relevance or expertise. The presence of relevance or expertise was assigned a value of 1; the absence of relevance or expertise was assigned a value of 2.

Presence and absence scores were totaled for each category. High levels of relevance or expertise were less than or equal to a value of 7 indicating the presence of relevance or expertise for at least three of the five questions for situation type. Low levels of relevance or expertise were greater than 7 indicating the absence of relevance or expertise for at least three of the five questions for situation type.

Questionnaires were color coded for building size; Group A received green survey questionnaires, and Group B received blue survey questionnaires. The data for school size was ordinal data. The five situation types (students, community, personnel, business, and curriculum and instruction) provided nominal data.

Data for waves (first and second sets of returns) and for respondents/nonrespondents were ordinal. Years of teaching and area of teaching provided nominal data. Areas

Table 3

Classification of Data

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Relevance	Ordinal
Expertise	Ordinal
School size	Ordinal
Situation type	Nominal
Decision-making process (Amount of participation)	Interval
Waves	Ordinal
Respondent/nonrespondent	Ordinal
Years of teaching	Interval
Area of teaching	Nominal

---

of teaching were grouped by (1) math and science, (2) humanities (social science and English), (3) fine arts (art, foreign language, music), and (4) trades (home economics, industrial technology, marketing).

The decision-making processes provided an interval data scale. Vroom and Yetton (1973) assigned values to the decision-making processes. They found that responses formed a unidimensional-nonarbitrary scale. Using an algorithm, the following values were assigned to the decision-making processes; Process 1 = 0, Process 2 = .63, Process 3 = 5.0, Process 4 = 8.13, and Process 5 = 10. These values were assigned after three analyses. Vroom and Yetton found that this scale accounted for a greater number of responses than an equal interval scale. These values were also evaluated by panels of experts who agreed with the assigned values.

The coding of the data is presented in Table 4. The SPSS-X, Release 3 (Norusis, 1988) software from the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) and the BMDP-4V version (BMDP Project, 1987) from the Biomedical Data Package (Dixon, Brown, Engelman, Hill, & Jennich, 1987) were used for the data analyses.

Table 4

Data Coding

Column	Data	Code
	First line	
1-3	Subject ID number	Actual number
4	Situation #1	Process #1-5
7	Situation #2	Process #1-5
10	Situation #3	Process #1-5
13	Situation #4	Process #1-5
16	Situation #5	Process #1-5
19	Situation #6	Process #1-5
22	Situation #7	Process #1-5
25	Situation #8	Process #1-5
28	Situation #9	Process #1-5
31	Situation #10	Process #1-5
34	Situation #11	Process #1-5
37	Situation #12	Process #1-5
40	Situation #13	Process #1-5
43	Situation #14	Process #1-5
46	Situation #15	Process #1-5
49	Situation #16	Process #1-5
52	Situation #17	Process #1-5
55	Situation #18	Process #1-5
58	Situation #19	Process #1-5

Table 4 - continued

61	Situation #20	Process #1-5
64	Situation #21	Process #1-5
67	Situation #22	Process #1-5
70	Situation #23	Process #1-5
73	Situation #24	Process #1-5
76	Situation #25	Process #1-5
5	Relevance for #1	Yes = 1, No = 2
8	Relevance for #2	Yes = 1, No = 2
11	Relevance for #3	Yes = 1, No = 2
14	Relevance for #4	Yes = 1, No = 2
17	Relevance for #5	Yes = 1, No = 2
20	Relevance for #6	Yes = 1, No = 2
23	Relevance for #7	Yes = 1, No = 2
26	Relevance for #8	Yes = 1, No = 2
29	Relevance for #9	Yes = 1, No = 2
32	Relevance for #10	Yes = 1, No = 2
35	Relevance for #11	Yes = 1, No = 2
38	Relevance for #12	Yes = 1, No = 2
41	Relevance for #13	Yes = 1, No = 2
44	Relevance for #14	Yes = 1, No = 2
47	Relevance for #15	Yes = 1, No = 2
50	Relevance for #16	Yes = 1, No = 2
53	Relevance for #17	Yes = 1, No = 2
56	Relevance for #18	Yes = 1, No = 2
59	Relevance for #19	Yes = 1, No = 2

Table 4 - continued

62	Relevance for #20	Yes = 1, No = 2
65	Relevance for #21	Yes = 1, No = 2
68	Relevance for #22	Yes = 1, No = 2
71	Relevance for #23	Yes = 1, No = 2
74	Relevance for #24	Yes = 1, No = 2
77	Relevance for #25	Yes = 1, No = 2
6	Expertise for #1	Yes = 1, No = 2
9	Expertise for #2	Yes = 1, No = 2
12	Expertise for #3	Yes = 1, No = 2
15	Expertise for #4	Yes = 1, No = 2
18	Expertise for #5	Yes = 1, No = 2
21	Expertise for #6	Yes = 1, No = 2
24	Expertise for #7	Yes = 1, No = 2
27	Expertise for #8	Yes = 1, No = 2
30	Expertise for #9	Yes = 1, No = 2
33	Expertise for #10	Yes = 1, No = 2
36	Expertise for #11	Yes = 1, No = 2
39	Expertise for #12	Yes = 1, No = 2
42	Expertise for #13	Yes = 1, No = 2
45	Expertise for #14	Yes = 1, No = 2
48	Expertise for #15	Yes = 1, No = 2
51	Expertise for #16	Yes = 1, No = 2
54	Expertise for #17	Yes = 1, No = 2
57	Expertise for #18	Yes = 1, No = 2
60	Expertise for #19	Yes = 1, No = 2

Table 4 - continued

63	Expertise for #20	Yes = 1, No = 2
66	Expertise for #21	Yes = 1, No = 2
69	Expertise for #22	Yes = 1, No = 2
72	Expertise for #23	Yes = 1, No = 2
75	Expertise for #24	Yes = 1, No = 2
78	Expertise for #25	Yes = 1, No = 2
79	Group (by size)	A = 1, B = 2
80	Wave (first or second)	1st = 1, 2nd = 2

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 Second line

1	Area	1 = math & science 2 = humanities 3 = fine arts 4 = trades
2	Response	1 = responded 2 = did not respond
3-4	Years of teaching	Actual years

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### Pilot Studies

After revisions and validation, the first pilot study of the participative decision-making inventory included 50 teachers to determine accuracy and face validity. Thirty of the individuals who completed the survey provided comments and suggestions. Results of the pilot study were examined for preliminary data. Necessary revisions were made.

Revisions based on the results of the first pilot included the following:

1. Reduced number of independent variables.
2. More narrowly defined population.
3. Refined wording used in the situations.
4. Replacement of some situations.
5. Directions written more clearly.
6. Improved layout of the survey.
7. Refined wording used for the decision-making processes.
8. One of the situation types (operations) was eliminated.

A second, smaller pilot study was conducted. Subjects included 25 regular education, senior high school teachers. Results from this pilot study were favorable. Revisions included the refinement of the wording used to describe each situation. For example, rather than stating "Some community members," the number marker was removed and rewritten as "Community members."



Cronbach's alpha levels were improved from the first pilot study to the second pilot study. The narrowing of the population, the refinement of the decision-making processes, and the clarification of situations proved beneficial.

The decision-making processes were modified after the first pilot. The decision-making processes used for the first pilot were also written from the teachers' perspective, but alluded to building administrators. For example, the first item stated, "The principal should make this decision with the information available."

This wording caused respondents of the first pilot to become more interested in the role of the principal than in their preference for participation. Respondents commented that individuals other than the principal should be involved in the decision-making process. Responses from the second pilot indicated a better focus on teachers' preferences for participation with no apparent underlying concerns about the more carefully worded decision-making processes.

#### Test-Retest Reliability

Test-retest reliability is sometimes referred to as the coefficient of stability, and measures the stability of the test instrument over time (Borg & Gall, 1983). Two procedures, the Pearson correlation coefficient and chi-square cross-tabulations, were used to determine test-retest reliability.

A Pearson correlation coefficient was obtained as a

coefficient of stability. Fifteen subjects completed a survey questionnaire (Test 1) and then completed the questionnaire again 7-14 days later (Test 2). Correlation coefficients were obtained overall and by category group. That is, the responses were analyzed to determine if subjects' responses were consistent for the desired amounts of involvement for Test 1, and for Test 2, overall and for each of the categories of personnel, students, business, community, and curriculum and instruction.

An overall positive Pearson  $r$  equal to .6333 was significant at the .05 level. Positive correlations were evident in each category; .6546 for personnel issues, .7782 for community issues, and .6877 for curriculum and instruction issues. Correlations that were positive but not significant at the .05 level included .3871 for the category of business issues, and .2316 for student issues.

The Pearson correlation coefficient was obtained using the converted values for the decision-making processes. Because of the small number of subjects, some of the variance was not accounted for using the converted values for the Pearson correlation coefficient. Another means of evaluating test-retest reliability was utilized -- the chi-square cross-tabulation.

A chi-square cross tabulation was conducted as a second analysis to allow for variance; whereas variance, especially with the small number ( $n = 15$ ) used in the analysis, may

have affected the results of the Pearson correlation coefficient. A cross-tabulation by item was conducted to analyze test-retest reliability more accurately.

The results for each situation were examined to determine consistency and whether or not subjects responded similarly for Test 1 and for Test 2. Responses were considered to be consistent if the subjects tended to choose the same decision-making process both times the test was administered. Responses were also considered to be consistent if the subjects tended to choose the decision-making process that immediately preceded or followed, both times the test was administered. Table 5 provides an example of the cross-tabulation for one of the situations. Each situation was evaluated and refinements made as needed.

The second step of the analysis required the comparison of row totals (first administration of the survey) with column totals (second administration of the survey) of the cross-tabulations. For example, for situation #1, 50% of the respondents chose process #5 for Test 1, and 50% of the respondents chose process #5 for Test 2.

Column and row totals were tallied for the number of responses for each process for each administration of the survey. Totals for each process from Test 1 were added to the total for each process for Test 2, divided by the number of subjects, and subtracted from 100 for test-retest percent of agreement for each category. An acceptable level of

Table 5

Example of Cross-Tabulation - Situation #17

Process chosen for test	Process chosen for retest					% Responses	n
	1	2	3	4	5		
1	12					85.8%	12
2			1			7.1%	1
3	1					7.1%	1
4						0.0%	0
5						0.0%	0
% of Responses	92.9%	0%	7.1%	0%	0%	100%	
<u>n</u>	13		1				14

Note. Y axis = test, X axis = retest. Twelve respondents selected Process #1 for item #17 for both the test and the retest. One respondent selected Process #3 for the test and Process #1 for the retest. One respondent selected Process #2 for the test and Process #3 for the retest.

percent of agreement was considered to be 70% or above. For Process #1, the percent of agreement was 80.07%; Process #2, 97.5% agreement; Process #3, 93% agreement; Process #4, 90.07% agreement; and Process #5, 89.4% agreement. Overall, there was 90% agreement.

Test-retest percent of agreement was also calculated for relevance and expertise. An acceptable level for percent of agreement was considered to be 70% or above. Overall percent of agreement was 83% for expertise and for relevance. Percent of agreement was also examined for each item to acquire information to improve the instrument. The number of items at the various levels of percent of agreement are provided in Table 6.

Only three items did not meet criterion for the question of relevance. Only two of the items for expertise did not meet the criterion of 70%. The two items that did not meet criterion for expertise did not meet criterion for relevance. A need for refinement of those items had also been indicated based on the results of the Cronbach's alpha, the chi-square cross-tabulation by category, and the Pearson correlation coefficient.

This information was obtained at the same time the second pilot was conducted. Results from the second pilot and results from the test-retest correlation were used to clarify the items and to make the wording more specific for the situations presented.

Table 6

Percent of Agreement for Relevance and Expertise for the Pilot Study

Number of Situations	Percent of Agreement
<b>Relevance</b>	
3	57%
2	71%
7	79%
5	86%
4	93%
4	100%
Overall	83%
<b>Expertise</b>	
1	36%
1	64%
3	71%
5	79%
7	86%
5	93%
3	100%
Overall	83%

Note: The number of situations is listed in the left column identifying the number of situations at the various levels of percent of agreement. The percent of agreement for these situations is listed in the right column.

Some of the inconsistency in responses could be attributed to the increased comprehension by reading situations a second time. For example, situation #3 referred to noninstructional budget concerns. Results from the first administration indicated a desire for greater involvement than the results from the second administration.

