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An Analysis Of Perceptual Differences Between Parents, Teachers, Principals, Superintendents, And School Board Members Relating To Issues Important To Merit Pay Implementation

William J. Hoff

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AN ANALYSIS OF PERCEPTUAL DIFFERENCES BETWEEN PARENTS, TEACHERS, PRINCIPALS, SUPERINTENDENTS, AND SCHOOL BOARD MEMBERS RELATING TO ISSUES IMPORTANT TO MERIT PAY IMPLEMENTATION

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

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

by
William J. Hoff
Spring 1985
William J. Hoff
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1985
This dissertation, written and submitted by

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AN ANALYSIS OF PERCEPTUAL DIFFERENCES BETWEEN PARENTS, TEACHERS, PRINCIPALS, SUPERINTENDENTS, AND SCHOOL BOARD MEMBERS RELATING TO ISSUES IMPORTANT TO MERIT PAY IMPLEMENTATION

Abstract of Dissertation

Purpose: Within school districts groups may be identified whose function influences their perceptions about what would occur in the schools relative to issues important to merit pay implementation. The purpose of the study was to identify those differences that exist between groups regarding issues relevant to merit pay implementation.

Procedures: Parents, teachers, principals, superintendents, and school board members were drawn from elementary, high school, and unified school districts residing in regions designated by the Association of California School Administrators. A survey instrument was developed in order to elicit group responses about issues related to merit pay. Analyses of variance were carried out to test the hypotheses relating to: a) differences between groups and b) differences between dimensions identified for the study. In addition, an analysis of individual items and pertinent supplementary analyses were carried out.

Results: Teachers rejected the premise that merit pay would improve educational productivity and benefit school community members. Principals were cognizant of the relationship between motivational principles and merit pay, and expressed confidence that the reinforcement principles related to merit pay would be carried out. All groups were confident that school administrators would maintain an effective merit-pay program. However, the groups were uncertain about what evaluation procedures would be employed; the effect merit pay would have on incompetent teachers; and how incompetent teachers' performance would be improved.

Conclusions: At this time, the data examined suggest that merit pay implementation should be delayed until those differences identified between groups are reconciled. This does not imply that merit pay implementation should be abandoned, but rather, each issue should be examined and acted upon carefully.

Recommendations: Those school districts considering merit pay implementation should give consideration to the development of standards specifying what the school district's outcomes are to be. Within the context of outcomes, the development of evaluation procedures that link merit-pay awards to outcomes is essential. Therefore, in order to establish trust and cooperation within the school district, recognizable links between performance outcomes and the merit-pay awards are to be firmly established.
ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS.</td>
<td>V</td>
</tr>
<tr>
<td>LIST OF TABLES.</td>
<td>viii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>2</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Hypotheses of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>7</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>8</td>
</tr>
<tr>
<td>Methodology</td>
<td>9</td>
</tr>
<tr>
<td>Population</td>
<td>9</td>
</tr>
<tr>
<td>Research Methodology</td>
<td>9</td>
</tr>
<tr>
<td>Instrument</td>
<td>10</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>11</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>12</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>13</td>
</tr>
<tr>
<td>Motivational Factors Influencing Decisions to Implement Merit-pay</td>
<td>15</td>
</tr>
<tr>
<td>Programs in the Schools</td>
<td></td>
</tr>
<tr>
<td>Political Entities</td>
<td>15</td>
</tr>
<tr>
<td>Teacher Organizations</td>
<td>15</td>
</tr>
<tr>
<td>Parents</td>
<td>17</td>
</tr>
<tr>
<td>Teachers</td>
<td>19</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Evaluation Criteria to be Used to Measure Performance Relating to Merit Pay</td>
<td>21</td>
</tr>
<tr>
<td>Psychological Determinants Influencing Improved Teacher Performance</td>
<td>26</td>
</tr>
<tr>
<td>Mechanics of Applied Psychology</td>
<td>31</td>
</tr>
<tr>
<td>Identification of Effective Incentives</td>
<td>33</td>
</tr>
<tr>
<td>Alternative Financial Incentives Related to the Improvement of Functionally Incompetent Teachers</td>
<td>36</td>
</tr>
<tr>
<td>Master Teacher/Career Ladder</td>
<td>39</td>
</tr>
<tr>
<td>Mentor Teacher Plan</td>
<td>41</td>
</tr>
<tr>
<td>School Administrative Responsibilities Related to Merit Pay Implementation</td>
<td>44</td>
</tr>
<tr>
<td>3. METHOD OF THE STUDY</td>
<td>54</td>
</tr>
<tr>
<td>4. RESULTS OF THE STUDY</td>
<td>65</td>
</tr>
<tr>
<td>5. CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS</td>
<td>107</td>
</tr>
<tr>
<td>Conclusions</td>
<td>108</td>
</tr>
<tr>
<td>Discussion</td>
<td>112</td>
</tr>
<tr>
<td>Recommendations</td>
<td>114</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>116</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>124</td>
</tr>
<tr>
<td>I. RESEARCH COMMUNICATIONS TO SCHOOL DISTRICTS</td>
<td>125</td>
</tr>
<tr>
<td>II. SURVEY INSTRUMENT</td>
<td>133</td>
</tr>
<tr>
<td>III. LISTING OF SCHOOL DISTRICTS DRAWN FOR THE STUDY</td>
<td>139</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dimension I Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means</td>
<td>67</td>
</tr>
<tr>
<td>2. Dimension II Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means</td>
<td>69</td>
</tr>
<tr>
<td>3. Dimension III Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means</td>
<td>71</td>
</tr>
<tr>
<td>4. Dimension IV Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means</td>
<td>73</td>
</tr>
<tr>
<td>5. Dimension V Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means</td>
<td>74</td>
</tr>
<tr>
<td>6. Parents Summary Tables for the Analysis of Variance, and Difference Between Means</td>
<td>78</td>
</tr>
<tr>
<td>7. Teachers Summary Tables for the Analysis of Variance, and Difference Between Means</td>
<td>80</td>
</tr>
<tr>
<td>8. Principals Summary Tables for the Analysis of Variance, and Difference Between Means</td>
<td>81</td>
</tr>
<tr>
<td>9. Superintendents Summary Tables for the Analysis of Variance, and Difference Between Means</td>
<td>83</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>10. School Board Members Summary Tables for the Analysis of Variance, and Difference Between Means</td>
<td>93</td>
</tr>
<tr>
<td>11. Summary Tables for Favorable, Unfavorable, and Not Sure Responses for Individual Items</td>
<td>94</td>
</tr>
<tr>
<td>12. Survey Items and Respondents' Favorable, Unfavorable, and Not Sure Responses to Items</td>
<td>94</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

Merit pay as a strategy to be used for the improvement of educational services, notably teacher performance, has resurfaced and has become a public and political issue as well as an educational issue. Merit pay, however, remains a controversial issue with sides drawn as to the strategies to be employed and the acceptability of merit pay implementation in the schools.

School districts, as open systems, are influenced by national politics and various professional organizations. At the local level, school districts may be divided into five principal groups based on the function of each group in the school districts' operation. Within each group, the perceptions held, with regards to merit pay, will vary relative to the group's function, national political policies, and affiliations with organizations representing each group.

However desirable merit pay may be from a theoretical view, a number of considerations should be analyzed prior to the installation of merit-pay programming in the schools. Five dimensions play a role in the success or failure of merit-pay programs. These are: a) motivational factors influencing decisions to implement merit-pay programs in the schools; b) psychological
determinants influencing improved teacher performance; c) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; d) alternative financial strategies relating to the improvement of functionally incompetent teachers; and e) school administrative responsibilities related to successful merit pay implementation.

In order to assure the successful installation of merit-pay programs in the schools, an analysis of these dimensions, relative to the school district's members' perceptions, should be carried out. In effect, agreement among parents, teachers, principals, superintendents, and school board members, with regards to the efficacy of merit-pay programming, must be clarified.

The Problem

Statement of the Problem

Two factors influence the individual's decision to accept or reject merit-pay programming. Lawler (1971), reviewing data collected by Beer and Gery, concluded that individuals' needs and the situation in which they find themselves influence their preferences for merit-pay programming. Therefore, the problem of this study was to determine if parents', teachers', principals', superintendents', and school board members' perceptions are in agreement with regards to: a) motivational factors influencing decisions to implement merit-pay programs in the
schools; b) psychological determinants influencing improved teacher performance; c) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; d) alternative financial strategies related to the improvement of functionally incompetent teachers; and e) school administrative responsibilities related to merit pay implementation as they perceive what would occur in the schools relative to issues comprising each dimension.

Purpose of the Study

Merit pay has become a recurrent theme perceived as a strategy for increasing educational outcomes through the improvement of teacher performance. What is not clear, is how parents, teachers, principals, superintendents and school board members perceive what would occur in the schools relative to issues relevant to the successful implementation of merit-pay programs in the schools.

Two principal reasons necessitate the determination of the respondents' perceptual response patterns for each of the dimensions identified and the elements within each dimension. First, the dimensions are interdependent to the extent each dimension must be positively valenced, favorable to merit pay implementation. Second, the respondents' perceptual response patterns are interdependent in that agreement among the respondent classifications—parents, teachers, principals, superintendents, and school board members—must exist in order to assure successful merit pay
implementation.

Therefore, the purpose of the study was to identify those points of agreement and disagreement within each respondent classification and among the respondent classifications. Once these response patterns are identified and analyzed, decisions, as to whether efforts should be made to reconcile the identified differences or to abandon merit-pay programming, can be made. To do otherwise would lead to erroneous assumptions that could result in unsuccessful merit pay implementation and probable advesive effects on existing teacher performance.

**Hypotheses of the Study**

Fundamental to the successful implementation of a sound merit-pay program is: a) parents, teachers, principals, superintendents, and school board members must have perceptual response patterns that agree with respect to each dimension; and b) each dimension identified in the following hypotheses must have a positive valence favorable to the implementation of the merit-pay program selected. The hypotheses of the study are:

**Hypotheses 1:** There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions about what would occur in the schools relative to dimensions identified for the study.

**Hypothesis 11:** There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would
occur in the schools relative to the motivational factors influencing decisions to implement merit-pay programs in the schools.

Hypothesis 1\textsubscript{2}: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the psychological determinants influencing improved teacher performance.

Hypothesis 1\textsubscript{3}: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards.

Hypothesis 1\textsubscript{4}: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the alternative strategies related to the improvement of functionally incompetent teachers.

Hypothesis 1\textsubscript{5}: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the school administrative responsibilities related to merit pay implementation.

Hypotheses 2: There are no differences among the
following dimensions as the respondents perceive what would occur in the schools with regards to issues relevant to merit-pay programming. The dimensions are: a) motivational factors influencing decisions to implement merit-pay programs in the schools; b) psychological determinants influencing improved teacher performance; c) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; d) alternative financial strategies related to the improvement of functionally incompetent teachers; and e) school administrative responsibilities related to merit pay implementation.

Hypothesis 2.1: There are no differences among the dimensions listed above with regards to the parents' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.2: There are no differences among the dimensions listed above with regards to the teachers' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.3: There are no differences among the dimensions listed above with regards to the principals' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.4: There are no differences among the dimensions listed above with regards to the superintendents' perceptions about what would occur in the
schools relative to each dimension.

Hypothesis 25: There are no differences among the dimensions listed above with regards to the school board members' perceptions about what would occur in the schools relative to each dimension.

Significance of the Study

Research in the area of merit pay has been limited in quantity and perspective as related to education. Those discussions relating to merit pay have frequently referred to research conducted outside of education or reflect opinions held by various writers. This study provides a multi-dimensional collection and analysis of individuals' responses focusing on the school community's concepts about what would occur in the schools relative to issues important to successful merit pay implementation.

The implementation of merit-pay programs has ramifications that are far reaching and have an effect on those participants that make up the school community. Frequently, programs are developed and implemented that have not been well thought-out nor has sufficient consideration been given to those groups that have an investment in the program implemented.

Parents, teachers, principals, superintendents, and school board members have different interests that need to be served. However, the success of merit-pay programs require that these participants reconcile those differences that may exist among them. This study addresses those
points of agreement and disagreement that may exist among parents, teachers, principals, superintendents, and school board members.

**Definition of Terms**

The terms used in this study are defined as follows:

**Achievement motivation**—behavior that is not easily motivated by extrinsic rewards, such as money or symbols of awards; performance is motivated when measured against some standard of excellence.

**Incentive**—the product of an externally applied stimulus. This stimulus provides the promise of some reward which is regarded as having value.

**Incentive wages**—wages received by an employee for the accomplishment of a specific quantity and/or quality of production task. See Merit Pay.

**Incentive wage system**—a plan of wage payment that relates wages of employees to effort and output, either individually or as a group.

**Mentor teacher**—a teacher selected whose duties are to assist and guide new teachers, assist other teachers, provide staff development and develop special curriculum. In California, the mentor teacher must teach at least 60% of the time.

**Merit pay**—one of the classes of incentive payments that awards extra compensation based on observed performance increments but are ancillary to the primary wage scale.

**Merit evaluation**—measurement of educational
productivity or effectiveness through which employees are ranked for purposes of distributing merit-pay increments.

**Salary**--compensation received by an employee for services rendered during a specified time.

**Wages**--compensation of employees receiving a stated sum per piece, hour, day, or any other unit or period. Usually it is all compensation paid including salaries.

**Methodology**

The procedures set forth for the study are described under the following headings. They are: 1) Population Sample; 2) Research Methodology; 3) Instrument; and 4) Analysis of the Data.

**Population Sample**

The participants for the study were parents, teachers, principals, superintendents, and school board members drawn from elementary, high school, and unified school districts residing in 16 of 18 regions designated by the Association of California School Administrators (ACSA Members Handbook, 1983-1984). Two regions were omitted because they did not meet the criteria establishing that each region have an elementary school district, high school district, and unified school district.

**Research Methodology**

The school districts selected for the study were randomly drawn using stratified random sampling procedures.
Within each school district, the parents, teachers, and school board members were assigned a computer generated random number, which was to be used by the superintendents as a means for selecting respondents in their school districts. Each principal was preselected and drawn from the 1984 California Public School Directory prior to the distribution of the survey instrument. The selection of superintendents corresponded with the selection of the school districts.

A query letter was mailed to the Superintendents of each school district selected for the study. Upon receiving confirmation that they would participate in the study, a packet containing: a) a letter identifying the study; b) respondents to be selected; c) selection and distribution procedures; d) provisions for recording the respondents; and e) reaffirmation that the results of the study would be provided, was returned to each Superintendent. In the event a Superintendent did not wish to participate in the study, a substitute school district was selected.

Instrument

In the absence of an instrument to meet the objectives of the study, a survey instrument was constructed. The instrument consisted of issues relevant to merit pay implementation and were categorized according to five dimensions. The dimensions were: 1) Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools; 2) Psychological Determinants Influencing Improved
Teacher Performance; 3) Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards; 4) Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers; and 5) School Administrative Responsibilities Related to Merit Pay Implementation. The items were drawn from issues directly addressed in the review of the literature or related to an issue discussed.

Analysis of the Data

In order to test the hypotheses established for the study, five single factor analyses of variance were conducted to determine if differences existed between groups by dimension; also, five single factor repeated measures analyses of variance were conducted to determine if differences existed between dimensions within groups. In addition to the analyses of variance, Fisher's Least Significant Differences procedures were used to determine which group means or dimension means differed when the analyses of variance rejected the null hypotheses.

Under the assumption that individual item response differences would not be detected by the analyses of variance, an analysis of individual items was carried out. Supplementary analyses were conducted with regards to the respondents' definition of merit pay, how the respondents' perceived merit pay would affect employee relations, sex differences, and age differences, whenever these distinctions could be made.
Organization of the Study

Presented in Chapter 1 are the problem, purpose and procedures of the study. Chapter 2 contains the review of the literature, and Chapter 3 includes the research design and procedures of the study. A presentation and analysis of the data is included in Chapter 4. The conclusions, discussion, and recommendations for future research are given in Chapter 5.
Chapter 2

REVIEW OF THE LITERATURE

Merit-pay programming, although not new to education, has not played, in recent years, a significant role in the school districts' compensation planning practices. However, those districts giving consideration to merit pay implementation must evaluate several dimensions that play an important role in the merit-pay program's success or failure. Essentially, successful merit pay implementation rests upon the degree of agreement among parents, teachers, principals, superintendents and school board members with regards to: a) who will benefit from merit-pay programming; b) the appropriate psychological preconditions necessary to facilitate the effectiveness of merit-pay programs; c) decisions relating to performance evaluations; d) effective alternative incentive programs focusing on teacher incompetence; and e) school administrative responsibilities ensuring effective merit-pay program implementation.

Although, merit pay as a concept, more pay for improved performance, suggests a relatively simple method for improving teacher performance, merit pay implementation requires a careful examination of numerous factors that will affect the merit pay program's effectiveness. Prior to merit pay implementation, those factors that are critical
to successful merit pay implementation are to be identified and evaluated within the context of personal and organizational expectations. By clearly identifying these factors and clarifying those points of agreement and disagreement among parents, teachers, principals, superintendents, and school board members, decisions can be made about the feasibility of merit pay implementation in the schools.

Each member of the school community contributes to the achievement of the school's goals in different ways. These may be examined as mutually exclusive events, but directed towards the same end, the educational development of students. Within the context of the school's function, merit-pay program design should account for those differences relative to the role played by each member of the school community. In order to maximize the potential effectiveness of a merit-pay plan, identification of those differences that may exist among parents, teachers, principals, superintendents, and school board members is required.

The preceding issues and related items are discussed under the following dimension categories in this chapter. They are: 1) Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools; 2) Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards; 3) Psychological Determinants Influencing Improved Teacher Performance;
4) Alternative Financial Strategies Relating to the Improvement of Functionally Incompetent Teachers; and 5) School Administrative Responsibilities Related to Merit Pay Implementation.

**Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools**

**Political Entities.** School districts as open systems are influenced by: a) political entities either seeking ways to retain their political position or b) by political entities whose political contribution is directed at assisting the school districts achieve their educational outcomes. Van Zwoll (1964) suggested the following as motives for endorsing merit pay in the schools. First, the motive to endorse the merit-pay concept may be to draw favorable attention to the political entity or second, to divert attention from the installation of favored programs not generally acceptable to the public. In either case, Van Zwoll contended, the intent is not to primarily improve instruction. Furthermore, Kempner (1983) referring to the political process observed, "it is unwise to assume that people [or groups] rise to greater heights of selflessness or self sacrifice" (p. 55).

