# A COMPARISON OF PERCEPTIONS CONCERNING DIFFERENTIAL SALARY COMPENSATION FOR TEACHERS IN THE EIGHT LARGEST SCHOOL DISTRICTS OF TEXAS

#### DISSERTATION

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The problem of this study was to determine if educationally, politically, and economically viable alternatives to the single salary schedule for teachers exist in the eight largest school districts in Texas. After a review of the literature, a questionnaire was developed designed to obtain views of superintendents, school board members, randomly selected principals, teachers, and PTA members in the eight school districts on these issues: whether a multi-factor teacher salary schedule should be developed; which factors should be included in such a system; what amount of monetary compensation should be awarded for each factor; and if teacher job performance is a factor, what criteria should be used to evaluate teachers and who would conduct the evaluations. Analyses of the data were conducted according to the following demographic variables: school district; position, sex, and ethnicity of the respondents; whether the respondents owned homes in the school districts: and whether the respondents had children enrolled in the

district schools. The results were presented for the respondents as a whole and according to the various demographic variables.

The findings of the study evidenced that there is strong support for differentiated salary schedules regardless of demographic characteristics, and the belief that differentiated salary schedules can be successfully implemented is strongly supported. Whereas the traditional factors of formal training and experience rated highest in terms of mean scores, seven additional factors received strong support. In rank order these were post-degree study, performing additional duties, teacher job performance, areas of personnel shortages, teaching special populations, class enrollment, and business-related experience.

There was very strong, consistent support among all respondents for the inclusion of job performance as a factor in the determination of teacher salaries.

Principals and teacher supervisors were supported as evaluators.

Recommendations included that school districts work toward the ultimate goal of totally restructuring the present state salary system, incorporating more factors on which to base compensation.

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#### CHAPTER I

## INTRODUCTION

An increasing number of teachers, particularly those in urban areas, are leaving the profession. Under the single salary schedule presently used, in which salary increases are based on formal training and experience alone, no monetary allowances or rewards are made for outstanding job performance or for taking assignments in schools having high concentrations of economically- and educationally-disadvantaged students, nor for teaching subjects which are perceived to require rigorous preparation such as mathematics and chemistry. Special problems created by variance in student enrollment, environment, and scarcity of teachers in certain critical areas are not recognized as factors that might require additional remuneration. To counter these several problems, the idea of incentives or rewards for public service in the teaching profession is gaining momentum. At present scant incentive exists to encourage effective teachers to stay in the classroom (40, p. 2).

It may be argued that outstanding teachers are underpaid for what they do, while others in the profession are overpaid for inadequate performance. "There is

equally. Yet that is the case of teacher salaries" (31). Jobs and performance vary, yet all teachers are paid the same with regard only to their training and experience. Is this equitable? Does such a system contribute to mediocrity? Perhaps educators need to develop techniques for rewarding professionals differentially, based upon certain significant and/or critical standards.

Casey (9) states that we must move away from the notion that all teachers are the same and must be paid on the same scale. To continue to do so is to drive hardworking, ambitious teachers from the profession. He cites the following false conceptions commonly held by public school policymakers and the public in general.

- Teachers are somehow different from other human beings in that they will continually work beyond the call of duty without any hope of material reward.
- Students are more important to teachers than the teacher's self, family, and friends; and teachers will continue to take time from these other aspects of life in order to develop outstanding courses.
- 3. An excellent teacher will see a lot of change in the students and, therefore, be motivated to continue striving for excellence (9, p. 500).

The single salary schedule for teachers, by which salary increments are based on formal training and experience alone, has been adopted almost universally in public education. However, this almost unquestioned

acceptance of the single salary schedule is beginning to meet with resistance and even opposition. School boards are being forced to take a closer look at compensation plans for teachers (3, p. 3). Accordingly, to have or not to have a new type of salary schedule with pay differentials is a viable issue.

It is obvious that the salary structure is not the only factor influencing the quality of instruction in elementary and secondary education. It is, nonetheless, an important factor (19, p. 99). The salary schedule is also a major factor in the ability of a school district to attract and retain effective teachers within its area of jurisdiction. Unlike such factors as student population, parental attitude, and the nature of the community, over which the district has no direct control, it does have final authority in salary schedules.

Cohn (11, p. 254) notes that the salary structure is likely to affect the movement of human resources into or out of education. The incentives inherent in the salary structure will determine to some extent the quality and type of teachers that a school district will be able to recruit and retain.

#### Statement of the Problem

This study attempts to determine if educationally, politically, and economically alternatives to the single

salary schedule for teachers exist in the largest school districts in Texas; and, if alternatives do exist, to describe, evaluate, and justify them.

# Purposes of the Study

Specifically, the purposes of this study are

- 1. To survey citizens, school board members, teachers, principals, and superintendents to identify possible factors that should be considered in determining salaries for teachers;
- 2. To analyze and compare what citizens, school board members, teachers, principals, and superintendents consider to be the significant variables which should be used in the determination of teachers' salaries.

  Specific variables to be considered are the following.
  - a. TEACHING EXPERIENCE: Years employed as a certified, full-time teacher in an accredited school;
  - b. COLLEGE DEGREE: Level of degree awarded by an accredited college or university;
  - c. POST-DEGREE STUDY: Credit-hours, relating to job, achieved beyond a degree, taken at an accredited college or university;
  - d. ADDITIONAL DUTIES: Time spent beyond that which is recognized as a standard work-day in

additional school-related responsibilities, assigned by the principal or other administrator;

- e. CRITICAL PERSONNEL SHORTAGES: Curriculum areas in which there are fewer teachers than positions available, notably in those demanding longer and/or more rigorous training;
- f. EDUCATIONAL NEEDS OF SPECIAL POPULATIONS
  TAUGHT BY THE TEACHER: Populations such as low
  achievers, the handicapped, the economically
  disadvantaged, and those with language deficiencies;
- g. CLASS ENROLLMENT: Class enrollment which is significantly above that of the rest of the school or of the district average;
- h. STUDENT ACHIEVEMENT AND ABILITY LEVEL:

  Deviation from average academic performance, either below or above:
- i. TEACHER JOB PERFORMANCE: Effectiveness with which the teacher carries out duties, as for example average, below average, above average, or outstanding performance;
- j. MILITARY SERVICE: Prior years of military duty recognized by a state education agency;
- k. TEACHING FIELD RELATED EXPERIENCE: Prior employment in business or industry which relates to teaching assignment;

- 3. To investigate what authorities in the field have written concerning a differentiated salary plan for teachers:
- 4. To determine whether there is any thrust toward a differentiated salary plan and the source or sources of such thrust:
- 5. To construct and rationally to defend models for differentiated salaries.

#### Research Questions

In pursuing the purposes of this study, the following questions were addressed.

- 1. Should factors other than the traditional ones of training and experience be considered in the determination of teacher salaries?
- 2. If factors other than the traditional training and experience are to be considered, what factors should they be and why should such factors be contemplated?
- 3. What are the different perceptions of the targeted groups in the study concerning the factors believed to be significant in a differentiated salary compensation plan for teachers?
- 4. Is a departure from the single salary schedule considered desirable by one or more of the groups surveyed and, if so, what is the nature of the departure?

5. What would constitute an acceptable model or models for a differentiated salary plan?

#### Background of the Study

Teacher salaries, before and during the early

1900s, were generally determined by means of individual
bargaining. Seldom did two teachers, even those with
similar qualifications, receive the same remuneration
from a district. Standardly, married men received more
than single men, and single women more than married
women. High school teachers were paid more than
elementary teachers. Teachers of certain subjects often
received greater remuneration than their colleagues.
Family status and race were factors that entered into
salary provisions. As a result, salaries were arbitrarily
determined by school administrators, who exercised wide
discretionary power (3, p. 1).

In the case where a school system has different salary ranges that apply separately for two or more groups of classroom teachers in the same system, the school system is said to have a differentiated salary schedule. Such schedules were commonplace in most school districts in the early 1900s. By comparison, differentiated schedules are rare or non-existent today (30, p. 1).

Differentiated schedules have been replaced by single salary schedules that apply uniformly to all classroom teachers in a school system regardless of the sex, race, family status of the teacher, or of the grade level taught. Although single salary schedules apply uniformly to all teachers in a school system, these schedules usually contain two factors for placement and movement that result in different salaries for teachers:

(1) academic preparation of the teacher, and (2) number of years of teaching experience (30, p. 1).

In the 1920s, the single salary schedule was adopted with increasing frequency. The Denver and Des Moines school systems are believed to have been the first to adopt salary schedules for teachers. The movement toward the single salary schedule was considered "a step forward in its time" (24, p. 2). Such a schedule afforded equity among professionals and was easy to administer. According to Bhaerman (3, p. 1), by 1946 more than 40 per cent of all districts were using single salary schedules. By 1950, about 97 per cent of the districts using salary schedules had adopted the single salary schedule with differentials based solely on levels of preparation and years of experience, rather than on grades or subjects taught. By 1966, teachers in thirtyone states had a legally guaranteed minimum salary. By

that year, also, twenty-three of the thirty-one states which provided minimum salaries also recognized both college training and years of service.

A survey conducted by the National Education
Association (NEA) in 1950 indicated that, although more
than 97 per cent of the school systems surveyed had
single salary schedules for elementary and secondary
teachers, a number of school systems took years longer
to remove differentials for men and women teachers,
for family responsibilities, and for white and black
teachers. Presently, however, single salary schedules
are being used by all school systems known to have a
formally adopted schedule by which teachers are
compensated (30, p. 15).

The typical single salary schedule consists of a basic salary—the amount paid to teachers with no previous teaching experience but who have completed an accredited program of formal training. Increments are paid (1) to those whose training is in excess of the minimum required for the basic salary and (2) to those who have a specified number of years of previous experience. The two factors, formal training and longevity, are measurable, require no judgment, and can be objectively assessed by a clerk. Computing teacher salaries has become relatively simple, making the single salary plan

easy to administer. The single salary schedule is considered by many educators to be fair and equitable. Its widespread acceptance is believed to have contributed to improved morale among teachers (19, p. 116).

Such large teacher organizations as the National Education Association (NEA) and the American Federation of Teachers (AFT) have supported the single salary schedule. NEA has maintained that every qualified and competent teacher should be paid according to a professional schedule of salaries. Salary schedules provide members with stimulus and recognition for continued professional growth. As NEA observes, "Schedules of the single salary type serve the joint aims of encouraging growth and giving full recognition to all types of teaching" (34, p. 45).

The single salary schedule has provided a means whereby teachers could advance their careers, in terms of salary, while staying in the classroom. In the teaching profession, job functions, unlike those in business and industry, do not change from year to year unless one leaves the classroom.

That is, an individual teaching for the first time is generally accorded the same responsibilities as more experienced colleagues; and, if the individual stays in the profession, he could likely retire with the same professional status and the same responsibilities accorded during the early years. Teaching is one of the few professions which does not

impose, or allow for, changes in the type of work activities as a function of amount of experience in teaching (26, p. 20).

The single salary schedule is presently accepted by most school boards and teacher groups (3, p. 3).

However, in this day of community involvement, increased teacher accountability, and frequent expressions of teacher dissatisfaction, school boards are beginning to look at the single salary schedule more critically. A number of shortcomings are cited for the single salary concept. While large teacher organizations support a salary schedule based upon formal training and teaching experience, there have been pressures within the past few years to expand the number of factors which constitute the base of the single salary schedule (3, p. 12).

The single salary schedule rewards longevity and both pertinent and non-pertinent credits. It does not reward initiative, creativity, efficiency, enthusiasm, innovation, cooperation, ability, or improved teaching performance. It is inadequate for "career professionals" who continually strive to be better teachers. Many teachers who are highly trained, efficient, and effective, resent their less capable colleagues being on the same inflexible salary schedule (31).

The single salary schedule is unresponsive to the law of supply and demand in teaching skills. The

differentials between starting salaries of scienceengineering graduates and school teachers are larger
than for those between liberal arts graduates and
teachers. This differential can be used to explain
relative shortages in teaching. Teacher shortages
have been acute in some fields such as mathematics and
science, while other fields, notably social science and
English, have an oversupply. In a free market society
one way to eliminate shortages is through adjustment of
prices, in this case salaries. Presently, persons who
major in mathematics and science find that they can earn
significantly more in business and industry than in
education, contributing to teacher shortages in those
fields (19, p. 127).

It is possible that the single salary schedule fosters mediocrity. Teachers are not rewarded for doing a better job, for having greater ability, or for expending greater effort. At one time the military services had what amounted to a single salary schedule—with steps and differentials determined by the number of years in service and position in the table of organization. The differentials had little relationship to the markets for various skills, involving truck drivers, cooks, jet mechanics, and electronic specialists.

While the military, unlike the school districts, could

draft men for an initial period of service, the service's difficulties became obvious chiefly in retention rates after the first enrollment. The outcome was that with the single salary schedule, the military services had a plethora of cooks and truck drivers, but too few electronic technicians and highly trained mechanics. When their tour of duty was over, the latter found more financially attractive opportunities in the civilian economy. A Defense Advisory Committee on Professional and Technical Compensation, arguing that the basic trouble was the single salary pay schedule, wrote,

Present compensation practices of the armed forces are so clearly out of step with the times, so clearly inadequate to the needs of a technically advanced form of national defense, and so clearly contrary to all that has been learned about human motivations that they can unmistakably be identified as a major impediment to national security (33, p. 12).

The Defense Advisory Committee's efforts resulted in pay differentials that not only recognized market realities but also provided incentives for superior effort and performance. As a result, the retention of those with scarce skills improved. It is essential that education, like defense, procure the greatest effectiveness from human resources devoted to it. Outstanding ability and achievement in teaching must likewise be

recognized and rewarded in order to attract and retain capable, bright, motivated teachers.

Another serious shortcoming of the single salary schedule, says Cohn (11, p. 219), is that it does not differentiate between areas of teaching, such as physical education and mathematics. It is frequently stated or implied that teachers are all alike--that there is no difference between the skills and training desired for various teaching positions. Whereas it appears that those presently making salary decisions would agree that different salaries for bookkeepers and engineers, or teachers and principals, are appropriate, they deny that salary differentials are in order for teachers in different subject fields. It is their belief that the skills that schools are trying to attract are not really different from each other, and therefore there is no reason for pay differentials. As a result, teachers do not have an incentive to select teaching curricula in "difficult" subject areas. Business and industry, unlike teaching, pay different rates for different jobs.

The economics of pay differentials become clearer if extreme examples are considered. What would be the consequences, for instance, of having a single pay schedule for everyone in all jobs, nationwide? In those circumstances, no differences in pay or prospects would

show people where relative shortages existed. No salary differentials would attract people into the occupations where demand was outstripping supply or into jobs where climate or working conditions were comparatively unappealing. Without salary differentials as an inducement, few people would enter courses of training that are especially arduous, or take jobs that are hazardous or unusually demanding. Most would want pleasant jobs requiring little preparation, in appealing locations. Very quickly such jobs would be filled and the forces working toward a sensible allocation of skills would be very weak (19, pp. 106-107).

#### Significance of the Study

The study is significant in the following respects.

- It proposes alternative financial means whereby teachers can be retained in the profession through a reward system;
- 2. It identifies factors considered to be significant for the determination of teacher salaries in the large school districts in Texas;
- 3. It provides information that can be utilized by Texas legislators in determining the allocation of monies for teacher salaries in the state:
- 4. It presents models for the determination of teacher salaries on a differentiated basis.

#### Definition of Terms

The following terms have been defined for the purposes of this study.

- Salary--Compensation for the work of a professional teacher whose contract usually stipulates monthly remuneration;
- 2. Salary Schedule--Classification structure that contains specific salary scales along with criteria used by school systems for the placement and movement of teachers at particular steps on the scales for the purposes of determining individual monetary compensation;
- 3. Single Salary Schedule--Plan by which the same salary is paid to all teachers in a school system who have the same amount of professional experience and level of formal training;
- 4. <u>Differentiated Salaries</u>—-Differences in teachers' salaries according to a variety of factors in addition to training and experience;
- 5. Teacher--Professional who is certified, assigned to a school, has daily professional interaction with students, and who is assessed and paid as a teacher in pay grades seven and eight according to the state salary index as designated by Senate Bill 350 (Texas).

#### Basic Assumptions

The following basic assumptions were made.

- 1. That the subjects responded thoughtfully and honestly to the questions on the survey instrument;
- 2. That the responses received on the survey instruments were typical of the views held by others of the same population at that time;
- 3. That an appropriate random distribution procedure was utilized in each of the targeted school districts.

#### Limitations

The following limitations were recognized.

- 1. The study was limited solely to the eight largest school districts in Texas: Houston, Dallas, Fort Worth, San Antonio, El Paso, Austin, Ysleta, and Corpus Christi. The target populations within those districts were the following: superintendents, school board members, principals, teachers, and citizens;
- 2. Citizens in the study were limited to local unit PTA presidents because of the inability to get an adequate per cent of responses from the general public selected at random;
- 3. The study was subject to all the limitations recognized in collecting data by mailed questionnaire.

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#### CHAPTER II

#### REVIEW OF RELATED LITERATURE

# The Single Salary Schedule Characteristics and Assumptions

Currently the most widely used method of remuneration for teachers is based upon the single salary schedule. This method of compensation represents the increment in salary associated with the years of experience in the school system. In general, teachers receive higher salaries as (1) their number of years of experience in the school system increases and (2) their amount of formal training (college units, advanced degrees) becomes more extensive. Typically, the single salary schedule considers only these two factors in the compensation of teachers (4, 10, 14, 16, 55).

Presently there are approximately two million teachers in public elementary and secondary education in seventeen thousand separate school districts in America. According to Bruno and Nottingham (11, p. 48), most districts compensate teachers under the single salary system, based almost entirely upon years of teaching experience and level of formal training. Hence, under this system the best teacher in the district is paid on exactly the same basis as the poorest.

Elseroad (25, p. 627) states that teacher pay plans based on only the two variables have worked fairly well for school districts which assume that the responsibilities of all teachers are identical. Mauch (68, p. 1), however, declares that there is widespread discontent with the current and commonly accepted methods of compensating teachers which finds its source in the practice of "using the majority of teachers as if they were interchangeable parts, turned out on assembly lines of schools of education." Gerwin (35, p. 109) affirms that "it is reasonable to believe that teachers are not all alike, that they are not interchangeable, and that the markets for their services differ."

Under the single salary schedule, differences in pay by school level (elementary or secondary) and by teaching assignment (mathematics or physical education) have been obviated. In theory, sex and race differentials are barred. "Advocacy of single salary schedules often appears tantamount to opposition to differentials based on quality of the individual's performance" (4, p. 290).

The NEA Handbook 1949-50 (82, p. 45) maintains that every qualified and competent member of the association should be paid according to a professional schedule of salaries. Salary schedules are believed to provide members with stimulus and recognition necessary for

continued professional growth. "Schedules of the single-salary type serve the joint aims of encouraging growth and giving full recognition to all types of teaching" (82, p. 45).

The large professional teacher organizations,
National Education Association, American Federation of
Teachers, and their state affiliates, have supported
the single salary schedule. The acceptance of the fundamental aspects of the salary schedule is shown in the
following statement.

In 1921, when the National Education Association first went on record in favor of a single schedule of salaries for elementary and high school teachers of equal qualifications, not more than a handful of pioneering school systems had adopted schedules of this type. Twenty years later, in 1940-41, only 31 per cent of the cities reporting in the Research Division's salary study had single schedules. By 1946-47, however, the proportion had doubled. . . Today, almost all schedules are single salary schedules (80, p. 9).

Cassetter (14, p. 138) states that teachers and unions have favored retention of the single salary schedule because pay progression through the salary range is virtually automatic and does not place primary emphasis upon performance appraisal. He reports further that boards of education have found the single salary schedule easy to understand, to administer, and to utilize in budget planning and preparation.

Cassetter (14, p. 138) concludes that the single schedule is a deep-rooted compensation procedure in American education. Rand and English (92, p. 264) agree that the single salary schedule and the assumptions of homogeneous teacher roles which support it, constitute a school tradition carefully built over the past thirty or forty years.

Bhaerman (6, p. 14) has termed the so-called single salary schedule a misnomer. Originally the single salary schedule was so termed to distinguish the dichotomies which existed in salaries of men and women, high school and elementary school teachers, married and single teachers, etc. It was called "single" because it made no distinctions according to sex, grade level, and subject area. However, Bhaerman believes it should technically be called the dual salary schedule, for the factors upon which the plans is based are (1) the academic preparation of the teacher and (2) the number of years of teaching experience. Thus the single salary schedule is actually a plan with two factors determining salary levels of teachers.

Several assumptions which underlie the pay structure of the single salary schedule have been identified by Cassetter.

- 1. Salaries for teachers should be scheduled and paid solely on the basis of professional preparation and experience.
- 2. Teacher effectiveness increases with experience and preparation.
- 3. All positions are equal in importance and responsibility (14, p. 138).

Additional assumptions found in Bhaerman's report were these.

- Salary variations of special incentives are extrinsic, unnecessary, and undesirable stimuli for the professional improvement of teachers, and
- 2. From the administrative point of view, the single salary schedule is desirable because of the ease with which it can be administered (6, p. 12).

## Inherent Problems

Benson (4, pp. 305-308) enumerates four basic problems with the single salary schedule: (1) the absence of rewards for superior classroom performance; (2) the lack of salary differentials for teachers in subject areas in short supply; (3) the emphasis on rewarding experience rather than training; and (4) the failure to distinguish the degree of teachers' commitment to the profession, especially in terms of time they can devote to it.