It was determined that the term "noninstructional" may not have been emphasized adequately enough so that respondents fully comprehended the item the first time. The word noninstructional was underlined for emphasis for the final draft of the survey questionnaire (noninstructional was modified to noninstructional).

The test-retest consistency was considered satisfactory. Refinements were made to further improve the survey instrument.

#### Survey Distribution

The participative decision-making inventory, with an appropriate cover letter and a self-addressed, stamped envelope, was mailed to each subject in the sample population. Each survey was numbered before it was mailed. As each survey was returned, the survey was dated, and the return of the questionnaire recorded. The surveys were numbered and dated as they were returned to monitor the response rate. Subjects responses were treated confidentially.

If the return of the questionnaires lagged, individuals

were sent a second survey and cover letter. After the cut-off date for returns, five nonrespondents were selected and contacted to determine why they had chosen not to return the questionnaire.

#### Timeline

The schedule for this study was:

Completion of the first draft	March, 1991
First panel of experts	March, 1991
First pilot study	April, 1991
Major revisions	May and June, 1991
Field test	August, 1991
Second panel of experts	August, 1991
Moderate revisions	September, 1991
Third panel of experts	October, 1991
Second pilot study	October, 1991
Test-retest reliability	October, 1991
Minor revisions	October, 1991
Mailing of survey	November 4, 1991
Second mailing	November 15, 1991
Cut off for responses	December 15, 1991

#### Data Analysis

Data analysis involved five steps. Table 7 provides an explanation of the variables and procedure used for each analysis. Alpha levels of .05 were established for significance testing in consideration of the research questions and the sample size.



Table 7

Variables and Procedures

Independent variable	Dependent variable	Procedure
Waves	Amount of participation	Mixed model ANOVA
Waves	Relevance	Chi-square
Waves	Expertise	Chi-square
Respondent/nonrespondent	Years of teaching	t-test
School size	Respondent/nonrespondent	Chi-square
Area of teaching	Respondent/nonrespondent	Chi-square
Situation type	Amount of participation	Repeated Measures ANOVA
Relevance	Amount of participation	t-test
Expertise	Amount of participation	t-test
Relevance and Expertise	Amount of participation	ANOVA
School size	Amount of participation	Mixed Model ANOVA

### Step 1) Descriptive Information

Information from the questionnaires was reported including the percent of respondents and a description of the respondents. Descriptive information including means, numbers of subjects, and standard deviations were presented in table form.

### Step 2) Response Bias

Survey questionnaires were numbered and dated as they were returned. An analysis of questionnaires received after the initial mailing and after the second mailing was conducted. A table and descriptions were used to present the response bias analysis check. Results of the response bias check were analyzed.

A mixed-model analysis of variance was used to compare differences between the first and second wave (independent variable) and the mean amounts of participation desired (dependent variable) for each situation type. This procedure was appropriate because subjects within each wave had scores in each of the cells for situation type for that wave (repeated measures) and two waves were being analyzed (independent measures).

A chi-square formula was used to examine the relationship between the first and second wave (independent variable) and levels of relevance (dependent variable) for each situation type. The same procedure was used to examine the relationship between the first and second wave

(independent variable) and levels of expertise (dependent variable). The chi-square statistic was appropriate for analyzing variables that were both ordinal.

### Step 3) Nonresponse Bias

Five nonrespondents were selected and contacted by telephone or in person to determine why they did not respond. These subjects were asked two questions:

1. Did you receive the questionnaire?
2. Was there a reason for not responding?

Results were presented in narrative form.

Borg and Gall (1983) suggested an analysis of the characteristics of nonrespondents and respondents to determine whether these two groups tended to show differences for specific characteristics. A  $t$ -test was used to analyze the difference between respondents/nonrespondents (independent variable) and years of teaching (dependent variable). This procedure was appropriate for determining differences between the means for years of teaching for respondents and nonrespondents.

A chi-square formula was used to examine the relationship between school size (independent variable) and respondents/nonrespondents (dependent variable). The chi-square statistic was also used to find whether or not a relationship existed between area of teaching (independent variable) and respondents/nonrespondents (dependent variable). This procedure was appropriate for examining the

relationship between two variables that were nominal and ordinal. Results were presented in table form.

#### Step 4) Internal Consistency Reliability

Cronbach's coefficient alpha (Cronbach, 1951) was applied for each type of situation to determine internal consistency reliability. The data were described and presented in table form. Cronbach's coefficient alpha was appropriate for computing internal reliability with responses that were weighted (Borg & Gall, 1983). A minimum level of .6 was established for acceptance of the category as recommended by Plake (1992). If Cronbach's coefficient alphas for the types of situations were less than .6, then internal consistency would be considered to be lacking for the categories.

#### Step 5) Research Questions

The research questions were answered in the following ways and appropriate tables presented for:

Question (1). To what extent is there a difference among types of situations and teachers' preferences for participation? The procedure used for Question (1) was a one-way repeated measures analysis of variance (ANOVA). This method was implemented to determine if a statistically significant difference existed among the five means for type of situation (independent variable) and the amount of preferred participation (dependent variable). A repeated measures ANOVA was implemented because a single sample was

used (the same individuals were measured for each type of situation) and because there was more than one dependent variable (preferences for participation).

Dependent t-test follow-ups were utilized to identify the differences among types of situations as recommended by Hinkle, Wiersma, and Jurs (1988). To maintain the .05 alpha level of significance, adjustments were made to control for inflation that could have resulted in Type I errors.

Hinkle, Wiersma, and Jurs (1988) described the comparisonwise alpha as the probability of making a Type I error for any of the comparisons and an experimentwise alpha as the probability of making a Type I error for an entire set of comparisons. Since the established alpha level was .05, the researchers recommended dividing .05 by the number of t-tests (10), resulting in a critical value of .005 for the dependent t-tests ( $.05/10 = .005$ ). This .005 alpha level for the dependent t-tests allowed for the maintenance of the "a priori level of significance across all comparisons" (Hinkle, Wiersma, & Jurs, 1988, p. 370). This was a conservative procedure for a set of dependent comparisons to control the experimentwise error rate that was more likely to result in a Type II error, rather than a Type I error (Hinkle, Wiersma, & Jurs, 1988). Results were reported at the .05, .005, and the .001 levels.

Situations #1, #9, #12, #16, and #21 were curriculum and instruction issues. Situations #2, #7, #11, #19, and

#25 were personnel issues. Situations #3, #6, #13, #17, and #24 were business issues. Situations #4, #8, #14, #20, and #23 were community issues. Situations #5, #10, #15, #18, and #22 were student issues.

Question (2). To what extent is there a difference between the relevance of a situation and teachers' preferences for participation? The procedures used to answer Question (2) were independent two-tailed  $t$ -tests for each situation type (personnel, curriculum and instruction, business, community, and students).

Independent  $t$ -tests were used to analyze differences between the mean values of relevance and the mean amounts of participation desired. Responses of "yes" regarding relevance were assigned a value of 1 and responses of "no" were assigned a value of 2. Five situations were included in each of the five situation types. If the total value for relevance in a category was less than or equal to 7, the mean for amount of participation desired was assigned to Group 1. If the category total for relevance was greater than or equal to 8, the mean for amount of participation desired was assigned to Group 2.

For example, a subject's responses for relevance for the five questions for the personnel situation type may have included four "yes" responses (a value of 1 for each) and one "no" response (a value of 2) for a total of 6. Since this respondent indicated the presence of relevance for most

of the situations for this category, the respondent's score of 6 was placed in the high level of relevance group.

The participation means for a high level of relevance and for a low level of relevance were compared. This process allowed for the examination of the extent of the difference between the perception of relevance (independent variable) and the amount of participation desired (dependent variable).

Question (3). To what extent is there a difference between teachers' expertise and teachers' preferences for participation? The procedures used to answer Question (3) were independent two-tailed  $t$ -tests for each situation type (personnel, curriculum and instruction, business, community, and students).

Independent  $t$ -tests were used to analyze differences between the mean values of expertise and the mean amounts of participation desired. Responses of "yes" regarding expertise were assigned a value of 1 and responses of "no" were assigned a value of 2. Five situations were included in each of the five situation types. If the total value for expertise in a category was less than or equal to 7, the mean for amount of participation desired was assigned to Group 1. If the category total for expertise was greater than or equal to 8, the mean for amount of participation desired was assigned to Group 2.

For example, a subject's responses for expertise for

the five questions for the personnel situation type may have included four "yes" responses (a value of 1 for each) and one "no" responses (a value of 2 for each) for a total of 6. Since this respondent indicated the presence of expertise for most of the situations for this category, the respondent's score of 6 was placed in the high level of expertise group.

The participation means for a high level of expertise and for a low level of expertise were compared. This process allowed for the examination of the extent of the difference between the perception of expertise (independent variable) and the amount of participation desired (dependent variable).

Question (4). To what extent are there differences among teachers' perceptions of (a) high levels of both relevance and expertise (+R+E), (b) high levels of relevance and low levels of expertise (+R-E), (c) low levels of relevance and high levels of expertise (-R+E), and (d) low levels of both relevance and expertise (-R-E), and teachers' preferences for participation? The procedure used to answer Question (4) was a one-way analysis of variance (ANOVA) for levels of relevance and expertise for each situation category. Tukey honestly significant differences (HSD) follow-ups were used as appropriate. This method was selected in order identify statistically significant interactions among relevance and expertise (independent



variables) and the amount of participation desired (dependent variable).

Five situations were delineated for each situation category (personnel, curriculum and instruction, business, community, and students). When responses for relevance or expertise were affirmative, a value of 1 was assigned for each situation. When responses for relevance or expertise were negative, a value of 2 was assigned for each situation. Responses were then grouped according to the total values for each situation category.

Group 1 included values for relevance that were less than or equal to 7 and values of expertise that were less than or equal to 7 (+R+E). Group 2 included values for relevance that were less than or equal to 7 and values for expertise that were greater than 7 (+R-E). Group 3 included values for relevance that were greater than 7 and values for expertise that were less than or equal to 7 (-R+E). Group 4 included values for relevance that were greater than 7 and values for expertise that were greater than 7 (-R-E). For example, if a respondent's scores for a situation type totalled 10 for relevance and 10 for expertise, that respondent was placed in the low relevance, low expertise group.

The participation means for each group were analyzed for statistically significant interactions. These results and the results of the Tukey HSD follow-ups were presented

in table form. The Pearson product moment correlations were also provided on the SPSS-X printout for the ANOVA results. These correlations were also presented and discussed.

Question (5). To what extent does the size of the school effect teachers' preferences for participation? The procedure used for Question (5) was mixed-model analysis of variance. This method was chosen to identify differences between the independent variables, larger schools and smaller schools, and the dependent variable of amount of participation desired for each situation type (personnel, curriculum and instruction, business, community, and students). This procedure was appropriate for determining differences between repeated measures (situation type) and independent measures (school size).

## CHAPTER IV

### Results

The purpose for conducting this study was to determine teachers' preferences for participation in decision-making. Although participative decision-making has been purported to be a means to achieve improvements in education, not all incidents of participative decision-making were perceived by teachers to be successful (Conway, 1984; Locke & Schweiger, 1979; Lowin, 1968). Identifying teachers' interests prior to using participative decision-making may provide more effective results.

Therefore, this study was designed to determine teachers' preferences for involvement in decision-making. Preferences were examined by the type of situation involved. Situation types included personnel, business, student, community, and curriculum and instruction issues. The situations were designed to represent examples of incidents that occur or could occur in senior high schools.

Situational preferences were further examined by teachers' perceptions of their expertise regarding the situation and by teachers' perceptions of the relevance of the situation. Expertise was defined as possessing experience and competence relative to the situation. Relevance was defined as a high personal stake regarding the situation.

Subjects were presented with 25 situations. For each

situation, subjects responded "yes" or "no" for the presence or absence of relevance, and for the presence or absence of expertise. Subjects selected one of the five decision-making processes modified from the Vroom-Yetton (1973) decision-making processes for each of the situations presented. The decision-making processes indicated the amount of involvement subjects wanted for each situation.

#### Subject Information

Subjects for this study were regular education teachers who taught in senior high schools in the ten largest school districts in Nebraska. A total of 482 questionnaires were sent to potential subjects. The overall response rate was 71.8% ( $n = 346$ ). For all 346 questionnaires returned, 64.5% ( $n = 223$ ) were returned in the first wave and 35.5% ( $n = 123$ ) were returned in the second wave.

After the first mailing of the questionnaires, eight subjects were replaced. Six of the eight individuals were dropped from the study because less than one-half of their assignment involved teaching; the other two subjects were no longer employed in the target schools. A total of 136 of the 482 (28.2%) subjects were nonrespondents. This number included four refusals and three incomplete or incorrectly completed questionnaires.