**Teacher Organizations.** In response to the President, other political figures, and political groups, the National Education Association (NEA) criticized the motives underlying the endorsement of merit-pay programs in the schools by suggesting that their motives are politically
self-serving (NEA Memo, 1983). Rather than endorsing merit-pay programming, the NEA favors general salary increases designed to attract and retain qualified teachers. Kennedy (1971), Belcher (1974), Sibson (1981) and others have pointed out that those objections and counter-proposals raised by unions to merit-pay programs are related to:

a) maintaining equity among employees or b) maintaining control over various management perogatives. By placing an emphasis on general salary increases, the NEA is able to satisfy the above and maintain the support of its membership. With regards to this point, Uzell (1983) contended, the NEA, "knows he is not there to represent the minority of superior teachers but the vast majority of nonsuperior teachers" (p. 24).

In essence, the NEA strongly opposes merit pay implementation in the schools primarily because merit-pay awards, by design, will not be distributed to all teachers. Instead of block distributions of salary increases that are the same for each level based on senority, the NEA argues that merit pay represents increases that are pyramidal in form (NEA Memo, 1983). That is, as the apex of the pyramid is approached, fewer teachers will receive increases. However, the fundamental purpose of merit-pay programs is to stimulate improved performance of all employees, not specifically to reward existing performance excellence. In contrast to the pyramidal distribution of financial rewards as described by the NEA, an inverted pyramidal distribution
of financial rewards is conceivable, provided management has the desire to support the teacher's increased financial success, as well as achieve improved educational productivity. The American Federation of Teachers (AFT), similarly, does not openly endorse merit-pay programming. But, in contrast to the NEA, recognizes that merit pay will be an issue to be dealt with during negotiations with some school districts. As a consequence of this awareness, the AFT has defined the conditions under which merit-pay programming is acceptable. These are:

1. substantially higher pay for all teachers.
2. negotiated evaluation procedures that offer protection against subjectivity and local school politics.
3. no sanctions against teachers who do not receive extra pay.
4. an appeal and review procedure for teachers who are not selected for merit pay.
5. eligibility for extra pay available to all teachers.
6. any extra pay or status should not be subject to diminution.
7. evaluation plans should not be simplistic or based merely on student achievement tests but reflect the complexity of all the factors contributing to teacher and student success.
8. plans should only be adopted if they are acceptable through the collective bargaining process. (American Teacher, 1983, p. 23)

Parents. Two principal issues have led education reformers to perceive merit pay implementation as a remedy for the schools' poor performance. These are: a) dissatisfaction with educational institutions (Newton, 1982), and b) the inability of the schools to compete with the private sector (Education USA, 1984). Given that
dissatisfaction with educational institutions stems from poor performance by capable teaching personnel, merit pay is a viable consideration. Should the attraction and retention of quality teaching personnel be the issue, merit pay is, at best, only a partial solution. Careful analysis and determination of teacher quality is imperative in order to make correct decisions relating to the methods of compensation required to improve teacher performance. An attempt to present confused or misrepresented purposes for or against merit pay implementation, without realistic assessment of teacher quality, will further erode the support for education by parents, who, according to Newton (1982) are already skeptical of current performance evaluation practices.

Two important points have been identified regarding parents' opinions relating to merit pay and accompanying increased finances for education. First, according to the 1983 Gallup Poll and Newsweek poll, 61 and 80 percent of the parents respectively indicate support for merit pay implementation in the schools. Second, 70 percent of the parents surveyed by the Gallup Poll indicated they would be willing to pay higher taxes if it would raise the standard of education. There appears to be reasonable evidence to suggest that public support for merit pay implementation exists, provided the increases granted to teachers are related to increased performance. This last point is especially critical to the effective implementation of
merit-pay programs. The costs of merit pay implementation are high and justifiable only if accompanying gains in performance warrant the costs. Sibson (1981) pointed out that the relative costs, when corresponding performance increases occur, are low. Sibson, Lawler (1974), and others have also pointed out that the relative costs of merit pay implementation are excessive and wasteful when the objectives of merit pay implementation do not correspond to improved performance.

On the negative side, however, Friedman (1983) contended merit pay in the schools will not work because; parents do not directly pay for the services as is the case in the private sector. Thus, parents are unable to control the school districts in order to make their wants heard. Belcher (1974) has suggested in contrast, public policy sets the floors and sometimes the ceilings on financial rewards even though the public does not play a role in the internal distribution of rewards.

**Teachers.** Teachers over the past years have developed a distrust for merit-pay programming. However, according to the National School Board Association survey, approximately two-thirds of those teachers surveyed favored payment plans based upon classroom performance (NSBA, 1983). Stress on classroom performance results from the criticism frequently made by teachers, as well as employees in the private sector, that merit-pay increments are frequently distributed on the basis of factors other than performance--
essentially favoritism.

Assessment of the NSBA findings requires further analysis in light of interest expressed in the application of the merit-pay concept in education. A number of variables have been identified that impact on beliefs workers in the private sector hold with regards to merit pay. These are:

1. incentive plans result in speed up,
2. rates will be cut if increased earnings are made under the plan,
3. incentive plans encourage competition among workers and the discharge of slow workers,
4. incentive plans result in unemployment through working yourself out of a job,
5. workers do not get their share of increased productivity,
6. incentive plans are too complex,
7. standards are set unfairly,
8. earnings fluctuations make it difficult to budget household expenditures,
9. incentive plans increase the strain on the worker and may impair his health,
10. incentive plans are used to avoid a deserved wage increase,
11. incentive plans increase the frequency of method changes,
12. incentive plans ask workers to do more than a "fair days work," and
13. incentive plans imply a lack of trust in workers by management. (Belcher, 1974, p. 309)

In addition to the above deterrents to successful merit pay implementation, teachers and teacher associations frequently cite the following as a basis for not accepting merit-pay programming. First, inequity in the distribution of merit-pay increases. Second, evaluation procedures are either nonexistent and/or difficult to develop. Third, security in the form of wage increments for all teachers...
rather than a select few. Collectively, whether the teacher perceives merit-pay programming as a vehicle for gaining personal benefits is a function of the above variables influence with reference to: a) organizational motive; b) organizational ability to administer the program appropriately; and c) how teachers needs are satisfied within the organization.

In general, merit-pay programs are to be designed to recognize and reward those exceptional performers who contribute to the organization's outcomes in a significant way. Van Zwoll (1964) and Newman and Logan (1976) have indicated negative aspects found in some merit-pay programs directed at: a) maintaining a ceiling on salary increases and b) exploitation of the worker. Essentially, effective merit-pay programs should be designed to eliminate the perceived manipulation of the employees and according to Townsend (1984), maximize the program's motivational potential by eliminating suspicion, loss of understanding, and loss of trust.

**Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards**

Explicit to the merit pay concept is that the measures used for determining merit-pay eligibility are performance. Sibson stated, "Therefore, the first essential step in any merit-pay program is supervisory evaluation of employee performance" (1981, p. 104). This position is in contrast to evaluations for employment, retention, and
dismissal, which may include a number of factors, of which, performance is only one factor.

The key to rewarding performance is to make correct judgements about it. This implies that the exact method by which performance is rated does not matter as long as it gets valid results (Sibson, 1984). Caution must be taken, however, not to confuse performance measurements that relate to merit-pay awards with general evaluative measurements. With regards to performance rating, the issue is not a question of subjective versus objective measurements, but failure to design performance measures specific to merit-pay programming (Sibson, 1981). Newman and Logan (1976) identified five conditions that are important to the design of effective incentive wage policies. These are:

1. The final results must truly reflect the effect of the worker.
2. All important elements that are subject to the control of the worker should either be included in the compensation plan or controlled for by other means.
3. The method of computing must be simple enough so that employees can readily understand it.
4. The effect of good performance on the amount of compensation should become apparent quickly so that the worker realizes the importance of good performance.
4. The confidence and cooperation of the employee should be secured. (Newman and Logan, 1976, p. 245)

Two organizational factors may influence the type of evaluation strategies employed by service organizations. First, since schools are service institutions and typically paid out of budget, their emphasis will be on behaviors that
assure protection of the budget (Drucker, 1974). Drucker added, this behavior centers around "good intentions and programs," rather than what produces the contribution.

Second, Anthony (1981), relating to government and education, suggested that the reason for continued "fuzzy" performance measures result from not putting enough time or effort required for the development of better performance measures. Given the opinions of Drucker (1974), Ingster (1972), and others, unions and employee associations do little to bring about changes resulting in precise performance measures. According to Ingster (1972) unions (and employee associations) are particularly opposed to the use of performance appraisals for making administrative decisions about promotions, layoffs, or wage increases. He added, unions contend that more experienced workers are more effective because of their familiarity with the job to be done. In effect, "Unions say long service means better work" (Ingster, 1972, p. 5-27). Shils (1972) also pointed out that unions favor the principle of job difficulty and responsibility as the criteria for more pay. However, through collective bargaining in the schools, Uzzell, (1983) contended that the emphasis would continue to be more pay for more work rather than more pay for better work.

Linking organizational expectations (Castetter, 1981) and the conditions set forth by Newman and Logan (1976) with the emphasis on performance provides a basis for determining those teacher performances that are measurable
within the context of merit-pay programming. The thrust behind the establishment of performance measures lies simply in the recognition that different evaluation strategies are required to satisfy different objectives—where performance objectives are different in focus than are membership objectives (Belcher, 1974).

Measurement of employee performance, relative to merit pay, are to be based on "results" (Haworth, 1972) or, in other words, "outputs" rather than "inputs" (Belcher, 1974). Thus, Belcher added, an assumption can be made that one or a few measurements of output represents the performance contributions required by the organization.

White (1983) argued that there was no one best system of instruction, and the definition of what makes an effective or outstanding teacher for the comparison of teachers is fraught with problems. White's position differs from Haworth and Belcher in emphasis. According to the distinction between inputs and outputs, methods of instruction and teacher attributes represent inputs through which outputs are assumed to follow. In the researcher's opinion, a counter argument may be proposed pointing out that although method and outcomes are associated, there is no assurance that this association holds for all cases. In addition, evaluations based on method may, in fact, be biased by the evaluator's preference of one method over another, despite the fact, that alternative methods achieve the same or improved results (outputs). A more consistent
evaluative procedure would be to determine those outputs to be achieved which are important to the organization, and then measure performance relative to these outputs. However, the NEA and the AFT appear to reject performance measures relating to the performance of students which is the measure of teacher effectiveness in terms of output--to cause a change in student behavior. Haworth (1972) has pointed out, relative to the above discussion that incentive plans are designed to play a causal role as well as reward the effect. Essentially, merit pay focuses on the payment of performance only, whereas membership pay focuses on the attributes (inputs) that the individual brings into the organization, of which, performance is only one consideration.

Within the scope of the preceding discussions, much of the conflict evolving around what is to be evaluated and who will do the evaluations, can be eliminated through the communication of expectations and the degree that these expectations can be met, relative to teacher performance. Haworth (1972) stressed that the incentive plan provides a basis for communication not found in other compensation components. Dinsmore (1972) extends this position further, emphasizing that the incentive plan is a system of communication as well as a system of compensation. In effect, a communication link established among the constituents within the school district would allow the identification of the criteria that is to make the
school district's evaluation procedures. This can be accomplished by: a) parents and school board members establishing the school district's performance expectations; b) principals and central office administrators clarifying the reality of achieving those performance objectives in relationship to the availability of personnel and resources; and c) teachers defining those work elements that are under their direct control. By clearly defining the school district's performance expectations and determination of those performance expectations that are achievable by which the teacher is solely responsible, it is the opinion of the researcher that teacher performance evaluation can be carried out by representatives from each of the school district's special interest groups, provided the measures used for teacher evaluation are performance outputs not performance inputs.

Psychological Determinants Influencing Improved Teacher Performance

Compensation programs developed and implemented by school districts have focused primarily on salary considerations and collateral benefits; whereas, organizations outside education, frequently include incentive payments as a necessary component of the total compensation package. Should school districts decide to implement merit-pay programming, three separate but interrelated components are to be analyzed prior to the district's announcement of their total compensation policy.
Salary, collateral benefits, and incentive payments have distinct focal points that should be clearly recognized in order to prevent confusion and misunderstandings, and to serve as a basis for decisions regarding evaluation strategies. Salaries represent periodic payments made to employees, represent fixed costs to the organization, and are the basis for administering other forms of compensation (Sibson, 1981). Collateral benefits as defined by Castetter are:

direct or indirect forms of compensation initiated by the board of education generally on the behalf of all personnel, which do not require additional services to be performed. (1981, p. 36)

Merit pay, a form of incentive payment, represents those payments made in recognition for performances that exceed the organization's basic performance requirements.

Fundamentally, total compensation programs serve a number of purposes. First, compensation is a management method that contributes to the effective management of the organization (Sibson, 1981). Second, competitive compensation programs enhance the organization's ability to attract, retain, and motivate employees. Third, reasonable wage levels increase the effectiveness of incentive-pay programs installed as part of the organization's total compensation program (Haworth, 1972). Fourth, as a reward, compensation can be used to make employees feel satisfied with their job and gain their commitment to the organization (Lawler, 1971). Fifth, sound compensation
programs account for the employee's perceptions as to how their standard of living is affected (Dunn and Rachel, 1976), their status in society (Castetter, 1981), the employee's self esteem and their perceived worth to the organization (Sibson, 1981).

Currently, emphasis in the schools is placed primarily on basic salary considerations, which include extra-duty benefits, and collateral benefits. Generally speaking, salaries possess incentive value, but primarily focus on the attraction of new employees and the retention of those currently employed by the school district by providing satisfying salary structures. However, Lawler (1971) stressed that pay satisfaction does not influence performance very strongly and should not be a major consideration when pay satisfaction is discussed. Collateral benefits, according to Brunker (1982), have generally represented rewards for membership in the organization rather than for performance. Furthermore, Lawler (1971) pointed out that employees do not always value the fringe benefits they receive. Assuming that current salary structures are reasonably set, including collateral benefits, incentive payments as a method for improving teacher performance in the school district need to be examined.

Two principal reasons underlying the rationale for including incentive payments as part of the total compensation package are: a) to motivate increased teacher
performance, usually above the standard of acceptable performance set forth during salary determination, and b) to reward those teachers who perform above the acceptable standard. Using the distinction between performance and learning made by Tolman (1949) and Bandura (1974), incentive plans may be examined either as performance-based plans or learning-based plans. Performance-based plans include merit-pay programs and other financial or nonfinancial plans that directly reward improved performance. Learning-based plans include master teacher/career ladder and mentor teacher plans in which emphasis is on the acquisition of new knowledge and skills. Payment is made principally on these new acquisitions and increased performance is presumed to be a result of these knowledge and skill acquisitions. (See Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers.)

Merit-pay systems, as performance-based plans, are seen from a management perspective as, "management practices designed to relate differences in pay for the same job to differences in work performance" (Sibson, 1981). In effect, merit-pay programming means giving a superior performer a wage increase and denying a poor performer a similar increase (Anthony, 1981). Alternatively, from an employee's perspective, merit-pay programming gives the employee an opportunity to earn more in relation to their increased performance, where, according to Dunn and Rachel (1974), "differences in ability, motivation, and output are
automatically recognized and rewarded accordingly" (p. 241).

Haworth (1972) described effective incentive-payment plans as those systems that clearly define the results to be achieved; carry out periodic reporting; build a desire for remedial improvement; and establish communications to a degree not possible in most other compensation package components. A number of prerequisites have been identified that are necessary for effective incentive-pay plans. The following prerequisites are comprehensive and include elements identified by other writers. They are:

1. Adequate competitive floors (salary and wage) and security areas (benefits) on top of which incentives can produce variable incomes.
2. Significant individual or group impact on important results.
3. Measurable results.
4. Reasonable time spans.
5. Management commitment to the program.
6. A salubrious climate in which striving towards group or individual excellence is applauded. (Haworth, 1972, p. 7-5)

Organizations that have not implemented some form of incentive pay program must rely solely on salaries and collateral benefits as the primary incentives to induce increased performance. The weakness to be found in the use of salaries and collateral benefits as incentives directed at improving performance, lies in the fact, that the performance expectations are predetermined, and the ability to increase performance is severely limited. Three major reasons contribute to these restrictions on salary and collateral benefits as effective incentives. First, the
performance expectancies are set by mutual agreement between management and employee. That is, the salary represents what management is willing to pay, or able to pay, for the performance expected and the employee's rate of production in turn for a specified salary. Second, salaries and collateral benefits have become rights that accrue as a condition of employment. Third, salaries do not specifically relate to performance but include other factors. Therefore, adjusting salary and collateral benefits, once established, will not improve performance, unless, taken away or significantly reduced.

If increased performance is the objective of management, implementation of an incentive program is called for. However, the effectiveness of incentive programs rely on the recognition and application of a number of psychological principles. These are discussed under the following: 1) Mechanics of Applied Psychology and 2) Identification of Effective Incentives.

Mechanics of Applied Psychology. Successful implementation of a viable merit-pay program requires that those school administrators in charge of the distribution of awards and maintenance of merit-pay programs possess a functional understanding of reinforcement theory and practices. With respect to the issues of administering rewards, Castetter (1981) expressed the following:

Until there is greater administrative and technical rationality in the operation of reward systems, the
greater the likelihood that the single-salary schedule... will continue to shape compensation for a majority of professional people. (p. 36)

Functionally, merit-pay programs follow the reinforcement paradigm set forth by Skinner (1954). Within the operant conditioning scheme, each time a significant increase in performance is noted a reinforcement is given. The significant feature of operant conditioning as the procedure relates to merit pay is, financial incentives follow observed performance. Critical to this procedure are: a) the reinforcement must be associated with the performance specified by the merit-pay program (Lawler 1971); b) the reinforcement must follow the desired performance within a reasonable time span (Newman and Logan, 1976); and c) the employee must be aware of and understand the organization's performance expectations (Haworth, 1972; Dinsmore, 1972; and Dunn and Rachel, 1974).

Within the scope of the operant conditioning principles, schedules of reinforcement are to be given full consideration. First, continuous reinforcement is an effective method for achieving temporary rapid gains in performance. Negatively, the performance curve reaches a plateau and eventually declines following successive continuous reinforcements. Ratio and interval scheduling provides a viable alternative for maintaining high levels of performance, where the interval scheduling stabilizes performance more effectively in between reinforcements (Ferster and Skinner, 1957). Difficulties arise as a result
of management's manipulation of ratio and interval schedules. Should the employee perceive ratios of reinforcement that are not appropriate to the performance differences among employees, dissension may result. If, in the event of interval scheduling, the intervals become spaced too far apart, extinction occurs, thereby adversely affecting performance by reducing the performance level or causing the performance to cease entirely.