Concerning problems with the single salary system, Koerner wrote,

Until school boards face up to the whole matter and begin to pay their teachers, not according to a set schedule wherein the worst are paid as well as the best, but on the basis

of individual performance, teaching will continue to be a field that fails to attract high-quality people and put them through demanding programs (60, p. 249).

Gerwin's (35, pp. 102-103) study reveals that the single salary schedule leads to inefficient use of existing teacher supplies. Such salary schedules allow teaching skills to be misallocated among schools and regions, as well as within schools. Salary differentials, he believes, would help correct such misallocation.

Mauch (68, p. 1) denounces the single salary schedule as perhaps the most tangible testimony to the lack of recognition of differences among teachers. A study performed by Mauch reveals there is great variation among teachers. Among the parameters of this variation are interest in teaching, participation in administrative duties, in leadership activities, in curriculum evaluation, and in the development and design of materials. It also reveals, reports Mauch (68, p. 2), that the time commitment of any teacher can and should be allowed to vary. This commitment might vary from the mother who has a minimum amount of time to devote to teaching per day to the head of the family who desires to be a full-time professional with appropriate salary.

Bruno (9, pp. 27-30) states that the rigidity of the single salary schedule has given rise to serious problems which cause widespread concern among educators. Bruno further discusses elements he believes are vital to any salary plan for teachers.

- 1. The salary schedule should be logical and internally consistent, that is, each employee of the school district should receive a fair and adequate salary in relation to every other employee. This parity, he believes, is essential for morale.
- 2. Many economists argue that the salary schedule for school district personnel should reflect the relative difficulties in the assignment, such as in inner-city schools. In large metropolitan districts, school personnel are usually compensated by use of the same fixed salary schedules regardless of the difficulty of the assignment.
- 3. The resources of the school district should be considered in determining the final school district salary structure, since school districts must exercise fiscal responsibility in remunerating the professional staff. The single salary schedule does not, and cannot, consider school district resources in the fixing of salary.
- 4. Overlaps should be permitted between the various salary hierarchies in a school district. Presently it is common practice in many school districts for the salaries of school administrators to be linked with the

teachers' salary schedule, with the purpose of preserving a distinction between the salaries for these two groups. Most economists and educators would agree that there is no reason why a highly qualified teacher should receive less salary than a less qualified administrator. Highly qualified and experienced teachers should be permitted to remain in the classroom, and not suffer from the economic discrimination of the fixed step salary schedule. In short, a major limitation of the fixed step salary schedule is that it does not provide an economic incentive for good teachers to remain in the classroom.

- 5. An effective salary evaluation scheme should be able to incorporate salary differentials into the wage salary scheme in order to comply with the economic laws of supply versus demand for teachers and administrators with specialized skills. This compliance would place the school district in an advantageous position of being able to compete, economically, for teachers and administrators possessing specified skills and knowledge.
- 6. An effective salary scheme should consider a large set of factors in salary evaluation, in addition to the two factors currently considered: experience and formal training.
- 7. An effective salary evaluation scheme should parallel established school district priorities and

policy objectives. This parallel would ensure that school district resources for the support of the salary structure are expended in a manner which economically reflects the desired performance goals of the school district.

Since present methods of determining salary are not capable of considering multiple factors in salary evaluation, Bruno (11, pp. 42-62) formulates a linear programming model to determine a school district salary schedule. His model can be used essentially to determine a logical, internally consistent salary schedule in which each member of the school district receives a fair salary in relation to every other member of the organization.

Mahdesian (65) defends the "old lockstep pay schedules that treat everybody alike." He strongly believes that it is time school board members and administrators cease feeling guilty about traditional teacher salary schedules simply because they are based on years of experience and formal training. He asserts that boardmen would do well not to react every time they are told the public no longer will tolerate pay schedules that do not "make sense" because they reward every teacher irrespective of quality of performance.

The truth, Mahdesian (65, p. 24) declares, is that salary schedules do not make sense, but they do work. He says it is admittedly hard to claim that every teacher on Step Ten is necessarily more effective than every teacher on Step Four, or that all teachers are better if they possess more formal training. Even so, he asserts "most school systems are perfectly satisfied with situations where two teachers use adjoining classrooms, teach the same grade level, and get unequal salaries. So, it seems, are most teachers" (p. 24). He further perceives that teachers' salary concerns are with the amounts, not with the method of distribution.

Public school Superintendent William Coats of Kalamazoo, Michigan, is an antagonist of "lock-step" salary schemes, which reward mediocrity and excellence equally; those that pay for age, need, years of service, and academic credentials rather than for performance. He argues that the private sector of the economy does not pay for degrees earned or longevity in the job, but rather for job performance. Education must begin basing salary structures on performance, he asserts (22, p. 34).

It has been contended that differentiated salaries for teachers could produce serious morale problems among personnel. Kershaw and McKean (55, p. 117) are careful to point out that no private industry or profession has a

single salary schedule; these groups do not try to pay
the same salaries to persons having different college
majors and different skills. These practices have
certainly not eroded morale in all private businesses.
Other circumstances would seem to determine whether morale
is high or low in business firms.

Real (95) laments the disparity in learning situations and the lack of recognition of this disparity in teacher salaries in Los Angeles. In his article in the Los Angeles Times, he quotes economist Werner Hirsh:

Teachers in Los Angeles are given no salary differential. Not so surprisingly, then, most of them choose to work in places like Westwood or Sherman Oaks. The result has been a serious decline in teacher quality in areas where teacher quality should be highest. One answer would be incentives for teachers in ghetto This would bring better talent into these classrooms and would work to the advantage of other problems brought on by a uniform salary schedule (e.g., shortages of teachers of mathematics and sciences and surpluses of teachers of art, social studies and physical education). A differential wage, tied to supply and demand conditions, could give the L.A. system a better balance of education (95).

The Houston Independent School District addresses this problem of disparity in learning situations and the lack of recognition of this disparity in teacher salaries in their innovative Second Mile Plan (103, pp. 5, 7) whereby teachers who are assigned to schools having high concentrations of economically deprived students receive additional stipends. A "critical location factor" is

determined by the degree of concentration of economically and educationally disadvantaged students. Three categories exist, based upon Title I eligibility and the extent of deprivation. Stipends for teachers vary accordingly, with greater amounts paid to teachers serving in areas with the highest concentration of economically and educationally disadvantaged students.

In an exhaustive study on salary schedules conducted in the early sixties, Kershaw and McKean (55, p. 117) contend that boards of education and administrators had money to spend, but "no one is breathing down their necks" to ensure that they maximize profits of anything that can be measured. In dramatic contrast, according to Levin (61), the situation that exists today is one where state and local coffers are stretched to the limit. Expenditures, 70 to 90 per cent of which are teachers' salaries, are rising rapidly with little or no demonstrated increase in educational outcomes. Local taxpayers are revolting; costs continue to rise while little or no educational progress is being made. School boards, particularly in large cities, are, therefore, reexamining present methods of personnel compensation.

The plight of public education in large cities,
Knezevich (59, p. 538) declares, is one due to population
shifts, where the more affluent moved to the suburbs,

and in their place, the deprived and disadvantaged came to live in the core cities. Special programs and individualized services have increased the operating costs. Gradually the tax bases have eroded as superhighways and urban-renewal projects removed property from the tax rolls. Knezevich further asserts that new patterns for financing the educational enterprise and for compensating teachers will have to be developed in large urban communities.

Teacher organizations have questioned differential salaries. They argue that all professional personnel should be paid on exactly the same salary schedule with just the two traditional factors of formal training and years of experience. Extra pay, or a differential, is generally granted because of added responsibilities or duties, but not for greater responsibility. Usually, the extra pay is for extra time spent. According to Elseroad (25, p. 627), there are definite positions in which a salary differential can be justified on the basis of greater responsibility.

Bhaerman (6) reports that basic changes are being contemplated toward expanding the single salary system with its dual base into a multi-factor salary determination. Cohn (16, p. 249) agrees that the utilization of the single salary schedule leads to a number of

undesirable results. At the same time, no operational alternatives have been widely accepted or implemented. A discussion of factors that could be considered when a salary schedule is formulated follows.

# Factors in Salary Consideration for Teachers Teaching Experience

The single salary schedule is structured toward progressively higher salaries for teachers as they become more experienced and as they attain higher levels of education. These, generally, are the only two factors that determine a teacher's base rate of pay. According to Benson (4, p. 307), however, the single salary schedule is based far more on experience than training.

In a discussion of the financial aspects of teacher employment, Elseroad (25, p. 626) states that although the exact figure varies, there are generally ten to fifteen annual increments built into the salary schedule, thereby giving the teacher a virtually automatic raise each year until the top of the scale is reached. In the 1950s, the time span of the incremental schedule was relatively short—in many cases well under ten years; but in later years it was stretched to thirteen years on a national average.

Essentially, states Rhodes (98, p. 5), the single salary system is based upon the premise that longevity

in the job entitles one to higher compensation. Teaching, critics are quick to point out, is the only profession that rewards longevity rather than performance. It is believed by some that the system perpetuates, even encourages, mediocrity in the classroom.

Meyer (76, p. 39), a critic of the single salary schedule, mocks a system whereby the individual is rewarded merely for "sticking around." He severely criticizes pay increases solely for protracted service or for surviving a lengthy period of time. Benson (4, p. 307) maintains that unless a teacher's years of experience are complemented by continued study and training, the contribution is likely to become modest after seven or eight years of work. If, however, experience is combined with relevant study and training, Benson concludes, this would be conducive to higher performance for all individuals.

By contrast, Levin (61, p. 190) reports that experienced teachers are generally found to be more effective than "novice" teachers. His study indicates that teacher experience has been found to be related to student achievement on a fairly consistent basis. Bruno and Nottingham (11, p. 60) refute this claim, however. They declare that years of experience proved to be almost unrelated to pupil performance.

Rosenshine and Furst (100) support the claim of Bruno and Nottingham (11) that the number of years teaching experience does not correlate with student achievement. They cite eight studies in which it was observed that teachers who had taught more than five years compared to those with less than five years experience, realized no better results in terms of student achievement.

Another study, using a sample of 383 sixth-grade students, was undertaken by Lewis and Ouelette (63, pp. 305) to determine if the amount of teacher experience was related to pupil achievement. The data were analyzed with multiple regression and analysis of covariance techniques. Both statistical analyses revealed that the length of teacher experience was not related to pupil achievement.

The conclusions of studies measuring the values of teaching experience were conflicting. Burkhead and Guthrie, for instance, find teaching experience to have a positive effect on achievement; by comparison, Smith and Perl show teaching experience to have little or no relationship with achievement as cited by King (57, p. 358). Coleman (17, p. 325) finds that a teacher's verbal ability was more important than experience in determining his effectiveness, and that verbal ability

of teachers has a rather low correlation with experience and salary.

Klitgaard and Hall's (58, p. 103) study of "unusually effective schools" indicates that the top seventy-two schools tended to have a greater number of teachers with five or more years experience. Comparisons over different years and grades of consistently over-achieving schools, with the number expected by chance, showed teaching experience to be a significant characteristic in their success.

Bruno and Nottingham (11, p. 61) further explore the issue of teacher experience; and concluded that, with birthrates declining and the amount of new teacher talent diminishing, many districts are increasingly faced with problems of teacher aging, tenure, and poor performance. Many years of experience are, in their view, a questionable asset.

Since there is a positive correlation between teachers' age and teachers' experience, it is notable that Kaufman (53, p. 46) proclaims the most widely known studies about the relationship between professional competence and age, and finds that the best job performance occurs when people are in their early thirties. Yet another important group of studies reports a consistent upward trend in professional output that reaches a

peak for those over fifty. A third body of research suggests that the relationship between age and performance is saddle-shaped: two peaks in competence occuring the early thirties and in the fifties--with a slight drop-off between the two.

Persuasive observers of the changing education scene caution that a specter soon to haunt school planners is an experienced—and expensive—teaching staff. Grambs and Seefeldt (41, pp. 259-260) point to significant declines in school enrollment. Therefore, there is a lack of need for new teachers, which lack coincides with a reluctance of older teachers to leave at the expected rate. The pay of these experienced teachers is significantly higher than that of the less experienced teachers. One school district in Minnesota reports 70 per cent of its teachers at the top of the pay scale; two other districts report 50 per cent. Two beginning teachers can be hired for one senior teacher with thirty years of experience.

It is postulated by Burtnyk (12, p. 13) that in the early 1980s, the number of teachers at or very near the maximum of their category will be very high, while the number of new inexperienced teachers will be very low because of decreasing enrollments. Burtynk believes that providing salary increases for experience will

necessitate increasing the maxima. He contends that over a number of years the declining number of inexperienced teachers and the increasing number of veteran teachers will undermine the structure of the single salary schedule.

# College Degree and Post-Degree Study

The single salary schedule places financial incentives on years of experience and formal training. At any given time, the differences in pay of teachers would appear to be more strongly affected by longevity; in terms of lifetime earnings, however, the level of formal training becomes the significant factor (4, p. 289).

Levin's (61, p. 190) study indicates that while teacher experience has been found to be related to student achievement, the teacher's degree level has rarely shown such an effect.

Simmons (105, p. 25) states that the assumption exists that additional education will provide the teacher with higher qualifications in his or her educational specialty. This is evidenced by the school system's provision of differential salary scales on the basis of degrees earned, which is a form of recognition of the value of the higher degrees. If all degrees were assumed to be of equal value, then this would not be so. The teacher usually enters at the bottom or entrance level

of the scale when starting to teach, and moves upward on the scale by regular increments until the maximum level of the scale is reached.

Rabalais (91, p. 3) declares that, based on common practice and conventional wisdom, it would appear that there should be a statistically significant relationship between the number of hours of graduate credit, the number of years of teaching experience, and teaching effectiveness. Accordingly, he conducted a study to investigate such relationships.

The subjects for his study were 109 faculty members who had master's degrees and additional graduate credit and whose teaching experience ranged from zero to more than eleven years. An analysis of variance (ANOVA) was computed to test the mean differences in ratings received by faculty members at each of three levels of graduate credit and at each of three levels of years of teaching experience. It showed that there are no statistically significant differences between groups of faculty at three levels of graduate credit or between groups of faculty at three levels of teaching experience (91, pp. 6-8).

A study by Lewis and Ouelette (63, pp. 3-5) was conducted to determine if the extent of formal training beyond the baccalaureate degree was related to teachers'

success in terms of student achievement. The data were analyzed with multiple regression and analysis of covariance techniques. From both analyses, the extent of teacher training was negatively related, at a statistically significant level, with scores on an objective measure of achievement.

In response to a question posed by the Burbank Teachers' Association, regarding the inclusion of the master's degree requirements in a proposed new salary class, the Research Department of the Burbank Unified School District of California conducted a study to determine if teachers' attainment of advanced degrees improved their effectiveness (65, p. 2). Their review of the literature disclosed that research studies of teacher effectiveness were numerous, but the studies did not precisely address this question. They noted that Morsh and Wilder compiled a large annotated bibliography of studies of teacher effectiveness. A. S. Barr reported on eighty-six additional studies. N. L. Gage, Stanford University, compiled an entire volume on research related to teaching. However, it is contended that the answers to the relative value of a teacher having a master's degree are not available.

In general, all of these studies have foundered because of the apparent multiplicity and inter-relationship

of factors which constitute "good teaching;" the studies did not even attempt to trace these factors to their source in the training and experience of individuals. The first problem of such studies has been the definition of "good teaching." While Ryans (101) identifies a constellation of characteristics of a good teacher, even he would admit that this basic question has not been answered.

The fragments of data relevant to the significance of having a graduate degree must be considered in the light of the caution given in a letter by Arthur L. Benson, Director of Teacher Examinations for the Educational Testing Service. Benson wrote,

Any research in this area is likely to have limited applicability for at least two reasons. First, the operational definition of "improved teaching" used as the criterion is likely to be unacceptable to many school districts and, indeed, may be inappropriate for different teaching fields or levels. Second, the wide variations in Master's Degree programs, both with respect to content and standards, seem to preclude much generality for the outcome of these programs (67, p. 2).

It was reported by the Burbank School District's
Research Department that there is no substantial
empirical evidence that the holder of a master's degree
is a more effective teacher than one without it. It
is also generally agreed that there is little probability
that such evidence will become available (67, p. 15).

The landmark study by Coleman and his associates (17, p. 325) showed that the characteristics of the teacher and the quality of the teacher's training are the most important factors in stimulating pupils to achieve. The study suggests that the verbal ability of the teacher is a more appropriate measure of teaching competence than either the possession of a master's degree or a long-term teaching experience. Owens (85, p. 214) states that there is some empirical evidence that school hiring officials are in agreement with this assessment.

Levin's (61, p. 192) study reveals that investigation into this area of teachers' verbal competence has suggested that obtaining teachers with higher verbal scores is five to ten times as effective, per dollar of expenditure, in raising student verbal score than a strategy of obtaining teachers with more experience. According to Levin, the implications of this finding are that schools might derive higher student performance by emphasizing the recruitment of more verbally able teachers rather than a more experienced teacher complement.

Superintendent William Coats of Kalamazoo, Michigan, believes that

degrees are silly things to reward. A degree may help someone get a job but, except in

education, it won't help a person keep that job. The private sector won't pay any more just to have someone with a doctorate hanging around, unless that person can demonstrate by his performance that his credentials and experience make him more effective (22, p. 34).

Rosenshine and Furst (100) report that the results of six studies indicate that teachers having an advanced degree, a master's or a doctorate degree, in their teaching area, do not correlate with student achievement.

In its report of June 1980, the Governor's Advisory Committee on Education (Texas) (40) states that although many teacher education graduates become effective teachers, many do not. The Committee asserts that the degree or additional course work from educational institutions is not necessarily a predictor of teacher effectiveness. This is due, in part, to an inconsistent quality among programs and graduates. The Committee suggests, also, that some teacher preparation programs may not be consistent with actual job conditions, needs, and responsibilities. The Committee, therefore, recommends that the Legislature should

- delegate the responsibility to approve/ renew certificate programs in teacher education only to the State Board of Education. The Coordinating Board, Texas College and University System, should be responsible for approving programs and degrees, but should have no responsibility for approving certification.
- provide an expanded and formal structure for Teacher Education Centers, as defined by the State Board of Education, to

strengthen the cooperative relationship between institutions approved for teacher education and school districts, particularly in student teaching certificate program planning, inservice education, and fieldbased experience (40, p. 10).

The Governor's Advisory Committee further recommends that the State Board of Education should

- enforce, in a rigorous and consistent manner, a single set of standards for the approval of institutions for teacher education and programs for certification.
- 2. establish a state testing program for persons seeking Texas certification that assesses competency in general academic skills, knowledge of subject matter in the teaching field, and proficiency of the skills of teaching (40, pp. 10-11).

The Committee further recommends that teacher preparation institutions should

extend cooperative Teacher Education Center involvement in a variety of schools as necessary to ensure high quality field experiences for students preparing to become teachers (40, p. 11).

### Additional Duties

Additional duties generally means special student or staff supervision; coaching responsibilities; band directing; sponsorship of student programs, organizations, or clubs; major assignments with the parent-faculty organization; administration of adult education or summer school; approved research projects; management of concerts, operas, dramatics, and speech activities; and

any other such assignments as may be required from time to time by an administrator.

It is widely accepted by teachers that added duties or responsibilities shall bring additional compensation. Rhodes (98, p. 34) suggests a separate salary scale to cover these assignments to be applied along with the elements of the basic salary schedule.

Benson (4, p. 290) notes that teachers' organizations have been supportive of the general concept, "extra pay for extra duties." Middlebrooks (77, p. 26) suggests that additional compensation should be paid to teachers who have an additional work load, such as sponsors of clubs, cheerleaders, athletic coaches.

In a position paper, Bhaerman (6, p. 10) indicates that the American Federation of Teachers is a proponent of additional compensation for assignments such as curriculum development activities, additional work involving inservice courses, supervision of interns and student teachers, and research activities. In all cases, additional compensation would be based on the amount of time required by the teacher to perform these duties.

Although there is general agreement in the concept of additional compensation for extra duties, complaints about additional duties for teachers are common. There are vast discrepancies between extra-curricular duties assigned to teachers. The present single salary schedule does not address this problem. A goal of the extracurricular activities program is providing students with the opportunity to explore and develop interests and talents, and assistance in the development of physical, emotional, and intellectual growth. Extra-curricular activities are a major means of fulfilling those educational objectives that are not always adequately served by the regular classroom instruction (90).

An examination of the literature available on the subject of additional duties reveals that there is a great amount of discussion of extra-curricular activities, but very little has been written about salary schedules for sponsors of activities. No central repository for justification of salary schedules is available, even though the Educational Research Service has published a national survey entitled "Extra Pay for Extra Duties of Teachers 1974-75" (28). This document deals with the practice of adding supplements to teachers' salaries for the guidance and supervision of extra-curricular activities outside regularly scheduled school hours. It also presents a system-by-system of listing of extra pay, along with examples of salary schedule supplements. Noticeably absent from the document is any reference to a comprehensive rationale or justification for salary schedule differentials.

Postlethwait's (90, p. 17) study of salary schedules and criteria used for extra-curricular activities discloses that there are numerous different procedures for rewarding teachers that direct extra-curricular activities among school districts. His analysis indicates also that most school districts have no criteria to support the schedule in existence. He ultimately develops criteria from which all extra-curricular activities could be evaluated for the purpose of establishing pay schedules. His method, however, is a recommended addition to the single salary schedule, not an integral part of it.

A Purdue University project conducted in South Bend, Indiana, concludes that extra pay for extra duties should consider the following significant factors:

- Total clock hours devoted to the extra duty during the school year outside the school day;
  - 2. The quality and importance of the assignment;
- The individual's base salary or any specified base salary.