### Descriptive Information

Descriptive data are provided in Table 8 for each situation in the questionnaire. The percentage and number of respondents are provided for each decision-making process and each situation. Subjects were asked to select one of the five decision-making processes for each of the 25 situations to reflect the amount of desired participation. The decision-making processes ranged from "1" indicating no involvement to "5" indicating total involvement in the decision-making. The mean scores for these five decision-making processes and the standard deviations are also provided for each situation.

On the average, subjects indicated a preference for the most participation for Situation #12 (a curriculum and instruction situation), and for the least amount of participation for Situation #24 (a business situation).

Table 9 contains the percentage and number of respondents who indicated relevance and expertise for each situation in the survey. Mean values and standard deviations are also provided. The mean values are based on a value of 1 for presence of relevance or expertise and a value of 2 for the absence of relevance or expertise. The smaller mean scores indicate greater relevance and expertise than the larger mean scores.

Most subjects perceived relevance for Situation #12 (a curriculum and instruction item) and fewest subjects

Table 8

Percent (%) and Number (n) of Respondents' Selections of Decision-Making Processes (1-5) for Each Situation

Situation	Decision-Making Processes					M	SD
	1	2	3	4	5		
#1	6.1 (21)	9.5 (33)	14.2 (49)	19.9 (69)	50.3 (174)	3.99	1.26
#2	20.8 (72)	7.2 (25)	16.8 (58)	24.3 (84)	30.9 (107)	3.37	1.50
#3	76.0 (263)	7.8 (27)	8.4 (29)	3.8 (13)	4.0 (14)	1.52	1.06
#4	36.4 (126)	15.6 (54)	21.1 (73)	16.8 (58)	10.1 (35)	2.49	1.39
#5	73.4 (254)	8.1 (28)	8.7 (30)	4.0 (14)	5.8 (20)	1.61	1.16
#6	87.9 (304)	4.3 (15)	4.3 (15)	2.0 (7)	1.4 (5)	1.25	.76
#7	15.9 (55)	10.1 (35)	16.2 (56)	29.8 (103)	28.0 (97)	3.44	1.40
#8	33.8 (117)	9.0 (31)	16.8 (58)	20.2 (70)	20.2 (70)	2.84	1.56
#9	11.3 (39)	8.7 (30)	16.8 (58)	15.3 (53)	48.0 (166)	3.80	1.41
#10	70.2 (243)	9.0 (31)	8.1 (28)	6.4 (22)	6.4 (22)	1.70	1.23
#11	14.7 (51)	13.0 (45)	18.5 (64)	30.1 (104)	23.7 (82)	3.35	1.36
#12	1.7 (6)	2.3 (8)	3.5 (12)	7.8 (27)	84.7 (293)	4.71	.79
#13	88.4 (306)	3.2 (11)	4.3 (15)	1.4 (5)	2.6 (9)	1.27	.83
#14	32.9 (114)	17.1 (59)	19.1 (66)	16.5 (57)	14.5 (50)	2.62	1.45
#15	71.7 (248)	11.6 (40)	6.6 (23)	3.2 (11)	6.9 (24)	1.62	1.18
#16	9.5 (33)	7.2 (25)	13.3 (46)	17.6 (61)	52.3 (181)	3.96	1.34
#17	85.0 (294)	5.2 (18)	4.9 (17)	2.0 (7)	2.9 (10)	1.33	.89
#18	73.7 (255)	7.2 (25)	6.1 (21)	9.8 (34)	3.2 (11)	1.62	1.16

Table 8 - continued

Percent (%) and Number (n) of Respondents' Selections of Decision-Making Processes (1-5) for Each Situation

Situation	Decision-Making Processes					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
#19	46.2 (160)	11.0 (38)	11.8 (41)	12.7 (44)	18.2 (63)	2.46	1.59
#20	28.9 (100)	25.4 (88)	19.1 (66)	14.7 (51)	11.8 (41)	2.55	1.36
#21	8.4 (29)	9.5 (33)	16.8 (58)	19.7 (68)	45.7 (158)	3.85	1.32
#22	82.7 (286)	5.8 (20)	4.9 (17)	3.5 (12)	3.2 (11)	1.39	.96
#23	26.9 (93)	10.4 (36)	19.1 (66)	22.0 (76)	21.7 (75)	3.01	1.51
#24	93.6 (324)	2.0 (7)	2.3 (8)	.3 (1)	1.7 (6)	1.15	.63
#25	4.9 (17)	5.2 (18)	13.0 (45)	20.5 (71)	56.4 (195)	4.18	1.15

Table 9

Percent (%) and Number (n) of Respondents' Selections for Relevance and Expertise for Each Situation

Situation	% (n) Relevance		M	SD	% (n) Expertise		M	SD
	Yes	No			Yes	No		
	#1	93.1 (322)			6.9 (24)	1.07		
#2	80.6 (279)	19.4 (67)	1.19	.40	54.0 (187)	46.0 (159)	1.46	.50
#3	27.2 (94)	72.8 (252)	1.73	.45	14.2 (49)	85.8 (297)	1.86	.35
#4	60.1 (208)	39.9 (138)	1.40	.50	37.9 (131)	62.1 (215)	1.62	.49
#5	20.5 (71)	79.5 (275)	1.80	.40	19.9 (69)	80.1 (277)	1.80	.40
#6	15.6 (54)	84.4 (292)	1.84	.36	7.5 (26)	92.5 (320)	1.93	.26
#7	84.7 (293)	15.3 (53)	1.15	.36	76.9 (266)	23.1 (80)	1.23	.42
#8	63.0 (218)	37.0 (128)	1.37	.48	33.9 (138)	60.1 (208)	1.60	.49
#9	88.4 (306)	11.6 (40)	1.12	.32	73.4 (254)	26.6 (92)	1.27	.44
#10	22.0 (76)	78.0 (270)	1.78	.42	24.6 (85)	75.4 (261)	1.75	.43
#11	81.2 (281)	18.8 (65)	1.19	.39	73.4 (254)	26.6 (92)	1.27	.44
#12	99.1 (343)	.9 (3)	1.01	.09	96.5 (334)	3.5 (12)	1.04	.18
#13	8.7 (30)	91.3 (316)	1.91	.28	12.1 (42)	87.9 (304)	1.88	.33
#14	68.5 (237)	31.5 (109)	1.32	.47	45.1 (156)	54.9 (190)	1.55	.50
#15	23.4 (81)	76.6 (265)	1.77	.42	28.0 (97)	72.0 (249)	1.72	.45
#16	88.4 (306)	11.6 (40)	1.12	.32	72.3 (250)	27.7 (96)	1.28	.45
#17	20.5 (71)	79.5 (275)	1.80	.40	9.8 (34)	90.2 (312)	1.90	.30
#18	21.4 (74)	78.6 (272)	1.79	.41	16.8 (58)	83.2 (288)	1.83	.37



Table 9 - continued

Percent (%) and Number (n) of Respondents' Selections for Relevance and Expertise for Each Situation

Situation	% (n) Relevance		M	SD	% (n) Expertise		M	SD
	Yes	No			Yes	No		
#19	54.9 (190)	45.1 (156)	1.45	.50	44.2 (153)	55.8 (193)	1.56	.50
#20	70.2 (243)	29.8 (103)	1.30	.46	49.4 (171)	50.6 (175)	1.51	.50
#21	91.6 (317)	8.4 (29)	1.08	.28	76.0 (263)	24.0 (83)	1.24	.43
#22	15.0 (52)	85.0 (294)	1.85	.36	15.6 (54)	84.4 (292)	1.84	.36
#23	74.3 (257)	25.7 (89)	1.26	.44	46.2 (160)	53.8 (186)	1.54	.50
#24	19.9 (69)	80.1 (277)	1.80	.40	2.9 (10)	97.1 (336)	1.97	.17
#25	94.5 (327)	5.5 (19)	1.06	.23	85.0 (294)	15.0 (52)	1.15	.36

perceived relevance for Situation #13 (a business item). The most subjects perceived expertise for Situation #12 (a curriculum and instruction situation), and fewest subjects perceived expertise for Situation #24 (a business situation).

#### Response Bias

In order to assess response bias, a mixed-model analysis of variance was used to analyze the differences between the first and second waves (independent variable) and the mean amounts of participation desired for each type of situation (dependent variable).

As reported in Table 10, no significant difference was found between the first wave respondents' and the second wave respondents' scores for amount of participation desired for any of the types of situations. No significant interactions occurred among waves and situation types. No follow-ups were indicated.

A chi-square test of independence was conducted to examine the relationships between the first and second wave (independent variable) and levels of relevance (dependent variable) for each situation type. The same technique was used to examine the relationships between the first and second wave (independent variable) and levels of expertise (dependent variable) for each situation type. Results are presented in Table 11.

No significant differences were found for any of the

Table 10

Mixed-Model Analysis of Variance Results - Wave by  
Situation Types for Amount of Participation Preferred

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Wave	16.49	1	16.49	.06
Error	94092.09	344	273.52	
Situation Type	277583.31	3.01	69395.83	803.72***
Wave by Situation Type	755.41	3.01	188.85	2.19
Error	118807.96	1036.02	86.34	

\*  $p < .05$

\*\*  $p < .005$

\*\*\*  $p < .001$

Table 11

Actual and Expected Frequencies for Situation Types for Levels of Relevance and Waves and for Levels of Expertise and Waves

Area Level	Wave 1	Wave 2
	Relevance	
Personnel		
High - Actual Frequency	199	112
High - Expected Frequency	200.4	110.6
Low - Actual Frequency	24	11
Low - Expected Frequency	22.6	12.4
Curriculum and Instruction		
High - Actual Frequency	214	121
High - Expected Frequency	215.9	119.1
Low - Actual Frequency	9	2
Low - Expected Frequency	7.1	3.9
Business		
High - Actual Frequency	29	10
High - Expected Frequency	25.1	13.9
Low - Actual Frequency	194	113
Low - Expected Frequency	197.9	109.1
Community		
High - Actual Frequency	164	86
High - Expected Frequency	161.1	88.9
Low - Actual Frequency	59	37
Low - Expected Frequency	61.9	34.1
Students		
High - Actual Frequency	32	18
High - Expected Frequency	32.2	17.8
Low - Actual Frequency	191	105
Low - Expected Frequency	190.8	105.2

Table 11 - continued

Actual and Expected Frequencies for Situation Types for Levels of Relevance and Waves and for Levels of Expertise and Waves

Area Level	Wave 1	Wave 2
	Expertise	
Personnel		
High - Actual Frequency	164	90
High - Expected Frequency	163.7	90.3
Low - Actual Frequency	59	33
Low - Expected Frequency	59.3	32.7
Curriculum and Instruction		
High - Actual Frequency	190	99
High - Expected Frequency	186.3	102.7
Low - Actual Frequency	33	24
Low - Expected Frequency	36.7	20.3
Business		
High - Actual Frequency	11	5
High - Expected Frequency	10.3	5.7
Low - Actual Frequency	212	118
Low - Expected Frequency	212.7	117.3
Community		
High - Actual Frequency	102	46
High - Expected Frequency	95.4	52.6
Low - Actual Frequency	121	77
Low - Expected Frequency	127.6	70.4
Students		
High - Actual Frequency	38	16
High - Expected Frequency	34.8	19.2
Low - Actual Frequency	185	107
Low - Expected Frequency	188.2	103.8

Note. There were no significant differences.

chi-square tests of independence for relevance or for expertise. As presented in Table 11, the expected frequency for the low level of relevance for the situation type of curriculum and instruction was less than 5. That chi-square could not be interpreted since the assumption of a minimum expected frequency of 5 or greater was violated.

#### Nonresponse Bias

Five subjects who did not respond were contacted by phone or in person. These five subjects were asked if they had received the questionnaire and, if so, was there a reason for not responding. Three of the five subjects stated that they did not have time to complete the survey ("not enough time, must select what I do, meant to but did not get to it"). One subject reported the survey was lost. The other subject stated that he/she "did not do studies, did not want to help others with their degree, and did not believe in surveys anyway."

Characteristics of respondents and nonrespondents were analyzed using a pooled variance, two-tailed  $t$ -test to determine the difference between respondents and nonrespondents (independent variable) and years of teaching (dependent variable). No significant difference was found between respondents ( $M = 13.87$ ,  $SD = 7.97$ ) and nonrespondents ( $M = 14.29$ ,  $SD = 8.14$ ) for years of teaching (see Table 12).