Identification of Effective Incentives. Correct decisions made about the type of incentives to be employed to motivate increased performance is critical to any incentive plan. The ability of the plan to maximize performance is contingent on the selection of those incentives appropriate to the personnel in the organization. An absence of careful analysis and correct selection of incentives, at this point, may fail to cause improvement in performance or result in the deterioration of existing performance levels.

Two basic incentive types may be utilized to motivate increased performance. Van Zwoll (1964) classified these incentives as "financial" and "nonfinancial" incentives. Under the heading of financial incentives are those direct monetary rewards linked to excellence in performance. The acquisition of material goods according to Drucker (1974) is the primary basis that cause monetary rewards to be extremely powerful and pervasive. He added, due to the increasing costs of material goods, monetary
rewards continue to be the primary mechanism influencing employee performance. Lawler (1971) stressed, although pay can be a powerful motivator of performance, pay's role is that of a secondary reinforcer. Under these circumstances he added, if the needs with which pay is associated are satisfied by other means, pay has little or no effect on performance.

Sibson (1981) and Van Zwoll (1974) also recognize the importance of financial incentives as a primary motivational force. However, these writers, as well as Dunn and Rachel (1971), recognize that financial incentives are not always the key incentives of choice. Sibson (1981) pointed out that for all workers, at least, at one time in their working careers, financial gain is the principal motivator. Dunn and Rachel (1971) also pointed out that there will be variances in the employee's need for additional financial resources, at which time monetary gains will be most effective and have the highest incentive value. Implied is as one set of the individual's needs are satisfied, incentives will need to be changed if further performance increases are to be realized.

The selection of the appropriate incentive is a complex issue within the organization. First, a group of employees will be readily motivated by the choice to gain additional financial benefits, primarily because the financial benefits satisfy their basic needs (Van Zwoll, 1964). Second, a group of employees will look for
nonfinancial incentives for the satisfaction of higher-order needs (Lawler, 1971). Third, the remaining members of the organization may look at financial gain as a measure of their success, and in a sense use these monetary gains as a "score card" measuring their achievements within the organization (Dunn and Rachel, 1971).

Financial and nonfinancial incentives play a critical role depending on the following three factors. First, should the employee wish to satisfy higher-order needs as defined by Maslow's hierarchy of needs, nonfinancial incentives may be the incentive of choice in some cases. Second, those employees having a high need for achievement may actually be affronted by financial inducements, unless, they are being used by the individual to measure achievement. In contrast, however, those employees with low achievement needs are positively influenced by financial incentives (Dunn and Rachel, 1971). Third, the need for affiliation is a powerful factor with respect to employee performance. This simply implies that those with which the employee works must satisfy the need for interpersonal relationships.

Nine basic factors have been identified by Sibson that provide a basis for evaluating those preconditions necessary for the implementation of effective merit-pay programs. They are:

1. Fair pay.
2. Reasonable benefits.
3. Job security.
4. Fair treatment on the job.
5. Opportunity to get ahead.
6. Proper handling of questions and grievances.
7. Opportunity to do a job well.
8. Safe working conditions.

Each of the above factors should exist in order to assure that the financial incentives will induce the employees to improve their performance. The absence of one or more of these factors, except fair pay and reasonable benefits such as medical plans, should alert management that a careful examination of nonfinancial incentives is required prior to merit pay implementation. Collectively, these factors promote satisfaction with the organization. However, factor 1 is critical because according to Haworth (1972), in order to motivate the employee to take the risk relative to incentive increments, fluctuations relative to outputs must not jeopardize the individual's livelihood.

In retrospect, financial incentives may play an important role in the motivation of teachers to improve their performance. The importance of money, however, is governed by employee needs and the ability of money to satisfy these needs. Without careful analysis of these variables prior to merit pay implementation, the merit-pay program's effectiveness is questionable.

Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers

Incompetent employees represent a concern that organizations must contend with. Unfortunately, the
practices employed, other than dismissal or retraining, are costly in terms of the financial resources expended and the effects incompetent employees have on competent employees' performance. Anthony (1981) pointed out that the incompetent employees are great consumers of time for the following reasons: a) they make mistakes that others must correct; b) they work slowly and miss deadlines, which holds up other people; c) they can not solve problems themselves; and d) they manage the manager's time if allowed to. In effect, Anthony described the incompetent employee as one who simply can not get the job done right on time. They lack the skills, interests, aptitudes, ability, or motivation in some combination to properly perform the job.

Given the NEA's position that the quality of teaching personnel in the schools is declining (NEA Memo, 1983) and the emphasis advocates of reform on merit pay as a way to keep good teachers from leaving and to attract more able teachers (Education USA, 1984), one might be inclined to conclude that incompetence is a serious issue to be dealt with by the educational community.

Merit pay is conceptualized as a method to be used for increasing performance excellence while, at the same time, not rewarding poor performance (Anthony, 1981). However, merit-pay programming assumes that the capacity to perform exists but that the performance is not demonstrated. With respect to this point, Lawler (1971) pointed out that employees perform at 50-60 percent of their full capacity.
Thus the rationale for performance related incentive payments.

According to Education USA (1984) the National Commission on Excellence in Education emphasized, "... superior teachers can be rewarded, average ones encouraged, and poor ones either improved or terminated" (p. 38).

Brown (1982) supplemented this position by suggesting that the "deadwood who do not contribute significantly would be weeded out" (p. 32). Unfortunately, as Anthony (1981) has pointed out, incompetence is not an absolute, but varies in degree relative to the following factors. These are:

1. Insufficient training to perform the job.
2. Poor job placement. The person is in the wrong job.
3. A lack of direction from above.
4. A lack of aptitude and/or ability to do the job regardless of the amount or type of training provided.
5. A lack of interest in the job.
6. A lack of feedback on performance. The person does not know whether the job is being performed properly or not and repeats the same mistakes.
7. Inadequate physical resources--tools, space, equipment, energy, and so on.
8. Incompetent subordinates.
9. A lack of adequate support staff for planning.
10. An incompetent superior.
11. A poorly defined job and associated job standards.
12. A lack of clear agreement between superior and subordinate job expectations. (p. 15)

In addition to these factors, consideration should be given to: a) are the teacher's efficacy expectations consonant to good performance (Bandura, 1977); b) are organizational expectations consistent with production
related performance expectations (Drucker, 1974); c) does management strive to achieve organizational productiveness; and d) are employees conditioned by work (Kempener, 1982). Essentially, the identification of incompetency requires that the determination of incompetency be made in view of organizational activities and processes as well as the teacher's weaknesses leading to incompetence.

Each of the above require strategies other than merit-pay programming. These strategies fall within the scope of learning-based incentive plans. In order for noticeable changes in employee performance to occur, the teacher must acquire the appropriate knowledge and/or skills required to initiate performance improvements, or the organization must clarify its performance expectations relative to the outcomes desired. Without substantive behavior changes in these areas, merit pay will do little to motivate increased performance.

Currently, two alternatives to merit-pay programming have either been proposed or implemented in the schools. Although the focus of these plans is not on the improvement of incompetent teacher performance, the mechanics of these plans provide a basis by which prescriptive strategies can be developed for the correction of teacher incompetency. They are: 1) Master Teacher/Career Ladder Plans, and 2) Mentor Teacher Plans.

**Master Teacher/Career Ladder Plans.** Master teacher/career ladder plans are extensions and modifications
of existing salary structures. To a large extent these plans follow Merit System plans which are based on classification where salary advancements are principally associated with experience, education, and skill growth. The assumption underlying these plans are that both experience and the acquisition of knowledge and/or skill growth qualifies the teacher for advancement to a succeeding higher level in the classification system. In summarizing these plans, Uzell (1983) noted two additional criteria for advancement—attendance and superior performance evaluation. The two plans currently cited as examples of these strategies are the Florida Plan (Uzell, 1983) and the Master Teacher Plan advocated by Alexander (1983).

Alexander stressed that the plan he endorses would make it easier to remove the really incompetent teachers because a record of their performance will be maintained. However, Anthony (1981) pointed out that, frequently, incompetence is not the fault of the employee, and when incompetence is attributable to the individual, incompetent performance may be correctable. In effect, he added, the managers have the primary responsibility to manage incompetence even when the subordinate is somewhat responsible (p. 17). Drucker (1974) has further suggested that the organization has a moral obligation to deal effectively with incompetence. Principally, Drucker contended that the stability and productiveness of the organization depended on the proper management of
incompetence.

Two key factors found in the master teacher plans play an important role with respect to the improvement of incompetent teachers' performance. First, the performance evaluation should assess the teacher in these areas: a) inputs (Masse, 1983; Belcher, 1974)—what the teacher brings into the learning situation; b) processes and operational settings (Masse, 1983)—what methods and conditions prevail to promote learning; and c) outputs (Masse, 1983; Belcher, 1974)—how the students' behavior has been changed as a result of the teacher's efforts. Second, if the outputs do not meet the organization's expectations, what knowledge and skills are required to satisfy these expectations.

In order for the plan to have an effect on improved teacher performance, the expectations evaluations should be made in conjunction with the twelve causes of incompetence, which includes management incompetence and the consideration of incompetent colleagues. In essence, incompetence, is to be determined relative to the individual, his colleagues, and the supervision received.

Mentor Teacher Plans. Mentor teacher plans focus on the selection of teachers whose primary responsibility is to supervise new teachers or teachers who have less experience or effective teaching skills. Functionally, the mentor teacher serves as a model by which the organization's expectations are transmitted. Mentor teacher plans, as
modeling procedures, can be examined in context with research conducted by Bandura.

Prior to the implementation of a modeling strategy a number of conditions must be met before notable changes in behavior can occur. Bower and Hilgard (1981) reviewed four processes identified by Bandura that have an effect on the behavior of the individual through the model. These are:
a) the model stimulus must be attended by the individual;
b) the subject must be able to code the stimulus event symbolically; c) the subject must be able to reproduce the events; and d) reinforcement related to that obtained by the model must be apparent to the individual. This implies that the subject will be rewarded similarly to the model, or the expectation that similar reinforcements will be forthcoming.

In effect, the preceding processes establish the environment in which modeling is to take place and identifies those capacities that the individual must possess before behavior changes through modeling are to occur. Relevant to these processes are factors that have been identified by Bower and Hilgard (1981) as they relate to Bandura's research. They are:

1. High status models are more imitated.
2. Imitation induced in the subject decreases as the model is made more dissimilar to a real person.
3. The more complex the skills, the poorer the degree of imitation after one observation trial.
4. Rewarded behavior of the models is more likely
to be imitated.
5. Instruction given to the [individual] before he observes the model provides high or low motivation to learn the model's behavior. (Bower and Hilgard, 1981, p. 463)

Tolman (1949) focused primarily on the organism's expectancy that a given action will lead to a given consequence. That is, to the extent that an outcome contingent on an action is desired and expected, that action will be selected and activated. Bandura (1977) has further suggested that the organism has the conviction that it can execute the behavior required to produce outcomes. Essentially, the preconditions described above as they relate to the environmental setting and characteristics of the individual, four additional factors come into play with respect to the individual's responses to the model. They are:

1. Past accomplishments of one's own behavior.
2. Observing others successes and failures with the behavior.
3. Verbal persuasion by self and others.
4. Changes in one's emotional arousal in the target situation. (Bower and Hilgard, 1974, p. 470)

A number of variables come into play with respect to the effective use of modeling strategies. Critical to the model's success in changing behavior are the environmental setting, the capacities of the individual to learn and reproduce the model's behavior, the individual's efficacy expectations, and the reinforcement expected.

Master teacher/career ladder and mentor teacher
plans provide the school administrators with an opportunity to deal effectively with incompetence within the school system. First, performance weaknesses are identified and assignment to the most effective plan can be selected. Second, legal and moral obligations to employees can be excercised. Third, the responsibility to improve performance becomes the teacher's responsibility, being more desirable than dismissal. More important, however, would be the improved relations resulting from taking steps that would improve a teacher's likelihood of receiving future merit-pay increments.

School Administrative Responsibilities Related to Merit Pay Implementation

Prior to the implementation of merit-pay programming, administrative personnel charged with the maintainence of the program should have clearly in mind: a) how the participants--parents, teachers, principals, superintendents, and school board members--perceive the benefits they are to receive from the program's implementation; b) the potency of financial incentives to motivate performance increases; c) which incentive strategy will promote the greatest organizational productiveness; d) clear definitions of evaluation procedures appropriate to the incentive plan selected; and e) the fundamental purposes of salaries, collateral benefits, and incentive payments. To a large extent, the confidence, cooperation, and reduction of dissension resulting from merit-pay programming can be
achieved once these factors have been given careful consideration.

Once a determination has been made establishing that the preconditions satisfy the requirements necessary for successful installation of merit-pay programming, management will need to evaluate a number of administrative practices that play an important role in the successful implementation of merit-pay programming. The critical focus in this assessment relates to the level of trust and cooperativeness that can be instilled in the employee.

Lawler (1971), Belcher (1974), and Brunker (1982) emphasized the importance of fitting the organization's pay system with the organization's human relations climate and management style. In relation to the organizational climate, Belcher (1974) and Brunker (1982) as well as Lawler have pointed out that in order to maintain an effective incentive pay plan, some form of participative management practice is desirable to effectively tie pay to performance. This position has been stressed by Lawler despite the fact that the authoritarian management style has given emphasis to the use of pay to motivate performance. Sibson (1981) further suggested that the merit-pay plan not be used as a substitute for sound management practices. This implies that merit-pay programs be highly visible to employees and to achieve this visibility, management is required to utilize management practices that involve employees in the merit-pay program's development.
Participative management plays an important role with regards to establishing the tie between pay and performance in several ways. First, participative management provides an openness that allows employees to express their needs and what is to be expected from the program. Second, issues relating to pay secrecy are minimized since the worker plays an important role in the determination of merit-pay rates and standards determination. Third, participative evaluations reduce the tendency to award merit-pay increments for reasons other than performance. Fourth, the employees achieve a sense of purpose in the organization since the employees perceive themselves as causal agents in the determination and achievement of the organization's objectives.

Within the scope of participative management a number of factors are to be considered. Lawler (1971) suggested that pay be made public and that participative appraisals be carried out. With respect to pay secrecy, Drucker (1974) commented that workers will make pay comparisons regardless of management's attempt to keep pay strategies secret. He added, if the discrepancies are judged as inequitable, employees will express their dissatisfaction. Although pay secrecy, as the policy applies to education, is not currently a serious problem since pay scales and benefits costs are known by employees, should the school district decide to implement merit-pay programming, the temptation not to make awards public
becomes a possibility. There are two principal reasons underlying the failure of an organization not to make merit-pay increments public. First, adequate funds may not be available to support merit-pay programs that would distribute merit-pay increments to all deserving teachers and thereby necessitate the establishment of some form of quota system. Caution must be taken under these circumstances lest the employees attack the merit-pay program as being political and laden with favoritism. Should the merit-pay program be criticized on these grounds, justifiable or not, the link between pay and performance will be broken, rendering the merit-pay program ineffective. Second, management may wish to use merit-pay increments as a mechanism by which coercive pressure is applied to keep their employees in line or to maintain their position of authority in the organization. With regards to this point English and Marchione (1983) have contended that many managers still believe that the road to productivity is to stand over the worker with a club. In effect, merit pay serves as that club when used coercively.

Brunker (1982) has suggested that there are two ways of matching organizations and pay systems. Management can: a) fit the plan to the organization; or b) change the organization to fit the plan. In either case, the plan selected provides an opportunity to initiate participative management. Thus, Brunker added, this encourages widespread participation in job evaluation and provides opportunities
for participative performance appraisal (Lawler, 1971). Within the participative management structure, the following conditions outlined by Belcher with regards to incentive plans can be met. These are:

1. employees must [will] believe that good performance will lead to more pay.
2. employees must [will] believe that good performance will not lead to negative consequences.
3. employees must [will] believe that their efforts lead to improved performance. (p. 347)

Belcher (1974) has also emphasized that as employees receive more information on decisions, they are more likely to trust management and believe that performance--reward relationships exist even if evidence is not unequivocal. In contrast, Belcher concluded:

Unless employees in such organizations [authoritarian] can actually see pay-performance relationships, they are unlikely to believe they exist. (p. 452)

In conjunction with Belcher's position, Lawler (1971) added, the difficulty encountered by traditional management schemes is that these organizations, in the absence of employee trust, must install more "objectively" based plans and establish hard criteria for measuring performance in order to assure that pay will act as an incentive.

McGarrah (1983) argued that work life has declined because fewer Americans are participating in the planning and control of changes in the work process. He further contended: a) workers are rarely consulted; b) unions have
resisted efforts to enlist worker participation in planning job improvements; and c) managers perceive worker participation as a threat to management prerogatives. In place of participative management, a common reaction is to attack productivity with increased pressures and threats on their employees, by passing the real causes for productivity declines (English and Marchione, 1983). These writers added, productivity is not often thought of as a managerial output. Rather, the blame is shifted to anything or anyone but management itself. They concluded management's only acknowledgement of their responsibility to productivity management is when the organization's goals and objectives are met. Despite the excuses given by management for the organization's failure to be productive, Shetty (1982) emphasized that it is the manager—not government nor their resources (including employees) that make an organization productive. Ultimately, he added, productivity is the responsibility of the manager, and according to English and Marchione (1983) is to be achieved by management manipulation of those variables that will unlock the latent abilities of the employee based on mutual respect and interdependence of interests. Kent and Otte (1982) have made an important point regarding the necessity of involving employees in the decision-making process involving the organization. First, they contend that much to the chagrin of management, many people are finding more self actualization off the job than on the job. Second, in order to
gain employee loyalty to the organization and dedication to high production, organizations must meet various and frequently changing needs. Consequently, Kent and Otte (1982) concluded, by rewarding employees with the things they value, management will gain productivity and commitment to the organization.

Kippleman and Reinharth (1982) pointed out that organizations frequently claim to employ merit-reward systems. But as these writers and Sibson (1981) and Anthony (1981) have added, merit-pay increases are often-times granted for something other than improved performance. Freedman, Montaire, and Keller (1982) stressed that if the compensation system rewards only for loyalty and passive acceptance of existing procedures, the likelihood of increased performance is not promoted. Weiner (1982) added, as a consequence of rewarding for attributes other than performance, some organizations may have concluded that their supervisors are unable or unwilling to implement a true merit system.

Managerial commitment to their merit-pay system is critical to the program's success. Without a clear understanding of the processes related to the distribution of merit-pay increments and the determination of "merit," the merit-pay program's effectiveness becomes questionable. Consequently, the success of an incentive system (merit pay) depends on the following:

1. Management must be committed to spend the time
and effort necessary to maintain an incentive plan efficiently.

2. All incentive programs require predetermined standards whose degree of accuracy determines the plan's success in gearing pay directly to production.