Additionally, the study indicated that there is a trend toward paying teachers for extra duties, especially in urban areas (6, p. 13).

Extensive studies made by Educational Research

Service reveal that the highest supplement reported for

extra-curricular activities of all types is for coaching

high school varsity football. The highest supplement reported for nonathletic activities is for directing the high school band. Lowest supplements reported for an athletic-related activity are for sponsorship of cheerleaders. Lowest for nonathletic activities are for the production of school plays (28).

The Dallas Independent School District recently developed and implemented a supplemental pay schedule for its coaching staff and band directors, based on actual performance of the job in terms of effort, skill, and responsibility. Comprehensive questionnaires, completed by coaches and band directors provided definitive information regarding duties, responsibilities, and requirements of their respective jobs, making the development and implementation of an acceptable supplemental pay schedule possible.

In the Cupertino Union School District of California, the school board voted to base salaries not on education and experience, but on a factor-point system measuring the scope of responsibility. New salary schedules provide incentives to accept additional responsibilities for additional compensation. It raises questions, however, about the nature and determination of "additional" responsibility and conversely, about "regular" responsibility. This district does not claim to know the

answers to these problems. It is believed, however, that in a time of higher school budgeting matched by escalating demands among a relatively young teaching population, there will be many more plans implemented, based on traditional industrial relations concepts, instead of the traditional ones of academic background and experience (114, p. 59).

# Critical Personnel Shortages

The single salary schedule is unresponsive to the law of supply and demand. Cohn (16, p. 214) observes that the differentials between starting salaries of science-engineering graduates and school teachers are larger than for those between liberal arts graduates and teachers. This differential can be used to explain relative shortages in teaching. Teacher shortages have been acute in some fields such as mathematics and science, while other fields, English, social science, and physical education, have an oversupply. Presently, persons who major in mathematics and science find that they can earn significantly more in business and industry than in education, contributing to teacher shortages in those fields.

Benson (4) asserts that it is inevitable that there will be certain teaching fields that are oversupplied with qualified applicants, and other fields for which there

are too few applicants. In the private sector of the economy such surpluses and shortages are reflected in salary differentials. In areas where shortages occur, more money is offered as incentive. This incentive has both short-range and long-range effects; it supplies personnel to meet immediate needs, and it provides incentive to those making career choices. Benson (4) affirms that in education, however, specific market factors are not considered. Teacher organizations have strongly opposed recognizing the nature of the subject taught in determining salaries.

Quite possibly this refusal to adjust pay to market scarcities and surpluses is to blame, at least in part, for the fact that we have an over-supply of intending teachers in the fields of social studies, speech, and physical education, and a shortage in mathematics and science (4, p. 306).

Kershaw and McKeans' (55, pp. 90-91) comprehensive study of teacher shortages and teacher salaries argues the advantage of salary differentials. Their basic point is that higher pay should be offered to attract individuals with relatively scarce teaching skills. Using wage and employment theory, they cite the advantages, at the district and national levels, of subject area salary differentials. They set forth a three-step salary schedule incorporating additional pay in scarcity areas as a straightforward means of achieving their aims.

Bruno (10, p. 570) is of the persuasion that an effective salary evaluation plan should incorporate salary differentials into the wage salary plan in order to consider the economic supply versus demand laws for teachers with specialized skills. This would place the school district in an advantageous position of being able to compete, economically, for teachers possessing certain specified skills and knowledge.

Dunathan (24, p. 40) reports that new teacher production has declined 48 per cent nationally, and as much as 75 per cent in some states. His survey of 278 superintendents disclosed that superintendents interview fewer qualified candidates among the decreasing number of applicants. He is dismayed over acute shortages in mathematics, science, vocational education, bilingual and special education.

Business and industry create a personnel drain in certain fields in urban areas. Salaries offered for teaching positions in the fields of mathematics and science do not compare favorably with those of business and industry. School systems in these areas are victims of the law of supply and demands, and critical shortages exist. The Houston Independent School District, in an attempt to address this problem, awards additional stipends for classroom teachers who are specially

certified/endorsed by the Texas Education Agency to teach in curriculum areas where critical staff shortages exist. In so doing, Houston Independent School District believes it can compete more favorably with business and industry (103, p. 5).

### Educational Needs of Special Populations

Forty-four per cent of the students of special populations in Texas reside in the eight largest districts of the state. Special populations encompass a wide range of students. This list includes students who are low achievers, economically disadvantaged, language deficient, learning disabled, emotionally disturbed, and physically handicapped. It is believed to be especially difficult and demanding to teach students from these population groups. Certainly, success requires unusual ability and skill. Special programs exist for students who are economically and educationally disadvantaged, handicapped, and language deficient; but the very presence of these programs is an indication of greater professional challenge to classroom teachers (103, p. 7).

Teachers generally are compensated according to the same single salary schedule, regardless of the difficulty of the assignment. The disparity in learning situations in the Los Angeles area and the lack of recognition of this disparity in teacher salaries was indicated in the

article in the Los Angeles <u>Times</u> quoting the economist Werner Hirsh:

Teachers in Los Angeles are given no salary differential. Not so surprisingly, then, most of them chose to work in places like Westwood The result has been a serious or Sherman Oaks. decline in teacher quality in areas where teacher quality should be highest. answer would be incentives for teachers in This would bring better ghetto schools. talent into these classrooms and would work to the advantage of other problems brought on by a uniform salary schedule (e.g., shortages of teachers of English, mathematics and sciences and surpluses of teachers of art, social studies and physical education. A differential wage scale, tied to supply and demand conditions, could give the L.A. system a better balance of education (95).

Similar disparities exist in the large metropolitan school districts of Texas. Suburban school districts are inundated with teacher applicants for whom there are no positions, while large city districts go begging for qualified applicants.

In his extensive review of salary reward systems for teachers, Bhaerman (6, p. 4) notes that in the early 1960s the New York City Board of Education offered "extra pay" to teachers with assignments in schools with high levels of special population groups. The plan, however, was rejected by teacher unions. Subsequently, some districts have compensated teachers for accepting "difficult" assignments.

The Houston Independent School District recognizes the unique needs of special population groups. in "critical locations," determined by high concentrations of economically and educationally disadvantaged students, are given additional stipends based upon the socioeconomic category into which a school may fall, as identified and described in their Second Mile Plan (103). The plan includes the statement that "Research has shown a high correlation between socio-economic factors and student achievement" (103, p. 6). The rationale buttressing the Houston Plan is that these special population groups are more difficult to teach. This is supported in Swanson's (109, p. 456) article which states "Measured intelligence and socio-economic status have been found to be strongly correlated."

Bruno (10) declares that many economists agree that the salary schedule for teachers should reflect the relative difficulties in the learning or instructional environment. In metropolitan districts, however, teachers are compensated by means of the same single salary schedules regardless of the difficulty of the assignment.

According to Hall and Carroll (43), special programs require employing more specialized and highly trained individuals. They assert that the demand to provide such services far exceeds the number of qualified teachers available to serve such students.

The essence of American democracy is the recognition of the inherent capability of every individual. Our public schools, by the nature of their primary purpose for existence as tax supported institutions, must provide educational opportunities for all children. To achieve maximum benefits, these educational opportunities must be geared to the capabilities of the children served (54, p. ii).

The education of children of special populations demands teachers with specific specialized skills. Presently there is little incentive for working with students who, because of special needs, are most difficult to teach. Bruno and Nottingham (11, p. 49) believe that incentive should be weighted toward those students who are most difficult to teach.

#### Class Enrollment

"Most of the technical inefficiencies of the schools reflect the mindlessness of the educational decision-making, and no practice illustrates this better than that relating to class size" reports Levin (61, p. 180).

Characteristically, most elementary schools attempt to make class size uniform at each grade level. However, states Levin, the relevance of class size to the learning situation depends on the nature of the students, the subject, the teacher's behavioral style, as well as many other factors. In certain situations, class size needs to be small to facilitate the individualization of instruction, while in other contexts forty to sixty

students would be more appropriate. Bland uniformity of current class-size practice gives evidence that these concepts are not recognized (61, p. 182).

A study by Mann (66) notes that class size historically has been characterized by uniformity:

"Classrooms of the same size to accommodate the same numbers of children; like periods of time being assigned for different tasks; teachers trying to 'be all things to all pupils'" (66, p. 3). Mann states that since children learn in different ways and at varying rates, knowledge of these factors should be the determinants of class size not mere numbers of students (66, p. 5).

There has been a long-standing disagreement between teachers and administrators concerning the value of smaller classes. There are studies to indicate that class size makes a difference and those that indicate that it does not. Class size does make a difference to teachers. The results of a nationwide research survey of the opinions of public school teachers concerning class size in 1974 was that 79.7 per cent of the teachers polled said they believed small classes were extremely important in improving student achievement. Nineteen per cent of the teachers considered them moderately important. Sixty-five per cent of the teachers considered small classes extremely important for the

social and personal development of pupils whereas 31 per cent considered them moderately important. Seventy-four per cent considered small classes extremely important for job satisfaction for the teacher. Twenty-three per cent considered them moderately important. Half of the teachers polled felt the classes they were currently teaching were about the right size; the other half said they were too large or much too large (110, p. 109). A nationwide teacher opinion poll conducted by NEA in 1979 shows that teachers believe the maximum regular class size should be twenty-two in elementary schools and twenty-five in secondary schools (84, p. 13).

Teachers report that they can give more individualized time and personalized instruction when class
enrollments are small, according to Down (23). "Teachers
say they have the energy and interest to give concerned
care and attention if there are fewer in their classes"
(23, p. 22). Hall and Carroll (43, p. 838) agree that
smaller classes are considered highly desirable, because
they lend themselves to greater individualization of
instruction. Porwoll (89) confirms that this and many
other qualities of classroom instruction are improved
when class size is reduced.

Teachers are convinced of the need for smaller classes. According to Fenstermacher (29), teacher

satisfaction is an important consideration in its own right. Down (23, p. 22) concurs that teacher morale is too important to dismiss. John Ryor (102), President of the National Education Association is quoted as saying that salaries and class size were the primary issues in teachers' strikes in 1978-79. "Most teachers haven't seen the benefits of declining enrollments in small class sizes," he added (102, p. 258).

A search made by Glass and Smith (39) produced approximately eighty studies on the relationship between class size and pupil achievement, dating back to 1900 and involving over 900,000 students. Seventy additional studies were found relating to the impact of class size on attitudes and teaching practices. An examination and analysis of these 150 studies showed more than 60 per cent of the comparisons favored small class enrollment. Glass and Smith (39) postulate that present sophisticated methods of data analysis not available to previous researchers show a more complete relationship between class size and achievement.

A typical student in a typical class of forty students scores at the 50th percentile of an achievement test. If this pupil had been taught in a group of thirty pupils, his achievement would have tested out at about the same level. But taught in a group of twenty, the pupil would score at the 55th percentile. His achievement would rise to the 60th percentile if he were taught in a

group of fifteen, and the 75th percentile in a group of five (37, p. 22).

Contrary to the findings of the Glass and Smith (39) studies, Down (23) cites studies that state that the number of students in a class makes little difference in students' achievement. Studies by the Educational Research Service (1978), The New England School Development Council (1976), the Tulsa Public Schools (1970), support his claim that twenty-five or thirty students in a class make little or no difference in student achievement. To reduce student class enrollment significantly below those figures would not be economically feasible. "In a major school system a few years ago, reducing the pupil-teacher ratio by just one pupil per class would have cost 2.8 million dollars in salaries" (23, p. 22).

Down (23) concedes that there are instances, aside from economics, in which class size does make a difference. Small classes for low achievers and in certain curriculum areas would be preferred. He indicates, for example, that high school English teachers would probably be more effective teachers of writing if they had smaller classes.

Glass and Smith (39) make the claim that the relationship of class size and affective outcomes is even more dramatic than that of class size and pupil achievement.

A typical pupil in a class of thirty who is at the 50th percentile in his attitude and interest toward school drops to the 40th percentile in a class of forty-five pupils. But place that pupil in a class of fifteen and his attitude rises about the 60th percentile; in a class of ten the affective outcomes for this pupil exceed the 70th percentile (37, p. 22).

Despite the Coleman report and more recent research efforts which have eroded the belief that different school policies can lead to increases in educational achievement, Klitgaard and Hall (58) conducted a study that produced evidence of schools that consistently produced outstanding students. Comparisons over different years and grades of consistently overachieving schools and the number expected by chance showed that one of the characteristics of overachieving schools is smaller classes (58, p. 94).

Levin's (61, p. 190) review of the effect of different levels of expenditure on educational output indicates that most studies have found no statistical effect of differences in class size on pupil performance. In studies on school size, Kiesling (56) found a consistent negative relationship between school size and student performance as measured by standardized tests.

Hall and Caroll's (43) study indicates also that district size was expected to be negatively related to the student-teacher ratio. They point out two reasons for

this: first, a large number of public school pupils in a community implies strong support for the school system. As small classes are usually preferred to larger ones, the community support was expected to be translated into small classes. Second, larger districts often find it possible to undertake special programs which may not be economically feasible in smaller ones. Many of these special programs are characterized by small classes, thereby reducing the average class size (43, p. 838).

A review of the literature by Hall and Carroll (43) indicates that while there has been a relatively large amount of work done on the topic of relationships between class size and quality of education, there appears to be little previous research on the determinants of class size. Based on their review of the literature and a priori expectations, they constructed a model which was able to explain a large portion of the observed variation. It was subsequently hypothesized that a larger community population would generally lead to larger classes. This admittedly was based upon the casual observation that larger classes are commonly found in the larger suburbs, although the reason for this was not clear (43, p. 838).

Hall and Carroll (43, pp. 837-839) report that in addition to teachers' salaries, one of the most frequently considered questions between school boards and representatives of teachers' organizations is class enrollment. Teachers' organizations normally negotiate for smaller classes. Large classes are generally regarded as an undesirable condition of employment by teachers. For this reason they are likely to demand higher salaries as compensation for accepting more students. This implies that large classes lead to higher salaries. On the other hand, school boards confronted with relative fixed budgetary constraints are often forced to increase the pupil-teacher ratio in response to higher salaries.

Teacher organizations often respond to rank-and-file preferences and ask for smaller classes during collective bargaining or in consultation agreements. School boards in return are frequently willing to grant higher salaries to keep labor peace if teachers are willing to accept more students. Salaries and the student-teacher ratio appear to be simultaneously determined in negotiations or in professional consultation.

Green's (42) report of the Lodi (California)

Education Association Class Size Committee describes an attempt to weight factors in the classroom in adjusting

class size, so that it better reflects the range of teaching responsibilities. Factors considered are the number of slow learners, hyperactive students, bilingual students, and others manifesting special needs. Green indicates all of these issues create complications in simplified indices such as class size.

Cahen and Filby (13, p. 492) report that the chief objective in a study produced under a National Institute of Education grant, was to find what aspects of instruction in smaller classes account for the achievement advantages. The study attempted to discover whether changes in instruction are a function of reduced class size. It was anticipated that as the total number of pupils in a class decreases, the teacher would be able to provide more appropriate personal instruction for every student.

On the basis of their study, Cahen and Filby (13) assert that if student achievement increases as class size decreases, then some change in instruction must be taking place in the classroom. "With fewer pupils to attend to, a teacher should be able to improve the quantity and/or quality of instruction" (13, p. 494). They hasten to add, however, that research in this area must depict the problem as interactive, a function of student characteristics, teachers and quality of teaching, and subject

matter taught, commingled with their interaction of different outcome measures such as student achievement, classroom processes, teacher morale, and pupil affect. They reiterate the comments of other scholars that the effect of class size depends on the intervening classroom instruction. "Poor teaching will not be effective, even in a small class" (13, p. 495). It should be noted also that it is their persuasion that teachers may need help in learning to use the potential available in the small-class situation. There are those that have suggested that reducing class size will have no effect if teachers do exactly the same thing in a small class as they do in a large one (13, pp. 494-495).

Class size has tremendous policy implications.

Small classes make a big difference in school budgets.

The relevance of class size in educational financing is emphasized in the Final Report of the President's

Commission on School Finance (31). In this report it is repeatedly noted that there is no known relationship between class size and educational quality. Furthermore, the Commission suggests that significant economic gains may be possible by increasing class size, without necessarily decreasing educational quality.

## Student Achievement and Ability Level

Schools are entering an era in which a widespread movement toward educational reform seems inevitable, reform that would improve the functioning of schools, the effectiveness of educational dollars, and the performance of teachers. Expenditures are rising rapidly with little or no demonstrated increase in educational outcomes. Local taxpayers are revolting and state coffers are stretched; costs continue to rise while little educational progress is being made (61, p. 201).

Knezevich (59) states that there is an effort to change the focus from accountability for instructional inputs and processes to accountability for instructional outcomes. Taxpayers are no longer satisfied simply with a process faithfully performed over a prescribed period of time. There is a growing demand for teachers to be accountable for results. However, in education, the end products are difficult to define and even more perplexing to measure.

Teacher accountability for results in education was proposed over a century ago and was actually employed in England in 1862. A study of the educational system of England during the last half of the nineteenth century revealed that rising costs of education, questions about the uneven distribution of the costs, and lack of faith

in the publicly-supported educational system led to an emphasis on accountability similar to that extolled by Leon Lessinger and others today and for essentially the same reasons (49, p. 79).

A commission, officially called "The Royal Commission on the State of Popular Education in England" and popularly known as "The Newcastle Commission," was appointed

to inquire into the present state of popular education in England, and whether the present system is, or is not, sufficient for its object, and to consider and report what changes, if any, are required for the extension of sound and cheap elementary instruction to all classes of the people (44, pp. 1183-1184).

After carefully examining selected schools in ten different areas of the country, the Commission published an eight hundred page report of their findings and recommendations. A proposal was presented by the Commission which members felt would "preserve the benefits they found in the educational system and provide a remedy for what they saw as its defects" (49, p. 79).

Government subsidies were seen as remedies to the inadequacies in education. To be eligible, certain basic conditions had to be met by the schools. Once these conditions were met, the Commission recommended that the grants be distributed on the basis of attendance and examinations. According to Hetherington, "this provided what in modern accountability terms would be described

as quality control and knowledge of results" (49, p. 81). It was believed that examinations would improve teachers' effectiveness.

There can be no sort of doubt that if one teacher finds that his income depends on the condition that his scholars learn to read, whilst another is paid equally well whether they do so or not, the first will teach more children to read than the second. The object is to find some constant and stringent motive to induce them to do that part of their duty which is at once most unpleasant and most important (49, p. 81).

The Newcastle Commission plan for payment by results was not applied in the same spirit in which it had been developed. Instead, the system was put into operation by Robert Lowe, vice-president of the Education Department, who wanted everything run on a basis of efficiency. Lowe managed to reduce educational costs by combining payment by results with an elimination of the teachers' pension fund and the removal of salary scales for teachers (2, p. 112).

English history further reveals that the schools which succeeded financially under the new system were those who did anything for which they were paid and ignored or even suppressed everything else. One observer made the following comments on the system.

The strain on the teachers is very great and everything is done with the sole object of getting a high percentage of passes. In consequence of the high pressure the teachers get very brutal and knock the children about.

In one case sums were given out and it was announced that everyone who had made a mistake in the answer would be caned, and this was carried out. When one meets with things of this kind one is surprised to find how stupid or savage an animal man is; but much is due to the incessant grind, which develops all his worse feelings (49, p. 83).

Another observer revealed that children under this system in Victorian England were taught only to pronounce syllables and not to understand what they read. Intellectual curiosity was suppressed; coercion often replaced guidance and direction (49, p. 84).

In their study, Rhodes and Kaplan (99) indicate that the present emphasis upon accountability in the United States stresses that the teacher should be judged on the product of his work as well as upon the process. In the past, most evaluation has been focused on the process -- the methods used by teacher, rather than the outcomes gained in the students' performance as the result of the work of the teacher. Under this concept of accountability, the teacher would be judged at least in substantial measure upon the results produced in students as a result of teaching. This has been very difficult to measure in the past. Rhodes and Kaplan note that serious studies are being made to try to find realistic measures of effectively measuring the real outcomes, based upon what the teacher does (99, p. 3).

Thomas (113) also affirms that there is a growing movement toward what is called product-evaluation methods. Teachers are, thereby, evaluated on student achievement, test scores, and other so-called objective data. views such an evaluation process negatively, stating that the evaluation process does not give adequate consideration to the many variables that effect the "product." Nevertheless, he contents that concentration on specific competencies to be achieved is a more acceptable performance evaluation measure than is a rating of personality traits and technical skills. He, however, repeats the warning of Henry Chaucey, former president of Educational Testing Service: "Standardized tests of student achievement are such useful teaching tools that it is often a mistake to try to make them do double duty as measures of the teacher as well" (113, p. 14).

Cahen and Filby (13, p. 493) caution also that achievement tests measure only one aspect of instruction. They do not capture, for example, the quality, the enthusiasm, or humanness of the classroom environment.

Bruno and Nottingham (11, p. 50) believe that school administrators would like to devise a plan which provides financial incentives toward increasing student performance. Presently, incentives for teachers to maximize

student achievement do not seem to be important characteristics of schools as organizations.

Financial rewards and promotions for school government are handed out in a mindless fashion according to the years of service and accumulation of college credits. Individual schools, teachers, or administrators who are successful in achieving important education goals are treated similarly to those who are unsuccessful, mediocre, or downright incompetent. In lockstep fashion the schools reward all equally. no wonder, then, that schools can fail persistently to teach children to read, or to foster the formation of healthy attitudes, for there are no direct incentives to change the situation. That is, success if not compensated, or formally recognized, and the reward structure is systematically divorced from educational effectiveness (61, p. 181).