The relationship between school size (independent

Table 12

t-test Results Between Respondents/Nonrespondents and Years of Teaching

<u>Variable</u>	<u>N</u>	<u>M Yrs</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
Respondents	346	13.87	7.97			
				-.51	480	.61
Nonrespondents	136	14.29	8.14			

\*  $p < .05$

Note. No significant difference was found.

variable) and respondents/nonrespondents (dependent variable) was examined using a chi-square formula. Table 13 contains the results of this analysis. No significant relationship was found between school size and respondents and nonrespondents. ( $\chi^2 (1, N = 482) = .89969, p < .05$ ).

A chi-square statistic was also used to examine the relationship between area of teaching (independent variable) and respondents/nonrespondents (dependent variable). The areas of teaching included math and science, humanities, fine arts, and trades. Results of this analysis are in Table 14. No significant relationship was found among areas of teaching and respondents/nonrespondents ( $\chi^2 (3, N = 482) = 2.50714, p < .05$ ).

#### Internal Consistency Reliability

Internal consistency reliability for each of the five types of situations was computed using Cronbach's coefficient alpha. Situation types, situation numbers, and alpha levels are presented in Table 15. All coefficients were greater than .60, indicating good internal consistency (Plake, 1992).

#### Research Questions

##### Question (1)

To what extent is there a difference among types of situations and teachers' preferences for participation? Using the values assigned to the decision-making processes by Vroom and Yetton (1973), mean scores for each situation



Table 13

Chi-Square Measure of the Relationship Between Larger Schools and Smaller Schools and Respondents/Nonrespondents

School Size Frequency	Respondents	Nonrespondents	<u>Row Total</u> $\frac{n}{\%}$
<b>Larger Schools</b>			
Actual Frequency	178	63	241
Expected Frequency	173	68	50%
<b>Smaller Schools</b>			
Actual Frequency	168	73	241
Expected Frequency	173	68	50%
Column Total $\underline{n}$	346	136	482
Column Total %	71.8%	28.2%	100%

\*  $p < .05$

Note. Based on expected and actual frequencies of respondents and nonrespondents for larger schools and smaller schools,  $\chi^2 (1, N = 482) = .82969$ ,  $p < .05$  ( $p = .3624$ ). The chi-square statistic was not significant at the .05 level.

Table 14

Chi-Square Measure of the Relationship Between Area of Teaching and Respondents/Nonrespondents

Area of Teaching Frequencies	Respondents	Nonrespondents	Row Total $\frac{n}{\%}$
<b>Math and Science</b>			
Actual Frequency	108	43	151
Expected Frequency	108.4	42.6	31.3%
<b>Humanities</b>			
Actual Frequency	107	33	140
Expected Frequency	100.5	39.5	29%
<b>Fine Arts</b>			
Actual Frequency	59	28	87
Expected Frequency	62.5	24.5	18%
<b>Trades</b>			
Actual Frequency	72	32	104
Expected Frequency	74.7	29.3	21.6%
Column Total $\underline{n}$	346	136	482
Column Total %	71.8%	28.2%	100%

\*  $p < .05$ 

Note. Based on expected and actual frequencies of respondents and nonrespondents for area of teaching,  $\chi^2 (3, \underline{n} = 482) = 2.50714$ ,  $p < .05$  ( $p = .4740$ ). The chi-square statistic was not significant at the .05 level.

Table 15

Cronbach's Coefficient Alpha Values for Situation Types

Situation Type	Alpha Reliability Values
Personnel Situations #2, #7, #11, #19, and #25	.6659
Curriculum & Instruction Situations #1, #9, #12, #16, and #21	.7096
Business Situations #3, #6, #13, #17, and #24	.6039
Community Situations #4, #8, #14, #20, and #23	.6850
Students Situations #5, #10, #15, #18, and #22	.8057

Note. N=346.

had a possible range of 0-10. A value of 0 was assigned to Process #1, a value of .63 was assigned to Process #2, a value of 5 was assigned to Process #3, a value of 8.13 was assigned to Process #4, and a value of 10 was assigned to Process #5. These values were assigned by Vroom and Yetton (1973) using an algorithm and the values were in agreement with panels of experts who also assigned values.

Each situation type consisted of five situations resulting in a possible mean score range of 0-50. The mean scores for each type of situation were as follows: curriculum and instruction = 38.08, personnel = 29.37, community = 20.41, students = 6.71, and business = 3.40.

A one-way repeated measures analysis of variance (ANOVA) was used to determine if a statistically significant difference existed among the means of the situation types. Results are depicted in Table 16. Differences between types of situations and teachers' preferences for participation in decision-making were significant,  $F(3.01, 1037.78) = 864.78$   $p < .05$ . Homogeneity of variance was examined using the Greenhouse Geisser Epsilon. Since that score equaled .75, the univariate approach to repeated measures using the Huynh-Feldt probability value was appropriate.

Two-way dependent  $t$ -tests were conducted as follow-ups to the repeated measures ANOVA. The results of the dependent  $t$ -tests are presented in Table 17 in order of greatest to least mean differences. The dependent  $t$ -tests

Table 16

Results of One-Way Repeated Measures Analysis of Variance - Amount of Desired Participation by Situation Type

Source	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
Situation Type	299700.22	4 (3.01)	74925.06	864.78***
Error	119563.37	1380 (1037.78)	86.64	
Total	419263.59	1384		

\*  $p < .05$

\*\*  $p < .005$

\*\*\*  $p < .001$

Note. Greenhouse Geisser Epsilon = .75, Huynh-Feldt Adjusted DF shown in parenthesis, Huynh-Feldt Adjusted F Value was used.

Table 17

Dependent t-test Follow-Ups to Repeated Measures Analysis of Variance

Situation Types	<u>M</u>	<u>SD</u>	<u>t</u>
Curriculum and Instruction	38.08	11.46	51.41***
Business	3.40	6.60	
Curriculum and Instruction	38.08	11.46	37.20***
Students	6.71	10.97	
Personnel	29.37	12.38	36.18***
Business	3.40	6.60	
Personnel	29.37	12.38	26.50***
Students	6.71	10.97	
Curriculum and Instruction	38.08	11.46	25.20***
Community	20.41	13.07	
Community	20.41	13.07	-24.78***
Business	3.40	6.60	
Community	20.41	13.07	19.09***
Students	6.71	10.97	
Personnel	29.37	12.38	12.02***
Community	20.41	13.07	

Table 17 - continued

Dependent t-test Follow-Ups to Repeated Measures Analysis of Variance

Situation Types	<u>M</u>	<u>SD</u>	<u>t</u>
Curriculum and Instruction	38.08	11.46	-16.44***
Personnel	29.37	12.38	
Students	6.71	10.97	- 6.25***
Business	3.40	6.60	

\*  $p < .05$ \*\*  $p < .005$ \*\*\*  $p < .001$ Note. N=346.

showed that all pair-wise comparisons were significant at the .05, .005, and the .001 levels.

Significant difference were found between all of the categories, indicating teachers had specific preferences for participation in decision-making. Significant differences occurred between the following categories: curriculum and instruction and business ( $\underline{t} = 51.41, p < .005$ ), curriculum and instruction and students ( $\underline{t} = 37.20, p < .005$ ), personnel and business ( $\underline{t} = 36.18, p < .005$ ), curriculum and instruction and community ( $\underline{t} = 25.20, p < .005$ ), community and business ( $\underline{t} = -24.78, p < .005$ ), community and students ( $\underline{t} = 19.09, p < .005$ ), personnel and community ( $\underline{t} = 12.02, p < .005$ ), curriculum and instruction and personnel ( $\underline{t} = -16.44, p < .005$ ), and students and business ( $\underline{t} = -6.25, p < .005$ ).

Correlational data. The SPSS-X printout for the dependent  $\underline{t}$ -test follow-ups also provided correlational information. These Pearson product moment correlations are presented in Table 18. Borg and Gall (1983) advised against predicting relationships when slight (.20 to .35) and moderate (around .50) correlations were obtained, even if statistically significant.

Correlational coefficients in the .65 to .85 range more accurately predict the presence of one variable given the presence of the other (Borg & Gall, 1983). One correlation ( $\underline{r} = .66$ ) was within that range -- the personnel and



Table 18

Pearson Product Moment Correlations (r) for Situation Types

Situation Types	r
Personnel - Curriculum and Instruction	.66***
Personnel - Business	.11*
Personnel - Community	.41***
Personnel - Students	.08
Curriculum and Instruction - Business	.12***
Curriculum and Instruction - Community	.44*
Curriculum and Instruction - Students	.02
Business - Community	.30***
Business - Students	.46***
Community - Students	.39***

\*  $p < .05$ \*\*  $p < .005$ \*\*\*  $p < .001$

curriculum and instruction situation types. Even though the dependent  $t$ -test indicated a significant difference between these situation types, the correlation indicated that personnel and curriculum and instruction situation types were measuring some common intervening variable.

Therefore, results from Question (1) indicated that those respondents who desired participation with curriculum and instruction situations also tended to desire participation in personnel situations. Respondents clearly preferred involvement in curriculum and instruction situations more than involvement with personnel situations. Following involvement in curriculum and instruction and personnel, subjects indicated preferences for involvement in community, student, and business issues in that order.

#### Question (2)

To what extent is there a difference between the relevance of a situation and teachers' preferences for participation? Results of the independent  $t$ -tests used to analyze this question are displayed in Table 19.

Results from each of the five categories of types of situations indicated a significant difference between high and low levels of relevance and the amount of participation desired. The  $t$  values were: personnel,  $t = 8.41$ ,  $p < .05$ ; curriculum and instruction,  $t = 6.96$ ,  $p < .05$ ; business,  $t = 9.13$ ,  $p < .05$ ; community,  $t = 10.80$ ,  $p < .05$ ; and students,  $t = 13.22$ ,  $p < .05$ . Subjects wanted more involvement in the

Table 19

Results of Independent t-tests Between High and Low Levels of Relevance and Expertise and Amount of Desired Participation for Each Situation Type

Relevance Levels Expertise Levels	<u>n</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Personnel				
Relevance High	311	31.08	11.41	8.41***
Low	35	14.15	10.13	
Expertise High	254	32.96	10.69	10.22***
Low	92	19.46	11.32	
Curriculum and Instruction				
Relevance High	335	38.81	10.85	6.96***
Low	11	15.92	6.07	
Expertise High	289	40.64	9.78	10.83***
Low	57	25.10	10.55	
Business				
Relevance High	39	11.58	10.83	9.13***
Low	307	2.37	5.00	
Expertise High	16	15.08	12.17	7.86***
Low	330	2.84	5.66	
Community				
Relevance High	250	24.48	12.01	10.80***
Low	96	9.81	9.23	
Expertise High	148	28.09	11.07	10.97***
Low	198	14.66	11.41	
Students				
Relevance High	50	22.18	13.06	13.22***
Low	296	4.10	8.06	
Expertise High	54	20.55	14.64	12.00***
Low	292	4.15	7.85	

\*  $p < .05$ \*\*  $p < .005$ \*\*\*  $p < .001$

decision-making process when they perceived the situation to be relevant.

### Question (3)

To what extent is there a difference between teachers' expertise and teachers' preferences for participation?

Independent  $t$  - tests were used to assess differences for this question. Results of the independent  $t$ -tests used to analyze this question are also displayed in Table 19.

Each of the five categories of types of situations revealed a significant difference between high and low levels of expertise and the amount of participation desired. The  $t$  values were: personnel,  $t = 10.22$ ,  $p < .05$ ; curriculum and instruction,  $t = 10.83$ ,  $p < .05$ ; business,  $t = 7.86$ ,  $p < .05$ ; community,  $t = 10.97$ ,  $p < .05$ ; and students,  $t = 12.00$ ,  $p < .05$ . Respondents wanted more involvement in the decision-making process when they perceived that they possessed expertise for the situations presented.

### Question (4)

To what extent are there differences among teachers' perceptions of (a) high levels of both relevance and expertise (+R+E), (b) high levels of relevance and low levels of expertise (+R-E), (c) low levels of relevance and high levels of expertise (-R+E), and (d) low levels of both relevance and expertise (-R-E), and teachers' preferences for participation? Cell means and standard deviations for

each group (a,b,c,d) are presented by category in Table 20.

The means for the amount of participation desired were consistently greater when high levels of relevance and expertise were present. The next greatest amount of participation resulted when the situation type resulted in a high level of relevance and a low level of expertise. Low levels of relevance and high levels of expertise were next, with low levels of both relevance and expertise resulting in the least amount of participation desired.