3. Under an incentive plan workers can be motivated either to increase output or reduce standards. The system of setting standards is, therefore critical. (Sibson, 1981, p. 165)

Incentive plans require constant maintenance because of variations that occur as a result of doing business, and as a result of human variation. With regards to this point, Belcher (1974) added, more incentive plans fail due to inadequate maintenance than for any other cause.

Complex merit-pay plans are counter-productive and frequently defeat their intended purpose—to improve performance. Belcher (1974), Newman and Logan (1974), and Lawler (1971) stressed the importance of keeping merit-pay programs simple and understandable. With respect to this point, Lawler (1974) emphasized, "the actual policies and procedures are often so complex that they mystify and obfuscate" (p. 84). Belcher (1974) stressed that simplicity and avoidance of complicated formulas is necessary to maintain employee trust through employee understanding of how the plan works and affects their pay.

Establishing a participative management program serves to: a) encourage inputs from employees with regards to the standards to be established; b) the rates to be utilized; and c) determining eligibility for merit increments. Belcher has commented on these issues as
follows. First, he contended that employees be encouraged to use grievance procedures when there is a question about any part of the operation of the incentive plan. Second, standards must be accepted by employees and guaranteed against any change except on agreed-on changes. Third, a base rate should be established for each job on incentive and this rate should be guaranteed regardless of the production of the workers. In addition, the plan is not a scheme to be used to avoid justifiable increases in base rate.

Although not specifically discussed by those writers reviewed as a problem with merit-pay programs, the question of quotas is brought up by teachers within education. Success of the merit-pay program depends on the eligibility of the organization's members to receive merit-pay increments. Given the premise that merit-pay plans are installed to reward performance and not reward incompetence, the cut-off point is to be determined relative to the employee's performance or lack of performance. In addition, another consideration that affects the decision to establish quotas is the degree of participation the employee has with regards to the design of the plan. If trust in the management procedures is a key factor in the acceptance of merit-pay programming, then management must assure that the plan does not make incentive payments without corresponding increases in performance (Belcher, 1974). On the other hand, management, in order to assure cooperation from the
employees, must provide merit-pay benefits restricted only by the failure to perform to standard. Belcher (1974) pointed out that with reasonable effort workers should be able to attain some incentive earnings. Consequently, the establishment of quotas, without regards to the performance standards established in a participative management setting, would undermine the intent of merit-pay programming.

Summary

Five dimensions were identified and the issues relevant to each dimension were discussed in this chapter. Those factors leading to the initial acceptance or rejection of the merit-pay concept were presented as well as the psychological determinants influencing improved teacher performance, evaluation considerations, alternative strategies to be used for the improvement of incompetent teacher performance, and the administrative responsibilities related to successful merit pay implementation.

Chapter 3 describes the procedures used to identify the differences among parents, teachers, principals, superintendents, and school board members regarding issues relevant to successful merit pay implementation.
Chapter 3

Method of the Study

Merit pay effectiveness is likely to be governed by the degree of congruence between the perceptions held by parents, teachers, principals, superintendents, and school board members with regards to what would occur in the school districts relative to issues important to merit pay implementation. In order to identify and evaluate the perceptual differences that may exist among the school district constituents, the procedures of the study are discussed under the following headings. They are 1) Sample; 2) Research Methodology; 3) Instrument; and 4) Data Analysis.

Sample

The participants for the study were parents, teachers, principals, superintendents, and school board members drawn from California school districts residing in 16 of 18 regions designated by the Association of California School Administrators (ASCA Members Handbook, 1983-1984). The criteria for selecting school districts was that each region had elementary, high school, and unified school districts within regional boundaries, and the administrators of the school districts selected were Superintendents. Two regions were omitted from the study because they did not meet the elementary, high school, and unified school
district requirements. Region 6 did not have high school districts and region 16 made up the Los Angeles Unified School District. See Appendix III.

Research Methodology

Ninety-six California school districts were initially drawn from 16 of 18 regional lists provided by the Association of California School Administrators. Stratified sampling procedures (Ferguson, 1981) and tables of random numbers (Edwards, 1960) were used to select the school districts according to school district type—elementary, high school, and unified school districts.

Within each school district a parent, teacher, principal, superintendent, and school board member was selected to participate in the study. Random numbers were computer generated for each group—parents, teachers, and school board member respondents—and assigned to the participants for the purpose of establishing a selection criteria to be used by the Superintendents. For ease of distribution, an option was given allowing the teacher to be selected from the Principal's school site. The parent, regardless of the option exercised, was selected from the student list of the participating teacher. The principals were selected from school district directories listed in the 1984 California Public School Directory prior to the distribution of the survey instrument. Each principal, in school districts having more than one principal, was either randomly selected by random number from those districts
having more than five principals; or by numerical sequence for those school districts having five or fewer principals. The selection of the superintendents for each school district corresponded with the selection of school districts as described above.

A query letter was mailed to the superintendents of each school district selected for the study. The letter contained a brief introduction to the study, the sample required, and a request for their participation in the study. See Appendix I. A self-addressed, postage-paid response card was included with the query letter. Provisions were made for the superintendents to indicate on the response card their willingness to participate in the study and make comments. See Appendix I.

Upon receipt of the response card one of the following occurred: 1) When a response was received indicating that the superintendent did not wish to participate in the study, a substitute school district was selected using the selection procedures outline above. 2) Whenever the superintendents expressed a willingness to participate in the study, a packet was immediately mailed.

Each packet distributed to the superintendents contained: a) a letter identifying the study; b) the respondents to be selected; c) selection and distribution procedures; d) provisions for recording the respondents should a follow-up for nonresponse be required; and d) a reaffirmation that the results of the study would be
provided upon completion of the data analysis. See Appendix I. Accompanying each survey instrument was a letter describing the study, its importance, a request for prompt return of the completed instrument, and an assurance of confidentiality, and a self-addressed, postage-paid envelope. See Appendix I.

Following an interval of three weeks from the date the packet was mailed follow-ups were made. An initial telephone call was made to the superintendents of school districts from which no responses were received. When a telephone contact was not able to be made, a letter was mailed expressing the importance of their participation and the urgency of the district's response. See Appendix I.

In the event one or more respondents did not return a survey instrument, a second packet was sent to the school district. This packet contained a letter identifying those respondents who had not returned a questionnaire as well as those who did respond. A second questionnaire was provided in case the original survey was misplaced. Instructions were provided for the selection of an alternate respondent should the first respondent not wish to participate. See Appendix I.

Instrument

In the absence of an instrument to meet the objectives of the study a survey instrument was constructed. The survey instrument consisted of 49 items (statements) written to elicit the respondents' attitudes with regards to
what would occur in the school districts relative to issues important to merit pay implementation. Each item represented a question directly addressed in the review of the literature or related to an issue discussed. The items were categorized according to five dimensions. The dimensions included: 1) Motivational Factors Influencing Decisions to Implement Merit-Pay Programs in the schools; 2) Psychological Determinants Influencing Improved Teacher Performance; 3) Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards; 4) Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers; and 5) School Administrative Responsibilities Related to Merit Pay Implementation. Four additional questions were included on the survey instrument. Question 1 determined how respondents defined merit pay. Question 2 determined how the respondents perceived the effects merit pay implementation would have on interpersonal relations in the schools. Questions 3 and 4 referred to the respondents' sex and age. See Appendix II.

Likert Scale procedures were used to evaluate the responses made by the respondents. In lieu of the conventional Likert Scale responses, the range of responses were numerical in value, i.e., 3, 2, 1, 0, -1, -2, -3, where the positive signed values represent "agreement", negative signed values represent "disagreement", and 0 (zero) is "not sure." Thirty items required a positive response
(agree) in order to be a positively valenced attribute favorable to merit-pay programming. These items were: I-2, I-4, I-5, I-6, II-2, II-3, II-5, II-6, II-7, II-8, II-9, III-1, III-3, III-4, III-5, III-8, III-9, III-10, III-11, III-12, IV-5, IV-6, IV-7, IV-8, V-1, V-2, V-4, V-5, V-6, and V-7. The remaining 19 items required a negative response (disagree) in order to be a positively valenced attribute favorable to merit-pay programming. Each of the responses were weighted as follows: Positively valenced responses (agree) were weighted 7, 6, 5, 4, 3, 2, and 1 relative to 3, 2, 1, 0, -1, -2, and -3 responses. Positively valenced responses (disagree) were weighted 1, 2, 3, 4, 5, 6, and 7 relative to the 3, 2, 1, 0, -1, -2, and -3 responses.

Twenty respondents, 10 parents and 10 teachers, participated in the pretesting of the survey instrument. The survey instrument was checked for clarity of instructions, clarity of statements, instrument format and time required to complete the survey. The respondents responded to the survey instrument under the same conditions as established for the formal study. In addition, the respondents identified those items that were not clearly written and evaluated the instrument's format. Items were rewritten and resubmitted to the respondents for reevaluation if fifty percent or more of the respondents were uncertain about an item's meaning. An assessment of the item response variation was made to determine if items were to be rewritten or excluded. In addition to the preliminary
administration of the survey instrument, three superintendents, three principals, and two managers from the private sector evaluated the survey instrument in terms of content and relevance to merit pay prior to the final revision of the instrument.

Two reliability coefficients were obtained. They are: 1) Coefficients of Stability and 2) Coefficients of Internal Consistency. Kuder Richardson's KR$_{20}$ was used to determine the internal consistency of items for each dimension by group. For the purposes of obtaining the coefficients of internal consistency, the responses were treated as dichotomous data.

**Coefficients of Stability.** Two groups were selected for the determination of stability coefficients. The stability coefficients for parents by dimension are: a) Dimension I, .70; b) Dimension II, .67; c) Dimension III, .52; d) Dimension IV, .01; and e) Dimension V, .54. The coefficients of stability for teachers are: a) Dimension I, .65; b) Dimension II, .58; c) Dimension III, .79; d) Dimension IV, .64; and e) Dimension V, .95.

**Coefficients of Internal Consistency.** The coefficients obtained for parents are: a) Dimension I, .81; Dimension II, .29; c) Dimension III, .51; d) Dimension IV, -.15; and e) Dimension V, .73. For teachers the coefficients obtained are: a) Dimension I, .69; b) Dimension II, .03; c) Dimension III, .51; d) Dimension IV, .14; and e) Dimension V, .81. Coefficients for principals are:
a) Dimension I, .90; b) Dimension II, .32; c) Dimension III, .32; d) Dimension IV, .35; and e) Dimension V, .48. For superintendents the coefficients obtained are: a) Dimension I, .66; b) Dimension II, -.38; c) Dimension III, .02; d) Dimension IV, .07; and e) Dimension V, .72. The coefficients obtained for school board members are: a) Dimension I, .86; b) Dimension II, -.14; c) Dimension III, .28; d) Dimension IV, .22; and e) Dimension V, .84.

Data Analysis

Analyses of variance were conducted using the computational procedures described by Winer (1962). The purpose of these analyses were to determine if differences existed between: a) groups by dimension and b) dimensions within groups. In addition to the analyses of variance, Fisher's Least Significant Differences procedures were used to determine which group means or dimension means differed when the analysis of variance rejected the null hypotheses.

Five single factor (1 X 5) analyses of variance were carried out to determine if differences existed among the respondent classifications for each dimension. The hypotheses are:

**Hypothesis 1**: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the motivational factors influencing decisions to implement merit-pay programs in the schools.
Hypothesis 12: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the school relative to the psychological determinants influencing improved teacher performance.

Hypothesis 13: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the evaluation criteria to be employed for the measurement of teacher performance related to merit-pay awards.

Hypothesis 14: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the alternative financial strategies related to the improvement of functionally incompetent teachers.

Hypothesis 15: There are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the school administrative responsibilities related to merit pay implementation.

Five single factor (1 X 5), repeated measures, analyses of variance were carried out to determine if differences existed among the dimension responses within each respondent classification. The dimensions are: a) motivational factors influencing decisions to implement
merit-pay programs in the schools; b) psychological determinants influencing improved teacher performance; c) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; d) alternative financial strategies related to the improvement of functionally incompetent teachers; and e) school administrative responsibilities related to merit pay implementation. The hypotheses are:

Hypothesis 2.1: there are no differences among the dimensions listed above with regards to the parents' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.2: There are no differences among the dimensions listed above with regards to the teachers' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.3: There are no differences among the dimensions listed above with regards to the principals' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.4: There are no differences among the dimensions listed above with regards to the superintendents' perceptions about what would occur in the schools relative to each dimension.

Hypothesis 2.5: There are no differences among the dimensions listed above with regards to the school board members' perceptions about what would occur in the schools
relative to each dimension.

Additional analyses were carried out which consisted of: a) an analysis of individual items and b) supplementary data analyses. The analyses of individual items were reported in terms of group means and standard deviations, and proportion of favorable responses by group. Included in the supplementary analyses were: a) group responses relative to the respondents' definition of merit pay; b) group responses relative to the respondents' perceptions regarding the effect merit pay implementation would have on interpersonal relations in the schools; c) group responses relative to the respondents' sex and age.

Summary

A description of the population, the method of the study, development of the instrument, procedures of the study, and the methods for data analysis have been provided in this chapter. Chapter 4 presents the results of the study and interpretation of the results.
Chapter 4

RESULTS OF THE STUDY

Five groups, namely: parents, teachers, principals, superintendents, and school board members, were selected for the determination of differences between groups, with regards to what would happen in the schools, relative to issues important to merit pay implementation. The issues identified for the study are categorized according to five dimensions. The dimensions are: 1) Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools; 2) Psychological Determinants Influencing Improved Teacher Performance; 3) Evaluation Criteria to be Employed for the Measurement of Teacher Performance; 4) Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers; and 5) School Administrative Responsibilities Related to Merit Pay Implementation. See Table 12, page 94 for a description of the items included in each of the above categories.

The data analysis is divided into four parts, namely: 1) Group Differences Within Dimensions; 2) Dimension Differences Within Groups; 3) Individual Item Analysis; and 4) Supplementary Analyses.

Group Differences Within Dimensions

In order to obtain maximum effectiveness, the
merit-pay programs selected by school districts should be implemented in a school environment where agreement among the school district's constituents is favorable to merit pay. Five dimensions were analyzed in order to determine if differences existed between groups, and to identify those groups in which differences occurred.

Five single factor (1 X 5) analyses of variance were carried out in order to test the hypotheses that there are no differences between groups within each dimension. In addition, Fisher's Least Significant Differences procedures, for unequal sample sizes, were used to identify differences between group means within each dimension for those cases in which the hypotheses were rejected. The .05 level of significance was used to test the following hypotheses.

**Dimension I. Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools.** The purpose for implementing merit-pay programs in the school is to benefit the members of the school community by improving the school district's productivity, which, in turn results in increased financial benefit to the teachers relative to improved performance.

Hypothesis H1: there are no differences among parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the motivational factors influencing decisions to implement merit-pay programs in the schools, is rejected at the .05 level of significance;
Differences were found between groups which are limited to differences between teachers and parents, principals, superintendents, and school board members. The differences between group means indicate that teachers' responses are less favorable to merit pay implementation in regards to the motivational factors influencing decisions to implement merit pay in the schools than are the responses of parents, principals, superintendents, and school board members. Teachers fail to accept the hypothesis that merit pay will improve educational productivity or benefit members of the school community. However, parents, principals, superintendents, and school board members accept the hypothesis. See Table 1.4, page 68 for the summary of differences between groups. Table 1.2, page 68 provides a summary of item and dimension means.

Table 1

Dimension I Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>52.41</td>
<td>4</td>
<td>15.10</td>
<td>7.68*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>250.92</td>
<td>151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>303.33</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F_{obs.} = 7.68, \ .95 F(4, 151) = 2.43. See Table 1.1, page 67 for the analysis of variance summary.
Table 1.2. Item Means: Motivational Factors Influencing Decisions to Implement Merit-pay Programs In the Schools

<table>
<thead>
<tr>
<th>Item</th>
<th>Means: Motivational Factors Influencing Decisions to Implement Merit-pay Programs In the Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>5.00 5.48 5.43 5.74 5.00 5.09 3.83 3.56 4.87</td>
</tr>
<tr>
<td>Teachers</td>
<td>2.87 4.07 3.53 3.83 3.30 3.43 2.67 2.30 3.22</td>
</tr>
<tr>
<td>Principals</td>
<td>3.91 5.06 5.30 5.27 4.52 4.52 3.94 2.94 4.46</td>
</tr>
<tr>
<td>Superintendents</td>
<td>4.23 4.77 5.51 5.33 4.16 4.52 4.70 3.26 4.62</td>
</tr>
<tr>
<td>School Board Members</td>
<td>4.03 5.48 5.56 5.00 4.37 4.46 4.48 3.59 4.62</td>
</tr>
</tbody>
</table>

Table 1.3. Proportion of Responses Favorable to Merit Pay: Motivational Factors Influencing Decisions to Implement Merit Pay In the Schools

<table>
<thead>
<tr>
<th>Item</th>
<th>Proportion of Responses Favorable to Merit Pay: Motivational Factors Influencing Decisions to Implement Merit Pay In the Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>.65 .83 .78 .87 .65 .65 .30 .35 .64</td>
</tr>
<tr>
<td>Teachers</td>
<td>.20 .47 .43 .43 .20 .37 .10 .13 .29</td>
</tr>
<tr>
<td>Principals</td>
<td>.45 .67 .80 .77 .60 .63 .50 .20 .58</td>
</tr>
<tr>
<td>Superintendents</td>
<td>.47 .63 .74 .72 .35 .56 .53 .28 .54</td>
</tr>
<tr>
<td>School Board Members</td>
<td>.48 .81 .76 .70 .59 .63 .63 .33 .62</td>
</tr>
</tbody>
</table>

Table 1.4. Differences Between Group Means Using Fisher's Critical Method: Motivational Factors Influencing Decisions to Implement Merit-pay Programs In the Schools

<table>
<thead>
<tr>
<th>Item</th>
<th>Differences Between Group Means Using Fisher's Critical Method: Motivational Factors Influencing Decisions to Implement Merit-pay Programs In the Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>School Board Members</td>
</tr>
<tr>
<td>Teachers</td>
<td>4.62*</td>
</tr>
<tr>
<td>Principals</td>
<td>1.17 3.82*</td>
</tr>
<tr>
<td>Superintendents</td>
<td>.75 4.57* .54</td>
</tr>
<tr>
<td>School Board Members</td>
<td>.16 4.61* 1.06 .59</td>
</tr>
</tbody>
</table>

Dimension II. Psychological Determinants Influencing Improved Teacher Performance.

Hypothesis H12: there are no differences between parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the psychological determinants influencing improved teacher performance, is rejected
at the .05 level of significance; $F_{\text{obs.}} = 8.48$, $0.95 F(4, 151) = 2.43$. See Table 2.1, page 69 for the analysis of variance summary.