Levin (61, p. 180) states that few outcomes of the schools are measured systematically. While some achievement data from paper and pencil testing are available, these are not adjusted for differences in performance due to student backgrounds and other non-school influences.

Sergiovanni (104, p. 113) questions whether pupil gain occurs systematically enough to make it a basis for determination of teachers' salary or teachers' success. For example, it would be difficult to separate the gain of a third grader during his third year of schooling from that which he gained during his first year. "Pupil gain is not to be sneered at, but in itself represents a paltry symbol of educational achievement" (104, p. 113).

Precise measures of achievement are not only unattainable, says Sergiovanni (104), but neither are they always the most accurate.

The extent to which a youngster enjoys reading, reads when he does not have to, has confidence in himself as a reader, and accumulates personal meanings as a result of reading may be a more accurate goal than mere pupil gain on an achievement test (104, p. 113).

Thomas (113) stresses that there are limitations in the emphasis on test results. Most tests, he says, examine the ability to recall information. Tests, however, cannot adequately measure an individual's ability to utilize the information.

Most tests examine components of a human act. They say nothing about one's ability to put the components into meaningful human behavior. Knowing the color charts does not make a painter. Knowledge of sonnets does not guarantee that one can write a sonnet. The ability to select from four numbers does not mean that one can add. These abilities can be "tested" through extensive observation and/or conversation with the learner (113, p. 62).

Thus, while Thomas agrees that tests can be an indication of what has been learned, he believes they are limited in usefulness and should be used only within this context.

According to Hoover (50, pp. 286-287), salary increases based on student achievement have been incorporated into performance contracts with a measure of success. He identifies two types of performance contracts; one is based on the educational process and the

other on the educational product. Process contracts are commonly utilized by the professions and in industry. Thus, an attorney contracts to defend a client; a teacher signs a contract to teach for one school year; a university employs security police to maintain order on the campus. Such contracts imply rendering a service, regardless of specific outcomes. By contrast, the product contract is not satisfactorily met until the agreed upon product is achieved. Hoover suggests that this form of performance contracting represents accountability in its most direct form (50, pp. 286-287).

Studies reveal that product contracts can be made inside or outside of the school district. Hoover (50, pp. 286-287) cites the Mesa Public School Project in Arizona as an example of contracting within the school district. Teams of Mesa teachers submitted bids to instruct students for a specific period of time. Payment was made according to the rate and level of student performance.

Texarkana, Texas, schools in 1969, were the first to negotiate a product contract with an outside agency, according to Katzman (52). Dorsett Educational Systems of Norman, Oklahoma, was contracted to teach reading, mathematics, and study skills to over two hundred underachievers in their secondary schools. The contracting

agency guaranteed that student achievement levels would be raised one full grade level with eighty hours of instruction. Performance gains were measured by commercially-prepared standardized tests. If achievement goals were reached in less than the prescribed amount of time, the contracting agency received a bonus; if they took longer, a penalty was imposed (52, p. 6).

The Board of Trustees of the Houston Independent School District recognizes the need to reward teachers whose students exhibit high levels of academic growth. Their Second Mile Plan (103) provides supplements to classroom teachers' salaries in instances where the teachers are assigned to schools in which the school norm for students' rate of academic gain, as measured by standardized tests, is greater than the norm for similar schools in HISD. Houston teachers receive additional monies if the average number of months gained at their schools is greater than that average for the entire group. This is figured by computing the difference between achievement scores one year and that of the preceding year. Achievement growth serves as the criterion opposed to a single achievement score. Outstanding educational progress stipends are paid to all eligible classroom teachers who return to the eligible

campus the subsequent school year and each year thereafter (103, p. 7).

It is noted, when student achievement scores are used to help determine teachers' salaries, that it is necessary to implement additional testing security measures to guard against unprofessional administration of the tests (103, p. 7). The danger also exists that teachers will teach the test, concentrating on the testable areas and overlooking other considerations (49, p. 82).

## Teacher Job Performance

Melvin (71) proclaims, "There is little in life so unfair as a system that pays unequals equally. Yet that is the case of teacher salaries." The outstanding teacher is paid the same as the below-par teacher with the same amount of formal training and number of years experience. Bruno and Nottingham (11, p. 48) support this belief and state that the best teacher in the district is paid on exactly the same basis as the poorest, according to the single salary schedule by which most school districts compensate their personnel.

Benson (4, p. 305) reiterates that since the annual increments in the single salary schedule are largely automatic, the most dedicated teacher is offered no greater financial reward than the least dedicated. The

single salary structure, unfortunately, fails to establish strong incentive for teachers to work hard in the classroom.

The reward structure for teachers is systematically divorced from educational effectiveness, concurs Levin (61). This is sharply contrasted with business and industry, which regularly compensate their personnel on the basis of their contributions to the effectiveness of the organization. "Commissions for sales personnel, bonuses, promotions, profits, and salary increases all represent rewards for individual or organizational proficiencies" (61, p. 181). According to Melvin (73), the incentive of better pay for better work remains the most valid formula for success. "He who delivers the best product gets the most money under most circumstances. It is the essential capitalist system; and it worked well for the consumer and for the producer of the best goods."

Hart (47, p. 3) believes that a rational basis for employee compensation in education has been almost nonexistent in the United States. "Collective bargaining between public school employers and employees historically has evinced a general unwillingness to attempt to correlate compensation factors and employee production" (47, p. 3). Hart suggests replacing the single salary schedule for teachers with a pay structure based on productivity.

Hart (47) declares that conditions changed in the 1970s to make a compensation plan based on productivity more attractive, and he identifies these changes accordingly: First, the public is demanding "accountability." It is seeking answers to questions such as: What do I get for my dollar? How do I know I'm not being overcharged? Does any increase in expenditures reflect an increase in quality education? Second, there is an awareness now that not all teachers are good teachers, and not, therefore, deserving of all the benefits equally. Third, the conditions of supply and demand, currently favoring boards of education, give an opportunity to upgrade the teaching profession in a discerning and discriminating manner, with the most competently qualified and/or experienced personnel available. Fourth, attitudes about definitive measurement have changed. The public no longer accepts without question the primacy of certain intangible elements which defy analysis.

Pragmatic analysis on objective dimensions has become a common expectation in society. State legislators, congressmen, and even the President of the United States, are critiqued with scorecard precision for actions and decisions undertaken (47, pp. 5-6).

Fifth, there is increasingly widespread belief that there is a limit in revenue for educational expenditures (47, pp. 5-6).

The educational system of the United States is undergoing serious scrutiny from critics both inside and outside of education. Rasmussen and Holobinko (93, pp. 207-208) note that teachers are gaining increased visibility because of collective negotiations, consultation agreements, and the public's inclination to hold school personnel accountable for the results. authors argue that under the present single salary schedule teachers are without adequate incentive to improve their performance. Although teachers have traditionally resisted having their salaries correlated with their abilities to guide the learning of students, these authors state that in order to command the respect of society, teachers must become responsible for the kinds of changes that do or do not occur in their product, the students.

In a severe indictment of education in America today, Finn (32, p. 88) declares that unwillingness to recognize and reward excellence in teaching has resulted in the deterioration of teaching from position of respect and honor to that of a politically active public employees union, which is more concerned with working conditions than with accomplishments. He asserts that great teachers deserve reward and recognition.

We should encourage unusually gifted persons to become and remain teachers by rewarding them appropriately: with salary bonuses, to be sure, but also with marks of singular status (a title like "master teachers," for example), with public commendations, with sabbaticals, with invitations to join influential community boards, organizations, and commissions (32, p. 94).

DeBloois (19) maintains that remuneration must be tied to the type of responsibility and the amount of responsibility the teacher carries, his performance on the job, and these individual characteristics which increase the quality of his performance. He affirms that teachers' salaries should be determined by a combination of variables dictated by the goals of a school district.

In an extensive investigation of teacher salaries,

Swanson (108, p. 17) concludes that teacher salaries

presently are determined irrationally and without information as to the influence of teacher quality on the

learning process. He asserts that compensation in

education is frequently conditioned by political processes,

and is, unfortunately, unrelated to educational output.

Teacher unions have been roadblocks to pay incentives for teachers. The rank and file of their membership is interested in economic gain and improved working conditions for all members equally. Union membership is the avenue for such benefits. "No union can exist, certainly

not for long, without an instrumental role in improving the employees' economic condition on a yearly basis" (47, p. 11). Finn (32), however, suggests that teacher unions, with all their political activism, insistence on uniformity of treatment, and emphasis on fringe benefits, might more effectively advance their cause if they were equally concerned with teacher qualifications and performance (32, p. 94).

Melvin (73) deplores the single salary schedule currently used in education since it "locks all teachers of unequal merit into pay schedules of equal low pay."

Pay for merit, she believes, is still the most sound and effective way to generate incentive for excellence.

Merit pay would put extra money in the best teachers' pockets, and all of education would enjoy the profit (72).

In an effort to overcome some of the severe limitations of the single salary schedule, merit pay schemes have been proposed by many, both inside and outside of the field of education. In the simplest terms, merit pay means paying a teacher according to the quality of his teaching, according to Templeton (112, p. 1). In practice, however, programs range from vague statements allowing school boards to exceed regular pay schedules under some conditions, to programs in which all teachers

and administrators are paid according to an evaluation rating (112, p. 1).

Liechti's (64, p. 7) survey of merit pay plans in public school systems led him to conclude that the larger the school district, the less likely it is to have a merit pay plan. However, depending on the definition of merit pay, he acknowledges that many school systems have some salary provisions that would fit isolated definitions of merit pay.

Annual surveys of the number of school systems having some form of merit pay have shown a remarkable stability in the total number and percentage of school districts employing such plans, states Rhodes (98, p. 1). Each year approximately 6 per cent of school districts report some form of merit pay. The number fluctuates only slightly from year to year. Further analysis indicates that a number of school systems have abandoned their so-called merit pay plans, and a substantial additional number initiated plans, maintaining essentially the same total number.

Merit pay is a recurring interest. Weissman (117) observes that there was a time prior to the Depression and World War II when all teachers received merit salaries. When the idea was revived in the fifties, the National Education Association passed a resolution

against this basis of compensation. The results can be seen in a review of NEA statistics. In 1938 about 20 per cent of the salary schedules in urban school districts with populations of thirty thousand or more had provisions for a superior service maximum. In 1963 only 5 per cent of 2,500 of the largest local school systems had merit plans of compensation, and two-thirds of those were in school systems with less than 6,000 students.

Merit pay plans, Weissman (117) observes, have seldom been successful. A survey of officials from thirty large school districts reflected some of the reasons for the abandonment of merit plans.

The plans had been poorly inaugurated without teacher consent and created low morale, a sense of injustice, misunderstanding, dissension, suspicions of discrimination among teachers, opposition by teacher organizations, extra recordkeeping, and dissatisfaction with the instrument used for evaluation (primarily subjective evaluation without sufficient accompanying data) (117, pp. 17-18).

Templeton (112) states that a revival of merit pay programs stems from interest in such innovations as team teaching, differentiated staffing, and elective programs, all of which recognize differences in teacher roles, interests, and strengths. Further support for merit pay is the result of current pressure for accountability in education.

Templeton (112, p. 1) notes that the literature, written primarily by educational administrators and professors, strongly supports merit pay; authors view merit pay as a step toward teacher professionalism and a means of rewarding outstanding teachers. Opposition to merit pay comes primarily from teachers and is more evident in faculty rooms than in the literature. Primary arguments opposing merit pay centers on two claims: merit pay will create competition in a profession that requires teamwork, and there are no objective standards for evaluating teacher performance.

The issue of merit pay for teachers has been intensely debated for over half a century in school systems of various sizes in all parts of the country. In school systems where merit pay has been successful, a cooperative climate between teacher and evaluator has been an important prerequisite. In school systems where merit pay has been unsuccessful, unsatisfactory evaluations and staff dissension have been major reasons why school systems have abandoned such programs (74, p. vi).

A comprehensive report on merit pay by Educational Research Service indicates that merit pay for teachers reached a peak in the 1920s; interest in the issue resurfaced in the 1950s. During the 1960s approximately 10 per cent of the nations' schools had merit pay plans

for teachers. However, this percentage had dropped to 5.5 per cent by 1972. Educational Research Service surveyed all school systems in the United States that enrolled 300 students or more on their use of merit pay and incentives for teachers in 1978. Of those responding, 115, or 4 per cent, reported a merit pay or incentive plan for teachers during the school year 1977-78 (74, p. 11).

Nagle (79) presents four assumptions which underlie a merit system: good teaching should be rewarded with more money; the good teacher can be evaluated; money will motivate the good teacher to stay in the profession; and, the school system only needs good teachers to make it run smoothly and efficaciously. She concludes that the major problem lies within the evaluation system.

Cassetter (14, p. 142) acknowledges that the real difficulty in relating compensation to individual performance is one of appraisal. Who should appraise, what means should be used to appraise, and by which means should appraisals be translated into monetary values are questions that are difficult to answer. He notes further that those who advocate relating quality of service to compensation do so largely on grounds that personnel differ in quality of service they render, and that these differences must be reckoned with financially

in order to attract and retain professionally effective personnel. He believes the argument is valid and persists despite opposition.

Mahdesian (65, p. 24) presents the reasons advanced for the single salary schedule for teachers. From his point of view, most school districts and teachers are satisfied with the present, workable system. Merit programs would complicate salary negotiation and increase the cost of instruction in most school districts.

Wagoner (116) recounts the three most common arguments against merit pay: experience indicates it is not workable; current evaluation criteria are believed to be too inaccurate to serve as a basis for merit pay; and, the method produces teacher unrest within schools. On the other hand, he points out that in practice, merit pay systems succeed more often than they fail; teachers are continually involved in evaluation and oppose it only when it applies to them personally; and the present single salary system is itself unfair and discriminatory. He insists that merit pay rewards teachers judged to be superior according to established criteria. He believes that excellence in teaching can be furthered through competition and that opposition to merit pay will tend to perpetuate mediocrity.

Meyer (76, pp. 39-50) states that most salary administrators will admit that it is very difficult to administer a merit pay plan properly. Evaluation techniques vary; there is no generally accepted method of measuring a teacher's effectiveness in the classroom. He fears that in the absence of an objective measure of performance which can be agreed upon by all parties and without suitable controls, the merit approach will generate inconsistent rewards, leading to a decrease in teacher morale.

Melvin (73) insists that individual teachers noted for excellence do not oppose pay based on performance. Teacher unions do. Teacher unions, whose membership is composed of large numbers of teachers with varying levels of skill and ability, have a responsibility to all their members. They are supported by the membership and serve all members uniformly in their efforts to improve salaries and fringe benefits.

Patterson (87) argues that the single salary schedule is inadequate for the needs of any profession and that rewards based on ability, preparation, and effort are overdue in the teaching profession. He suggests the rating of teachers for recognition, privileges, and compensation as a remedy for several maladies in education. These maladies include high

turnover in the teaching profession, equal pay for unequal performance, low salaries that result in moon-lighting, and low teacher status. The promotion of high teacher professionalism, Patterson maintains, requires not only financial incentives but also recognition of individual skills. As guidelines, he describes five suggested teacher ratings and related pay levels and increments.

Redfern (96) points out that many schemes have been used to institute merit pay. The stumbling block always has been the inability to devise a satisfactory evaluation process that could be objectively and fairly applied. Many systems have tried merit pay plans and abandoned them after the attempt created more problems than it solved. Redfern espouses the belief that collective negotiation may ultimately be a means of achieving merit pay for the following reasons:

- Negotiation tends to elevate salary levels to a point where the public will be unwilling to support the cost of these increased outlays for teaching service unless boards of education and administrators show a willingness to evaluate teachers and work out differentiated pay plans.
- 2. Boards of education and school administrators will be unable to avoid this responsibility.
- 3. Teacher organizations are likely to continue to resist attempts to install merit pay plans.
- 4. Eventually an evaluation process will be unilaterally developed and administered as a managerial prerogative. It will largely

be by rating. Principals will be required to make the evaluative assessments. Teachers will be obliged to accede in order to obtain escalations in pay achieved through successful collective bargaining. Differentiated pay scales tend to justify the public demand for compensation according to merit (96, p. 9).

Redfern (96) indicates that there is an ebb and flow to the interest in and demand for instituting merit pay. However, he reiterates that an effective evaluation process remains the major stumbling block, a problem for which he sees no resolution. On the other hand, he states that if adversary negotiation forces maximum salaries even higher, the public may demand that differentiated salary schedules be instituted so that mediocre teaching service will not be compensated for at the same rate as that for superior performance. Indeed, he concludes, public pressure may be sufficient to force arbitrary judgments regardless of the difficulties this type of assessment may cause.

Cohn (16) summarizes the merit pay controversy as follows:

Although the single salary schedule eliminates the aspect of arbitrariness and personal judgement in the determination of teacher salaries, as well as reducing the potential element of discord among teachers, it creates an intolerable situation in which talent and ability go unrewarded—resulting in loss of the most capable teachers. Our impression is that most scholars would not quarrel with the desirability of merit rating—if a "workable"

scheme could be found. What separates the proponents and opponents of merit rating is a value judgment concerning the workability of the merit-rating system currently employed or proposed (16, p. 221).

Dwight Allen, Dean of Education at the University of Massachusetts, believes that merit pay is not the answer. The growth of the teacher should be the main consideration. One possible answer, Allen suggests, is differentiated staffing. Differentiated staffing is one means to the desired end of improving student learning, and is an alternative which might be more readily embraced by districts which have rejected merit pay in the past (79, p. 5).

Bhaerman (6, p. 22), noting that confusion surrounds the terms merit pay and differentiated staffing, distinguishes between them. Merit pay is based on the level of teacher competency; differentiated staffing is based on the level of responsibility. Unfortunately, the terms have been used interchangeably in spite of definitions to the contrary. He points out that the major difference between the two relates to staff utilization patterns.

Mann (66) agrees with English that "A merit pay plan doesn't alter the structure of the school. It leaves it intact . . . but differentiated staffing does change the structure. It changes the roles and responsibilities, and

it pays more for the assumption of additional duties" (66, p. 2)

Roy Edelfelt, executive secretary of the National Commission on Teacher Education, insists that merit pay means salary differentials based on quality of performance in situations where every teacher has a similar task and the same degree of responsibility. Differentiated staffing, on the other hand, would establish differentials based on differences in degree of responsibility (107, p. 8).

Ratsoy, Holdaway, and Haughey's (94) review of the literature regarding differentiated staffing indicates that it is now generally accepted to be an organizational attempt to improve instruction. This improvement is accomplished through the reorganization of the teaching functions within a school, so that professional and paraprofessional staff together perform all the tasks traditionally assigned to the classroom teacher such as checking attendance, marking papers, etc. "The extent of differentiation within these staffing categories may be based on any combination of responsibility, skill, functions, or salary" (94, p. 17).

The concept of differentiated staffing is based on two premises: (1) teachers differ in the level of teaching skills and in the extent of their commitment to

the profession, and (2) teaching is a global concept which contains both instructional and noninstructional functions. Recognition of these variations in teacher characteristics, and of the multidimensional nature of teaching tasks, suggests that it might be advantageous to provide for greater specialization among instructional personnel than is usually possible under more traditional forms of staffing. Differentiation, therefore, encourages specialization not only in terms of the quality and extent of the skills used, but also in terms of the actual functions included in "teaching" (118, pp. 131-133).

In Snyder's (107, p. 3) review of differentiated staffing, he states that it is an outgrowth and extension of team teaching, which recognizes there is a diversity of teaching tasks. He says advocates of differentiated staffing suggest that teaching duties could be categorized to allow for different interests, different abilities, and different ambitions. It calls for differentiating salary in terms of responsibilities assumed and allows for both a training and a career-ladder. Differentiated staffing is a refinement of teach teaching, and pay is a necessary part.

The National Commission on Teacher Education and Professional Standards has been a strong proponent for differentiated staffing, according to Snyder (107). The

Commission describes a plan for the recruitment, preparation, induction, and continuing education of staff personnel for the schools, which could bring a broader range of manpower to education than is now available.

As advocates of differentiated staffing, they maintain that the chief thrust is to upgrade the quality of instruction in the classroom and to provide more individualized learning programs for students. It allows for full utilization of talents of master teachers, releasing them from non-teaching duties.

Templeton (111) contrasts the two basic models of differentiated staffing for teachers. The Trump plan, generally regarded as the first model for horizontal differentiation of staffs, assumes that teachers perform different kinds of tasks and that these tasks are equal in importance and responsibility. This plan suggests a team teaching approach with differentiated functions among teachers, in somewhat the way the school hopes to provide for individual differences among pupils. A second model, variously called vertical or hierarchial differentiation, is usually attributed to Dwight Allen and assumes that teachers perform different tasks, and that these tasks are not equal in importance and responsibility. This, then, forms the basis of the career ladder; a new or inexperienced teacher can begin with a

less responsible role and work up the career ladder to a more responsible and, possibly, more remunerative position in the team (111, pp. 1-3).

Mauch's (68, pp. 1-3) paper on differentiated staffing indicates that there is a great difference among teachers with respect to their skills, what they like to do, what they do best, what they are trained to do, the levels at which they like to work, and their degree of commitment to the profession. They differ further in their interest in dealing with administrative problems, filling leadership roles, developing curricula, and carrying out instructional research. He believes that these differences make worthwhile the investigation of alternate staffing concepts.

Demeter (21) points out that in the last few decades we have given enormous attention to, and recognition of, pupil differences and individualized instruction.

However, we have paid scant attention to teacher differences.

We have come to regard one teacher as essentially the equivalent of any other, with the same authority and the same responsibility—and the same salary. All of this we know, from our own daily observations, runs contrary to the facts (21, p. 37).