Results of the one-way analysis of variance (ANOVA) were significant for each category as presented in Table 21. Significant differences were found among high levels and low levels of relevance and expertise and the amount of participation desired as follows: personnel  $F(3, 342) = 48.5669 < .05$ , curriculum and instruction  $F(3, 342) = 50.2927 < .05$ , business  $F(3, 342) = 47.3200 < .05$ , community  $F(3, 342) = 65.5512 < .05$ , and students  $F(3, 342) = 87.7057 < .05$ .

The Tukey honestly significant differences (HSD) was used as a post hoc measure to consider all pair-wise comparisons. The results of the Tukey HSD are provided in Table 22. A significant difference resulted for all categories (personnel, curriculum and instruction, business, community, and students) for high levels of both relevance and expertise compared with high levels of relevance and low levels of expertise. A significant difference resulted for

Table 20

Means for High Levels of Relevance and Expertise (+R+E),  
High Levels of Relevance and Low Levels of Expertise (+R-E),  
Low Levels of Relevance and High Levels of Expertise (-R+E),  
and Low Levels of Relevance and Expertise (-R-E)  
by Situation Type

Group	<u>n</u>	<u>M</u>	<u>SD</u>
Personnel			
+R+E	245	33.41	10.48
+R-E	66	22.44	10.61
-R+E	9	20.70	9.48
-R-E	26	11.88	9.49
Curriculum and Instruction			
+R+E	286	40.86	9.59
+R-E	49	26.86	10.15
-R+E	3	20.22	6.63
-R-E	8	14.30	5.40
Business			
+R+E	8	22.82	10.55
+R-E	31	8.67	8.95
-R+E	8	7.35	8.32
-R-E	299	2.23	4.83

Table 20 - continued

Means for High Levels of Relevance and Expertise (+R+E),  
High Levels of Relevance and Low Levels of Expertise (+R-E),  
Low Levels of Relevance and High Levels of Expertise (-R+E),  
and Low Levels of Relevance and Expertise (-R-E)  
by Situation Type

<u>Group</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Community			
+R+E	138	28.90	10.79
+R-E	112	19.03	11.22
-R+E	10	17.01	9.00
-R-E	86	8.97	8.93
Students			
+R+E	28	27.20	11.62
+R-E	22	15.80	12.17
-R+E	26	13.39	14.34
-R-E	270	3.20	6.56

Table 21

Results of One-Way Analysis of Variance - Amount of Desired Participation by High and Low Levels of Relevance and Expertise (Levels)

Source	SS	df	MS	F
<b>Personnel</b>				
Levels	15802.47	3	5267.49	48.5669***
Within	37092.82	342	108.46	
Total	52895.30	345		
<b>Curriculum and Instruction</b>				
Levels	13859.61	3	4619.87	50.2927***
Within	31416.01	342	91.86	
Total	45275.62	345		
<b>Business</b>				
Levels	4411.11	3	1470.37	47.3200***
Within	10626.95	342	31.07	
Total	15038.07	345		
<b>Community</b>				
Levels	21519.15	3	7173.05	65.5512***
Within	37423.94	342	109.43	
Total	58943.08	345		
<b>Students</b>				
Levels	18053.69	3	6017.90	87.7057***
Within	23466.21	342	68.62	
Total	41519.90	345		

\*  $p < .05$   
 \*\*  $p < .005$   
 \*\*\*  $p < .001$



Table 22

Results of Tukey Follow-Ups - Amount of Participation by  
High Levels of Relevance and Expertise (+R+E),  
High Levels of Relevance and Low Levels of Expertise (+R-E),  
Low Levels of Relevance and High Levels of Expertise (-R+E),  
and Low Levels of Relevance and Expertise (-R-E).

	+R-E	-R+E	-R-E
+R+E	Personnel*	Personnel*	Personnel*
	Cur & Ins*	Cur & Ins*	Cur & Ins*
	Business*	Business*	Business*
	Community*	Community*	Community*
	Students*	Students*	Students*
+R-E		Personnel	Personnel*
		Cur & Ins	Cur & Ins*
		Business	Business*
		Community	Community*
		Students	Students*
-R+E			Personnel
			Cur & Ins
			Business
			Community
			Students*

\*  $p < .05$

all categories for high levels of relevance and expertise compared with low levels of relevance and high levels of expertise. A significant difference resulted for all categories for high levels of relevance and expertise compared with low levels of both relevance and expertise.

A significant difference also resulted for all categories when high levels of relevance and low levels of expertise were compared with low levels of both relevance and expertise. A significant difference resulted for the student situation type when low levels of relevance and high levels of expertise were compared with low levels of both relevance and expertise. No significant differences were found for the situation types of personnel, curriculum and instruction, business, or community when high levels of expertise only were compared with low levels of both relevance and expertise. No significant difference was found between high levels of relevance and low levels of expertise, and low levels of relevance and high levels of expertise.

Results of Question (4) indicated that the presence of both relevance and expertise resulted in a desire for more involvement. Perceived relevance seemed to influence subjects to desire more participation than perceived expertise when compared with the perception of neither relevance or expertise. No difference was found between relevance only and expertise only and the amount of

participation desired.

Question (5)

To what extent does the size of the school effect teachers' preferences for participation? A mixed-model analysis of variance was used to measure the difference between larger and smaller schools and the amount of desired participation for each situation type. The results of this analysis are presented in Table 23. No significant difference was found for the main effect of school size. No significant difference was found for the interaction of size and situation type.

Table 23

Results of Mixed-Model Analysis of Variance - School Size by Amount of Participation for  
Situation Type

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Size	145.17	1	145.17	.53
Error	93963.41	344	273.15	
Situation Type	299655.89	3.01	74913.97	863.94***
Size by Situation Type	248.19	3.01	62.05	.72
Error	119315.18	1036.46	86.71	

\*  $p < .05$ \*\*  $p < .005$ \*\*\*  $p < .001$

## CHAPTER V

## Discussion

Introduction

Administrators have been urged to implement participative decision-making, but the research regarding teacher satisfaction with involvement in decision-making has been conflicting (Conway, 1984; Elenbogen & Hiestand, 1989; Locke & Schweiger, 1979; Lowin, 1968). Identifying teachers' preferences for participation prior to implementation of participative decision-making may be useful. This study was conducted to examine teachers' preferences for involvement in decision-making. Five types of situations (personnel, curriculum and instruction, business, community, and student issues) were presented to determine the amount of participation teachers preferred for each. Teachers' perceptions of the relevance of situations and the expertise they possessed for situations were also examined to determine whether preferred amount of involvement varied accordingly.

Subjects, Instrumentation, and Data Collection

A description of subjects, instrumentation, and data collection is provided in Chapter III. Regular education senior high school teachers from 21 of Nebraska's 10 largest school districts were randomly selected and surveyed. The survey instrument was developed by the author in collaboration with three panels of experts and field

tested prior to two pilot studies.

The questionnaire included 5 decision-making scenarios for each of the situation categories of personnel, curriculum and instruction, business, community, and students, for a total of 25 situations. Respondents ( $N=346$ ) were asked to choose one of five decision-making processes for each situation to indicate the amount of participation they would want for that situation. The decision-making processes formed a Likert-type scale, which ranged from no involvement to full involvement. The decision-making processes and their assigned values were derived from the Vroom-Yetton (1973) decision-making model.

The decision-making processes and their assigned values were:

Process #1. I do not want to be involved in this decision. Assigned value = 0.

Process #2. I have useful information I want to contribute regarding this situation, on an individual basis. However, I do not want to evaluate or generate alternatives. Assigned value = .63.

Process #3. I want to be consulted about this situation on an individual basis. I want to offer ideas and suggestions. However, I do not want to make the decision. Assigned value = 5.

Process #4. I want to be included in an advisory group. This group should offer collective ideas and

suggestions. This group should not make the decision.

Assigned value = 8.13.

Process #5. I want to be included in a group that generates and evaluates alternatives and attempts to reach consensus. The solution supported by the group should be accepted and implemented. Assigned value = 10.

For each situation, respondents were asked to indicate whether or not they perceived the situation to be relevant to them. Respondents were also asked to indicate whether or not they possessed expertise for that situation. The relevance and expertise variables were derived from Bridges' (1967) decision-making model.

Responses of "yes" for either relevance or expertise were assigned a value of 1 -- responses of "no" were assigned a value of 2. Each person's scores for relevance and for expertise were summed for each of the five situation types. Scores for relevance or expertise greater than 7 were analyzed in the low relevance or low expertise group. Scores less than or equal to 7 were analyzed in the high relevance or high expertise group.

#### Examination for Bias

Response bias and nonresponse bias were assessed. Responses from teachers did not vary between the first and second waves of the analysis either in the amount of preferred participation or for levels of relevance and expertise. Respondents did not differ from nonrespondents

in years of teaching, school size, or area of teaching.

#### Validity and Reliability

Ratings of the final questionnaire by a panel of experts confirmed content validity. All panel members matched each situation from the questionnaire with the designated type of situation. Test-retest reliability obtained from the pilot test was satisfactory with an overall Pearson  $r$  equal to .6333 which was significant at the .05 level. The internal consistency reliability coefficient for each situation type was greater than .60, indicating good internal consistency (personnel .6659, curriculum and instruction .7096, business .6039, community .6850, and students .8057).

#### Discussion of the Research

##### Implications from the Theories

Results from this research supported the decision-making models of Vroom-Yetton (1973) and Bridges (1967). The decision-making processes derived from the Vroom-Yetton model provided distinct, realistic choices for teachers. Teachers' choices for amounts of participation were situational with distinct preferences. Results were consistent with results reported by Vroom and Yetton (1973), Vroom and Jago (1988), and Steers (1977). Steers found that situational factors influenced teacher participation more than individual differences.

The amount of participation teachers wanted appeared to



coincide with perceived relevance and expertise as postulated by Bridges (1967). When levels for relevance and expertise were both high, teachers wanted more involvement than when both were low. High levels of relevance or expertise usually resulted in a moderate amount of involvement wanted. Teachers who expressed high levels of relevance wanted more participation than teachers with low levels of both relevance and expertise. Teachers who expressed high levels of expertise did not want more participation than teachers who had low levels of both relevance and expertise for four of the five situation types.

Schneider (1984) also found that teachers wanted to be involved with issues when high levels of interest and expertise were present. Issues presented in a study by Riley (1984) were considered to be relevant and within teachers' areas of expertise. Teachers in that study also indicated that they wanted involvement. As the issues became more directly concerned with the classroom, teachers wanted more involvement.

#### Research Questions

The first research question was designed to examine the amount of preferred involvement for the five situation types. Teachers indicated specific preferences for the types of situations in which they wanted to participate. Teachers' preferences for involvement in descending order

were curriculum and instruction issues, personnel, community, students, and business situations.

The overall mean scores for each of the situation types were divided by the number of situations (5) for each situation type. The resulting quotients were: Curriculum and Instruction, 7.62; Personnel, 5.87; Community, 4.08; Students, 1.34; and Business, .68. The quotients were compared to the values assigned to the decision-making processes by Vroom and Yetton (1973) to determine the amount of involvement teachers wanted.

The values assigned to Process #1 through Process #5 -- 0, .63, 5, 8.13, and 10 -- did not directly coincide with the quotients presented above. The decision-making processes that most closely approximated the quotients were selected as guidelines for amounts of participation. For example, the quotient for the curriculum and instruction situation type was 7.62 which was closest to 8.13. The 8.13 value represents Process #4.

Even though the quotients for community and personnel were closest to Process #3, there was a statistically significant difference in the amount of involvement teachers wanted between those situation types. The quotients for business and students were both closest to Process #2, but there was also a statistically significant difference for the amount of involvement between those situation types. Although the decision-making processes provided clear

choices for subjects, the means derived from this study were not in exact correspondence with these processes.

Recommendations provided in this chapter were made in consideration of this information.

The second research question was designed to examine high and low levels of relevance and the amount of participation wanted. Responses for the presence or absence of relevance were summed for each situation type. Three or more of the five situations for the corresponding situation type had to be considered relevant to be placed in the high relevance group. Subjects wanted increased participation when the situation type was perceived as relevant.

The third research question was designed to examine high and low levels of expertise and the amount of participation wanted. Responses for the presence or absence of expertise were also summed for each situation type. Subjects had to indicate perceived expertise for three or more of the five situations for the corresponding situation type to be placed in the high expertise group. Subjects wanted increased participation when they indicated perceived expertise for the situation type.