Differences between groups were identified. The differences between group means indicate that the principals' responses are more favorable to merit pay regarding the psychological determinants influencing improved teacher performance than are parents, teachers, superintendents, and school board members. In addition, teachers' responses are less favorable to merit pay than are the responses of parents, principals, superintendents, and school board members. See Table 2.4, page 69 for the summary of differences between groups. Table 2.2, page 69 provides a summary of item and dimension means.

Table 2
Dimension II Summary Tables for the Analysis of Variance, Item Means, Proportion of Responses Favorable to Merit Pay, and Differences Between Means

<table>
<thead>
<tr>
<th>Table 2.1. Analysis of Variance Summary: Psychological Determinants Influencing Improved Teacher Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Between Groups</td>
</tr>
<tr>
<td>Within Groups</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

$* 0.95 F(4, 151) = 2.43$
Table 2.2. Item Means: Psychological Determinants Influencing Improved Teacher Performance

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>4.48</td>
<td>4.30</td>
<td>3.04</td>
<td>4.30</td>
<td>3.21</td>
<td>3.87</td>
<td>5.61</td>
<td>5.00</td>
<td>4.13</td>
<td>3.87</td>
<td>4.25</td>
</tr>
<tr>
<td>Teachers</td>
<td>4.60</td>
<td>4.49</td>
<td>3.97</td>
<td>3.81</td>
<td>3.53</td>
<td>3.60</td>
<td>5.90</td>
<td>3.73</td>
<td>3.13</td>
<td>2.53</td>
<td>3.92</td>
</tr>
<tr>
<td>Principals</td>
<td>5.06</td>
<td>4.52</td>
<td>2.61</td>
<td>4.48</td>
<td>4.00</td>
<td>4.12</td>
<td>5.36</td>
<td>5.73</td>
<td>5.33</td>
<td>4.88</td>
<td>4.62</td>
</tr>
<tr>
<td>Superintendents</td>
<td>5.13</td>
<td>4.28</td>
<td>2.63</td>
<td>4.53</td>
<td>3.40</td>
<td>4.16</td>
<td>5.67</td>
<td>4.83</td>
<td>5.47</td>
<td>5.16</td>
<td>4.39</td>
</tr>
<tr>
<td>School Board Members</td>
<td>4.65</td>
<td>3.88</td>
<td>2.24</td>
<td>4.42</td>
<td>4.15</td>
<td>4.54</td>
<td>5.54</td>
<td>5.38</td>
<td>4.73</td>
<td>3.92</td>
<td>4.33</td>
</tr>
</tbody>
</table>

Table 2.3. Proportion of Responses Favorable to Merit Pay: Psychological Determinants Influencing Improved Teacher Performance

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
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</tr>
<tr>
<td>Teachers</td>
<td>.63</td>
<td>.53</td>
<td>.40</td>
<td>.37</td>
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<td>.33</td>
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<tr>
<td>Principals</td>
<td>.67</td>
<td>.51</td>
<td>.12</td>
<td>.55</td>
<td>.48</td>
<td>.33</td>
<td>.73</td>
<td>.85</td>
<td>.70</td>
<td>.67</td>
</tr>
<tr>
<td>Superintendents</td>
<td>.79</td>
<td>.56</td>
<td>.07</td>
<td>.58</td>
<td>.30</td>
<td>.47</td>
<td>.84</td>
<td>.63</td>
<td>.40</td>
<td>.74</td>
</tr>
<tr>
<td>School Board Members</td>
<td>.65</td>
<td>.38</td>
<td>.08</td>
<td>.54</td>
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<td>.73</td>
<td>.73</td>
<td>.24</td>
<td>.46</td>
<td>.51</td>
</tr>
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</table>

Table 2.4. Differences Between Group Means Using Fisher's Critical t Method: Psychological Determinants Influencing Improved Teacher Performance

<table>
<thead>
<tr>
<th></th>
<th>Parents</th>
<th>Teachers</th>
<th>Principals</th>
<th>Superintendents</th>
<th>School Board Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>2.38*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principals</td>
<td>2.72*</td>
<td>5.55*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendents</td>
<td>.85</td>
<td>3.70*</td>
<td>2.25*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Board Members</td>
<td>.56</td>
<td>3.06*</td>
<td>2.21*</td>
<td>.24</td>
<td></td>
</tr>
</tbody>
</table>


Hypothesis H13: there are no differences between parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the evaluation criteria to be employed for the measurement of teacher performance.

\[ .99 \div 151 = 1.65 \]
relating to merit-pay awards, is not rejected at the .05 level of significance; $F_{\text{obs.}} = .56$, $.95 F(4, \mu) = 2.43$.

See Table 3.1 for the analysis of variance summary.

No differences were found between group means. As a result, it can not be concluded that the responses provided by the parents, teachers, principals, superintendents, and school board members reflect different attitudes with regards to the evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards. However, there is variation between the individual item means which are discussed in the Analysis of Individual Items section. See Table 3.2, page 71 for a summary of item and dimension means.

Table 3

Dimension III Summary Tables for the Analysis of Variance, Item Means, and Proportion of Responses Favorable to Merit Pay

Table 3.1. Analysis of Variance Summary: Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.93</td>
<td>4</td>
<td>.23</td>
<td>.56*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>62.04</td>
<td>151</td>
<td>.41</td>
<td>.41</td>
</tr>
<tr>
<td>Total</td>
<td>62.97</td>
<td>155</td>
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<td></td>
</tr>
</tbody>
</table>

*$.95 F(4, \mu) = 2.43$
Table 3.2. Item Means: Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-pay Awards

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
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<td>5.35</td>
<td>3.83</td>
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<td>4.30</td>
<td>4.26</td>
<td>2.70</td>
<td>3.91</td>
<td>5.87</td>
</tr>
<tr>
<td>Teachers</td>
<td>6.10</td>
<td>3.93</td>
<td>3.87</td>
<td>3.87</td>
<td>4.60</td>
<td>5.73</td>
<td>5.47</td>
<td>3.43</td>
<td>2.83</td>
<td>4.07</td>
<td>3.57</td>
<td>3.20</td>
<td>5.40</td>
<td>4.30</td>
</tr>
<tr>
<td>Principals</td>
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<td>3.42</td>
<td>4.94</td>
<td>5.18</td>
<td>4.36</td>
<td>5.30</td>
<td>5.94</td>
<td>4.73</td>
<td>2.73</td>
<td>2.70</td>
<td>3.39</td>
<td>4.73</td>
<td>6.03</td>
<td>4.35</td>
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<tr>
<td>Superintendents</td>
<td>5.53</td>
<td>3.47</td>
<td>4.23</td>
<td>4.70</td>
<td>4.60</td>
<td>4.63</td>
<td>5.63</td>
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<td>3.23</td>
<td>5.58</td>
<td>5.35</td>
<td>5.91</td>
<td>4.36</td>
</tr>
<tr>
<td>School Board Members</td>
<td>5.81</td>
<td>3.62</td>
<td>4.50</td>
<td>4.98</td>
<td>3.69</td>
<td>4.88</td>
<td>3.88</td>
<td>4.62</td>
<td>3.27</td>
<td>3.04</td>
<td>3.27</td>
<td>4.68</td>
<td>5.88</td>
<td>4.28</td>
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</tbody>
</table>

Table 3.3. Proportion of Responses Favorable to Merit Pay: Evaluation Criteria to be Employed for the Measurement of Teacher Performance Relating to Merit-Pay Awards

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>13</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>.26</td>
<td>.48</td>
<td>.74</td>
<td>.48</td>
<td>.78</td>
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<td>.91</td>
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<tr>
<td>Teachers</td>
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<td>.33</td>
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<td>.40</td>
<td>.33</td>
<td>.27</td>
<td>.87</td>
<td>.51</td>
</tr>
<tr>
<td>Principals</td>
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<td>.32</td>
<td>.62</td>
<td>.65</td>
<td>.59</td>
<td>.68</td>
<td>.47</td>
<td>.62</td>
<td>.21</td>
<td>.15</td>
<td>.26</td>
<td>.68</td>
<td>.91</td>
<td>.54</td>
</tr>
<tr>
<td>Superintendents</td>
<td>.81</td>
<td>.42</td>
<td>.56</td>
<td>.65</td>
<td>.60</td>
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<td>.42</td>
<td>.72</td>
<td>.19</td>
<td>.30</td>
<td>.30</td>
<td>.79</td>
<td>.91</td>
<td>.56</td>
</tr>
<tr>
<td>School Board Members</td>
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<td>.42</td>
<td>.58</td>
<td>.62</td>
<td>.46</td>
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<td>.19</td>
<td>.65</td>
<td>.85</td>
<td>.54</td>
</tr>
</tbody>
</table>

Dimension IV. Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers.

Hypothesis H1.4: there are no differences between parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the financial strategies related to the improvement of functionally incompetent teachers is not rejected at the .05 level of significance; $F_{\text{obs.}} = 1.65, .95 F(4, 151) = 2.43$. See Table 4.1, page 73 for the analysis of variance summary.

No differences were found between group means. Therefore, it can not be concluded that the responses provided by the parents, teachers, principals, superintendents, and school board members have different opinions.
regarding the alternative financial strategies related to the improvement of functionally incompetent teachers. See Table 4.2, page 73 for a summary of the Dimension IV item and dimension means.

Table 4

Dimension IV Summary Tables for the Analysis of Variance, Item Means, and Proportion of Responses Favorable to Merit Pay

Table 4.1. Analysis of Variance Summary: Alternative Financial Related to the Improvement of Functionally Incompetent Teachers

<table>
<thead>
<tr>
<th>Source of Variation</th>
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<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.25</td>
<td>4</td>
<td>.56</td>
<td>1.65*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>51.48</td>
<td>151</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53.65</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* F .95 (4, 151) = 2.43

Table 4.2. Item Means: Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>4.96</td>
<td>3.74</td>
<td>4.08</td>
<td>2.70</td>
<td>4.13</td>
<td>5.26</td>
<td>5.61</td>
<td>4.09</td>
<td>4.38</td>
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<tr>
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<td>5.13</td>
<td>4.70</td>
<td>5.03</td>
<td>4.20</td>
<td>5.00</td>
<td>4.63</td>
<td>3.37</td>
<td>4.64</td>
</tr>
<tr>
<td>Principals</td>
<td>4.94</td>
<td>4.42</td>
<td>5.30</td>
<td>2.82</td>
<td>4.76</td>
<td>5.40</td>
<td>5.48</td>
<td>3.61</td>
<td>4.58</td>
</tr>
<tr>
<td>Superintendents</td>
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<td>4.79</td>
<td>4.77</td>
<td>2.51</td>
<td>4.12</td>
<td>4.88</td>
<td>4.63</td>
<td>4.07</td>
<td>4.34</td>
</tr>
<tr>
<td>School Board Members</td>
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<td>4.04</td>
<td>4.00</td>
<td>2.69</td>
<td>5.19</td>
<td>5.23</td>
<td>5.69</td>
<td>3.35</td>
<td>4.44</td>
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</table>

Table 4.3. Proportion of Responses Favorable to Merit Pay: Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>.57</td>
<td>.26</td>
<td>.39</td>
<td>.13</td>
<td>.78</td>
<td>.78</td>
<td>.74</td>
<td>.43</td>
<td>.51</td>
</tr>
<tr>
<td>Teachers</td>
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<td>.60</td>
<td>.60</td>
<td>.67</td>
<td>.40</td>
<td>.70</td>
<td>.57</td>
<td>.30</td>
<td>.56</td>
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<tr>
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<td>.56</td>
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<td>.62</td>
<td>.79</td>
<td>.82</td>
<td>.32</td>
<td>.54</td>
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<td>.16</td>
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<td>.81</td>
<td>.58</td>
<td>.37</td>
<td>.53</td>
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<tr>
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<td>.31</td>
<td>.31</td>
<td>.12</td>
<td>.56</td>
<td>.85</td>
<td>.81</td>
<td>.19</td>
<td>.48</td>
</tr>
</tbody>
</table>
Dimension V. School Administrative Responsibilities Related to Merit Pay Implementation.

Hypothesis H15: there are no differences between parents', teachers', principals', superintendents', and school board members' perceptions with regards to what would occur in the schools relative to the school administrative responsibilities related to merit pay implementation, is not rejected at the .05 level of significance; $F_{obs.} = 1.43$, \[.95F(4, 151) = 2.43.\] See Table 5.1, page 74 for the analysis of variance summary.

No differences were found between group means. As a result, it can not be concluded that the responses provided by parents, teachers, principals, superintendents, and school board members reflect differences of opinion regarding the school administrative responsibilities related to merit pay implementation. See Table 5.2, page 75 for a summary of item and dimension means.

Table 5

Dimension V Summary Tables for the Analysis of Variance, Item Means, and Proportion of Responses Favorable to Merit Pay

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.97</td>
<td>4</td>
<td>1.24</td>
<td>1.43*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>130.79</td>
<td>151</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.76</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[.95F(4, 151) = 2.43\]
Table 5.2. Item Means: School Administrative Responsibilities Related to Merit Pay Implementation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
<th>6</th>
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<th>9</th>
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</tr>
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<tbody>
<tr>
<td>Parents</td>
<td>5.32</td>
<td>5.74</td>
<td>4.52</td>
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<td>5.61</td>
<td>5.91</td>
<td>6.00</td>
<td>5.52</td>
<td>3.89</td>
<td>3.95</td>
<td>4.96</td>
</tr>
<tr>
<td>Teachers</td>
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<td>5.27</td>
<td>4.83</td>
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<td>4.90</td>
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<td>4.93</td>
<td>4.80</td>
<td>4.40</td>
<td>4.76</td>
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<td>4.91</td>
<td>3.41</td>
<td>5.76</td>
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<td>5.29</td>
<td>4.91</td>
<td>4.55</td>
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<tr>
<td>Superintendents</td>
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<td>4.88</td>
<td>3.67</td>
<td>5.35</td>
<td>5.70</td>
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<td>5.51</td>
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<td>4.23</td>
<td>4.19</td>
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<td>6.31</td>
<td>5.11</td>
<td>4.59</td>
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</tbody>
</table>

Table 5.3. Proportion of Responses Favorable to Merit Pay: School Administrative Responsibilities Related to Merit Pay Implementation

<table>
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<th></th>
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<th>2</th>
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<tbody>
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<tr>
<td>Teachers</td>
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<td>.73</td>
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<td>.37</td>
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<td>.63</td>
<td>.53</td>
<td>.57</td>
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<td>Principals</td>
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<td>.92</td>
<td>.62</td>
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<td>.46</td>
<td>.69</td>
</tr>
</tbody>
</table>

Summary. The contention that there are no differences between parents, teachers, principals, superintendents, and school board members is not confirmed for those dimensions relating to: a) motivational factors influencing decisions to implement merit-pay programs in the schools; and b) psychological determinants influencing improved teacher performance. For: a) evaluation criteria to be employed for the measurement of teacher performance related to merit-pay awards; b) alternative financial strategies related to the improvement of functionally incompetent teachers; and c) school administrative responsibilities related to merit pay implementation, the position that there are no differences between parents, teachers, principals, superintendents, and school board members is confirmed.

Differences between groups were identified for Dimension I and Dimension II. In the majority of the cases
where differences were noted, teachers were more frequently paired with other groups.

Teachers responses were not favorable to merit pay implementation with regards to: motivational factors influencing decisions to implement merit-pay programs in the schools. In contrast, parents and school board members were more inclined to respond favorably to the above. Teachers were "not sure" with regards to: psychological determinants influencing improved teacher performance. Principals tended to respond favorably. Teachers and principals responded more favorably to: alternative financial strategies related to the improvement of functionally incompetent teachers than did parents, superintendents, and school board members.

With respect to: school administrative responsibilities related to merit pay implementation, all groups provided favorable responses. However, teachers are not as strong in their conviction as are parents, principals, superintendents, and school board members.

Overall, there are no strong commitments, favorable or unfavorable, to merit pay implementation with the possible exception of: 1) Teachers rejecting the premise that merit pay would improve school productivity and benefit members of the school community. 2) Parents and school board members supporting the premise that school productivity would be increased and school community members will benefit. 3) Parents, teachers, principals, superintendents, and school board members supporting the position that school
administrators would provide administrative support facilitating an effective merit-pay program.

**Dimension Differences Within Groups**

Five single factor (1 X 5) repeated measures analyses of variance were carried out to test the hypotheses that there are no differences between dimensions within groups. The groups are a) parents, b) teachers, c) principals, d) superintendents, and e) school board members. Differences between dimension means were determined using Fisher's Least Significant Differences procedures for equal sample sizes. The .05 level of significance was used to test the following hypotheses.

**Parents.** Hypothesis $H_2_1$: there are no differences between dimensions within the parent group is rejected at the .05 level of significance; $F_{obs.} = 2.86$, $F_{(4, 88)} = 2.48$. See Table 6.1, page 78 for the analysis of variance summary.

Differences between the dimensions within groups were found. These differences indicate that parents respond less favorably to: a) psychological determinants influencing teacher performance; and b) alternative financial strategies related to the improvement of functionally incompetent teachers, than they do to motivational factors influencing decisions to implement merit-pay programs in the schools. In addition, parent responses are less favorable for: a) psychological determinants influencing improved teacher performance; and b) alternative financial strategies
related to the improvement of functionally incompetent
teachers than they do for school administrative responsi-
bilities related to merit pay implementation. The strongest
responses favorable to merit pay implementation made by
parents were: a) motivational factors influencing decisions
to implement merit-pay programs in the schools; and b)
school administrative responsibilities related to merit
pay implementation. See Table 6.2, page 78 for a summary
of differences between dimensions.

Table 6
Parents Summary Tables for the Analysis of Variance, and Differences Between Dimensions

Table 6.1. Parents Between Dimensions Analysis of Variance

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Parents</td>
<td>20.39</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Parents</td>
<td>76.62</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>8.81</td>
<td>4</td>
<td>2.20</td>
<td>2.86*</td>
</tr>
<tr>
<td>Residual</td>
<td>67.80</td>
<td>88</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>97.00</td>
<td>114</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $F = 2.86^*$

Table 6.2. Differences Between Dimension Means Within Parents Groups Using Fisher's Critical Difference Method ($X_C - X_R$)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Dimension I</th>
<th>Dimension II</th>
<th>Dimension III</th>
<th>Dimension IV</th>
<th>Dimension V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I</td>
<td>.62*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension II</td>
<td>.34</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension III</td>
<td>.49*</td>
<td>.13</td>
<td>.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension IV</td>
<td>.09</td>
<td>.71*</td>
<td>.43</td>
<td>.58*</td>
<td></td>
</tr>
</tbody>
</table>

*Critical Difference = .44
Teachers. Hypothesis H2: there are no differences between dimensions within the teacher group is rejected at the .05 level of significance; $F_{obs} = 13.71$, $.95 F(4, 116) = 2.46$. See Table 7.1, page 80 for analysis of variance summary.