Gary D. Watts of the National Education Association's Division of Field Services said about differentiated staffing, "It's camouflaged merit pay of the highest

order and I'm against it for all the reasons that I'm against merit pay." Teacher unions essentially have adopted this position. Demeter (21, p. 35), however, insists that differentiated staffing is not a form of merit pay. He describes the concept of differentiated staffing as a rearrangement of the faculty into instructional teams, whose members play different roles on a hierarchial basis. He strongly believes that this concept has the inherent potential of maximizing salary dollars. He further believes that differentiated staffing is an arrangement that will curtail the teacher brain drain for the nation's classroom, a plan that will enable school districts to maximize the return from their available resources; a setup that will help give pupils a more useful and effective education; and, lastly, an arrangement that will pay more dollars to teachers who have assumed greater responsibility for improving the effectiveness of instruction (21, p. 36).

Demeter (21) summarizes that staff differentiation is a label to describe a schools' organization of human resources. It involves a restructuring of the school organization to permit teachers to make better use of their talents and, most importantly, to improve the learning situation for students. It is both a reorganization of structure and a redesign of educational

programs. To differentiate a teaching staff means to separate it into different segments, to divide it into different roles with varying degrees of responsibility, difficulty, and complexity (21, p. 36).

Rhodes and Kaplan (99, p. 11) refer to differentiated staffing as an idea in which the tasks relating to the education of children may be analyzed and defined, then reassembled into more meaningful job assignments. The purpose of doing such would be primarily to have more efficient and effective education. It would also be possible through such a reorganization of jobs to have some educational tasks performed by those with less experience, less training, and at lower salaries, while some other jobs might require more skill and higher compensation. If education became more efficient, and the cost were held down at the same time, this would be doubly desirable for most school boards.

Differentiated staffing has emphasized development of teacher leadership roles, the importance of shared decision-making in schools, and constructive ways in which paid instructional aids and volunteer aids can support the professional teaching staff to facilitate a positive organizational climate for more effective working relationships. Through the efforts of a variety of differentiated staffing projects, which have been

funded through the Education Professions Development Act, a great many different models and approaches have been developed to implement differentiated staffing in public schools.

School districts which have implemented differentiated staffing programs report success. Among achievements reported by participants are reduced pupiladult ratios, greater individualization of instruction, and improved classroom discipline. Significant achievement gains in reading and mathematics are experienced by such districts (88, p. 6).

In their comprehensive overview of the subject,
Yeakey and Johnston (118, p. 134) note that critics of
differentiated staffing say that it is nothing more than
the concept of merit pay in disguise. This criticism,
they argue, is unfounded because merit pay is based on
the effectiveness with which one performs his duties.
"The salary paid to a teacher in differentiated staffing
is related to one's responsibility, not one's effectiveness" (118, p. 134).

In a paper presented at the Annual Meeting of the National Association of Secondary School Principals,
Miami Beach, 1980, Irgang and Gelber (51, p. 5) suggested that differentiated staffing is a money-saving operation that high schools could employ to reduce costs and

increase effectiveness. At a time when every school system must examine the efficiency of its own operation in order to maintain its credibility, it is their persuasion that if principals are given the authority and freedom to select and assign personnel in accordance with the needs of their schools, such assignments would result in a significant savings in time and/or money (51, p. 5).

Engel (26, pp. 407-409) notes that the problem of evaluating teachers hinders the implementation of both merit pay and differentiated staffing. He reviewed the role that evaluation plays in the education, training, placement, and instructional methods of teachers. concludes that teachers object to such evaluation only when it relates to their own salaries. If teachers were challenged to do so, he contends that they could devise acceptable methods for evaluating one another. Various benefits would result, among which are improved instruction, rewards for meritorious service, healthy and beneficial competition, and a higher level of professionalism. Such teacher evaluation of other teachers for merit pay might lead to the acceptance of differentiated staffing. Differentiated staffing could be a step toward solving staff assignment problems, pay

perplexities, and morale crises in the schools, besides meeting public criticism of the single salary schedule.

Will differentiated staffing be implemented on a large scale in the near future? Probably not, states Turner (115, pp. 11, 13). First, teacher organizations have taken the position that the hierarchal structuring of teaching fosters divisiveness among teachers; and they, therefore, oppose it. Second, present methods of allocating minimum foundation program (MFP) funds on a classroom teacher unit (CTU) basis virtually preclude much movement toward differentiated staffing. According to Turner, this is a useful concept, but one that would require changes in some state funding programs to implement successfully.

## Military Experience and Teaching-Field Related Experience

A search of the literature disclosed little information with reference to teachers with military experience or with previous teaching-field related experience. The Teacher Retirement System in Texas allows teachers to purchase credit for military experience toward retirement. To be eligible to purchase credit for up to five years of military service, the teacher must have rendered ten years of service as a member of the Teacher Retirement System (1, p. 16).

Interviews with assistant superintendents in charge of school district hiring in several cities in this study indicate that the number of applicants for teaching positions with military experience or previous teaching-field related experience are few, perhaps 2 per cent and not to exceed 3 per cent a year. It has been the observation of personnel superintendents that those entering the teaching profession from other types of employment seldom have previous experience in their teaching fields.

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### CHAPTER III

## PROCEDURE FOR THE COLLECTION AND TREATMENT OF THE DATA

The primary thrust of this study was to determine if politically, educationally, and economically viable alternatives to the single salary schedule for teachers exist in the eight largest school districts in Texas. Inflationary trends, tax resistance, and budgetary contraints suggested that data could be collected that would subsequently provide useful information for making future decisions relative to salary compensation for teachers.

Information regarding the methods and procedures of this investigation has been subdivided into the following topics: (1) review of the literature, (2) research design, (3) developing the initial survey instrument, (4) selection of the panel of experts for validation of the survey instrument, (5) content validity of the survey instrument, (6) construction of the final survey instrument, (7) establishing the reliability of the final survey instrument, (8) selection of sample and collection of data, and (9) statistical treatment of data.

### Review of the Literature

A thorough review of related literature dealing with teacher salary schedules constituted the initial phase of this study. Specific attention was directed to the literature that dealt with a variety of factors that could conceivably expand the dual base of the single salary system into a multi-factored salary plan. Inflationary trends, tax resistance, and budgetary constraints, coupled with a growing concern for quality education and the emerging accountability movement, have caused school boards to be more critical of the single salary schedule as it exists and to explore the possibility of viable alternatives.

Professional journals, books, monographs, research bulletins, and research studies were examined at various university and private libraries. Additionally, the assistance of the following groups was solicited to identify significant studies and related research: (1) The Educational Resources Information Center (ERIC) Search Service, North Texas State University; (2) the ERIC Search Service, Education Service Center, Region 10; (3)

Dissertation Abstracts (DATRIX, Service of University Microfilms, Ann Arbor, Michigan); (4) The School of Research Information Service (SRIS) of Phi Delta Kappa; (5) Educational Research Service, Inc. (Arlington, Va.);

(6) Coordinating Information for Texas Educators (CITE)
Resource Center (Austin, Texas); and (7) Bibliographies
Retrieval Services, Inc. (Scotia, New York).

### Research Design

A cross-sectional survey was the research design utilized for this study. The model followed was developed by Earl R. Babbie and set forth in his publication entitled, Survey Research Methods (1). Data were collected at one point in time from samples selected to describe larger equivalent populations at that time: school board members, superintendents, principals, teachers, and citizens of the eight largest urban school districts in Texas.

This most commonly utilized survey design was useful for purposes (1) of describing the manner in which the total sample distributed itself on the response alternatives of a single questionnaire and (2) for determining relationships between variable at the time of the study (1, p. 62).

Developing the Initial Survey Instrument

The survey instrument was designed to gather

specific information to provide a basis for future school

finance decisions in the state of Texas. Approximately

half (51 per cent) of the state's budget is allocated

for education. Of that amount, 85 per cent is designated for personnel salaries (3). The salary issue, critical and complex, must be addressed. Continuous debate by educators, laymen, and professional organizations concerning the most appropriate methods for determining teacher salaries indicates that there are many problems and unresolved issues which deserve attention. Therefore. a survey of perceptions concerning possible factors to be considered in determining teacher salaries seemed appropriate. A comprehensive study of school finance, a thorough review of the literature, and numerous interviews with acknowledged experts in school finance preceded the development of the questionnaire entitled, "Perceptions Concerning Differential Salary Compensation for Teachers."

The questionnaire is divided into five main parts. The first part, designed to collect demographic data, was adapted to population groups; that which was sent to school district employees varied slightly from that which was sent to school board members and local-unit PTA presidents. Following the demographic portion were four identical sections of questions to be answered by all population groups. Each section was distinctly different one from the other, both in terms of format and types of information sought.

Section I consisted of two questions asking respondents' opinions on two basic salary issues, namely

- 1. Do you believe that factors in addition to college degree and years of service <u>should</u> be considered in determining teacher salary rates?
- 2. Do you believe that a system for determining teacher salaries which takes into account factors other than degree held and years of service <u>could</u> be implemented and administered in our public schools?

Section II required respondents to consider eleven factors that could conceivably be included in salary determination and, on a Likert-type scale, make a judgement as to their importance. Section III consisted of a series of multiple-choice questions that asked respondents to designate dollar amounts for possible factors in salary determination. Section IV solicited responses regarding performance evaluation, namely (1) criteria to be used for performance evaluation and (2) personnel to be involved in performance evaluation.

Selection of the Panel of Experts for Validation of the Survey Instrument

Panel members were carefully chosen with reference to their knowledge of teacher salary issues and for their expertise in the research process. Included in the ten member panel were (1) three professors at two major universities, two in Educational Administration and one in Statistics and Research; (2) two public school superintendents, acknowledged authorities in school finance and teacher salary issues; and (3) five additional public school administrators with doctorates in administrative leadership, including an emphasis in school finance.

Each of the ten panel members participated in the validation procedure, critically examining the instrument to determine its adequacy. The cover letter requested that panel members rate each item on the questionnaire according to its appropriateness in content validity. Additionally, panel members were requested to submit recommendations for eliminating ambiguities and to make suggestions for improving the totality of the questionnaire. Additional personal interviews with panel members constituted a part of the validity study in order to further refine the instrument, eliminating obscurities in intent or meaning.

### Content Validation of the Survey Instrument

The survey instrument was sent to each of ten panel members to evaluate its content validity. According to Roscoe (8, p. 136), content validity is exhibited by demonstrating how well the content of the instrument

samples the situations about which deductions are to be made. An accompanying cover letter requested that panel members rate each item on the survey instrument in the following manner.

"A" for items appropriate in content validity;

"I" for items inappropriate in content validity;

"A-M" for items appropriate with modification.
Suggestions for additions, deletions, or modifications that would contribute to the instrument's adequacy and clarity were solicited. The enclosed, self-addressed, stamped envelopes brought the responses from the panel members after their critical examination of the instrument.

### Construction of the Final Survey Instrument

The final draft of the survey instrument incorporated all recommendations of panel members. This draft included the addition of two general questions. Also, the number of factors under study was expanded from ten to eleven with the inclusion of "Teaching Field Related Experience." No items were deleted. Minor changes were made to assure clarity, accuracy, and correctness.

The final survey instrument was professionally printed, thereby making it possible to include all material on a single foldout. The instruments were

color-coded to facilitate the identification of the five populations surveyed, each group receiving a different colored instrument as follows: superintendents, tan; school board members, goldenrod; principals, green; teachers, blue; and local unit PTA presidents, yellow. (see Appendix A.)

### Establishing the Reliability of the Final Survey Instrument

The reliability of the survey instrument was determined by using estimates of test-retest stability. Twenty-eight individuals, composed of a proportional representation of each of the populations surveyed, superintendents, school board members, principals, teachers, and local unit PTA presidents, were given the questionnaire. Two weeks later, the same group was asked to respond again to the questionnaire. Pearson Product Moment correlations were obtained for Sections I, II, III-B, and IV-A. These estimates were as follows.

		<u>r</u>	r <sup>2</sup>
Section	I	.93	.86
Section	II	. 79	.62
Section	III-B	.78	.61
Section	IV-A	.73	.53

This was close to reliability found on commercially prepared standardized tests. A review of research data indicated this to be adequate for an attitudinal questionnaire.

A different estimate of reliability, per cent agreement between both administrations, was used for Sections III-A, III-C, and IV-C with results as follows.

		<u>r</u>	<u>r</u> 2
Section	III-A	.93	.86
Section	III-C	.93	.86
Section	IV-C	.82	.67

Per cent agreement for section IV-B was reached after appropriate numbers were converted into percentages with results as follows:

$$\frac{r}{r} \qquad \frac{r^2}{section IV-B} \qquad .94 \qquad .88$$

Selection of Sample and Collection of Data

The Texas Council of Urban School Districts, a

group that meets regularly to discuss and work on the
common problems and concerns shared by its members,
consists of the following largest school districts in
the state: Houston, Dallas, Fort Worth, San Antonio,
El Paso, Austin, Ysleta, and Corpus Christi. The
average daily attendance of these eight districts is
as follows.

Name of District	Average Daily Atendance
Houston ISD	174,819
Dallas ISD	116,731
Fort Worth ISD	60,164
San Antonio ISD	55,486
El Paso ISD	53,771
Austin ISD	52,070
Ysleta ISD	40,961
Corpus Christi ISD	34,380

These districts, geographically distributed throughout the state, have urban populations with large inner-city components. Such populations include economic and cultural cross-sections of individuals. Twenty-five per cent of all children in the state, and 44 per cent of all economically disadvantaged children in the state reside in these eight urban-centered school districts-a mere 0.73 per cent of the total 1,099 districts in the state (9).

Membership in the Council is comprised of superintendents from these large districts which have
tremendous stake and representation at the Texas State
Legislature. The Council works together to assure
state appropriations that will finance education adequately
in these cities of high-density populations and eroding
tax revenues. These districts have a commonality of

problems in most aspects of school finance, not the least of which is meeting the salary needs of teachers.

Therefore, the selection of the sample for this study was made from this group in the following distribution:

8 superintendents, 58 school board members, 119 principals,

238 teachers, and 56 local unit PTA presidents, for a total sample of 479.

Roscoe (8, p. 165) defines a population as a collection of objects, events, or individuals having some common characteristic. A sample would be a smaller group of objects, events, or individuals selected from the population for actual participation in research. The entire population of superintendents and school board members was surveyed. Randomly selected principals, teachers, and local unit PTA presidents composed the samples of the remaining population groups.

The names of the superintendents of the eight largest school districts were taken from the <u>Texas</u>

<u>School Directory</u>. Letters then were sent to these superintendents inviting the participation of their districts in this study in exchange for information the study would yield. (See Appendix B.) If they concurred, they were to send the names of designees who would coordinate their districts' efforts for the dissemination, collection, and return of the surveys. All agreed to

participate and the names of appropriate personnel were supplied. Subsequently, letters were sent to the designees giving directions for distribution and completion of the surveys. (See Appendix C.)

The eight districts have well-developed administrative organizations that could assist with random sampling and give impetus to the distribution and retrieval of the survey instruments. Personnel departments in each district were requested to select at random the names of both elementary and secondary principals and teachers, half elementary and half secondary, to participate in the study. The number of survey instruments sent to principals was 119, in the following proportional distribution: Houston, 36; Dallas, 24; Fort Worth, 12; San Antonio, 11; El Paso, 10; Austin, 10; Ysleta, 9; and Corpus Christi, 7. The number sent to teachers was 238, in the following proportional distribution: Houston, 72; Dallas, 48; Fort Worth, 24; San Antonio, 22; El Paso, 20; Austin, 20; Ysleta, 18; and Corpus Christi, 14.

To have representation from the citizens of each city, the personnel departments in each school district in the Texas Council of Urban School Districts also randomly selected names of local unit PTA presidents from district rosters of the Texas Council of Parents and

Teachers. Surveys were sent to individuals thus specified. The total number of surveys sent to this population group was 56, in the following proportional distribution: Houston, 16; Dallas, 11; Fort Worth, 6; San Antonio 5; El Paso, 5; Austin, 5; Ysleta, 5; and Corpus Christi, 3. The individual superintendents wrote a cover letter that accompanied the surveys sent in their districts. Follow-up with superintendents' designees was made by the researcher at least three times. It was believed that local people handling the distribution would bring the greatest response.

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### CHAPTER IV

#### PRESENTATION OF FINDINGS

The purpose of this chapter is to present the findings of the study that compared perceptions concerning differential salary compensation for teachers in the eight largest school districts of Texas. These findings are the results of data obtained from the respondents' input on the 368 survey instruments that were completed and returned by superintendents, school board members, principals, teachers, and local unit PTA presidents.

A total of 479 survey instruments were sent in the following distribution: 8 superintendents, 58 school board members, 119 principals, 238 teachers, and 56 local unit PTA presidents. When the collection of the data had been accomplished, 368 instruments had been returned. A total response rate of 77 per cent was recorded for the five population groups in the survey.

Table I displays the number and per cent of return according to the school district's location and to the position of the respondent. By location, per cent rate of returns were as follows: Houston, 61; Dallas, 87; Fort Worth, 82; San Antonio, 87; El Paso, 79; Austin, 84; Ysleta, 85; and Corpus Christi, 69.

TABLE I SUMMARY OF SURVEYS RETURNED BY LOCATION AND POSITION

	Superi	ntendents	Board	Members	Prin	Principals	Tea	Teachers	PTA P	PTA Presidents	Total	al
Location	Z	دبن	Z	ф	z	æ	z	ф	Z	æ	Z	عن
Houston	<b>-</b>	100	m 	4.3	28	78	88	23	10	62	08	61
Dallas	н ———	100	ø	67	22	92	41	85	11	100	81	87
Fort Worth	н	100	4	57	12	100	21	88	m	20	41	82
San Antonio	, , , , , , , , , , , , , , , , , , ,	100	<b>(3)</b>	29	10	91	22	100	ĸ	100	40	87
El Paso	۲4	100	m	43	10	100	13	9.5	ط	20	34	79
Austin	<b>-</b>	100	7	29	10	100	19	95	4	80	36	84
Ysleta	н	100	4	57	0:0	68	17	94	ব	80	34	85
Corpus Christi	1	100	0	0	7	100	12	98	7	67	22	69
Total	æ	100	24	41	107	06	189	79	39	02	368	7.7

All superintendents in the targeted districts completed and returned the surveys for a return rate of 100 per cent. Of a possible fifty-eight, twenty-four surveys of school board members were completed and returned for a rate of 41 per cent for this population group. Unfortunately, the per cent rate of return for this group was not high enough to make valid comparisons, nor was it sufficient on which to base any legitimate conclusions. The total number of survey instruments sent to principals was 119. Ninety per cent were completed and returned. A total of 238 surveys were sent to teachers; 79 per cent were completed and returned.

Thirty-nine survey instruments were sent to local unit PTA presidents. Seventy per cent were completed and returned.

The survey questionnaire had five main parts. The first gained descriptive demographic data and four sections of questions followed. The demographic variables were (1) location of the school district (Houston, Dallas, Fort Worth, Austin, San Antonio, El Paso, Ysleta, and Corpus Christi); (2) position of respondents (superintendent, school board member, principal, teacher, or local unit PTA president); (3) sex; (4) ethnicity; (5) home owner in the school district; and (6) children attending public schools in the district.

Statistical Treatment of the Data

The data for the study were collected through a questionnaire instrument. The opinions of each respondent were recorded with check marks in spaces provided on the instrument. After all the question-naires were collected, the responses were coded so that they could be keypunched and input into the computer for analysis. Thus, for each respondent it was possible to identify both demographic characteristics and specific opinions on each question according to those coded values.

All of the responses to the questions on the questionnaire were analyzed for both descriptive and inferential
content. Using the Statistical Package for the Social
Sciences (SPSS) programs, descriptive and inferential
statistics were computed for respondents taken as a whole
and for respondent groups broken down by the demographic
variables (school district, position, sex, ethnicity,
home ownership, and children in school). In this way,
it was possible to determine simple descriptive information (frequency count and percentages) and statistically
generalizable information (significant differences in the
populations using either chi square, ANOVA, or t tests)

for each of the questionnaire items concerning each of the demographic variables.

The first section of the questionnaire was concerned with whether a multi-factor teacher salary schedule should be established and could be implemented. Respondents checked either yes or no to each question. Thus, the data are nominal (categorical). These data were analyzed with respect to their descriptive characteristics (frequency count and percentages) and to their inferential information (chi square tests for significant differences). Both the descriptive and inferential findings were reported for the items in Section I for the respondents with respect to their specific demographic characteristics.

The second section of the questionnaire was concerned with the particular factors that should be used in a multi-factor teacher salary schedule. For each of the eleven listed factors the respondents could check either a "definitely should be a factor," a "probably should be a factor," a "probably should not be a factor," or a "definitely should not be a factor" space. There was no attempt in the questionnaire to imply that there are equal intervals in the semantic differences between each of the adjacent response choices. Thus, one cannot assume equal numerical distances in these response

choices, and so the response data must again be treated as nominal. These data were also analyzed with respect to their descriptive (frequency count and percentages) and their inferential (chi square tests of significant differences) information. In the reporting of the descriptive information, the positive responses (i.e., definitely and probably should be a factor) were combined as were the negative responses (i.e., definitely and probably should not be a factor). These combinations were effected so that the opinions of the respondents could be presented in a more logical manner. That is, with the combinations, the number and percentage of overall respondents generally in favor and generally opposed to a given factor can be readily observed. computing the inferential information, the responses were retained as recorded on the questionnaire (i.e., in the four distinct response choices) so that the computation of any significant differences among the respondents would take into consideration the varying degrees of preference for a particular factor. Treating descriptive and inferential information differently in this section does not misrepresent the nature of the data but, in fact, presents a clearer, more understandable picture of the perspectives of the respondents. Once again, the

findings were reported according to the demographic characteristics of the respondents.