The fourth research question was designed to examine the interaction of high and low levels of relevance and expertise. Sums for expertise and relevance responses for each situation type were used to identify high and low levels of expertise and relevance.

Subjects wanted greater participation when high levels of both relevance and expertise were perceived than when low levels of both relevance and expertise occurred. Subjects wanted more participation with high levels of both relevance and expertise than with high levels of relevance only or with high levels of expertise only. Subjects wanted more participation with high levels of relevance only than they did for participation with low levels of both relevance and expertise.

The amount of preferred participation increased with high levels of expertise only than with low levels of both relevance and expertise in the student situation type, but not for the other situation types of personnel, curriculum and instruction, community, and business. No differences were found between high levels of relevance only and high levels of expertise only and the amount of participation wanted for any situation type.

The fifth research question was designed to examine the differences between school size and teachers' preferences for the amount of involvement wanted in participative decision-making. No differences were found. Although this study considered school size, the teachers in this sample taught in schools which were fairly homogenous in terms of school size. Perhaps greater differences in school size would affect teachers' preferences for participative decision-making.

In the following sections, the results from the research questions will be discussed more thoroughly. Amounts of preferred involvement will be examined for each of the five situation types. A discussion of the roles of relevance and expertise will follow. Limitations of this study will be addressed. The next section will address implications for administrators. Guidelines for the use of participative decision-making will be presented. Teachers' preferences to be consulted and teachers' perceptions of influence will be addressed. A section on increasing teachers' involvement is provided for administrators who want teachers to become more actively involved in decision-making. Implications for further research and a summary conclude this chapter.

#### Situation Type and Amount of Participation

##### Curriculum and Instruction

Teachers were most interested in participating in decisions related to curriculum and instruction. Similar interest in curriculum and instruction issues was also reported by Tallerico and Blumberg (1990). Teachers in that study reported productive interactions with small groups of other teachers discussing instructional methodology. Teachers stated that this involvement with other teachers allowed them to share concerns, learn from others, receive positive feedback, and assist others. Only two of the 90 subjects in that study reported similar interactions with

administrators.

Teachers' interests in topics related to curriculum and instruction were also noted in the pilot studies. Some situations presented in the pilot questionnaire were changed because the situations crossed-over into the curriculum and instruction category. This cross-over was detected by the coefficient for internal consistency reliability for situation types. The analysis provided coefficients if an item was to be deleted. If deletion of an item would result in a higher coefficient, that was an indication that the item needed to be examined more closely.

Upon inspection of the item, it was determined that the item crossed-over into the curriculum and instruction category. For example, an item that was supposed to pertain to a student issue crossed-over into the curriculum and instruction area. The item dealt with a student activity -- however, that activity would have occurred during scheduled instruction time. Teachers wanted a noticeably greater amount of participation for that item than with the other items in the category. The item was replaced with an internally consistent item.

Mohrman, Cooke, and Mohrman (1978) reported that teachers in their study were most interested in participation in the technical domain of curriculum and instruction. They suggested that this interest could be attributed to teachers' perceived influence.

Teachers receive most of their training in the area of curriculum and instruction. Marso and Pigge (1986) reported that individuals who teach do so because they want to help others learn and have an interest in specific subject matter. Teachers' apparent interest in helping others learn and preparation in a subject area make it reasonable that they would be interested in decision-making for curriculum and instruction issues.

Since teachers have expressed an interest in decision-making and discussion regarding curriculum and instruction issues, there may be a potential need to provide more opportunities for teacher-presented inservice, study groups, case-study groups, and other related activities in addition to participative decision-making for curriculum and instruction issues. Chapman (1988) pointed out that teacher participation in curriculum and instruction issues provided a vehicle for professional development. Chapman added that teachers were more committed to decisions for curriculum and instruction when they had been involved in the decision-making process.

The mean score for the curriculum and instruction situations in this study most closely approximated Process #4. That process indicated that teachers in this study generally wanted to be included in an advisory group for issues related to curriculum and instruction. The advisory group would offer collective ideas and suggestions, but

would not make the decision. Administrators are advised to utilize advisory groups for this purpose.

The curriculum and instruction situations presented in this study targeted a content area or the entire building. When subjects were informed that the situation targeted "your content area," more subjects selected Process #5. This process would involve teachers reaching consensus.

The median score for all curriculum and instruction issues corresponded with Process #5 indicating that most respondents wanted full involvement. Administrators should consider the specific situation and the individuals involved, and select the appropriate amount of involvement.

#### Personnel

Teachers expressed the second greatest interest in participation with personnel situations. Teachers wanted significantly less involvement with personnel issues than with curriculum and instruction issues, and significantly more involvement with personnel issues than with community, student, and business issues. Teachers appeared to be interested in taking a role in their teaching profession as related to evaluations, recognitions, and the selection of co-workers.

The results of this study suggested that those who were interested in curriculum and instruction issues also wanted involvement in personnel issues. In general, these teachers appeared to possess an interest and perceived having



expertise in teaching and the teaching profession.

Schneider (1984) also found that teachers were interested in participation with personnel issues. Teachers in that study did not want as much involvement with personnel issues as they did with issues pertaining to curriculum and instruction. Schneider's findings were consistent with the findings in this study.

Teachers' interest in personnel situations might be accommodated by including them on teams for hiring teachers, team leaders, and department chairs. Teachers could also become involved with decisions regarding awards and recognitions. Teachers indicated an interest in the criteria for hiring and recognition as well as descriptors for job performance. Teachers wanted input regarding who and what was rewarded.

The mean score for personnel situations most closely approximated Process #3. Process #3 indicated that teachers wanted to provide ideas and suggestions for personnel issues on an individual basis, but they did not want to make the final decision. The median score for personnel situations corresponded with Process #4 indicating that teachers wanted to be included in an advisory group. Administrators are advised to include teachers in this manner.

Subjects appeared to respond differently to one of the personnel situations, Situation #19. That situation referred to the development of an appraisal instrument for

noncertified staff. Respondents selected Process #1 more than twice as often than for any other situation. It appears that teachers want more involvement with personnel issues that affect them directly. Administrators should consider the personnel issue and analyze the possible effects of that issue.

For example, teachers selected Process #5 more frequently for personnel issues that directly affected their job and supervision of that job. Process #4 was most frequently chosen for situations that involved co-workers. Teachers could be included in advisory committees for some personal issues. If administrators want to include teachers more fully in the area of personnel, they are advised to provide the needed training.

### Community

Community issues comprised an area in which teachers wanted a moderate amount of involvement. Teachers wanted significantly more involvement in community issues than with business and student issues and significantly less involvement than with personnel and curriculum and instruction issues.

Interest in community issues could be due to an awareness of the interaction of the school and the community. The school as a public institution is also a political institution (Wirt & Kirst, 1989). Concerns expressed by community members about the school or related

activities appeared to prompt teachers to want some involvement in these issues. Teachers may have understood that the public schools are a political entity and, as such, are not closed systems.

The mean score for community issues in this study most closely approximated Process #3. The median score for community issues also corresponded with Process #3. That process indicated that teachers wanted to be consulted on an individual basis and they wanted the opportunity to offer ideas and suggestions regarding community issues. They did not want to make the decision.

A specific recommendation for administrators becomes more difficult for this situation type. Approximately one-third of the subjects selected Process #1 for the five community situations and the other two-thirds wanted varying amounts of involvement. Administrators are advised to not only consider the community issue and the group, but to also consider the amount of involvement specific individuals may want. The preference of the individual should be weighed with the needs of the situation and the administrator.

The mean score for Situation #23 was higher than the mean scores for the other community situations, indicating that teachers wanted more involvement with that situation. That situation involved the selection of a school-business partner. Teachers might have perceived that this situation had a more direct effect on their classrooms than the other

community situations.

It is recommended that teachers become involved in community issues on an individual basis. This involvement should include consultation when the issues have direct bearing on classrooms. Administrators presented with the selection of community advisory board members or contents of a community newsletter may want to consult with teachers.

Most teachers indicated a lack of expertise for community issues. Administrators who want to include teachers to a greater extent in community issues should provide training to increase expertise. Consultation would most likely result in teacher satisfaction and could provide the administrator with valuable suggestions.

Knezevich (1984) suggested that the politics of community decision-making warranted the gathering of information. This information could inform administrators about social, political, and economic forces within the community. Administrators could use this information to identify leadership within the community and groups with special interests. This information could be used to help administrators make more informed decisions.

### Students

Teachers wanted significantly less involvement with student issues than with community issues, and significantly more involvement with student issues than with business issues. Situations pertaining to student issues in this

study were clearly not related to instructional issues. The situations used for the category of student issues primarily dealt with student activities that were not related to curriculum and instruction and activities that occurred outside of the school day. Apparently senior high school teachers wanted involvement with student instruction, but not with non-academic student activities.

A possible explanation for the low level of preferred involvement with student issues could be that teachers felt that others already had responsibility for these student groups. Teachers may have been respecting the authority of another teacher or club sponsor by not seeking involvement. Or, teachers may not want involvement in student activities without compensation.

Book and Freeman (1986) reported that individuals who became secondary teachers typically wanted to work with a specific subject matter and help students to learn that subject matter. Senior high teachers indicated a greater interest in involvement with curriculum and instruction issues than with student issues. Teachers have traditionally been asked to develop knowledge, skills, attitudes, and values in students. Teachers may now be pressured to specialize, achieve instructional goals, and raise test scores. Charged with this task within their classrooms, teachers may neither want nor be able to assume additional responsibilities.

The mean score for student issues most closely approximated Process #2. This process indicated that teachers in this survey wanted to contribute information on an individual basis and that they did not want to generate or evaluate alternatives for student issues. Although the mean score for student issues approximated Process #2, most subjects selected Process #1 indicating they did not want to be involved. The median score for student issues was also Process #1. It is recommended that administrators consider the issue and the individuals when deciding whether or not to seek information. Again, some individuals may want more involvement. It is recommended that administrators gather information as appropriate, and accept ideas and suggestions for consideration.

#### Business

The least amount of interest was expressed for involvement with business issues. Teachers wanted significantly less involvement with business issues than with any of the other situation types.

Efforts to implement participative decision-making have often included the involvement of teachers in the decision-making for business issues. The lack of interest for involvement in business issues could explain why teachers do not always report satisfaction with participative decision-making. Although speculative, it is possible that unless teachers perceive business issues as directly related to

curriculum and instruction, teachers may not want this type of involvement.

Perceived expertise as well as perceived relevance was reported to be low for business issues. The lack of perceived expertise in the area of business may have lessened the amount of participation wanted. Teachers may have been apprehensive about assuming responsibility for the results of decisions made without adequate expertise.

The mean score for business issues most closely approximated Process #2. That process indicated that teachers in this study wanted to contribute information on an individual basis, but they did not want to offer ideas or suggestions. Although the mean score for business issues approximated Process #2, the median and mode scores corresponded with Process #1 indicating that they did not want to be involved with that issue.

Administrators are advised to consider specific business issues. The further the issues appear to be from the classroom, the less likely teachers will want any type of involvement. Administrators who still want teachers to become more involved in decision-making for business issues should provide training for teachers. This training should include specification of how business issues directly or indirectly affect curriculum and instruction.

Site-based management is described as a shift from central management to management at individual school sites

(Hill & Bonan, 1991). This would probably involve a shift of many business decisions to the building level. If site-based management is a goal for administrators, then teacher preparation programs should include information about business issues in their curriculum in order to facilitate site-based management. This information might include how business decisions affect curriculum and instruction. Information could also be provided that raised teachers' levels of expertise relative to making decisions about business issues.

Jordan, McKeown, Salmon, and Webb (1985) stated that, The sole purpose of school business administration is to support the teacher in the classroom, the principal in the school, the central administration, and the school board as each strives to fulfill its responsibilities and accomplish the educational mission (p. 31)....Regretfully, many practicing educators fail to recognize the important role of the school business administrator and view school business administration as an administrative adjunct to the instructional process (p.31)....School business administration exists as a service arm of general school administration, and its primary function is to facilitate the processes of instruction (p. 32).

Based on the results of this study, teachers probably



would want to be involved with business decisions that had a more obvious bearing on curriculum and instruction. If the relationship between business and curriculum and instruction was immediately apparent, teachers would probably be interested in more involvement in the decision-making.

Imber, Neidt, and Reyes (1990) reiterated the importance of teachers perceiving that participation was meaningful and worthy of the time invested. Since teachers perceived curriculum and instruction as meaningful and indicated an interest in becoming more fully involved in the decision-making, teachers might want to become more fully involved with business decisions when the relationship with curriculum and instruction was better understood.