Critical differences were found between dimensions within the teachers group. The differences between dimension means indicate that teacher's responses are more favorable towards: a) psychological determinants influencing improved teacher performance; b) alternative financial strategies related to the improvement of functionally incompetent teachers; c) evaluation criteria to be employed for the measurement of teacher performance related to merit-pay awards; and d) school administrative responsibilities related to merit pay implementation, than they are to motivational factors influencing decisions to implement merit pay programs in the schools. Teachers also respond more favorably to financial strategies related to the improvement of functionally incompetent teachers than to psychological determinants influencing improved teacher performance. In addition, teachers are more inclined to respond favorably to school administrative responsibilities related to merit pay implementation and less favorably to either: a) psychological determinants influencing improved teacher performance; and b) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards. See Table 7.2 for a summary of
of differences between dimensions.

Table 7

Teachers Summary Tables for the Analysis of Variance, and Differences Between Dimensions

Table 7.1. Teachers Between Dimensions Analysis of Variance

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Teachers</td>
<td>34.93</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Teachers</td>
<td>145.19</td>
<td>120</td>
<td>11.66</td>
<td>13.72*</td>
</tr>
<tr>
<td>Dimensions</td>
<td>46.63</td>
<td>4</td>
<td></td>
<td>11.66</td>
</tr>
<tr>
<td>Residual</td>
<td>98.56</td>
<td>128</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180.12</td>
<td>149</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *F* = 2.46 .95 (4, 116)

Table 7.2. Differences Between Dimension Means Within Teachers Group Using Fisher's Critical Difference Method (X_C - X_R)

<table>
<thead>
<tr>
<th>Dimension I</th>
<th>Dimension II</th>
<th>Dimension III</th>
<th>Dimension IV</th>
<th>Dimension V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I</td>
<td>.70*</td>
<td>.38</td>
<td>.72*</td>
<td>.84*</td>
</tr>
<tr>
<td>Dimension II</td>
<td>1.08*</td>
<td>.34</td>
<td>.34</td>
<td>.46*</td>
</tr>
<tr>
<td>Dimension III</td>
<td>1.42*</td>
<td></td>
<td></td>
<td>.12</td>
</tr>
<tr>
<td>Dimension IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical Difference = .40

**Principals.** Hypothesis H2:3: there are no differences between dimensions within the principals group is rejected at the .05 level of significance; \( F_{obs.} = 7.39, \)
\( .95 F(4, 132) = 2.44. \) See Table 8.1, page 81 for analysis of variance summary.

The differences found between dimension means indicates that principals respond more favorably to: school administrative responsibilities related to merit pay implementation than they respond to: a) motivational
factors influencing decisions to implement merit-pay programs in the schools; b) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and c) alternative financial strategies related to the improvement of functionally incompetent teachers. See Table 8.2, page 81 for a summary of differences between dimensions.

Table 8
Principals Summary Tables for the Analysis of Variance, and Differences Between Dimensions

Table 8.1. Principals Between Dimensions Analysis of Variance Summary

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Principals</td>
<td>17.44</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Principals</td>
<td>98.27</td>
<td>132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>18.43</td>
<td>4</td>
<td>4.61</td>
<td>7.39*</td>
</tr>
<tr>
<td>Residual</td>
<td>79.84</td>
<td>128</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>115.71</td>
<td>164</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ F(4, 128) = 2.44 \]

\[ .95^{*} \]

Table 8.2. Differences Between Dimension Means Within Principals Group Using Fisher's Critical Difference Method \( (X_C - X_R) \)

<table>
<thead>
<tr>
<th>Dimension I</th>
<th>Dimension II</th>
<th>Dimension III</th>
<th>Dimension IV</th>
<th>Dimension V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I</td>
<td>.16</td>
<td>.11</td>
<td>.12</td>
<td>.85*</td>
</tr>
<tr>
<td>Dimension II</td>
<td>.27</td>
<td>.04</td>
<td>.23</td>
<td>.69*</td>
</tr>
<tr>
<td>Dimension III</td>
<td></td>
<td>.96*</td>
<td></td>
<td>.73*</td>
</tr>
</tbody>
</table>

*Critical Difference = .33

Superintendents. Hypothesis H2: there are no differences between dimensions within the superintendents
group is rejected at the .05 level of significance; 
\[ F_{\text{obs.}} = 10.74, \quad .95 F(4, 168) = 2.43. \]
See Table 9.1, page 83 for the analysis of variance summary.

Differences between dimensions were found within the superintendents group. The differences between dimension means indicate that superintendents are less favorable to: a) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and b) alternative financial strategies related to the improvement of functionally incompetent teachers, than they are to motivational factors influencing decisions to implement merit-pay programs in the schools. In addition, superintendents are more favorable to school administrative responsibilities related to merit pay implementation than they are to: a) motivational factors influencing decisions to implement merit pay programs in the schools; b) psychological determinants influencing improved teacher performance; c) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and d) alternative financial strategies related to the improvement of functionally incompetent teachers. See Table 9.2, page 83 for a summary of dimension differences.
Table 9

Superintendents Summary Tables for the Analysis of Variance, and Differences Between Dimensions

Table 9.1. Superintendents Between Dimensions Analysis of Variance Summary

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Superintendents</td>
<td>36.38</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Superintendents</td>
<td>99.33</td>
<td>172</td>
<td>5.06</td>
<td>10.74*</td>
</tr>
<tr>
<td>Dimensions</td>
<td>20.24</td>
<td>4</td>
<td>5.06</td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>79.10</td>
<td>168</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.72</td>
<td>214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* F = 2.43 .95 (4, 168)

Table 9.2. Differences Between Dimension Means Within Superintendents Group

Using Fisher's Critical Difference Method ($X_C - X_R$)

<table>
<thead>
<tr>
<th>Dimension I</th>
<th>Dimension II</th>
<th>Dimension III</th>
<th>Dimension IV</th>
<th>Dimension V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension II</td>
<td>.26*</td>
<td>.03</td>
<td>.02</td>
<td>.81*</td>
</tr>
<tr>
<td>Dimension III</td>
<td>.28*</td>
<td>.05</td>
<td>.02</td>
<td>.81*</td>
</tr>
<tr>
<td>Dimension IV</td>
<td>.53*</td>
<td>.76*</td>
<td>.79*</td>
<td>.81*</td>
</tr>
<tr>
<td>Dimension V</td>
<td>.76*</td>
<td>.79</td>
<td>.81*</td>
<td></td>
</tr>
</tbody>
</table>

*Critical Difference = .25

School Board Members. Hypothesis H25: there are no differences between dimensions within the school board members group is rejected at the .05 level of significance; $F_{obs.} = 5.47, .95 F(4, 100) = 2.46$. See Table 10.1, page 84 for analysis of variance summary.

Differences were found between dimension means for the school board members group. The differences between dimension means indicate that school board members are less favorable to: a) psychological determinants influencing improved teacher performance; b) alternative financial
strategies related to the improvement of incompetent teachers, than they are to motivational factors influencing decisions to implement merit-pay programs in the schools. School board members are more favorable to school administrative responsibilities related to merit pay implementation than they are to: a) motivational factors influencing decisions to implement merit-pay programs in the schools; b) psychological determinants influencing improved teacher performance; c) evaluation criteria to be used to measure teacher performance relating to merit-pay awards; and d) alternative financial strategies related to the improvement of functionally incompetent teachers.

Table 10

School Board Members Summary Tables for the Analysis Variance, and Differences Between Dimensions

Table 10.1. School Board Members Between Dimensions Analysis of Variance Summary

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between School Board Members</td>
<td>28.45</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within School Board Members</td>
<td>75.63</td>
<td>104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>13.57</td>
<td>4</td>
<td>3.39</td>
<td>5.47*</td>
</tr>
<tr>
<td>Residual</td>
<td>62.06</td>
<td>100</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>104.08</td>
<td>129</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $F(4, 100) = 2.46$
Table 10.2. Differences Between Dimension Means Within School Board Members Group Using Fisher's Critical Difference Method ($X_C - X_R$)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension II</td>
<td>.48*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension III</td>
<td>.53*</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension IV</td>
<td>.37</td>
<td>.11</td>
<td>.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension V</td>
<td>.32</td>
<td>.80*</td>
<td>.85*</td>
<td>.69*</td>
<td></td>
</tr>
</tbody>
</table>

*Critical Difference = .37

Table 10.3. Groups-Dimensions Means Summary

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>4.87</td>
<td>4.25</td>
<td>4.53</td>
<td>4.38</td>
<td>4.96</td>
</tr>
<tr>
<td>Teachers</td>
<td>3.22</td>
<td>3.92</td>
<td>4.30</td>
<td>4.64</td>
<td>4.76</td>
</tr>
<tr>
<td>Principals</td>
<td>4.46</td>
<td>4.62</td>
<td>4.35</td>
<td>4.58</td>
<td>5.31</td>
</tr>
<tr>
<td>Superintendents</td>
<td>4.62</td>
<td>4.39</td>
<td>4.36</td>
<td>4.34</td>
<td>5.15</td>
</tr>
<tr>
<td>School Board Members</td>
<td>4.81</td>
<td>4.33</td>
<td>4.28</td>
<td>4.44</td>
<td>5.13</td>
</tr>
</tbody>
</table>

Summary. A number of differences were found between dimensions within each group. However, one pair of dimension differences are common to all groups. Parents, teachers, principals, superintendents, and school board members respond more favorably to school administrative responsibilities related to merit pay implementation than to psychological determinants influencing improved teacher performance. In addition, with respect to school administrative responsibilities related to merit pay implementation two pairs of dimension differences have been identified in which differences are found for four of five groups. First, teachers, principals, superintendents, and school board members respond less favorably to evaluation criteria to be employed for the measurement of teacher performance related to merit pay; and second, parents, principals,
superintendents, and school board members respond less favorably to alternative financial strategies related to the improvement of functionally incompetent teachers than they do to school administrative responsibilities related to merit pay implementation. See Table 10.3, page 85 for a summary of group-dimension means.

**Individual Item Analysis**

Group differences within dimensions and dimension differences within groups have analyzed and discussed above. Although differences were found, the differences identified provide only trends and general relationships between groups and dimensions. The following analyses examines group responses to item means within each dimension in terms of whether the responses to the items are: a) favorable to merit pay implementation; b) unfavorable to merit pay implementation; or c) "not sure." The assignment of the item means is based on a critical difference that estimates the items significant departure from the survey response value, 4, which represents "not sure." The decision rule used to determine critical differences takes into account the sample size and response variation. Those item means which exceed 4.0 + Diff, or are less than 4.0 - Diff are treated as favorable and unfavorable respectively, where Diff = .95 t(n)(s/√n). All other item means are treated as "not sure."

**Dimension I. Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools.**
Parents (6) and superintendents (5) have a greater frequency of responses favorable to merit pay implementation than do teachers, principals, and school board members with regards to motivational factors influencing decisions to implement merit-pay programs in the schools. Teachers (4) have the highest frequency of responses unfavorable to merit pay implementation. Teachers (4), principals (4), and school board members (4) are "not sure" on more items than parents (2) and superintendents (2).

Teachers indicated uncertainty with regards to: a) merit pay would improve educational productivity by motivating improved teacher performance (Item I-2); b) merit pay would exploit teachers rather than provide reasonable compensation for work done (Item I-3); and c) merit pay would benefit teachers (Item I-4). Teachers, believe that general salary increases would improve teacher performance at least as effectively as merit pay (Item I-7). Parents, principals, and superintendents responded favorably to Items I-2, I-3, and I-4, whereas parents, principals, and school board members are "not sure" about Item I-7, and superintendents disagree with teachers.

Parents and school board members were not sure with regards to whether the solution of school problems unrelated to financial incentives would have a greater effect on the improvement of teacher performance than would merit pay implementation. Teachers, principals, and superintendents gave responses unfavorable (agree) to merit pay
implementation. See Table 11.1, page 93 and Table 12, page 94 for a summary of favorable, unfavorable, and "not sure" responses for Dimension I.

Dimension II. Psychological Determinants Influencing Improved Teacher Performance. Parents (6), teachers (7), and school board members (5) have the highest frequency of "not sure" responses. Principals (7) and superintendents (6) have the highest frequency of responses favorable to merit pay implementation.

All groups responded "not sure" to Item II-6: school district practices would allow school administrators to distribute merit-pay awards as soon as improved teacher performance is documented. All groups responded favorably (agree) to: in order to establish the relationship between performance and merit-pay awards, merit-pay evaluations would have to be conducted more frequently than once a year (Item II-7). Principals and superintendents respond favorably to: a) school administrators would have a functional understanding of those reinforcement theories and practices that relate to effective merit pay implementation (agree) (Item II-8); b) school administrators would be able to determine when nonfinancial rewards more effectively improve teacher performance than financial rewards (agree) (Item II-9); and c) school administrators seldom reward improved performance (disagree) (Item II-10). Teachers agree that school administrators seldom reward improved performance; parents and school board members are "not
sure." See Table 11.2, page 93 and Table 12, page 94 for a summary of favorable, unfavorable, and "not sure" responses for Dimension II.

Dimension III. Evaluation Criteria to be Employed for the Measurement of Teacher Performance Related to merit-pay awards. Parents (6), teachers (7), and school board members (5) have the highest frequency of "not sure" responses. Principals (7) and superintendents (7) have the highest frequency of responses favorable to merit pay implementation.

Favorable responses among groups are indicated for:

a) merit-pay evaluations would relate specifically to those work elements the teacher has control over (Item III-1);
b) merit-pay evaluations would be determined solely by school administrators (disagree) (Item III-6); and c) merit-pay awards may be made on the basis of quality as well as quantity (Item III-13). Parents, principals, and superintendents indicate favorable responses to: merit-pay evaluations would be determined by teachers, school administrators, and parents (Item III-4). Teachers and school board members are "not sure." Parents, principals, and school board members responded unfavorably (agree) to: teacher style, characteristics, and instructional method would be the key elements used for merit-pay evaluations (Item III-11). Teachers and superintendents were "not sure." In contrast to Item III-11, principals, superintendents, and school board members responded favorably to:
student performance would be the key element used for the development of teacher performance measures relating to merit-pay awards (Item III-12). Teachers responded unfavorably (disagree) with item III-12 and parents were "not sure." See Table 11.3, page 93 and Table 12, page 94 for a summary of favorable, unfavorable, and "not sure" responses for Dimension III.

**Dimension IV. Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers.** Parents (4) have the highest frequency of "not sure" responses. Teachers (6), principals (5), and superintendents (5) have the greatest frequency of responses favorable to merit pay implementation.

All groups responded favorably to: a) financial awards based on performance would improve the performance of incompetent teachers (disagree) (Item IV-1); guidance and supervision by effective teachers would improve the performance of incompetent teachers (agree) (Item IV-6); and c) incompetent teachers should be removed from the classroom and placed in teacher development programs until determined able to return to the classroom (agree) (Item IV-7). Teachers responded favorably (disagree) to: teacher competency is the most critical issue bearing on educational productiveness in the schools (Item IV-4). All other groups responded unfavorably (agree) with regards to Item IV-4. School board members responses are unfavorable (agree) with regards to: dismissal would be the only appropriate action
to be taken with regards to incompetent teachers. All other
groups are not sure. See Table 11.4, page 93 and Table 12,
page 94 for the summary of favorable, unfavorable, and
"not sure" responses for Dimension IV.

Dimension V. School Administrative Responsibilities
Related to Merit Pay Implementation. Teachers (8), princi-
pals (9), and superintendents (9) have the highest frequency
of responses favorable to merit pay implementation. School
board members (4) have the greatest frequency of "not sure"
responses. All group responses are favorable to: a) school
administrators would establish policies and procedures
simple enough for teachers to see the direct relationship
between merit-pay increases and performance (Item V-1);
b) school administrators would maintain lines of communi-
cations that would allow teachers to provide input about the
reasonableness and equity of performance expectations (Item
V-2); and c) school administrators would maintain merit-pay
programs in which teachers contribute to the design and
administration of the program (Item V-5); d) school
administrators would be committed to excellence through the
concerted effort to assure that only competent performance
is rewarded (Item V-7); and e) school administrators would
distribute merit-pay awards on the basis of the job require-
ments and who fills the job, rather than performance
(disagree) (Item V-8). Principals and superintendents
respond favorably to all items except Item V-4: school
administrators would accept performance failures as their
ultimate responsibility. Principals responses are unfavorable (disagree) to merit pay implementation and superintendents are not sure. Teachers, principals, and superintendents respond favorably to: a) school administrators would establish quotas limiting the number of teachers that would receive merit-pay awards (disagree) and b) school administrators would attempt to modify teacher performance through the use of merit pay rather than changing rules, management practices, or the job (disagree). Parents and school board members are not sure with regards to these issues. See Table 11.5, page 94 and Table 12, page 94 for the summary of favorable, unfavorable, and "not sure" responses for Dimension V.