The third section of the questionnaire was concerned with the amount of money that should be awarded for each factor. For each of the eleven listed factors the respondents could check amounts ranging from \$250 to \$1,000 in increments of \$250. It was also possible to respond none or to write in any amount. Because one can assume equal intervals existing between each dollar unit, these data were treated as interval data. Descriptive statistical information for each factor was again computed in terms of frequencies and percentages. Inferential statistical information for each factor was computed by using ANOVA and t tests to determine where significant differences existed among the opinions of the respondents. Both descriptive and inferential findings were reported for each factor in this section with respect to the demographic characteristics of the respondents.

The fourth section of the questionnaire had three parts. The concern of the first part was with criteria to be employed in evaluating teacher job performance if job performance was to be included as a factor in the multi-factor schedule. To each of the listed criteria the respondents could mark a check for a yes or leave the space blank for a no. Thus, these data are again nominal.

These data were also analyzed with respect to their descriptive (frequencies and percentages) and their inferential (chi square tests of significant differences) information, and both descriptive and inferential findings were reported according to the demographic characteristics of the respondents.

The second part was concerned with the evaluators of teacher job performance. Respondents were asked to make a check if the listed person should be used as an evaluator of teacher job performance or to leave the space blank if the person should not be so employed. These data are again considered as nominal. Thus, once again descriptive (frequencies and percentages) and inferential (chi square tests of significant differences) information was computed and reported for the different demographic groups.

The third part of this section was concerned with whether the views of several evaluators of teacher job performance should be weighted. Respondents marked either yes or no to the question. The nominal data were recorded, and descriptive (frequencies and percentages) and inferential (chi square tests of significant differences) information was reported for the different demographic groups.

# Questionnaire Results Analysis Overview

Section I on the survey instrument consisted of two questions: (1) Should factors besides college degree and experience be considered in a teacher salary schedule, and (2) Could a multi-factor schedule be implemented in the respondent's school district. Section II of the questionnaire had eleven items. All of the items were factors which could be employed in the determination of a salary structure. The respondents were asked to rate each factor as to whether it (1) definitely should be a factor, (2) probably should be a factor, (3) probably should not be a factor, or (4) definitely should not be a factor. There was also a place for respondents to write in additional factors and rate them. The paucity and divergency of write-in comments make their reportage of negligible value.

Section III of the questionnaire had three distinct parts. The first part explored the question of the number of years of experience which should warrant a salary increment. The second part asked for suggested monetary amounts to be awarded for the eleven possible factors identified on the surveys. Monetary amounts on the questionnaire were listed in increments of \$250 with opportunity for the respondent to mark "none" or "other."

The third part of this section asked the respondents whether there should be a limitation on the number of stipends or monetary amounts to be received.

Section IV was concerned solely with the utilization of job performance in the determination of salary for teachers. There were three parts to this section which asked the respondents (1) what criteria should be used for measuring job performance, (2) who should evaluate teachers using those criteria, and (3) should evaluation of teacher performance be weighted in favor of the immediacy and duration of observation.

This presentation considers each item of every section and analyzes the responses of those who returned the questionnaires according to six demographic variables: school district, position, sex, ethnicity, home ownership in the school district, and children attending public schools in the district. The information presented here will briefly summarize the responses in terms of percentages and differences, whether statistically significant or not, among the demographic variables of location and position. At the end of each section a summary statement will be presented. It should be noted that few statistical differences occurred in the variables of sex, ethnicity, homeowner in the shool district, and children attending public schools in the district.

These, therefore, will be concisely enumerated at the conclusion of the analysis for this section.

## Analysis of Section I

The first section of the questionnaire concerned whether a multi-factor salary schedule should and could be established. The respondents to the questionnaire were heavily in favor of such a salary schedule, and they believed it could be implemented in their respective school districts. With respect to location, the following figures show the percentages of all respondents favoring the use of additional factors: Corpus Christi, 90; San Antonio, 88; Ysleta, 88; Austin, 86; Dallas, 84; Houston, 84; Fort Worth, 83; and El Paso, 71. The differences were not statistically significant. With respect to position, the percentages were superintendents, 100; PTA members, 93; board members, 92; principals, 84; and teachers, 80.

The second item of the first section inquired as to whether the multi-factor schedule could be implemented in one's own school district. With respect to location, the respondents' percentages were Fort Worth, 87; San Antonio, 85; Corpus Christi, 85; Ysleta, 84; Houston, 82; Dallas, 80; Austin, 69; and El Paso, 62. In general, the differences between the should and could questions

for each location were small with two exceptions. Austin is quite positive toward the theoretical development of such a system but not nearly so with respect to the practical implementation within the district. El Paso, meanwhile, not only presented the lowest percentage of favorable responses to both questions of all locations, but also recorded a considerable difference between the should possibilities and could expectations.

With respect to position, the percentages were superintendents, 100; PTA members, 98; board members, 87; principals, 76; and teachers, 76. There was a statistically significant difference. The difference occurred with the position variable. Superintendents, PTA members, and board members were significantly higher in the belief that such a system could be implemented  $(x^2 = 12.70, p < .02)$ .

Support for a multi-factor schedule and belief that it could be implemented was rather strong and quite consistent among respondents in all school districts and in every position. The only possible exceptions to this general statement involved the district of El Paso where support of the system appeared to be somewhat lower, and in the position variable where support seemed to be inversely related to the hierarchical power

structure as it relates to authority of school district performance.

Table II demonstrates by school district the respondents' belief that multi-factor salary schedules should be utilized. Table III demonstrates by school district the respondents' belief that a multi-factor salary schedule could be implemented. Tables IV and V present by position the respondents' belief that multi-factor salary schedules should and could be utilized.

## Analysis of Section II

The second section of the questionnaire involved the determination of those factors that should be used in a multi-factor teacher salary schedule. For this section, only those respondents who marked yes to item one in section I, "Should there be a multi-factor salary structure" were analyzed. It was assumed that only the opinions of those indicating their approval of such a system could be helpful in the analysis. The views of those opposed to a multi-factor schedule tended to be predicated on their negative response and, therefore, are irrelevant to this section. Eleven factors were listed in the questionnaire: teaching experience, college degree, post-degree study, additional duties, personnel shortages, teaching special populations, class enrollment,

TABLE II

STATISTICAL SUMMARY BY SCHOOL DISTRICT OF RESPONDENTS' BELIEF THAT MULTI-FACTOR SALARY SCHEDULES SHOULD BE UTILIZED

!			Z	301	5.9
	rpus	Christi	OFF	90 301	01
	ိ	ភ	Z	18	74
		Ysleta	-	88	12
		YB	z	29	4
		Austin	440	31 86 29 88	7
		. !	N	31	5
		El Paso	æ	24 73	58
			z	24	10
	an)	Antonio	<b>.</b>	88	5 13
	S	Ant	N	35	ľ
	ort	Worth	-	84 33 83	1.8
		≱;	Z	33	7
		las	نده	84	17
		Dallas	Z	99	13
		Houston	•	84	17 13
		Hon	Z	65	13
			Response	Yes	ON

84

16

TABLE III

STATISTICAL SUMMARY BY POSITION OF RESPONDENTS' BELIEF THAT MULTI-PACTOR SALARY SCHEDULES COULD BE UTILIZED

Total	z	80	73 20
Corpus		85 285	15
Corl	z	13	<u>س</u>
Ysleta	<b>3</b> 0	84	16
	z	27	ş,
Austin	مه	69	31
¥	Z	25	=======================================
El Paso	۽ جو	62	88
H	z	21	=======================================
San	•	89 V3	15
Ani	z	34	9
Fort		83	13
3	z	34	'n
Dailas	-	80	20
[ Da ]	z	6	91
Houston	<u>-</u>	82	18
Hou	2	2	7.
	Response	Yes	ON.

TABLE IV

STATISTICAL SUMMARY BY POSITION OF RESPONDENTS' BELIEF THAT MULTI-FACTOR SALARY SCHEDULES SHOULD BE UTILIZED

										Ī		
	Superin	Superintendents	Board	Board Members	Pri	Principals	Teac	Teachers	PTA Members	mbers	Total	tal
Response	z		z	*	z		z	- 16	z		z.	مه
Yes	۲	100	22	92	88	20.	147	147 80	37	93	93 301	84
ON ON	Φ	0	7	œ	1.7	17 16	37	37 20	m	7	59	16

TABLE V

STATISTICAL SUMMARY BY POSITION OF RESPONDENTS' BELIEF THAT MULTI-FACTOR SALARY SCHEDULES COULD BE UTILIZED

uperintendents         Board Members         Principals           N         %         N         %           7         100         20         87         79         76           0         0         3         13         25         24
11.01

student achievement, job performance, military service, and related business experience. Respondents could supply additional factors if they wished.

Each of the listed factors will be analyzed individually for each of the demographic variables, and a summary of the responses for all factors will be presented following each separate factor analysis. first factor considered for inclusion in the salary structure was teaching experience. With respect to location, 100 per cent of the respondents from Austin, Fort Worth, San Antonio, Corpus Christi, El Paso, and Ysleta stated that this factor either definitely or probably should be included. In Houston, 99 per cent of the respondents so indicated while the figure in Dallas was 94 per cent. With respect to position, the percentages of respondents marking either definitely or probably should be included were superintendents, 100; PTA members, 100; teachers, 99; principals, 97; and board members, 95. Differences did occur with reference to position in the responses "definitely a factor" or "probably a factor." Superintendents, principals, and teachers were significantly higher than board members and PTA members in their acceptance of teaching experience as a factor ( $x^2 = 23.98$ , p < .02).

In summary, the factor <u>teaching experience</u> received widespread approval from all respondents regardless of their various demographic characteristics. In the opinion of the respondents to this questionnaire, this factor should definitely be considered when designing a teacher salary schedule.

The second factor considered for inclusion was college degree. With respect to location, this factor received approval (i.e., marked as either definitely or probably should be a factor) according to the following: Corpus Christi, 100; San Antonio, 100; Dallas, 97; Austin, 97; Fort Worth, 97; Ysleta, 97; El Paso, 96; and Houston, 93. As with the previous factor, there were no meaningful differences among these figures. With only slight disagreement from board members, this factor was also favored by respondents in all positions: superintendents, 100; PTA members, 100; teachers, 97; principals, 96; and board members, 91. In summary, this factor was also highly favored by all respondents regardless of their demographic characteristics.

The third factor considered was <u>post-degree</u> <u>study</u>. This factor was concerned with continuing academic work relative to the teaching profession after receiving a degree. With respect to the location demographic variable, once again there was very high approval for

use of the factor and very little difference among the cities. The percentages of the respondents marking definitely or probably should be a factor were as follows: Ysleta, 100; Houston, 99; Fort Worth, 97; San Antonio, 97; Corpus Christi, 95; El Paso, 92; Dallas, 90; and Austin, 90. In comparison to the two previous factors, teaching experience and college degree, this factor might be ranked somewhat lower because of a greater proportion of the respondents marked probably should be a factor rather than definitely should be a factor. This factor also was highly favored by the respondents. With respect to position, the percentages of respondents either definitely or probably supporting its inclusion in a salary structure were board members, 97; teachers, 97; principals, 92; PTA members, 91; and superintendents, 75. Differences did occur in the position variable. Board members and teachers were significantly higher than other respondents in favoring this factor  $(x^2 = 24.02, p < .02)$ .

In summary, there was strong approval for this factor among all respondents regardless of their demographic characteristics. There were no significant differences among the various groups of each demographic variable. As previously noted, however, this factor might be viewed as somewhat less important in the eyes

of all respondents because of a greater proportion of probably and not definitely responses.

The fourth factor considered was additional duties. This factor involved compensation for teachers performing school-related duties which are separate from the ones prescribed in their teacher contracts. Once again, there was strong support for including this factor in a salary schedule. With respect to school district, the percentages are Corpus Christi, 100; Houston, 98; Ysleta, 93; El Paso, 92; San Antonio, 91; Austin, 90; Dallas, 89; and Fort Worth, 85. There was some spread in the scores, but the differences were not significant. Moreover, once again, these percentages were high, but there was a greater proportion of probably marks than definitely marks. With respect to position, the percentages were superintendents, 100; board members, 96, PTA members, 94; teachers, 94; and principals, 92. There were no significant differences here. It should be noted, however, superintendents were very high in their acceptance of additional duties as a factor  $(x^2 = 24.49)$ p < .02).

In summary, there was also very strong approval of the use of this factor. However, as noted, the approval was diminished somewhat by the greater proportion of probably should be a factor responses.

The fifth factor considered was personnel shortages. The factor asked whether the critical need for personnel in certain fields should be a consideration in the establishment of a salary schedule. With respect to school district, the percentages of respondents marking definitely or probably were Ysleta, 89; San Antonio, 80; Dallas, 79; Corpus Christi, 78; Fort Worth, 75; Houston, 74; Austin, 71; and El Paso, 71. Not only were these total percentages lower overall than those of the previous factors, but there was also a much greater proportion of probably responses. Thus, the ratings for this factor were high, but there seemed to be much less preference for it than for the previously named factors. respect to position, the percentages were superintendents, 100; board members, 92; PTA members, 90; principals, 73; and teachers, 72. In summary, this factor had the acceptance of the respondents, but their enthusiasm for it seemed to be considerably less than for the aforementioned factors. One other matter of interest is that preference for including the factor seemed to be directly proportional to one's authority in the district in terms of school personnel.

The sixth factor considered involved <u>teaching special</u> <u>populations</u>, "Should those teachers who work with special populations be compensated differently?" With respect to

location, there was a variety of acceptance rates for this factor. The percentages were as follows: Houston, 75; Austin, 74; Ysleta, 72; San Antonio, 71; Corpus Christi, 66; Fort Worth, 60; El Paso, 58; and Dallas, 57. The range of percentages was somewhat large, but the differences among cities were not significant. Of note, however, is that the approval percentages were lower than those of any factor yet discussed. With respect to position, the percentages were superintendents, 75; principals, 71; PTA members, 70; board members, 68; and teachers, 64. The differences were not significant.

In summary, it can be said that there was support for this factor, but that the support was less solid than for any other factor yet considered. There were no noteworthy differences in support for it among the demographic variables of school district and position.

The seventh factor concerned <u>class enrollment</u>.

Should a salary schedule take class size into consideration? With respect to school district, the favorable responses were again quite varied: Fort Worth, 79;

Houston, 74; Ysleta, 74; El Paso, 63; Corpus Christi, 61;

Austin, 59; Dallas, 57; and San Antonio, 51. The range was rather large, but again the differences were not statistically significant. Like the previous factor, while there was general support, that support was

lukewarm, especially in San Antonio where a majority was barely obtained. With respect to position, the percentages in favor of the factor read as follows: teachers, 75; principals, 67; PTA members, 65; board members, 41; and superintendents, 38. This factor seemed to be inversely favored according to one's level of authority in the school district in terms of school personnel. All groups were significantly higher than board members and superintendents in their acceptance of class enrollment as a factor ( $x^2 = 27.02$ , p < .007).

In summary, the following generalizations can be made about the factor <u>class enrollment</u>. Overall support for including the factor was positive but not strong. The factor was particularly preferred by teachers.

The eighth factor considered was student achievement. The questionnaire sought responses as to whether the academic performance of students should be used to reward teachers. In general, the responses indicated that this factor should not be used. With respect to school district, the percentages of those favoring the factors were Houston, 54; Dallas, 51; Corpus Christi, 45; Ysleta, 45; Austin, 43; Fort Worth, 42; San Antonio, 37; and El Paso, 29. With respect to position, the percentages were board members, 55; PTA members, 53; teachers, 46; principals, 45; and superintendents, 38.

There was a wide range for both demographic variables, but no significant differences and no noteworthy pattern.

In summary, the inclusion of this factor in a salary schedule was not favored by the respondents. This lack of support was fairly consistent among most respondents regardless of their demographic characteristics.

The ninth factor considered in this study was job performance. The question was whether a performance rating should be used to determine a salary structure. With respect to the school district variation, there was a good deal of variability. The percentages for both definitely and probably should be a factor were Fort Worth, 91; Dallas, 84; Ysleta, 83; Austin, 80; El Paso, 80; Houston, 79; San Antonio, 66; and Corpus Christi, 59. Yet these differences were not statistically significant. The responses for this factor were strong and indicated that there was considerable acceptance for the use of this factor. With respect to position, this wide range of responses was also shown. The figures were PTA members, 95; board members, 90; principals, 78; teachers, 76; and superintendents, 63. The significant differences occurred in the position variable. Board and PTA members rated this factor significantly higher than other respondents ( $x^2 = 22.98$ , p < .03).

In summary, there was strong, consistent support for the inclusion of this factor in a teacher salary schedule.

The tenth factor considered was military experience. Should past military experience be taken into consideration when determining salaries? Overwhelmingly, the respondents were opposed to including military experience. With respect to school district, the percentages were Houston, 44; Fort Worth, 36; Dallas, 34; Corpus Christi, 34; Austin, 26; El Paso, 25; San Antonio, 17; and Ysleta, 7. The factor was favored by only small percentages of the respondents. However, Houston, Dallas, Fort Worth, Austin, El Paso, and Corpus Christi were significantly higher than San Antonio and Ysleta in their acceptance of military experience as a factor  $(x^2 = 43.46, p < .003)$ . With respect to position, the percentages were principals, 42; board members, 36; superintendents, 25; PTA members, 24; and teachers, 23. In summary, the results show that this factor was widely disapproved of by the respondents. It was mildly favored only by principals, but even this support was very weak.

The eleventh and final factor considered in this study was previous experience in business or industry related to the teaching field. With respect to school district, this factor received favorable responses

according to the following figures: Houston, 64; El Paso, 64; Fort Worth, 57; Dallas, 56; San Antonio, 59; Austin, 52; Ysleta, 51; and Corpus Christi, 50. The support for the factor was very weak. With respect to position, the percentages were board members, 86; PTA members, 60; principals, 60; teachers, 53; and superintendents, 50.

In summary, this factor received some favorable support from a wide range of respondents, but that support was not very strong. With respect to demographic considerations, the only group which demonstrated strong support for the inclusion of business related experience in a teacher salary schedule was school board members.

The discussion thus far has reported the analysis of respondents' preferences for factors to be considered for a salary schedule according to the demographic variables of location and position. The analysis was made for respondents taken as a whole and for respondent groups broken down by the demographic variables. As noted earlier, there were relatively few significant differences in the variables of sex, ethnicity, home owner in the school district, and children attending public schools in the district. The differences that did occur were as follows.

- 1. Teaching special populations—Seventy—nine per cent of Hispanics, 78 per cent of Blacks, but only 61 per cent of Whites favored the use of this factor in a salary schedule. The differences among the groups were significant ( $x^2 = 33.01$ , p < .0001);
- 2. Class enrollment--Seventy-one per cent of those with no children in the schools but only 56 per cent of those with children in school favored the inclusion of this factor. The difference for children versus no children in the school district was statistically significant ( $x^2 = 10.55$ , p < .02);
- 3. Student achievement--Fifty-one per cent of Blacks, 51 per cent of Hispanics, and only 43 per cent of Whites favored this factor. Here the difference between the White and non-White respondents was statistically significant ( $x^2 = 16.85$ , p < .05);
- 4. Job performance--Eighty-three per cent of female respondents and 72 per cent of male respondents favored the use of this factor. The differences were significant ( $x^2 = 9.20$ , p < .03).

The above discussion of the factors was highly narrative and tends to describe differences among factors in verbal terms. In order to balance this discussion, a quantitative analysis of the differences among factors as perceived by the respondents in general

was undertaken. To perform this analysis, numerical values were assigned to the four possible response categories for each factor. That is, "definitely should be a factor" response was awarded four points; "probably should be a factor," three points; "probably should not be a factor," two points; and "definitely should not be a factor," one point. Such a quantitative approach presumes equal interval measures existing between each adjacent pair of verbal descriptions. This is a questionable presumption since it assumes that all respondents will perceive the same equal interval arrangement. Nevertheless, this is a quantitative approach that is frequently undertaken. Using this approach, weighted averages for each factor were calculated for all respondents. Table VI shows the ranking of the factors using the 4-3-2-1 value system for the corresponding response options.

Table VI reinforces the narrative statements made on the preceding pages and indicates the preferences for all respondents. The two traditional factors, teaching experience and college degree, received very strong support for inclusion in the salary structure. Two other factors, post-degree study and additional duties, also received strong support, but that support was slightly weaker than for the first two factors. Two

TABLE VI

RANKING OF RESPONDENT PREFERENCES FOR THE POSSIBLE FACTORS IN SALARY DETERMINATION

	All Respo	
Factor	Rank	Value
Teaching Experience	1	3.85
College Degree	2	3.80
Post-Degree Study	3	3.62
Additional Duties	4	3.53
Job Performance	5	3.18
Personnel Shortages	6	3.00
Special Populations	7	2.90
Class Enrollment	8	2.88
Business Experience	9	2.57
Student Achievement	10	2.44
Military Experience	11	2.02

other factors, job performance and personnel shortages, received strong support from the respondents, but it was weaker than the preference given to the previously named factors. Three other factors, teaching special populations, class enrollment, and business experience received endorsement as possible factors. One other factor, student achievement, was neither supported nor opposed by the respondents. The final factor, military

experience, was clearly opposed by the respondents for inclusion in the salary schedule.