#### Relevance and Expertise

Teachers wanted more involvement when a situation had relevance or when the teachers possessed expertise for the situation. Teachers had the highest level of relevance and expertise for curriculum and instruction situations. Relevance and expertise levels corresponded with preferred amounts of participation in descending order of personnel, community, student, and business situation types.

If teachers wanted a high degree of involvement with perceived relevance but not expertise, they may be reflecting an opportunity for an inservice topic. With the exception of student issues, teachers perceived relevance more frequently than expertise. Over one-fourth of the

respondents indicated that they had low levels of expertise for personnel issues, yet teachers wanted some involvement. More than one-half of the respondents reported low levels of expertise for community situation types, but still indicated they wanted some degree of participation for this area.

Full participation in decision-making based on relevance only may not result in the best decisions. The amount of participation teachers wanted however, generally involved consultation. Consulting with teachers would be beneficial because teacher satisfaction would improve and the administrator would gain valuable insights, and even unique perspectives regarding the situation.

Teachers involved in decision-making who do not possess the necessary expertise relative to a specific issue, may not be able to make the best decisions. If teachers were fully included in decision-making for personnel or community issues, then training would be indicated. Participants would need a thorough understanding of legal requirements, directions from research, and best practices.

Hutchins (1991) provided a list of areas in which teachers would need training before participating fully in decision-making. This list included the four domains of planning and designing, managing, interpersonal skills, and organizational skills. The subskills provided for each of the domains included envisioning goals, delegating, motivating others, building consensus, sharing leadership,

and knowing about organizational processes. These skills are similar to some of the skills addressed in college and university programs for administrator training.

Comprehensive training for teachers in these areas would be an enormous task for most school districts.

Approximately 90% of the respondents did not perceive business issues as relevant. Teachers may not be seeing the "big picture" or the parts as they relate to the whole. That is, teachers may not understand the bearing that business decisions have on curriculum and instruction.

Imber, Neidt, and Reyes (1990) found that teachers were most satisfied when involvement was perceived as relevant because of "benefit to self." Teachers do not want to participate in the decision-making for issues that do not generally effect them. Young (1989) pointed out that teachers who preferred no involvement had other interests competing for their time and energy. These interests included school, community, and home and family interests. Teachers may be too busy with other interests to want involvement in issues that do not directly pertain to them.

#### Limitations

Generalizations beyond the population studied may be limited. Subjects from senior high schools in 10 Nebraska school districts were included in the study. The population included only regular education teachers in senior high schools.

The situations utilized in this study were selected in part because they could easily be categorized into one of the five situation types. Prudence should be used when considering the extent of teacher involvement when no clear categorical delineations exist. For example, the purchasing of new textbooks could be considered as both a business and as a curriculum and instruction situation type.

Only five decision-making processes were provided. Other decision-making processes could be developed. The processes presented in this study did not specify who else would be involved with the advisory committees. If stated, the composition of the advisory committees could influence the amount of participation teachers wanted.

Responses could have been affected by subjects' perceptions of time available for participation in decision-making. Levels of preferred involvement may partially reflect the time available rather than the amount of preferred involvement if unlimited time were available.

#### Implications for Administrators

This section will address the role of school administrators in participative decision-making. General guidelines will be offered to guide administrators with the use of participative decision-making. These guidelines are derived from the results of this study. Consultation will be a key issue and, as such, will be discussed in terms of teachers' perceptions of influence in decision-making. Some

administrators may want teachers more fully involved, which will require changes in some schools. Suggestions are provided for administrators who want teachers more fully involved.

### Teacher Involvement

Teachers' responses indicated an interest for varying amounts of involvement for various situations. Teachers may have been saying they did not want to be a part of an environment where solutions were obtained through participative decision-making. In fact, the discrepancy between situation types and amounts of preferred involvement indicated that teachers did not necessarily want a democratic environment as suggested by Imber (1983). Teachers' responses indicated that they wanted to become more involved in those issues that directly effected them and at most, only wanted to contribute information for issues that did not directly effect them. Teachers may simply want some control over issues that directly pertain to them.

Some general guidelines are suggested based on the results of this study. Administrators should consider the specific situation and the individuals who may or may not be effected. The results of this study were analyzed in aggregate, however individual preferences should not be disregarded. Administrators should know individuals on their staff and be knowledgeable of each person's interests

and abilities. The administrator must decide who to include and whether to request information, implement an advisory group, or seek consensus.

Teachers who are directly effected by a curriculum and instruction issue should be included in an advisory group. If the curriculum and instruction issue is specific to teachers' content areas or classrooms, the advisory group should reach consensus. Advisory groups should also be formed to include teachers who would be directly effected by specific personnel issues, however some personnel issues could be addressed through consultation.

Teachers should generally be consulted about community issues, and asked for ideas and suggestions. Information could be requested from teachers relative to student issues. For the most part, teachers should not be involved in business issues. Some teachers may want to contribute some information about a specific business issue. If a particular issue somehow has a bearing on curriculum and instruction, it is recommended that teachers be consulted.

#### Consultation and Perceived Influence

Teachers generally want to be consulted about most issues. Teachers want to be consulted informally on an individual basis, to share information and perceptions about specific issues. Administrators are presented with the challenge of soliciting input from a variety of teachers, making the decision, and having those who offered input feel

their involvement was meaningful.

Consultation becomes a matter of effective communication within the school organization. Simon (1957) described the informal aspect of organizations as the interpersonal relationships within the organization that affect decisions. These informal interactions contribute to norms and values within the organization. Consultation with individual teachers would develop interpersonal relationships and influence decisions made by the administrator.

Teachers appear to want the opportunity to provide input, but for the most part, they do not want to make the decision. Perhaps by providing information and/or suggestions and perceiving that their input is considered, teachers' needs are met. Thierbach (1981) suggested that perceived involvement resulted in teacher satisfaction. Vroom (1960) discussed actual and psychological involvement. Psychological involvement was described as the perception of influence and was as rewarding as actual involvement.

Duke, Showers, and Imber (1980) stated that teachers did not become involved in decision-making because of a lack of influence. Their finding is not consistent with the findings in this study. In fact, when presented with the opportunity to select the preferred amount of involvement, teachers generally preferred at most, to be a part of an advisory group that did not make the decision, or to be

consulted. Perhaps a more descriptive label is needed for participative decision-making such as advisory or consultative decision-making.

#### Increasing Teachers' Involvement

The results of this research indicate that teachers do not want to be fully involved in decision-making. Despite information derived from the research, there is a trend toward use of participative decision-making. If Boyer (1988) was correct, an increase in teachers' involvement in decision-making is needed for schools to "flourish." More empirical evidence is needed to determine the accuracy of this statement.

Perhaps the implementation of participative decision-making to increase teacher satisfaction is not appropriate. School leaders must identify the reason for increasing teacher participation and use research to determine if that goal is met. There is some evidence that teacher involvement may increase commitment to organizational goals (Bacharach, Bamberger, Conley, & Bauer, 1990). No evidence exists to demonstrate that participative decision-making increases student outcomes (Hutchins, 1991). If teacher involvement is to be used for that purpose, then the structure for participation should be specifically designed for the improvement of student outcomes and results should be evaluated.

The involvement of teachers in decisions that have



effects beyond a single classroom may not occur in some schools. Implementation of participative decision-making in some schools would involve a change in how decisions were made. If teacher involvement in decision-making is a desired goal, an understanding of the change process is needed for efforts to be successful. Administrators who are knowledgeable about change will be more likely to bring about change with a minimum of disruption.

If participative decision-making is to be used, the administrator must become an adult developer -- one who mentors and helps teachers develop. Brandt (1990) pointed out that leaders must adapt to teacher involvement and learn to work with others in a different manner. For example, administrators must be aware of individuals' responses to change.

Horgan (1988) suggested that some individuals thrived on change, but most became stressed by change. Individuals could learn to cope with change by acknowledging their difficulty and taking responsibility to cope more effectively. Horgan added that individuals needed information about change throughout the change process to reduce anxiety. Expectations should be clear and training should be provided (Campbell & Warner, 1988). Teachers need to know what is expected of them, and they need to know how they will be able to meet those expectations.

If administrators involve teachers in decision-making,

resources to empower teachers and to implement participative decision-making are needed. A structure must be provided that allows for collaboration and increased collegiality. Meetings, committees, groups, and forums must be used effectively and meaningfully.

The decision of whether or not to implement participative decision-making is difficult. Chapman (1988) and Imber (1983) suggested that more teacher participation in decision-making could negatively effect the amount of time teachers have for instruction and curriculum planning. Imber also suggested that teacher satisfaction was actually higher among teachers in schools that did not use participative decision-making on a regular basis.

Administrators are advised to determine the reason for using participative decision-making. If the reason is to increase satisfaction, guidelines from this study should be used. If student and/or school improvement is the goal, that goal should guide administrators in the use of participative decision-making.

#### Implications for Research

It would be of further interest to determine whether there were benefits other than teacher satisfaction associated with participative decision-making. The effect on student performance as a result of using participative decision-making specifically designed to improve student performance should be studied. Other areas of school

improvement, decision quality, and teacher commitment could also be examined.

Researchers should examine the role of consultation in decision-making more thoroughly. Consultation may require administrators to use new or expanded communication techniques. Particular attention should be devoted to studying the role of communication between administrators and teachers relative to decision-making.

Teacher satisfaction levels should be studied to determine if implementation of participative decision-making as recommended in this study increased teacher satisfaction. Researchers might determine if there was a relationship with other personal and work outcomes. These outcomes were described by Frase and Sorenson (1992) as high quality performance, low absenteeism, low turnover, and high intrinsic work motivation, in addition to high job satisfaction.

This study examined five situation types. Additional situational types should be considered such as discipline issues. For example, teachers might prefer involvement when students' behaviors effect their classrooms in contrast to behavior that did not effect classrooms.

The situation types presented in this study could be further examined. The area of curriculum and instruction could include many more situations. These might include student placement in class, student grouping, textbook

selection, and instructional techniques.

Further research could be conducted to determine whether or not training to increase relevance and/or expertise for a specific situation also increased a teacher's preferred amount of involvement in decision-making for that situation. Specific methods of training could also be studied. The effects of staff development relative to involvement in decision-making should be investigated.

The accuracy of teachers' perceptions of their expertise would be another area of interest. Are teachers' perceptions of expertise accurate, too low, or inflated? In-depth interviews could be conducted to classify levels of expertise or specific evidence of expertise could be compared with perceptions of expertise.

The Decision-Making Inventory developed for this study could be refined to obtain adequate internal consistency reliability (Cronbach's  $\alpha \geq .8$ ) to measure individual differences. The instrument could be used to obtain an individual's decision-making profile. Administrators presented with a profile of a teacher's preferred levels of involvement could include teachers more effectively.

This study did not attempt to compare differences among buildings, but such differences may exist. The culture of a building could effect how decisions are made (Sergiovanni, 1987). Researchers may also want to study amounts of preferred involvement among districts.

Additional information of interest could be obtained by conducting similar research, using other independent variables such as area of teaching, years of teaching, gender differences, and elementary and secondary differences for amount of involvement wanted in decision-making. Stages in the development of teachers could be investigated to determine the effects of training for participative decision-making.

#### Summary

The purpose for conducting this study was to determine teachers' preferences for participative decision-making. Some educators called for more involvement of teachers in decision-making, but the research results indicated that teachers were not always satisfied. It was hypothesized that teachers had specific preferences for types of situations in which they wanted involvement. Teachers' preferences for involvement were studied by situation type, by the relevance of the situation, and by teachers' perceived expertise relative to the situation.

Teachers had specific preferences for amount of involvement in decision-making. Administrators who wanted to use participative decision-making were advised to consider the level of involvement, individuals' expertise, the situations, and their relevance to teachers.

If participative decision-making was used to increase teacher satisfaction, the following guidelines were offered.

Teachers should generally be included in an advisory committee for curriculum and instruction issues. If these issues directly pertained to the teachers, the advisory group should reach consensus. Teachers should generally be consulted regarding personnel issues to get specific ideas and suggestions. More involvement may be indicated for personnel issues that directly effected teachers' jobs or supervision of their jobs.

Teachers should typically be consulted about community issues, especially if the issues might have some bearing on their classrooms. Teachers might be asked to share information relative to student issues. Teachers should not generally be included in business issues. At most, administrators may want to ask for information, but not suggestions, for business issues. If further involvement was indicated or wanted by administrators for any issue, teacher training was suggested.