Summary. Across all dimensions, the total favorable, unfavorable, and "not sure" responses for each group are: a) parents (22, 6, 21); b) teachers (19, 8, 22); c) principals (31, 7, 11); d) superintendents (32, 7, 10); and e) school board members (21, 7, 21). In terms of total score, principals and superintendents reflect response patterns largely favorable to merit pay implementation. Teachers, parents, and school board members are less favorable to merit pay implementation with a high frequency of "not sure" responses as part of their response pattern.
Table 11
Summary Tables for Favorable, Unfavorable and Not Sure Responses for Individual Items

Table 11.1. Favorable, Unfavorable, and Not Sure Responses: Motivational Factors Influencing Decisions to Implement Merit-pay Programs in the Schools

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Table 11.2. Favorable, Unfavorable, and Not Sure Responses: Psychological Determinants Influencing Improved Teacher Performance

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Table 11.3. Favorable, Unfavorable, and Not Sure Responses: Evaluation Criteria to be Employed for the Measurement of Teacher Relating to Merit-pay Awards

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Table 11.4. Favorable, Unfavorable, and Not Sure Responses: Alternative Financial Strategies Related to the Improvement of Functionally Incompetent Teachers

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Table 11.1. Favorable, Unfavorable, and Not Sure Responses: School Administrative Responsibilities Related to Merit Pay Implementation

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Table 12
Survey Items and Respondent's Favorable, Unfavorable, and Not Sure Responses to Items

1. MOTIVATIONAL FACTORS INFLUENCING DECISIONS TO IMPLEMENT MERIT-PAY PROGRAMS IN THE SCHOOLS.

<table>
<thead>
<tr>
<th></th>
<th>FAVORABLE</th>
<th>NOT SURE</th>
<th>UNFAVORABLE</th>
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<tr>
<td>1. Political endorsement of merit pay implementation in the schools is to satisfy political purposes rather than improvement of educational quality.</td>
<td>Pa, Pr, S, T</td>
<td>SB</td>
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<tr>
<td>2. Merit pay would improve educational quality by motivating improved teacher performance.</td>
<td>Pa, Pr, T</td>
<td>S, SB</td>
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<td>3. Merit-pay programs would exploit teachers rather than provide reasonable compensation for work done.</td>
<td>Pa, Pr, T</td>
<td>S, SB</td>
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<td>4. Merit-pay would benefit teachers.</td>
<td>Pa, Pr, T</td>
<td>S, SB</td>
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<td>5. Parents would benefit from merit pay implementation.</td>
<td>Pa, Pr, T</td>
<td>S, SB</td>
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<td>6. The performance gains achieved as a result of merit pay implementation would justify the additional finances required to maintain a merit-pay program.</td>
<td>Pa, S T, Pr, SB</td>
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<td>7. General salary increases would improve teacher performance at least as effectively as merit-pay awards.</td>
<td>S Pa, Pr T</td>
<td>SB</td>
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<td>8. The solution of school problems unrelated to financial incentives would have a greater effect on the Improvement of teacher performance than would merit pay implementation.</td>
<td>Pa, SB T, Pr, S</td>
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II. PSYCHOLOGICAL DETERMINANTS INFLUENCING IMPROVED TEACHER PERFORMANCE.

1. Merit-pay awards would improve teacher performance only if current salaries are perceived as inadequate to meet the teacher's basic needs.  
   Pr, S  Pa, T  SB

2. Merit-pay awards would have little effect on the performance of teachers who have social or self-actualization needs.  
   Pr  Pa, T  SB  S

3. Teachers who establish their own standard of performance excellence would be positively influenced by merit-pay awards.  
   T  Pa, Pr, S, SB

4. Merit-pay awards would have little effect on the performance of teachers who have security, status, or esteem needs.  
   Pr, S  Pa, T  SB

5. Merit-pay awards would more likely improve the performance of those teachers who have low achievement needs.  
   T, Pr  Pa, S  SB

6. School district payroll practices would allow school administrators to distribute merit-pay awards as soon as improved teacher performance is documented.  
   Pa, T  Pr, S  SB

7. In order to establish the relationship between performance and merit-pay awards, evaluations would have to be conducted more frequently than once a year.  
   Pa, T, Pr, S, SB

8. School administrators would have a functional understanding of those reinforcement theories and practices that relate to effective merit pay implementation.  
   Pa, Pr, T  S, SB

9. School administrators would be able to determine when nonfinancial rewards more effectively improve teacher performance than financial rewards.  
   Pr, S, Pa  T  SB

    Pr, S  Pa, T  SB

III. EVALUATION CRITERIA TO BE EMPLOYED FOR THE MEASUREMENT OF TEACHER PERFORMANCE RELATING TO MERIT-PAY AWARDS.

1. Merit-pay evaluation would relate specifically to those work elements the teacher has control over.  
   Pa, T, Pr, S, SB

2. Teacher performance ratings relating to merit-pay awards would be based only on those work elements that can be objectively measured.  
   T, Pr, Pa, S  SB
3. Subjective performance measures would be acceptable for determining merit-pay eligibility.

4. Merit-pay evaluation measures would be determined by teachers, school administrators, and parents.

5. Merit-pay evaluation measures would be determined by teachers and school administrators.

6. Merit-pay evaluation measures would be determined solely by school administrators.

7. Merit-pay evaluations would be conducted solely by school administrative personnel rather than by a panel of teachers and school administrators.

8. Merit-pay evaluation measures would be based upon organizational objectives set forth by school officials.

9. Merit-pay evaluations would include teacher performance evaluations made by parents.

10. Merit-pay ratings would refer only to the performance of teachers carrying out their normal classroom duties.

11. Teacher style, characteristics, and instructional method would be the elements used for merit-pay evaluations.

12. Student performance would be the key element used for the development of measures relating to merit-pay awards.

13. Merit-pay awards may be made on the basis of quality as well as quantity.

IV. ALTERNATIVE FINANCIAL STRATEGIES RELATED TO THE IMPROVEMENT OF FUNCTIONALLY INCOMPETENT TEACHERS.

1. Financial awards based on performance would improve the performance of incompetent teachers.

2. Failure to receive merit-pay awards would cause incompetent teachers to seek ways to improve their performance.

3. Failure to receive merit-pay awards would cause incompetent teachers to leave the teaching profession.
4. Teacher competency is the most critical issue bearing on educational productiveness in the schools. T Pa, Pr, S, SB

5. Financial awards based on the acquisition of new knowledge and improvement of teaching skill would improve the performance of incompetent teachers. Pr, SB Pa, T, S

6. Guidance and supervision by effective teachers would improve the performance of incompetent teachers. Pa, T, Pr, S, SB

7. Incompetent teachers should be removed from the classroom and placed in teacher development programs until determined able to return to the classroom. Pa, T, Pr, S, SB

8. Dismissal would be the only appropriate action to be taken with regards to incompetent teachers. Pa, T, SB Pr, S

V. SCHOOL ADMINISTRATIVE RESPONSIBILITIES RELATED TO MERIT PAY IMPLEMENTATION.

1. School administrators would establish policies and procedures simple enough for teachers to see the direct relationship between merit-pay increases and performance. Pa, T, Pr, S, SB

2. School administrators would maintain lines of communications that allow teachers to provide input about the reasonableness and equity of performance expectations. Pa, T, Pr, S, SB

3. School administrators would establish quotas limiting the number of teachers that would receive merit-pay awards. T, Pr, S Pa, SB

4. School administrators would accept performance failures as their ultimate responsibility. T, S, Pa, Pr SB

5. School administrators would maintain merit-pay programs in which teachers contribute to the design and administration of the program. Pa, T, Pr, S, SB

6. School administrators would maintain a commitment to spend the time and effort necessary to maintain an effective merit-pay program. Pa, T, Pr, S, SB

7. School administrators would be committed to excellence through the concerted effort to assure that only competent performance is rewarded. Pa, T, Pr, S, SB

8. School administrators would distribute merit-pay awards on the basis of the job requirements and who fills the job rather than performance. Pa, T, Pr, S, SB
School administrators would set merit-pay rates and redefine performance expectations in order to control the amount of compensation to be received by teachers.

School administrators would attempt to modify teacher performance through the use of merit pay rather than changing rules, management practices, or the job.

Supplementary Analyses

Four additional analyses were conducted in order to identify differences that may exist within groups. The following analyses relating to: a) responses differences relating to the respondents' definition merit pay; b) response differences relating to the respondents' perceptions regarding the effect merit pay would have on interpersonal relations in the schools; c) responses differences relating to the respondents' sex; and d) age are descriptive, and should be treated as informative and suggest possible considerations for future research.

Differences within the parents group are suggested regarding: motivational factors influencing decisions to implement merit pay programs in the schools with regards to how respondents' define merit pay. Parents (4.87), defining merit pay as additional compensation for improved performance agreed that merit pay would improve school productivity and benefit the school community's constituents, whereas those parents (3.63), selecting one of the alternate definitions were not sure.

Differences were noted for: school administrative
responsibilities relating to merit pay implementation. Those teachers (4.76) defining merit pay as additional compensation for improved performance agreed that school administrators would maintain effective merit-pay programs, whereas teachers (4.43) choosing an alternate definition were not sure.

Principals and school board members also indicated differences for: school administrative responsibilities related to merit pay implementation. Principals (5.27) and school board members (5.13) indicating that merit pay was additional compensation for improved performance were in agreement that school administrators would maintain effective merit-pay programs, whereas those principals (4.63) and school board members (4.53) selecting an alternate definition were less certain.

Differences were also noted for principals defining merit pay as additional compensation for improved performance with regards to: motivational factors influencing decisions to implement merit-pay programs in the schools. Principals (4.24) selecting the merit pay definition were not sure, whereas those principals selecting an alternate definition (3.50) tended to disagree that merit pay would improve educational productivity and benefit school community members.

Differences were noted for all groups regarding their perceptions about the effects merit pay would have on interpersonal relations in the schools. With regards to
motivational factors influencing decisions to implement merit-pay programs in the schools, parents (2.55) and teachers (2.41), indicating that there will be adverse effects on interpersonal relations, disagree that educational productivity will be improved and school community members will benefit as a result of merit pay implementation. In contrast, those parents indicating that there would be no significant changes (4.76) or there will be a positive effect on interpersonal relations (5.27) agree with the above. Teachers indicating there will be no significant changes, interpersonal relations will be positively affected or did not know (4.48), were not sure whether merit pay would improve educational productivity or benefit the school community's members. Principals indicating there would be no significant changes (5.21) or interpersonal relations would be positively affected (5.12), agree that merit-pay programs would improve educational productivity and benefit the members of the school community. Similarly, superintendents indicating there would be adverse effects on interpersonal relations (3.92) were not sure, whereas those superintendents indicating no significant changes (5.23) or that merit pay would have positive effects on interpersonal relations (5.35), agree that merit pay would improve educational productivity and benefit the school community's constituents. School board members indicating adverse effects resulting from merit pay implementation (3.81) were not sure, but those school board members indicating that
there would be positive effects on interpersonal relations (5.27) or did not know (5.38), agree that merit pay will positively effect educational productivity and benefit the school community's members.

Differences were also noted between school board members with regards to: school administrative responsibilities related to merit pay implementation. In those cases where school board members indicated adverse effects on interpersonal relations (3.97) or that there would be no significant differences (4.44), were not sure about the school administrator's ability to maintain an effective merit-pay program. Those school board members indicating merit pay would have a positive effect on interpersonal relations (4.67), agree with the above.

Teachers indicating that merit pay will have adverse effects on interpersonal relations (4.95), appeared to be more cognizant of the effects merit pay would have on incompetent teachers, whereas teachers indicating positive effects were not sure (4.21).

Parents, teachers, superintendents, and school board members indicated differences with regards to: school administrative responsibilities related to merit pay implementation. Parents were not sure (4.43) when they indicated that merit pay would have an adverse effect on interpersonal relations. Those parents indicating that there will be positive effects on interpersonal relations, or did not know (5.27), agree that superintendents will
maintain effective merit-pay programs. Teachers responding that there will be adverse effects on interpersonal relations were not sure (4.39), whereas teachers indicating there would be no significant changes or did not know (5.31), felt superintendents would maintain effective programs. Although superintendents were in agreement that they would maintain effective merit-pay programs in the schools, those superintendents indicating that there would be positive effects on interpersonal relations (5.70) were more committed than those who indicated there would be adverse effects on interpersonal relations (4.68). School board members, indicating that merit pay would have adverse effects on interpersonal relations in the schools (4.24), were not sure about the superintendent's commitment to an effective merit-pay program, whereas those indicating that merit pay would have a positive effect on interpersonal relations (5.34), agree that superintendents will maintain effective merit-pay programs.

Important differences were noted for teachers only with regards to differences in response patterns by sex. Male respondents were not sure (4.36) about the school administrator's ability to maintain effective merit-pay programs in the schools. The female respondents (5.07) agree that superintendents would maintain effective programs.

Response differences were an issue with regards to age for: motivational factors influencing decisions to implement merit-pay programs in the schools. For parents,
the age group ranging from 41 or older (5.12), were more likely to agree that merit pay would improve educational productivity and benefit the school community's members than the age groups ranging from 20-40 (4.66). The response differences noted for principals indicates that the principals in the 31-50 group are more likely to agree (4.53) than those in the 50 or older group (4.02) who were not sure that merit-pay programs would benefit the school community's members and improve educational productivity. School board members ranging in ages 20-50 were more likely to agree that merit pay would improve educational productivity and benefit the school community's members (4.98) than those 51 or older (4.54).

Differences by age were also noted for principals with regards to: school administrative responsibilities related to merit pay implementation. Those principals ranging from 31-40 years of age, although in agreement that school administrators would maintain effective merit-pay programs, were less committed (5.02) than those ranging between 41-50 years of age (5.52).

SUMMARY

The hypotheses that there are no differences between groups within dimensions, and there are no differences between dimensions within groups, were tested. In addition, an analysis of individual items was carried out in order to identify differences between groups with regards to
responses to individual items.

Two hypotheses relating to group differences were rejected. Teachers differed significantly from parents, principals, superintendents, and school board members with regards to: a) motivational factors influencing decisions to implement merit pay programs in the schools; and b) psychological determinants influencing improved teacher performance. Teachers disagree that merit pay will improve educational productivity and benefit the school district's members, whereas parents, superintendents, and school board members agree that merit pay will have a positive effect on the productivity in the schools and benefit the school districts members. Principals, however, were not sure about these issues. Principals responded favorably to the psychological determinants influencing improved teacher performance, whereas parents, teachers, superintendents, and school board members were not sure whether the motivational factors and reinforcement principles would improve teacher performance. Although differences were obtained between teachers and parents, superintendents, and school board members, the differences were one of magnitude within the "not sure" response range, where teachers' responses were less favorable.

- No differences between parents, teachers, principals, superintendents, and school board members were indicated for: a) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay
awards; b) alternative strategies related to the improvement of functionally incompetent teachers; and c) school administrative responsibilities related to merit pay implementation. Although significant differences were not determined at the dimension-level analysis, an examination of individual items revealed a large number of differences among groups for: a) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and b) alternative financial strategies related to the improvement of functionally incompetent teachers. Furthermore, with the exception of: school administrative responsibilities related to merit pay implementation, all dimensions exhibited considerable variation among groups with regards to the individual items included in each dimension.

Dimension differences were found for all groups. One pair of dimension differences occurred in all groups. Parents, teachers, principals, superintendents, and school board members responded less favorably to: psychological determinants influencing improved teacher performance than school administrative responsibilities related to merit pay implementation. Teachers, principals, superintendents, and school board members responded less favorably to: evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards, than school administrative responsibilities relating to merit pay implementation. In addition, parents, principals,
superintendents, and school board members responded less favorably to: alternative financial strategies related to the improvement of functionally incompetent teachers, than school administrative responsibilities related to merit pay implementation.

Factors causing within group variation were suggested for future consideration. How the respondent defined merit pay, how the respondent perceived the effects that merit pay would have on interpersonal relations in the schools, the respondents' sex and age, may be considerations with regards to: a) motivational factors influencing decisions to implement merit-pay programs in the schools; b) school administrative responsibilities related to merit pay implementation; and c) alternative financial strategies related to the improvement of the functionally incompetent teacher.

The conclusions, discussion, and recommendations are presented in chapter 5.
Chapter 5

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Merit pay, conceptually, is a procedure by which employees are awarded extra compensation in accordance with degrees of performance improvements exceeding the organization's acceptable performance standards. Proposals have been made to install merit-pay programs in the schools as a method to improve the schools' productivity in general, and improve teacher performance specifically. However, within the framework of education, merit pay is a controversial issue, requiring an in depth examination of those factors contributing to successful merit pay implementation.

Within the school district, five groups have been identified that play an important role with regards to merit pay implementation in the schools. These groups are: a) parents, b) teachers, c) principals, d) superintendents, and e) school board members. Because these groups have different functions within the school setting, the determination of differences in their perceptions about what would occur in the schools, relative to a variety of issues relevant to successful merit-pay programs, is an essential first step to be taken prior to the program's installation.

The implications of the study within the context of the above discussion are presented in the following:
1) Conclusions; 2) Discussion; and 3) Recommendations.

Conclusions

Differences were found between groups in two of the five dimensions identified for the study. In Dimension I, teachers were found to be less favorable towards motivational factors influencing decisions to implement merit-pay programs in the schools. Dimension II—psychological determinants influencing improved teacher performance—teachers and principals took polar positions, where teachers were not sure and principals provided responses favorable to merit-pay implementation. Both teachers' and principals' responses were significantly different from parents, superintendents, and school board members. Differences were not found between groups with regards to: a) Dimension III—evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; b) Dimension IV—alternative financial strategies related to the improvement of incompetent teachers; and c) Dimension V—school administrative responsibilities related to merit pay implementation.

Teachers responded less favorably than did parents, principals, superintendents, and school board members to Dimension I. Essentially, teachers did not believe that merit pay would improve educational productivity or benefit the school community members. In contrast, parents, principals, superintendents, and school board members
believed that merit pay would improve educational productivity and benefit the school community members.

Teachers' and principals' responses were significantly different from those of parents, superintendents, and school board members with regards to Dimension II. However, teachers responded less favorably than did parents, principals, superintendents, and school board members. The principals' responses were more favorable than were those of parents, teachers, superintendents, and school board members. The difference between teachers and parents, superintendents, and school board members are less significant in-as-much as these groups were considered to have given responses indicating uncertainty with regards to those issues contained in Dimension II. Principals, however, are significant in-as-much as their responses are considered favorable to the issues found in Dimension II. This suggests, that principals exhibit, a greater knowledge of motivators and confidence that the appropriate reinforcement procedures will be applied in the schools.

Parents, teachers, principals, superintendents, and school board members indicated uncertainty with regards to the evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards. Caution must be taken not to assume that there were no differences in terms of individual item responses. There were only three issues in which all groups provided favorable responses. They are: a) merit-pay evaluations
would relate specifically to those work elements the teacher has control over; b) merit-pay evaluation measures would [not] be determined solely by school administrators; and c) merit-pay awards may be made on the basis of quality as well as quantity. The remaining responses were diverse, thereby indicating that evaluation procedures are not clearly enough defined to result in consistency among the groups.

Although no differences were indicated between groups for Dimension IV—alternative strategies related to the improvement of functionally incompetent teachers—an examination of individual items indicate that teachers and principals may be more cognizant of the effects merit pay would have on the improvement of the incompetent teacher's performance, and the alternative strategies that would productively improve the incompetent teacher's performance than are parents, superintendents, and school board members.

The responses for Dimension V—administrative responsibilities related to merit pay implementation—are consistent with respect to parents', teachers', principals', superintendents', and school board members' confidence that school administrators would take the necessary steps to maintain an effective merit-pay program. Although the parents and teachers responses are less favorable than principals, superintendents, and school board members, an examination of individual items support the consistency
of item responses favorable to merit pay.

At this juncture, recommendations favoring the implementation of merit-pay programs in the schools should be set aside temporarily. Both the dimension-level and item-level analysis suggest that sufficient differences exist between groups to warrant the development of information programs directed at reconciling important differences found between groups.