Table VII depicts the preferences of the respondents by the individual school district. In order for a factor to be considered important in this discussion, a value of 3.0 on a 4.0 scale must be attained. The respondents in Houston preferred the inclusion of eight factors in a salary schedule. Those in Fort Worth and Ysleta preferred seven; El Paso, six; Dallas, Austin, San Antonio, and Corpus Christi preferred five factors.

Table VIII shows the values of respondent preferences for the various factors by position. Superintendents, board members, PTA members, and teachers showed preference ence for seven factors; principals showed preference for only five.

Figure 1 summarizes both level of support for the factor and the primary supporting population groups.

The factors are in the order that they appeared on the survey questionnaire.

## Analysis of Section III

The third section of the questionnaire was concerned with the amount of money, or stipend, that should be awarded for each of the eleven listed factors. The amounts varied considerably for some factors, and only

TABLE VII
VALUES OF RESPONDENT PREFERENCES FOR THE VARIOUS FACTORS BY SCHOOL DISTRICT

	É	[4	потапон	404	Da.	Dallas	Fort	Morth	Ant	San	El Paso	880	Austin	rţ:	Ysleta	it a	Corpus	us sti
Factor	Rank		Rank	Rank Value	Rank	Rank Value	Rank	Rank Value	Rank Value	/alue	Rank	Rank Value	Rank Value	Jalue	Rank Val	Value	Rank	Rank Value
																_		
Teaching Experience	٦	3.85	-	3.84	71	3.71	٦	3.82	7	3.91	-	3.83	п	3,90	-	3.93		4.00
College Degree	~	3.80	~	3.78	М	3.77	7	3.79	7	3.83	N	3.71	7	3.84	N	3.83	Ν.	3.94
Post-Degree Study	w)	3.62	m	3.69	m	3,55	۳	3.64	m	3.60	3	3.63	4	3.39	m	3.83	4	3.72
Additional Duties	4	3.53	m	3,69	4	3.51	ιń	3,30	4	3.43	4	3.58	m	3.48	4	3.41	м	3,83
Job Performance	ιn	3.18	G.	3.24	'n	3.22	4	3,38	9	2,97	9	3.08	vı	3.23	æ	3.03	8	2,61
Personnel Shortages	9	3.10	٠	3.11	v	2.97	~	3,12	'n	3,09	'n	3.13	7	2.87	Ŋ	3.24	ιń	3.11
Special Populations		2.90		3.06	-	2.76	6	2,88	۲-	2.94	7	2.79	9	2.90	œ	2.97	9	2.83
Class Enrollment	<b>50</b>	2.88	∞	3.03		2.74	•	3.24	60	2.51	7	2.79	7	2.87	ø	3.03	ų	2.83
Business Experience	Φ.	2.57	6	2.73	97	2,60	6	2.55	•	2.53	ø	2.63	σ.	2,42	66	2.38	11	2.17
Student Achievement	10	2.44	0.1	2,55	10	2,59	10	2.36	10	2.29	10	2.21	10	2.40	10	2,34	on.	2.38
Military Experience	11	2.02	11	2.34	11	2.12	11	2.21	7	1.69	13	2.04	11	1.90	11	1.31	10	2.11
			-								ĺ							

Values = mean score based on a 4.0 scale.

TABLE VIII
VALUES OF RESPONDENT PREFERENCES FOR THE VARIOUS FACTORS BY POSITION

	2	Total	Superintendent	tendent	Board M	Members	PTA Mer	Members	Principals	pals	Tea	Teachers
Factor	Rank	Value	Rank	Value		Value	Rank	Value	Rank	Value	Rank	Value
Teaching Experience		3.85	r#	4.00	e	3.64	~	3.75	п	3.84	-	3.89
College Degree	~	3.80	m	3,88	-	3.77	-	3.89	7	3.81	~	3.78
Post-Degree Study	M	3.62	w	3.13	81	3.17	~	3.65	m	3,56	m	3.67
Additional Duties	•	3.53	1	4.00	uń.	3.41	ĸ	3.41	*	3.48	*	3.56
Job Performance	··	3.18	ч	3.00	m	3.64	m	3,65	LC1	3.16	ý	3.04
Personnel Shortages	ų.	3.10	4	3.63	ų	3,36	ų	3,29	4	2.98		3.01
Special Populations	٠	2.90	9	3.00	æ	2.82	~	3.03	۲-	2.94	œ	2.84
Class Enrollment	₩	2.88	Φ,	2.50	10	2.50	00	2.83	80	2.72	νη.	3.07
Business Experience	σ.	2.57	10	2.13	۲-	3.05	đ	2.65	<u> </u>	2.59	ę,	2,50
Student Achievement	70	2.44	85	2.50	6	2,55	10	2.64	10	2.38	10	2.41
Military Experience	11	2.03	11	1.88	11	2.09		1.92	11	2.28	11	1.88

Values = mean score based on a 4,0 scale.

·	
Level of Support	Supporting Groups
Very strong	All respondents
Strong	All respondents, especially superintendents
Strong	Females, Blacks, Hispanics
Strong	Teachers, Females, Blacks, Hispanics, home owners
Neither supported nor opposed	Females, Blacks, Hispanics
Strong	All respondents, especially PTA and board members, females, home owners, those with children in school
None	Principals, Males, Blacks
Supported	Board Members
	Support  Very strong Very strong Very strong Strong  Strong  Neither supported nor opposed Strong  None

Fig. 1--Narrative summary of all respondent preferences for possible factors in salary determination.

slightly for others. There were significant differences with respect to some demographic characteristics.

This section will identify the average amounts awarded to each of the factors as noted by all respondents in general. Table IX ranks the factors according to these averages. It can be seen that the master's degree and doctor's degree received much greater awards than the other factors.

TABLE IX

MEAN STIPENDS EXTRAPOLATED FROM ALL RESPONDENTS
FOR EACH POSSIBLE SALARY FACTOR

Factor Average Amount
Doctor's Degree
Master's Degree
16-30 Credits Beyond Degree
Teaching Low Achievement Students 452
Job Performance
Personnel Shortages 430
Teaching Special Populations 423
Additional Duties
1-15 Credits Beyond Degree
Class Enrollment
Teaching High Achievement Students 205

The remainder of the discussion on Section III was directed toward reporting statistically significant differences that existed among the demographic variables with respect to the amount of money deemed appropriate for each of the factors. The absence of significant differences is reported also.

There were no statistically significant differences with respect to amounts to be awarded for the master's degree among the demographic variables. With respect to the doctor's degree, however, there were significant differences among the demographic variables. These differences were with home ownership. Those without homes in the district awarded significantly higher amounts than those with homes (F = 5.19, p < .03).

Differences were seen again in the amounts of money designated by respondents for post-degree study (1-15 credit hours). These were noted in the school district, position, and children in school variables. Houston and Corpus Christi awarded significantly higher amounts of money than those in other school districts (F = 2.40, p < .03). Principals, teachers, and PTA members awarded higher amounts (F = 5.00, p < .001). Those without children in school awarded significantly higher amounts (F = 5.96, p < .02).

Differences were noted also in the amounts of money awarded for sixteen to thirty credit hours beyond the degree. Differences appeared in four demographic variables: position, sex, ethnicity, and children in school. Those awarding significantly higher amounts were PTA members, principals, and teachers (F = 5.46, p < .001), females (F = 5.09, p < .03), Blacks significantly higher than Whites (F = 3.14, p < .03), and those without children in school awarded significantly higher amounts than those with children in school (F = 6.97, P < .01).

With respect to additional duties, differences occurred among the four demographic variables: location, position, sex, and children in school. In Houston, Corpus Christi, and El Paso, respondents awarded significantly higher money awards (F = 2.14, p < .04). Superintendents, principals, and teachers were significantly higher than others in the position variable (F = 2.70, p < .03). Males also were significantly higher in their awards than were females (F = 3.96, p < .05). Those without children in school showed preference for higher awards than those with children in school (F = 6.87, p < .01).

There were no significant differences noted in the amounts of money awarded for critical personnel shortages. Differences did exist, however, with

reference to special populations in the position and ethnicity variables. Principals, teachers, and PTA members awarded higher amounts for this factor than did superintendents or board members. It was noted also that Blacks and Hispanics awarded higher amounts than Whites.

For class enrollment, significant differences existed among three of the demographic variables: school district, position, and ethnicity. Houston awarded significantly higher amounts for this factor than did respondents in other locations (F = 2.51, p < .02). Principals, teachers, and PTA members awarded higher amounts than superintendents and board members (F = 7.37, p < .0001). Blacks and Hispanics showed preference for higher awards than White (F = 5.09, p < .002).

With respect to teaching low achievers, significant differences occurred in the position and ethnicity variables. Principals, teachers, and PTA members awarded significantly higher amounts than superintendents and board members (F = 3.11, p < .02). Blacks and Hispanics were significantly higher in their dollar awards than Whites (F = 7.64, p < .0001). In teaching high achievers, significant differences occurred in the same demographic variables. Principals, teachers, and PTA members awarded significantly higher amounts than superintendents

and board members (F = 2.66, p < .04). Blacks and Hispanics awarded higher amounts than Whites (F = 6.70, p < .04).

With respect to job performance, significant differerences occurred in the school district variable. Dallas, Houston, and Fort Worth awarded higher dollar amounts than the other school districts in the study (F = 2.49, p < .02).

In summary, consistently across the factors there were statistically significant differences with respect to the position demographic variable. PTA members, principals, and teachers awarded a higher amount for each of the factors. Specifically, they awarded higher amounts for one to fifteen hours credit and sixteen to thirty hours credit beyond the degree, for additional duties, for teaching special populations, for class enrollment, and for teaching both high and low achievement students.

No significant differences were noted between males and females with reference to salary awards. Blacks and Hispanics, however, felt that more money should be awarded than did Whites; Blacks awarding significantly more money for five of the factors and Hispanics for four factors. By school district, the respondents in

Houston consistently showed preference for higher salary awards in four of the eleven cases.

Table X shows the actual number of dollars respondents deemed appropriate for each possible salary factor by school district. Table XI gives similar information by position.

## Analysis of Section IV

The fourth section of the questionnaire had three The first part sought to determine what criteria should be used if job performance were to be included as a factor in the determination of a teacher salary schedule. The respondents were asked to check those criteria they favored from a list of nine possible criteria for evaluating teacher job performance. this section, not all of the responses were accepted in the analysis. Responses were accepted only if they came from respondents who (1) favored a multi-factor teacher salary schedule, i.e., checked "yes" to the first question in Section I and (2) favored the use of job performance as a factor for determining a salary structure, i.e., checked either the "definitely" or the "probably should be a factor" space for the job performance item in Section II. Here, it was assumed that if a respondent were to determine which criteria should be used to evaluate job

TABLE X STIPENDS DEEMED APPROPRIATE FOR EACH POSSIBLE SALARY FACTOR BY SCHOOL DISTRICT

	Y Y	Average	Hous	Houston	Dal	Dallas	Fort	Fort Worth		San Antonio	E1 1	Paso	Yang	Austin	Ys]	Ysleta	8 8	Corpus
Factor	Rank	Rank Amount		Rank Amount		Rank Amount	Rank	Rank Amount		Rank Amount		Rank Amount	Rank	Rank Amount	11	Rank Amount	Rank	Rank Amount
Doctorate Degree	-1	\$1,488	1	\$1,677	-1	\$1,669	٦.	\$1,297	τ	\$1,661	1	\$1,034	н	\$1,188	1	\$1,567	-	\$1,094
Master's Degree	7	1,023	7	1,129	7	928	2	922	77	1,000	7	1,032	7	922	7	1,148	7	972
16-30 Credits Beyond Degree	m	562	m	647	m	540	₹	5.38	F.	525	E.	522	m	464	м	598	m	6 32
Teaching Low Achievement Students	<b></b>	452	07	414	10	315	10	304	10	234	10	283	10	198	₫ħ.	250	27	319
Jcb Performance	'n	437	5	520	4	466	m	552	9	386	ø	286	9	348	9	350	v	403
Personnel Shortages	9	430	9	513	Ŋ	373	'n	525	5	458	•	381	*	362	4	371	7	400
Teaching Special Populations	7	423	<b>খ</b>	527	9	367	ú	470	4	461	S.	424	00	324	10	240	7	400
Additional Duties	30	16€	00	45 5 5 5	<b>a</b> c	347	80	389		358	4	438	<b>5</b>	357	60	302	4	500
1-15 Credits Beyond Degree	<b>a</b>	387	7	463	r-	357	7	333	æ	346	۲	380	7	319	ĸ	366	4	200
Class Enrollment	10	312	6	433	6	237	<b>♂</b>	155	6	273	00	295	6	222	7	310	σ,	347
Teaching High Achievement Students	7	205	11	299	11	145	11	242	11	212	11	174	11	103	11	212	11	222

TABLE XI STIPENDS DEEMED APPROPRIATE FOR EACH POSSIBLE SALARY FACTOR BY POSITION

		Avorago	Superi	Superintendent	Board	Member	PTA	PTA Member	Prin	Principal	Tea	Teacher
Factor	Rank	Amount	Rank	Amount	Rank		Rank	Amount	Rank	Amount	Rank	Amount
Doctorate Degree	ı	\$1,488	T	\$1,18	. 7	\$ 875	<b>~</b>	266 \$	7	\$1,533	-	\$1,661
Master's Degree	7	1,023	7	1,142	П	006	н	895	7	1,033	ď	1,053
16-30 Credits Beyond Degree	m	562	vo	285	70	278	9	8.5 8.0	m	595	m	613
Teaching Low Achievement Students	4	452	70	35	6	158	4	410	4	535	4	468
Job Performance	Ŋ	437	ъn	355	E)	438	<b>6</b>	570	'n	455	σ.	400
Personnel Shortages	v	430	m	509	4	413	ιn	475	σ,	365	ın	450
Teaching Special Populations	~	423	7	178	7	200	4	809	· ·	443	ų.	430
Additional Duties	•	391	•	400	ø	268	10	300	σ.	390	7	425
1-15 Credits Beyond Degree	<b>5</b> 5	387	~	178	<b>69</b>	195	∞	328	Γ-	408	80	423
Class Enrollment	10	312	σ,	7.0	0.1	45	σ.	303	10	268	01	385
Teaching High Achievement Students	11	205	10	35	11	28	- 11	273	11	205	11	220

performance, then first he should favor the use of a multi-factor system, and second, he should desire to have job performance included as one of those factors.

The nine criteria listed on the questionnaire were analyzed with respect to all the demographic variables. As with Section II, the information presented here will briefly summarize the responses in terms of percentages and differences among the demographic variables of school district and position, whether statistically significant or not. At the end of each section a summary statement will be presented. Again, it should be noted that few statistically significant differences occurred in the variables of sex, ethnicity, homeowner in the school district, and children attending public schools in the district. These, therefore, will be simply enumerated at the conclusion of the analysis for this section.

The first criterion is student achievement as measured by standardized tests. The respondents opposed this criterion. With respect to school district, the percentages of the respondents favoring the use of student achievement on standardized tests were as follows: Houston, 53; San Antonio, 52; Dallas, 49; Ysleta, 33; Austin, 28; El Paso, 26; Fort Worth, 24; and Corpus Christi, 20. There seemed to be somewhat greater acceptance in the larger cities. Dallas and Houston were

signficantly higher in their acceptance of this criterion  $(x^2 = 14.84, p < .04)$ . With respect to position, the percentages were superintendents, 80; PTA members, 60; board members, 37; principals, 37; and teachers, 35. It was noted that superintendents and PTA members were higher in their acceptance of this criterion  $(x^2 = 9.39, p < .05)$ . In summary, this criterion was not favored for use as a measure of teacher job performance. Its strongest proponents appeared to be superintendents.

The second criterion considered was student achievement as measured by teacher-made tests. This criterion was even more opposed by the respondents. With respect to school district, the percentages of those favoring it were Corpus Christi, 40; Houston, 35; San Antonio, 35; El Paso, 26; Ysleta, 21; Austin, 20; Dallas, 19; and Fort Worth, 10. With respect to position, the percentages were PTA members, 29; teachers, 27; board members, 26; principals, 19; and superintendents, 0. In summary, this criterion for evaluating job performance was also not desired by the respondents.

The third criterion considered was the gain in the learning rate of the students. In general, this criterion was approved by the respondents. The percentages by school district were San Antonio, 87; Corpus Christi, 80; Houston, 71; Fort Worth, 62; Austin, 56; Ysleta, 54;

Dallas, 51; and El Paso, 42. Significant differences were noted in the school district variable. Corpus Christi, San Antonio, and Houston were higher in their acceptance of this criterion ( $\mathbf{x}^2$  = 16.18, p < .03). With respect to position, the criterion was favored by 79 per cent of board members, 80 per cent of superintendents, 74 per cent of PTA members, 62 per cent of principals, and 54 per cent of teachers. In summary, this criterion was favored for use by the respondents. Its strongest support came from those with the most authority in the district in terms of school personnel.

The fourth criterion considered was the teacher's classroom organization and management. This criterion received very strong acceptance. With respect to school district, the percentages of those favoring it were Austin 80; Ysleta, 79; San Antonio, 74; Corpus Christi, 70; Dallas, 70; Houston, 67; and El Paso, 63. With respect to position, 76 per cent of the teachers, 69 per cent of PTA members, 63 per cent of board members, 66 per cent of principals, and 60 per cent of superintendents favored it. In summary, this standard was highly supported. It was favored most by teachers.

The fifth criterion considered was teaching techniques. This criterion was also accepted by the respondents. With respect to school district, the

percentages were Austin, 80; Corpus Christi, 80;
Houston, 71; El Paso, 68; Fort Worth, 62; San Antonio,
61; Ysleta, 58; and Dallas, 51. With respect to position,
the percentages were superintendents, 80; teachers,
65; principals, 65; board members, 63; and PTA members,
60. In summary, the use of teaching techniques was
favored as a measure of job performance. It was most
favored by superintendents.

The sixth criterion considered was participation in school projects. There was also some acceptance of this criterion. The percentages by school district were Ysleta, 75; Austin, 64; Corpus Christi, 60; San Antonio, 56; Houston, 53; Dallas, 61; El Paso, 37; and Fort Worth, 35. With respect to position, the percentages were PTA members, 63; teachers, 59; board members, 58; principals, 38; and superintendents, 20. In summary, this criterion was somewhat accepted by the respondents, and its support came primarily from the respondents in Ysleta.

The seventh criterion considered was commendations from the principal. This criterion received very high acceptance from the respondents. The percentages by location were Ysleta, 71; El Paso, 68; Houston, 65; San Antonio, 65; Austin, 64; Fort Worth, 62; Dallas, 57; and Corpus Christi, 50. With respect to position, the

figures were superintendents, 80; principals, 68; teachers, 62; board members, 58; and PTA members, 57. In summary, this criterion received high general acceptance from the respondents. It was particularly favored by superintendents.

The eighth criterion considered was leadership in professional activities outside the school building. This criterion was opposed by the respondents. The percentages by school district were Dallas, 36; Austin, 32; Corpus Christi, 30; Fort Worth, 24; Houston, 24; San Antonio, 26; Ysleta, 25; and El Paso, 16. With respect to position, it was favored by 34 per cent of teachers, 34 per cent of PTA members, 21 per cent of board members, 18 per cent of principals, and no superintendents. In summary, this criterion was overwhelmingly opposed by the respondents, and lacks the support of any particular group.

The ninth criterion considered was adherence to district policy. Responses were nearly evenly split on this criterion. With respect to location, the standard was favored as follows: Ysleta, 83; Corpus Christi, 70; Austin, 48; Fort Worth, 48; Dallas, 45; San Antonio, 44; Houston, 47; and El Paso, 37. Fifty-four per cent of teachers, 49 per cent of principals, 49 per cent of PTA members, 42 per cent of board members, and 40 per cent of superintendents favored the criterion. In

summary, this criterion received mixed support. Its strongest proponents seemed to be respondents from Ysleta and Corpus Christi.

The discussion in Section IV thus far has reported the analysis of respondents' preference for factors to be considered for a salary schedule according to the demographic variables of school district and position. The analysis was made for respondents taken as a whole and for respondent groups broken down by the demographic variables. As was the case in previous sections of this analysis, there were relatively few significant differences in the variables of sex, ethnicity, home owner in the school district, and children attending public schools in the district. The differences that did occur were as follows.

- 1. Student achievement as measured by teacher-made tests: 42 per cent Blacks, 28 per cent Hispanics, and 17 percent Whites favor the criterion. Blacks were significantly higher than other ethnic groups in their acceptance of this criterion ( $x^2 = 11.56$ , p < .002);
- 2. Classroom organization and management: both those with property in the district and those without property favored this criterion, but there was a statistically higher proportion of respondents without property who favored it ( $x^2 = 4.16$ , p < .05);

3. Participation in school projects: females preferred this criterion over males by 60 to 38 per cent. This difference is statistically significant  $(x^2 = 7.55, p < .01)$ .

Once again, the above discussion is highly narrative and not quantitative. The following table is offered to show the ranking of the possible criteria for evaluating teacher job performance according to the views of all respondents combined. (See Table XII.)

TABLE XII

RESPONDENT PREFERENCE FOR JOB
PERFORMANCE EVALUATION

		Its Use		Its Use
Criteria	N	8	N	8
Classroom Management	165	70.8	68	29.2
Teaching Techniques	150	64.4	83	35.6
Commendations	147	63.1	86	26.9
Gain in Lear-ing	144	61.8	89	38.2
Participation in Projects	123	52.8	110	47.2
Policy Adherence	117	50.2	116	49.8
Student Achievement (Standardized Tests)	94	40.3	139	5 <b>9.</b> 7
Professional Leadership	64	27.5	169	72.5
Student Achievement (Teachers' Tests)	57	24.5	176	75.5

Table XII shows that only four criteria are supported by the respondents, classroom management, teaching techniques, principal commendations, and gain in student learning.