Teachers typically wanted more involvement with situations they considered to be relevant and for which they had perceived expertise. Teachers wanted the most involvement with issues that directly effected them. Teachers wanted to be involved in the decision-making for curriculum and instruction issues that had direct bearing on them. For curriculum and instruction issues that did not effect them and for other situation types, teachers did not want to be involved with making the final decision.

Participative decision-making should be implemented with a clear purpose and designed to achieve that purpose. More information is needed relative to the purposes for implementing participative decision-making and the possible benefits. In addition to an increase in teacher satisfaction, other possible benefits of teacher involvement should be studied. Since teachers wanted to be consulted about issues, the role of consultation in decision-making should be examined.

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## Appendix A

University of Nebraska Institutional Review Board Approval

UNIVERSITY OF NEBRASKA  
INSTITUTIONAL REVIEW BOARD  
FOR THE PROTECTION OF  
HUMAN SUBJECTS

Eppley Science Hall 3018  
600 South 42nd Street  
Omaha, NE 68198-6810  
(402) 559-6463  
FAX (402) 559-7845

May 15, 1991

Kristine Carlson  
Educational Administration  
UNL

IRB # 261-91 EX

TITLE OF PROPOSAL: Teachers' Preferences for Participative Decision Making

Dear Ms. Carlson:

I have reviewed your Exemption Information Form for the above-mentioned research project. According to the information provided this proposal is exempt from IRB review under 45 CFR 46:101B 3.

It is understood that an acceptable standard of confidentiality of data will be maintained.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Prentice'.

Ernest D. Prentice, Ph.D.  
Vice Chairman, IRB

EDP/lmc



## Appendix B

Example of Letter of Request Sent to  
Selected School Districts

Dear Administrator,

The purpose of this letter is to request permission to send a survey questionnaire to regular education senior high school teachers in your district. I am working on my dissertation for a Ph.D. degree in the department of educational administration at the University of Nebraska. The topic of the study is teachers' preferences for participative decision-making.

A survey questionnaire will be used to collect data to determine the relationships among the independent variables (types of decisions, relevance of the decision to teachers, and teachers' expertise relative to the situation), and the dependent variable (amount of participation desired). Data will be analyzed in aggregate. Implications from the results of this research will be presented to assist administrators as they utilize participative decision-making.

The population for this study includes regular education senior high school teachers from the ten largest school districts in Nebraska. The sample for this study will be chosen by using a random sampling method. The survey requires approximately 10 minutes to complete. All responses will be confidential. The names of specific

## Appendix B - continued

Example of Letter of Request Sent toSelected School Districts

schools or specific districts will not be mentioned. This study has been approved by the University of Nebraska's Institutional Review Board.

I would like to administer this survey during the 1991-92 fall semester. If you have any questions, please do not hesitate to call me. Thank-you for your assistance.

Sincerely,

Kristine J. Carlson

## Appendix C

Decision-Making Inventory**DECISION-MAKING INVENTORY****THIS SURVEY WILL TAKE ONLY TEN MINUTES TO COMPLETE.**

This inventory is designed to identify YOUR PREFERENCES for participative decision-making for each of 25 situations. There are five decision-making processes to choose from for each of the situations provided. The processes are listed below. Each process represents varying amounts of participation.

**DECISION MAKING PROCESSES**

- Process #1.** I do not want to be involved in this decision.
- Process #2.** I have useful information I want to contribute regarding this situation, on an individual basis. However, I do not want to evaluate or generate alternatives.
- Process #3.** I want to be consulted about this situation on an individual basis. I want to offer ideas and suggestions. However, I do not want to make the decision.
- Process #4.** I want to be included in an advisory group. This group should offer collective ideas and suggestions. This group should not make the decision.
- Process #5.** I want to be included in a group that generates and evaluates alternatives and attempts to reach consensus. The decision supported by the group should be accepted and implemented.

**INSTRUCTIONS:**

- Choose one of the five decision-making processes for each situation. Select the process that best approximates your preference. PLEASE SELECT ONLY ONE PROCESS FOR EACH SITUATION. Write the number of the preferred process in the space provided for each situation (Process #\_\_\_\_).
- Check the appropriate YES or NO response (Yes \_\_\_\_ No \_\_\_\_ ) to indicate whether or not each situation is RELEVANT to you.  
Relevance is intended to mean YOUR personal stake in the situation presented.
- Check the appropriate YES or NO response (Yes \_\_\_\_ No \_\_\_\_ ) to indicate whether or not you possess EXPERTISE relative to the situation.  
Expertise is intended to mean YOUR experience and training regarding the situation presented.

**EXAMPLE: SAMPLE SITUATION.** Students are concerned about the new discipline policy. They have presented a list of their concerns, and they would like a response to their concerns.

Process # 1  
 Relevance: Yes \_\_\_\_ No X  
 Expertise: Yes \_\_\_\_ No X

In this example, the respondent indicated that he/she did not want to be involved in this decision. This respondent indicated that the situation had no relevance to him/her, and indicated that he/she did not possess expertise regarding the situation.

## Appendix C - continued

Decision-Making Inventory


---

At least one-half of my assignment is teaching (circle one) YES NO

If YES: Please complete the questionnaire and return it in the enclosed envelope.

If NO: Please do NOT complete the questionnaire.

PLEASE RETURN THE QUESTIONNAIRE REGARDLESS OF YOUR ASSIGNMENT.  
IT IS ESSENTIAL THAT ALL QUESTIONNAIRES ARE RETURNED IN ORDER TO  
HAVE A VALID AND RELIABLE STUDY. YOUR ASSISTANCE IS DEEPLY  
APPRECIATED.

SITUATION #1

Minimum competencies must be developed for students in your building. These competencies will define the skills necessary to complete requirements and continue to the next level, for each area of instruction.

Process # \_\_\_\_\_  
Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #2

Enrollment at your school has reduced substantially. Reduction in force procedures will be implemented; however, many of the teachers involved have the same length of tenure. Decisions must be made regarding which teachers will be removed and the central office has asked for recommendations from your building.

Process # \_\_\_\_\_  
Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #3

The building's noninstructional budget must be reduced. The new budget can be implemented without personnel, instructional supply, or program reductions. Supply costs, such as the cost of the lawn mower, snow shovels, and trash cans will need to be reduced (not instructional or classroom supply costs). A plan for these reductions will be submitted to the central office.

Process # \_\_\_\_\_  
Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #4

Many parents and community members of your school are concerned about the negative behavior of the public (not students) at a recent school function. These groups want to know what will be done in the future to prevent these behaviors from occurring again.

Process # \_\_\_\_\_  
Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

OVER

## Appendix C - continued

Decision-Making InventorySITUATION #5

The student council has presented a proposal. They want to meet with the student councils of three other schools in the surrounding area. The meeting would not occur during the school day. A decision must be given to the student council.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #6

Your school has the choice of ordering non-instructional supplies such as floorwax each year, or buying these supplies in quantities of five years. Buying a five-year supply is more cost-effective and those funds may be spent for more non-instructional supplies. However, supplies could become outdated. A decision must be made to buy non-instructional supplies for one year or for five years.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #7

A teacher in your content area has resigned after having philosophical differences with other teachers. A new teacher must be interviewed and hired.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #8

Some members of the community have expressed concern about observing a moment of silence and the pledging allegiance to the flag during a recent school assembly. A similar assembly is being planned, and these community members will be present. The decision of whether or not to repeat this practice must be made.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #9

Your school has just received three computers for use in classroom instruction. A decision must be made regarding which areas of instruction will use the computers.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

NEXT PAGE

## Appendix C - continued

Decision-Making Inventory**SITUATION #10**

Students want to have the school dance in the school cafeteria rather than in the school gym. The students would like a response to this request.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**SITUATION #11**

A teacher from your building is to be given a teaching award and an accompanying cash award. A teacher must be chosen from your building.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**SITUATION #12**

Your school will be selecting a new instructional program for your content area. There are many programs available. The new program must be chosen.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**SITUATION #13**

Bids have been received for new typewriters for the main office. Prices and quality specifications vary. A decision to accept one of the bids must be made.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**SITUATION #14**

A community advisory board is being formed to improve school-community relations. This board will offer suggestions only. Many community members want to be a member of this voluntary advisory board. Only a limited number of community members can be selected.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**SITUATION #15**

Students in the chess club want to sell pens, to raise money to buy new chess sets. It must be decided if they may conduct this fund raiser.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

OVER

## Appendix C - continued

Decision-Making InventorySITUATION #16

The central office has a substantial amount of money available for the building to pilot a new program, Writing in Content Areas. All materials provided by the district would become the property of the school. You are not sure how this program will be implemented in your area of instruction. A decision must be made about whether or not to participate in the pilot.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #17

The school has just made major audio-visual equipment purchases. Amount and type of insurance coverage must be decided upon.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #18

Students would like to eliminate some of the menus from the school lunch. Students want to know if they can meet and discuss this proposal.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #19

The paraeducator and secretarial staff at your school have been evaluated each year. A new appraisal instrument is needed to evaluate these staff members. The appraisal instrument must be developed.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #20

The nonparent citizens in your school's community have not been well informed regarding your school. A newsletter will be sent each month to all of the citizens in the area surrounding your school to improve community relations. Your school's main office will organize and send the newsletters. The general content and topics of the newsletters must be decided.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

NEXT PAGE

## Appendix C - continued

Decision-Making InventorySITUATION #21

Your school must ensure that ethics are included within the curriculum. Methods of instruction for content areas must be decided.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #22

The student council would like to have more officers within the council. (For example, a secretary and a treasurer instead of a secretary-treasurer.) A decision must be given to the student council.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #23

Several businesses in the community would meet your school's curricular needs in a similar manner. Each of these businesses would like to be your school's "partner." Only one business can be selected. This decision could affect community relationships.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #24

The school needs a new furnace. Quality and safety specifications must be developed and submitted to bidders.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

SITUATION #25

Team leaders/department chairs rotate in your school every few years. It is time for the rotation of team leader/department chair to occur in your area. Several applications are submitted. Teachers must be chosen for the team leader/department chair role.

Process # \_\_\_\_\_  
 Relevance: Yes \_\_\_\_\_ No \_\_\_\_\_  
 Expertise: Yes \_\_\_\_\_ No \_\_\_\_\_

**THANK-YOU FOR YOUR TIME AND EFFORT**

Please return this questionnaire in the enclosed envelope to:

KRISTINE J. CARLSON  
 2700 DOROTHY DRIVE  
 LINCOLN, NEBRASKA 68507

Please return this survey by November 15, 1991



Appendix D  
Cover Letter

Dear Educator,

I am conducting research about teachers' preferences for participative decision-making. This study has been approved for distribution by the University of Nebraska Institutional Review Board and by your school district.

Participation of teachers in decision-making is increasing however, only one in three of the occurrences of involvement has been reported as successful. The purpose of this study is to determine whether teachers have specific preferences for participation. The results of this study could help guide efforts to utilize participative decision-making.

You have been chosen as a key respondent for this study. Your name was chosen through a random selection process from all of the senior high school regular education teachers who teach in the ten largest school districts in the state of Nebraska.

YOUR RESPONSES ARE CONFIDENTIAL.

You will notice that there is a number written on your survey. This number is to help monitor the return process ONLY. Results will be analyzed in aggregate. An individual's responses will NOT be analyzed. Your name will NOT appear anywhere in the report of this research. Results will be reported by the spring of 1992.

Appendix D - continued

Cover Letter

This survey questionnaire takes approximately 10 minutes to complete. A postage-paid, pre-addressed envelope is provided. Would you please take a few minutes to respond? Participation is voluntary. I appreciate your assistance with this study.

PLEASE RETURN THIS SURVEY BY NOVEMBER 15. THANK-YOU!

Sincerely,

Kristine J. Carlson

## Appendix E

Second Cover Letter

Dear Educator,

I am also an educator and understand your busy schedule. I work at Lincoln High School in Lincoln, Nebraska. As a part of my studies at the University of Nebraska, I am conducting research in an area in which I am extremely interested -- participative decision-making.

Permission has been granted from the Institutional Review Board at the University of Nebraska Medical Center and from individuals in your school district, to request your assistance in completing this survey questionnaire. Would you please take approximately ten minutes of your time and complete the enclosed questionnaire? Results of this study will only be useful if enough surveys are completed and returned.

I would like to reassure you that all responses will be treated confidentially. Please return the questionnaire by November 27th. I appreciate your time and your support. Thank-you.

Sincerely,

Kristine J. Carlson