To further complicate matters, differences are found between dimensions within groups. By treating the dimensions as a developmental sequence for the design of merit-pay programs, sufficient differences exist between the dimensions for all groups indicating weak points along the sequence that should be remedied prior to merit pay implementation. The weaknesses found common to the majority of groups are: a) psychological determinants influencing improved teacher performance; b) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and c) alternative financial strategies related to the improvement of functionally incompetent teachers. This implies that even though there is general support in terms of: a) motivational factors influencing decisions to implement merit-pay programs in the schools; and b) school administrative responsibilities related to merit pay implementation; failure of the groups to express certainty favorable to merit pay implementation in the preceding three dimensions makes the program's success
Finally, the principal assumption made was that all groups across all dimensions must have response patterns favorable to merit pay implementation. These prerequisites were not demonstrated. Contrary to the above assumption, Dimension II, Dimension III, and Dimension IV did not meet the above criteria since all group responses reflect uncertainty with regards to what would occur in the schools relative to those issues making up each dimension.

In retrospect, there is, at this time, no basis for suggesting that effective merit-pay programs would be successfully installed in the California schools. This does not mean that consideration of merit pay should be abandoned, but rather, there is still considerable work to be done in order to assure that parents, teachers, principals, superintendents, and school board members arrive at some agreement with regards to issues important to successful merit pay implementation.

Discussion

Merit pay implementation requires that there be sufficient trust and cooperation between school officials and teachers. Within the school setting this position can be extended to include parents who would both contribute to the maintenance of the program and derive benefits as a result of improved education for their children.

In order to improve the trust and cooperation, and
confidence among the participants in the school district's merit-pay program, perceptual congruence should be achieved between parents, teachers, principals, superintendents, and school board members that is favorable to merit pay with regards to those issues addressed by this study. An important issue confronting the installation of a merit pay program in the schools are those attitudes held by teachers regarding their contention that merit pay would not improve educational productivity nor benefit the school community members. A change in this attitude would seem necessary. However, the responsibility to initiate this change in the teacher's attitude must be shared by all groups in-as-much as the groups must be in agreement with respect to the evaluation procedures to be employed and how teacher incompetence is to be dealt with. Without consistency in these two areas, there is no reason to expect that teacher attitude changes will occur.

The recurrent theme emphasized in the literature refers to the establishment of standards by which a link between performance and pay can be made. Consequently, the focal point is the development of school district expectations specifying what the school district's outcomes are to be. Once these expectations are determined, made known, and agreed upon by parents, teachers, principals, superintendents, and school board members, the distinction between evaluations pertaining to organizational membership and performance (outcomes) can be made.
As the evaluation procedures become more clearly defined relative to the expectations (outcomes), procedures for dealing with teacher incompetence begin to fall in place because the causes of teacher incompetence can be more readily identified. Consequently, the teacher's expectations should change with regards to their unfavorable position taken towards merit pay's ability to influence increased educational productiveness and the provision of benefits to the school community members.

Essentially, steps should be taken that will assure the congruence between groups relative to what the schools are to achieve, from which, decisions can be made relative to those issues important to effective merit pay implementation. Without the achievement of favorable perceptual congruence among parents, teachers, principals, superintendents, and school board members regarding those issues important to merit pay implementation, the likelihood of installing a successful merit-pay program becomes severely diminished.

Recommendations

The study has identified important differences between parents, teachers, principals, superintendents, and school board members regarding issues important to merit pay implementation. Additional research is required in order to clarify the attitudes expressed by groups with regards to these issues. As a result, more intensive studies by
groups are called for.

Although differences were found between groups further studies are required to confirm the results of this study. However, future studies should focus on the clarification of group perceptions as they relate to:
a) the respondents' definition of merit pay; b) the respondents' perception about the effect merit pay will have on interpersonal relations in the schools; c) the respondents' sex; and d) the respondents' age.

In addition, research should be conducted to compare response behaviors resulting from regional characteristics which may be a function of the community's economic base--a) agriculture, b) commerce, c) industry, and d) technology. There appear to be levels of conservatism that may play an important role with regards to the acceptance or rejection of issues important to merit pay implementation.

Teachers were the only group that disagreed with the assumption that merit pay would improve educational productiveness and benefit the school district's constituents. A relationship between the teachers' rejection of this premise may be directly related to the absence of definitive evaluation procedures and methods for handling teacher incompetence. Studies designed to measure the rate of attitude change relative to precisely defined standards would be beneficial to the design of merit-pay programs.

Furthermore, the examination of the internal
consistency of the survey instrument suggests, and was confirmed by the various data analyses, that there was considerable response variation by groups within: a) psychological determinants influencing improved teacher performance; b) evaluation criteria to be employed for the measurement of teacher performance relating to merit-pay awards; and c) alternative financial strategies related to the improvement of functionally incompetent teachers. Research designs that pre- and post-test, with an intervening information period relative to merit pay issues, would help distinguish whether the variation was due to the items; or whether the variation was due to lack of knowledge of merit-pay concepts, lack of uniformity within education regarding educational standards, or the respondents' experience within the school district.

Concluding Comment

In the absence of promotional opportunities in education, merit pay can serve as a powerful motivator, enhancing school productivity while providing recognition and financial benefit to those teachers excelling in their work. However, in order to achieve these objectives, precise definitions of the school's outcomes are required from which suitable performance measures can be derived.
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APPENDICES
APPENDIX I

RESEARCH COMMUNICATION TO
SCHOOL DISTRICTS
November 8, 1984

__________________________, Superintendent
__________________________ School District
__________________________ 93001

Dear ____________________:

The success of merit-pay programs adopted by school districts is affected by those opinions held by the constituents within the school community. Decisions regarding the implementation of merit pay centers on whether the differences expressed by parents, teachers, principals, central office administrators, and school board members can be reconciled. By identifying those differences expressed, reconciliation becomes more likely and as a result, a merit-pay program’s chance for success is improved.

Currently, I am enrolled at the University of the Pacific, Stockton, California, and in the dissertation phase of my doctoral studies. Your assistance in the distribution of the questionnaire and the selection of a parent, teacher, and school board member respondent would be appreciated in order that I may identify these differences and provide you with a summary of the results.

Enclosed is a self-addressed post card on which you may indicate your interest in participating in the study. Immediately following your reply, a packet containing the questionnaires and selection criteria will be mailed.

Sincerely yours,

William J. Hoff
Dear Mr. Hoff:

[ ] Please send the questionnaires. I will be happy to participate in the study.

[ ] I am sorry but I do not wish to participate in the study.

Comments:

Date: __________, 1984

__________________________

Name

00-00-N
October 15, 1984

Dear ____________________:

Thank you for taking part in the study. With your assistance and support the study will generate information useful to the design of an effective merit-pay program.

Five groups were identified for the study. They are: a) Parents, b) Teachers, c) Principals, d) Central Office Administrators, and e) School Board Members. Please select the respondents and distribute the questionnaires as follows:

1. Fill out questionnaire addressed to you.
2. Give a questionnaire to __________, Principal.
3. Select and give questionnaires to:

   a. School Board Member--select the 4th school board member from your list of board members.
   b. Teachers--select the 20th teacher from your list of teachers. For ease of distribution the teacher may be selected from the Principal's school site.
   c. Parents--select the 14th parent from the above teacher's student list.

Should you feel it necessary to modify the selection criteria, do so, but attempt to observe randomness of selection.

In the event that it is necessary to follow-up a respondent because a questionnaire has not been returned, please keep a record of the respondents.

School Board Member: __________________________
Teacher: __________________________
Parent: __________________________

Following the completion of the data analysis, a summary of the results will be mailed to you.

Sincerely yours,

William J. Hoff
Dear Participant:

Merit pay has been given renewed consideration as an effective way to improve teacher performance in the schools. However, prior to the adoption of a merit-pay plan, issues affecting successful merit pay implementation are to be considered.

Essential to the development of sound merit-pay programs is the input of opinions expressed by those who are to benefit from the program. Your opinions on those issues presented in the enclosed questionnaire are important to the design of an effective merit-pay program.

Please complete the questionnaire and return promptly using the attached self-addressed, postage paid envelope. All individual responses will be treated as confidential communications between the researcher and the participant.

Thank you for taking the time from your busy schedule and contributing to the research being undertaken.

Sincerely yours,

William J. Hoff
December 5, 1984

Dear ____________________:

A preliminary examination of the data suggest a wide variety of differences among the respondents with regards to a number of issues addressed by the questionnaire related to merit pay. Enclosed are trends that appear to be emerging for several issues frequently discussed in the literature. However, conclusive statements can not be made until the outstanding questionnaires are returned.

I have received your questionnaire along with the Teacher and Principal respondents. Responses from the Parent and School Board Member respondents have not been received.

Enclosed are additional questionnaires in case the respondents have misplaced the first questionnaire distributed. Sometimes irregularities arise that cannot be controlled for. Should a respondent not wish to participate, please select a substitute respondent.

Thank you for taking the time from your busy schedule and providing the assistance needed to conduct this study.

Sincerely yours,

William J. Hoff
December 5, 1984

Dear __________________:

A request was made asking your assistance in the selection of respondents and the distribution of questionnaires for a merit-pay study directed at determining the differences among parents, teachers, principals, superintendents, and school board members on issues important to merit pay implementation. The questionnaires were mailed to you. As of this date, I have not received any responses from your district.

It is understood, with the demands placed on your time, priorities must be set, giving emphasis to the most pressing school matters. Your participation is needed in order that I meet the deadlines set for the completion of the study. Please give the questionnaires your immediate attention.

Enclosed are trends that appear to be emerging for several issues frequently discussed in the literature. However, conclusive statements can not be made until the outstanding questionnaires are returned.

I am looking forward to hearing from you soon.

Sincerely yours,

William J. Hoff
APPENDIX II

SURVEY INSTRUMENT
**PERCEPTUAL DETERMINANTS AFFECTING MERIT PAY IMPLEMENTATION IN CALIFORNIA SCHOOL DISTRICTS**

**INSTRUCTIONS:** The following questionnaire consists of five dimensions containing statements related to merit pay implementation in the schools. Please check either a 3, 2, 1, 0, -1, -2, or -3 as your choice relates to your degree of agreement or disagreement with each statement's relevance to merit pay implementation. Choices 3, 2, and 1 indicate your degree of agreement; choices -1, -2, and -3 indicate your degree of disagreement; and zero (0) indicates "not sure." The time required to complete the questionnaire is approximately **15 MINUTES**.

### I. MOTIVATIONAL FACTORS INFLUENCING DECISIONS TO IMPLEMENT MERIT-PAY PROGRAMS IN THE SCHOOLS.

<table>
<thead>
<tr>
<th>Statement</th>
<th>AGREE</th>
<th>NOT SURE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Political endorsement of merit pay implementation in the schools is to satisfy political purposes rather than improvement of educational productivity.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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<tr>
<td>5. Parents would benefit from merit pay implementation.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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<tr>
<td>6. The performance gains achieved as a result of merit pay implementation would justify the additional finances required to maintain a merit-pay program.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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<tr>
<td>7. General salary increases would improve teacher performance at least as effectively as merit-pay awards.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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<tr>
<td>8. The solution of school problems unrelated to financial incentives would have a greater effect on the improvement of teacher performance than would merit pay implementation.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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### II. PSYCHOLOGICAL DETERMINANTS INFLUENCING IMPROVED TEACHER PERFORMANCE.

<table>
<thead>
<tr>
<th>Statement</th>
<th>AGREE</th>
<th>NOT SURE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Merit-pay awards would improve teacher performance only if current salaries are perceived as inadequate to meet the teacher's basic needs.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
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<tr>
<td>2. Merit-pay awards would have little effect on the performance of teachers who have social or self-actualization needs.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
</tr>
<tr>
<td>3. Teachers who establish their own standards of performance excellence would be positively influenced by merit-pay awards.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
</tr>
<tr>
<td>4. Merit-pay awards would have little effect on the performance of teachers who have security, status, or esteem needs.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
</tr>
<tr>
<td>5. Merit-pay awards would more likely improve the performance of those teachers who have low achievement motivation.</td>
<td>[3]</td>
<td>[2]</td>
<td>[1]</td>
</tr>
</tbody>
</table>
6. School district payroll practices would allow school administrators to distribute merit-pay awards as soon as improved teacher performance is documented.

7. In order to establish the relationship between performance and merit-pay awards, merit-pay evaluations would have to be conducted more frequently than once a year.

8. School administrators would have a functional understanding of those reinforcement theories and practices that relate to effective merit pay implementation.

9. School administrators would be able to determine when nonfinancial rewards more effectively improve teacher performance than financial rewards.


III. EVALUATION CRITERIA TO BE EMPLOYED FOR THE MEASUREMENT OF TEACHER PERFORMANCE RELATING TO MERIT-PAY AWARDS.

1. Merit-pay evaluation would relate specifically to those work elements the teacher has control over.

2. Teacher performance ratings relating to merit-pay awards would be based only on those work elements that can be objectively measured.

3. Subjective performance measures would be acceptable for determining merit-pay eligibility.

4. Merit-pay evaluation measures would be determined by teachers, school administrators, and parents.

5. Merit-pay evaluation measures would be determined by teachers and school administrators.

6. Merit-pay evaluation measures would be determined solely by school administrators.

7. Merit-pay evaluations would be conducted solely by school administrative personnel rather than by a panel of teachers and school administrators.

8. Merit-pay evaluation measures would be based upon organizational objectives set forth by school officials.

9. Merit-pay evaluations would include teacher performance evaluations made by parents.

10. Merit-pay ratings would refer only to the performance of the teachers carrying out their normal classroom duties.

11. Teacher style, characteristics, and instructional method would be the elements used for merit-pay evaluations.
12. Student performance would be the key element used for the development of teacher performance measures relating to merit-pay awards.

13. Merit-pay awards may be made on the basis of quality of performance as well as quantity.

IV. ALTERNATIVE FINANCIAL STRATEGIES RELATED TO THE IMPROVEMENT OF FUNCTIONALLY INCOMPETENT TEACHERS.

1. Financial awards based on performance would improve the performance of incompetent teachers.

2. Failure to receive merit-pay awards would cause incompetent teachers to seek ways to improve their performance.

3. Failure to receive merit-pay awards would cause incompetent teachers to leave the teaching profession.

4. Teacher competency is the most critical issue bearing on educational productiveness in the schools.

5. Financial awards based on the acquisition of new knowledge and improvement of teaching skills would improve the performance of incompetent teachers.

6. Guidance and supervision by effective teachers would improve the performance of incompetent teachers.

7. Incompetent teachers should be removed from the classroom and placed in teacher development programs until determined able to return to the classroom.

8. Dismissal would be the only appropriate action to be taken with regards to incompetent teachers.

V. SCHOOL ADMINISTRATIVE RESPONSIBILITIES RELATED TO MERIT-PAY IMPLEMENTATION.

1. School administrators would establish policies and procedures simple enough for teachers to see the direct relationship between merit-pay increases and performance.

2. School administrators would maintain lines of communications that allow teachers to provide input about the reasonableness and equity of performance expectations.

3. School administrators would establish quotas limiting the number of teachers that would receive merit-pay awards.

4. School administrators would accept performance failures as their ultimate responsibility.

5. School administrators would maintain merit-pay programs in which teachers contribute to the design and administration of the program.
6. School administrators would maintain a commitment to spend the time and effort necessary to maintain an effective merit-pay program.

7. School administrators would be committed to excellence through the concerted effort to assure that only competent performance is rewarded.

8. School administrators would distribute merit-pay awards on the basis of the job requirements and who fills the job rather than performance.

9. School administrators would set merit-pay rates and redefine performance expectations in order to control the amount of compensation to be received by teachers.

10. School administrators would attempt to modify teacher performance through the use of merit pay rather than changing rules, management practices, or the job.

Please answer the following questions by checking one response only.

1. Which statement defines Merit Pay as you understand the concept.
   - a. Teachers are awarded additional compensation by advancing to higher job classifications as a result of professional improvement.
   - b. Teachers are awarded additional compensation for extra duties, longer work year, and/or serving in high priority locations.
   - c. Teachers are awarded additional compensation for performance that exceeds acceptable performance standards.
   - d. Teachers are awarded additional compensation for guidance and supervision of other teachers, and curriculum development in addition to assuming partial teaching responsibilities.
   - e. Don't know.

2. Which statement describes the effect merit pay implementation will have on interpersonal relations in the schools.
   - a. There will be no significant changes in the interpersonal relations among teachers.
   - b. There will be increased ill-feelings, lack of cooperation, and a highly competitive atmosphere that adversely effects teacher performance.
   - c. There will be less animosity among teachers and performance gains will be noted because high performing teachers will be identified and rewarded appropriately.
   - d. Don't know.

3. You are: ___ male ___ female

4. Your age is:
   - 20-30
   - 31-40
   - 41-50
   - 51-60
   - Over 60
APPENDIX III

LISTING OF SCHOOL DISTRICTS
DRAWN FOR THE STUDY
The following school districts were drawn from regional lists provided by the Association of California School Administrators, ACSA Headquarters, Burlingame, California.

<table>
<thead>
<tr>
<th>Region 1</th>
<th>Region 10</th>
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<tbody>
<tr>
<td>Trinity Union High</td>
<td>Soquel Elementary</td>
</tr>
<tr>
<td>Susanville Elementary</td>
<td>Monterey Peninsula Unified</td>
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<tr>
<td>Canyon Union Elementary</td>
<td>Mission Union Elementary</td>
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<td>Placer Union High</td>
<td>Lemoore Union High</td>
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<tr>
<td>Palmero Union Elementary</td>
<td>Muroc Unified</td>
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<tr>
<td>Golden Feather Union Elem.</td>
<td>Taft Union High</td>
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<td></td>
<td>Pioneer Union Elementary</td>
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<td>Grant Joint Union High</td>
<td>Beaumont Unified</td>
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<tr>
<td>Esparto Unified</td>
<td>Elsinore Union High</td>
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<td>Old Adobe Union Elem.</td>
<td>College Elementary</td>
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<tr>
<td>Santa Rosa HSD</td>
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<td>Petaluma Joint Union High</td>
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<tr>
<td>Sequoia Union High</td>
<td>South Bay Union High</td>
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<td>South San Francisco Unified</td>
<td>Hermosa Beach City Elem.</td>
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<td>Ripon Unified</td>
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<td>Hughson Unified</td>
<td>Hacienda La Puente Unified</td>
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<td>Tracy City Schools</td>
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<td>Capistrano Unified</td>
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<td>Morgan Hill Unified</td>
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<td>Mt. Pleasant Elem.</td>
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<td>Washington Joint Union Elementary</td>
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<td>Carlsbad Unified</td>
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