The following figure summarizes the level of support and the primary supporting group for each of the nine criteria. The criteria are listed as they appeared on the survey instrument. (See Figure 2.)

Tables XIII and XIV depict respondents' preferences for criteria to be employed in evaluating teacher job performance if job performance were to be included as a factor in a multi-factor salary schedule. Table XIII depicts responses by school location; Table XIV gives responses by position.

The second part of the fourth section sought to determine who would be responsible for evaluating the job performance of teachers should job performance be used as a factor in a teacher salary schedule. Once again, only those responses were accepted which came from individuals who had previously indicated that they favored a multifactor schedule, and that they favored the inclusion of job performance as one of those factors. The questionnaire listed eight possible individuals for evaluating teacher job performance. The following analysis of the preferences of the respondents is presented.

Criteria	Level of Support	Supporting Groups
Student Achievement (Standardized Tests)	Opposed	Superintendents, minority race members, and those with children in district schools
Student Achievement (Teachers' Tests)	Opposed	Blacks
Gain in Student Learning Rate	Supported	Superintendents, school boards, and PTA members, those with property in the district, minority race members
Classroom Management	Supported	All respondents, especially teachers and those with no property in the school district
Teaching Techniques	Supported	All respondents, especially superintendents
Participation in Projects	Neither supported nor opposed	Females
Principal Commendations	Supported	Superintendents, principals, teachers
Professional Leadership	Opposed	None
Adherence to Policy	Neither supported nor opposed	Females

Fig. 2.—Summary of job performance evaluation criteria.

TABLE XIII

RESPONDENT PREFERENCE IN FAVOR OF JOB PERFORMANCE EVALUATION BY SCHOOL DISTRICT

Agement 1 165 71 3 33 67 1 37 70 1 1 14ques 2 150 64 1 35 71 3 27 51 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Total	-		Houston	5		Dallas		35	Fort Worth		An	San Antonio		E .	Paso		Austin	tin		Ysl	Ysleta		Corpus Christi	pus
t         1         165         71         3         13         67         1         37         70         1         20         69         2         17         74         3         12         63         1         20         80         2         17         74         3         12         63         1         19         80         2         17         74         3         12         63         14         61         1         13         68         1         20         80         2         19           3         147         63         4         32         65         2         30         57         2         18         62         1         13         68         1         13         68         1         13         68         1         13         68         1         13         68         1         17         10         88         1         10	Criteria	Œ.	2.	<b>a</b>	<b>~</b>	z	•	~	z	<b>*</b>	l i	z		<b>=</b>	-  -		<u>_</u>	z	$\vdash$		$\vdash$	$\vdash$	-			z	<b>*</b>
2         150         64         1         35         71         3         27         51         2         18         62         4         14         61         1         13         68         1         20         80         5         14           4         144         62         1         3         15         65         2         30         57         2         18         62         1         13         68         3         16         4         17           4         144         62         1         36         65         2         30         57         2         18         62         1         20         87         4         17         4         8         4         8         4         8         4         8         4         17         4         8         4         8         4         18         4         8         4         8         4         18         4         8         1         10         35         14         48         7         10         44         5         7         37         6         12         48         1         10         44         5	Classroom Management		165	11	m	33	29	H	37	70	-	20	69		<del></del>	74				· · · · · · · · · · · · · · · · · · ·							70
3 147       63       4 32       65       2 30       57       2 18       62       3 15       65       1 13       68       3 16       64       4 17         4 144       62       1 35       71       3 27       51       2 18       62       1 20       87       4 8       42       5 14       56       13         5 123       53       5 26       53       3 27       51       7 10       35       5 13       56       6 7       37       3 16       64       3 18         6 117       51       7 23       47       7 24       45       5 14       48       7 10       44       5 7 37       6 12       48       1 20         7       94       40       5 26       53       6 26       49       6 7 24       6 12       52       7 5 26       9 3 16       7 24       6 12       52       7 5 26       9 3 16       7 8 6       6 26       9 3 16       7 24       9 6 26       9 3 16       7 8 26       9 5 20       9 5 20       5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20       9 5 20 <td< td=""><td>Teaching Techniques</td><td>N</td><td>150</td><td>4</td><td>-+</td><td>35</td><td>17</td><td>~</td><td>27</td><td>Ę,</td><td>74</td><td>18</td><td>62</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>80</td></td<>	Teaching Techniques	N	150	4	-+	35	17	~	27	Ę,	74	18	62														80
4 144       62       1       35       71       3       27       51       2       18       62       1       20       87       4       8       42       5       14       56       6       7       37       3       16       64       3       18         6       117       51       7       24       45       5       14       48       7       10       44       5       7       37       3       16       64       3       18         6       117       51       7       24       45       5       14       48       7       10       44       5       7       37       3       16       64       3       18         9       10       2       26       49       6       7       24       6       12       5       7       5       26       8       7       28       7       8       6         9       57       24       8       19       36       8       7       24       9       6       26       9       3       16       8       8       6       26       9       3       16       8	Commendations	- M	147		4	32	9	7	30	5.2	N	9 †	62			- 59											5 50
5 123       53       5 26       53       3 27       51       7 10       35       5 13       56       6 7       37       3 16       64       3 18         6 117       51       7 23       47       7 24       45       5 14       48       7 10       44       5 7       37       6       12       48       1       20         7       94       40       5       26       53       6       26       49       6       7       24       6       12       52       7       5       26       8       7       28       7       8       6       26       9       3       16       7       24       6       12       52       7       5       26       8       7       28       7       8       6       26       9       3       16       7       28       7       8       6       26       9       3       16       7       8       6       26       9       3       16       8       8       6       26       9       3       16       8       8       8       5       26       9       5       20       9       5       20<	Gain in Learning	4	144	62	н	35	71	m	27	51	N	18	65			£8	4								-	<del></del>	80
6 117 51 7 23 47 7 24 45 5 14 48 7 10 44 5 7 37 6 12 48 1 20 7 94 40 5 26 53 6 26 49 6 7 24 6 12 52 7 5 26 8 7 28 7 8 8 64 28 9 12 24 8 19 36 8 7 24 9 6 26 9 3 16 7 8 32 8 6 9 57 24 8 17 35 9 10 19 9 3 10 8 8 35 7 5 26 9 5 20 9 5	Participation in Projects	· ·	123	53	и	26	53		27	51	-	10	35			99	9		<u></u>						٠	- 5	9
34     40     5     26     53     6     26     49     6     7     24     6     12     52     7     5     26     8     7     28     7     8       8     64     28     9     32     24     8     19     36     8     7     24     9     6     26     9     3     16     7     8     8       9     57     24     8     17     35     9     10     19     9     3     10     8     8     35     7     5     26     9     5     20     9     5	Policy Adherence	Φ	117	5.	_	23	47	7	24	45	'n	7	\$			4 4	Ŋ						<del></del>		<u></u>	<u></u>	7 70
8 64 28 9 12 24 8 19 36 8 7 24 9 6 26 9 3 16 7 8 32 8 6 9 57 24 8 17 35 9 10 19 9 3 10 8 8 35 7 5 26 9 5 20 9 5	Student Achievement (Standardized Tests)		94	40	ın.	56	53	w	26	49	9		24			25	7									<b>o</b> n	2
9 57 24 8 17 35 9 10 19 9 3 10 8 8 35 7 5 26 9 5 20 9 5	Professional Leadership	80	64	78	0,	3.2	24	00	19	36	œ	<u></u>	24			92			9							- 00	30
	Student Achievement (Teachers' Tests)	- A	57	24	ω	17	35	ø,	01	19	۵۰	m	10	<del></del>		35			9								

R--rank; N--number; 8--per cent.

TABLE XIV
RESPONDENT PREFERENCE IN FAVOR OF JOB PERFORMANCE EVALUATION BY POSITION

															Ī			
	L	Total		Superintendents	ntend	ents	Boar	Board Members	ers	PTA	PTA Members		Pri	Principals		Te	Teachers	
Criteria	æ	z	de	æ	z	de	a.	z	385	œ,	z	*	~	2	ø¢.	×	z	op.
Classroom Management	п	165	11	s.	m	09	2	12	63	7	24	69	2	45	99	П	81	76
Teaching Techniques	۸	150	64	Ħ	4	80	7	12	63	vo	21	09	m	44	65	7	69	65
Commendations	, m	147	63	-4	4	80	4	11	ъл В	٧n	20	57		46	68	m	99	62
Gain in Learning	4	144	62	<b>.</b>	4	80	7	15	79	7	23	74	47	7	62	ıń	5.7	54
Participation in Projects	ស	123	53	7	-	20.	₹	11	58	æ	22	63	·	26	3.8	4	63	59
Policy Adherence	· ·	711	50	٠	7	40	'n	×0	42	7	17	64	£Ω	33	49	Ŋ	57	54
Student Achievement (Standardized Tests)	۲-	9.6	40	<b>H</b>	₩	90	9	7	37	~	21	09	7	25	3.7	7	37	35
Professional Leadership	90	49	2.8	œ	٥		<b></b>	4	23	6	12	75	0	12	18	<b>a</b> o	36	34
Student Achievement (Teachers' Tests)	6	57	52	8	0	0	۲.	22	26	æ	97	29	œ	13	3.9	σ,	59	23

R--rank; N--number; %--per cent.

The first possible evaluator listed was the principal. With respect to school district, the following were the percentages of respondents favoring this individual as evaluator: Austin 92; Corpus Christi, 90; Ysleta, 88; Houston, 84; Fort Worth, 83; San Antonio, 83; Dallas, 76; and El Paso, 74. The acceptance of the principal as evaluator was very high. With respect to position, the percentages were principals, 90; teachers, 81; PTA members, 77; board members, 74; and superintendents, 60. In summary, the use of the principal as evaluator of teacher job performance was highly received by all respondents.

The second individual considered as evaluator was the superintendent. The respondents indicated that they did not favor using the superintendent. With respect to school districts, the percentages in favor of the superintendent were San Antonio; 30, Fort Worth, 21; Ysleta, 21; Houston, 24; Corpus Christi, 20; Austin, 16; Dallas, 13; and El Paso, 10. With respect to position, the percentages were PTA members, 34; board members, 37; superintendents, 20; principals, 18; and teachers, 12. In summary, the use of superintendents was opposed. The support the measure received from PTA members and board members was small in comparison to the number of superintendents, principals, and teachers who opposed it.

The third person(s) considered were parents. The use of parents as evaluators of teacher job performance was also opposed. By school districts, the figures were Corpus Christi, 60; Fort Worth, 38; Austin, 36; Houston, 33; San Antonio, 30; Dallas, 24; El Paso, 10; and Ysleta, 0. By position, the percentages were PTA members, 51; board members, 32; teachers, 24; principals, 21; and superintendents, 20. In summary, the use of parents as evaluators of teacher job performance was also opposed. The only support for the measure came from PTA members.

The fourth individual considered for possible evaluation of teacher job performance was the average citizen. This person was soundly opposed by all respondents. By school district, the percentages were Fort Worth, 14; Houston, 12; San Antonio, 9; El Paso, 5; Dallas, 4; Ysleta, 4; Austin, 0; and Corpus Christi, 0. By position, the percentages were board members, 10; teachers, 10; PTA members, 6; principals, 1; and superintendents, 0. In summary, no group supported the average citizen as a possible evaluator of teacher performance.

The fifth possible evaluator was the student. This person was also not favored as an evaluator. With respect to location, the percentages favoring using students were Austin 32; Fort Worth, 31; Corpus Christi,

30; Houston, 29; San Antonio, 26; El Paso, 21; Ysleta, 21; and Dallas, 17. By position, the figures were board members, 42; superintendents, 40; principals, 25; teachers, 23; and PTA members, 20. In summary, this measure was also opposed.

The sixth possible evaluator considered was a supervisor of the teacher. The respondents showed a favorable interest in the use of this person. respect to school districts, the percentages were El Paso, 84; San Antonio, 78; Austin, 76; Fort Worth, 72; Dallas, 57; Houston, 55; Corpus Christi, 50; and Ysleta, 50. Significant differences appeared in the location variable. El Paso, San Antonio, Fort Worth, and Austin favored the teacher supervisor more highly than others  $(x^2 = 13.65, p < .05)$ . By position, the percentages were superintendents, 80; principals, 78; board members, 63; PTA members, 57; and teachers, 57. It was noted that superintendents and principals were significantly higher in favoring the teacher supervisor  $(x^2 = 9.16)$ . p < .05). In summary, there was good support for using teacher supervisors as evaluators of job performance.

The seventh possible evaluators of teacher performance were other teachers. The respondents did not support the use of these evaluators. The percentages by school districts were Fort Worth, 48; Ysleta, 46; El

Paso, 42; Corpus Christi, 40; Houston, 39; Dallas, 36; San Antonio, 35; and Austin, 32. By position, they were PTA members, 49; teachers, 41; board members, 37; principals, 34; and superintendents, 20. In summary, this measure was not favored by the respondents.

The eighth possible evaluator of teacher performance was the teacher himself. The use of the teacher as a self-evaluator was favored by the respondents. The percentages favoring by school district were San Antonio, 70; Austin, 68; Ysleta, 67; Corpus Christi, 60; Dallas, 51; El Paso, 47; Houston, 43; and Fort Worth, 38. The spread was quite large, but not statistically significant. By position, the percentages were teachers, 62; principals, 53; board members, 47; superintendents, 40; and PTA members, 29. In summary, self-evaluation was favored by the respondents. Its strongest proponents were teachers.

Statistically significant differences among the demographic variables of sex, ethnicity, children in the district's schools, and homeowner in the district were as follows.

1. Students as evaluators: 30 per cent of the male respondents and only 21 per cent of the female respondents favored using students. This difference was statistically significant ( $x^2 = 3.81$ , p < .05);

2. Other teachers as evaluators: 46 per cent of Whites, 31 per cent of Hispanics, and 24 per cent of Blacks favored using other teachers. These differences were statistically significant ( $x^2 = 9.50$ , p < .03).

The above discussion is again largely narrative. To demonstrate those facts quantitatively, Table XV is presented to show respondents' ranking of possible evaluators. It can be seen that there are essentially only two possible evaluators of teacher job performance that are favored, principals and teacher supervisors.

TABLE XV

STATISTICAL SUMMARY ON THE USE OF CERTAIN INDIVIDUALS
AS EVALUATORS OF TEACHER JOB PERFORMANCE

_	In Fa	vor of	Oppose	ed to
Evaluators	N N	9.	N	8
Principals	191	82.0	42	18.0
Supervisors	149	63.9	84	36.1
Self	123	52.8	110	47.2
Other Teachers	91	39.1	142	60.9
Parents	64	27.5	169	72.5
Students	58	24.9	175	75.1
Superintendents	45	19.3	188	80.7
Citizens	16	6.9	217	93.1

Figure 3 summarizes the level of support and the primary supporting group for each of the eight possible evaluators of teacher performance.

Evaluator	Level of Support	Supporting Groups
Principals	Very strong	All respondents, especially principals
Superintendents	Opposed	None
Parents	Opposed	PTA members
Citizens	Opposed	None
Students	Opposed	None
Teacher Supervisors	Strong	All respondents, especially superintendents, principals, males, and Hispanics
Other Teachers	Opposed	Whites
Self	Supported	Teachers, females, minority race members, and those without homes in the school district

Fig. 3--Summary of preferences for evaluators of teacher job performance.

Tables XVI and XVII present a statistical summary of the use of certain individuals as evaluators of job performance. Table XVI displays respondent responses from all school district locations; Table XVII shows responses according to position.

The final part of the fourth section of the questionnaire asked respondents whether the appraisals of a teacher job performance evaluation system should be weighted when there is input from more than one person. Overwhelmingly, the respondents favored having a system for determining teacher performance weighted strongly in favor of evaluation by principals and moderately strongly by teacher supervisors. The percentages of those in favor with respect to location were El Paso, 100; Corpus Christi, 100; Dallas, 97; San Antonio, 94; Ysleta, 93; Austin, 89; Fort Worth, 89; and Houston, 79. By position, the figures were superintendents, 100; PTA members, 96; teachers, 91; principals, 88; and board members, 86. Females preferred a weighted system more than males 94 to 85 per cent. By ethnicity, the percentages were Hispanics, 96; Whites, 92; and Blacks, 84. Those with homes in the district preferred the system 93 to 88 per cent over those without, and those with children in district schools preferred it by 92 to 91 per cent over those without children in the schools.

STATISTICAL SUMMARY OF THE USE OF CERTAIN INDIVIDUALS AS EVALUATORS OF TEACHER JOB PERFORMANCE BY SCHOOL DISTRICT TABLE IVE

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	ļ	Dellad	=			Houston	, 5			Austin	ء	-	N	Fort Worth	ـ ا	-	5	San Antonio	وا	Ľ	and c	Corous Christi	1		El Paso	٩			Yeleta	1	
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TABLE XVII STATISTICAL SUMMARY ON THE USE OF CERTAIN INDIVIDUALS AS EVALUATORS OF TEACHER JOB PERFORMANCE BY POSITION

	J	Superintendent	ntend	1		Board Members	- Admin			Dra Membere	ahere		٩	bringinale	alec		∥ Ē	Toachore		
	គ	In Favor of		Opposed	I uI	In Favor	Орр	Opposed	In F	Favor	Oppo	Opposed	In	Favor	Oppor	Opposed	In Favor	avor	g,	Opposed
Evaluator	z	•	Z	8	z		z	40	z	œ	z	-	z		Z	-	z	-	2	-
Principals	m	09	2	40	14	74	7.0	26	27	7.7	8	23	61	06	2	10	986	81	20	19
Superintendents	7	70	*	80	<u></u>	37	12	63	12	34	23	99	13	1.8	26	82	13	12	93	89
Parents	-	20	4	80	9	32	13	89	1.8	51	11	<b>4</b>	<b>‡</b>	21	5.4	79	25	24	III	3.6
Citizens	0	0	5	3.00	7	10	17	90	N	٠	33	46	<del></del>	-	67	66	11	10	95	06
Students	7	40	m	20	9	42	11	90	r-	20	88	080	1.1	52	51	75	24	23	82	7.1
Supervisors	4	80	п.	20	12	63	1	37	20	5.7	15	<b>.</b>	53	78	15	22	09	57	46	<b>ئ</b> ت
Other Teachers	<b>~</b>	20	<b>-</b>	80	7	37	13	63	17	2.	91	51	23	*	<b>4.</b> R	99	<b>4</b>	1	63	65
Self	21	0	m	09	•	47	01	53	91	29	25	71	98	53	32	47	99	62	0.4	99

In summary, having a weighted system for evaluating teacher job performance was heavily favored by all respondents regardless of demographic characteristics.

Overall, the respondents favor the system as shown in Table XVIII.

TABLE XVIII

RESPONDENT PREFERENCES FOR HAVING A WEIGHTED TEACHER JOB PERFORMANCE EVALUATION SYSTEM

	Fay	<i>o</i> r	QO qo	pose
Question	N	8	N	96
Having a weighted job appraisal system	141	91.6	13	8.4

In summary, four criteria were highly favored for the evaluation of teacher job performance: classroom management, teaching techniques, principal's recommendation, and gain in the learning rate of students. The other criteria had little support. There were few statistically significant differences in the four acceptable criteria; no differences that were meaningful to this study. Of eight possible evaluators, only principals and teacher supervisors were widely favored as evaluators of job performance. There were no statistically significant differences between respondents with

respect to the principal as an evaluator, but with respect to having a teacher supervisor evaluator, superintendents and principals were more significantly in favor of this appraisor than PTA members, board members, or teachers ( $x^2 = 9.16$ , p < .05). An overwhelming per cent of the respondents (91.6) expressed preference for having a weighted teacher job performance evaluation system. Participant responses taken from the survey questionnaire, frequency counts, percentages, and dollar amounts, are presented according to the respective sections of the questionnaire in the raw data tables in the Appendix.

Additional Pertinent Respondent Comments

The survey questionnaire included areas in which
participants could include other factors, comments
regarding monetary amounts, and other criteria for
evaluation of teacher job performance and/or other
evaluators. Additional factors presented for consideration in salary determination were (1) distance from
school, (2) teacher attendance, (3) ability to employ
more than one teaching method, (4) intelligence, (5)
personality, (6) willingness "to go above and beyond"
what the job requires, and (7) ability to cope.

The following comments were included in the section that requested respondents to designate monetary amounts they deemed appropriate for salary stipends: (1) depends on local revenue available, (2) whatever is necessary to attract and keep well-qualified teachers, (3) depends on time involved, and (4) too difficult to set a flat rate.

Only one additional criteria on which to base teacher performance was presented, namely, the results of the Texas Assessment of Basic Skills Test (TABS). Other evaluators suggested were as follows: (1) assistant principals, (2) department chairpersons, and (3) committee. No indication as to type of committee or who would constitute its members were given.

#### CHAPTER V

# SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND CONCLUSIONS

#### Summary of the Study

In this country, the single salary system is the most widely utilized method of remuneration for teachers. Traditionally, two factors only are employed in the determination of classroom teacher salary schedules—the college degree attained and the number of years of teaching experience completed. The present study was conducted to determine if educationally, politically, and economically viable alternatives to the single salary schedule for teachers exist in the eight largest school districts in Texas and to justify them.

Specifically, the purposes of this study were the following.

- 1. To survey citizens, school board members, teachers, principals, and superintendents in order to identify possible factors that should be considered in determining salaries for teachers;
- 2. To analyze and compare what citizens, school board members, teachers, principals, and superintendents consider to be the significant factors which should be

used in the determination of teachers' salaries. Specific factors considered were the following:

- a. TEACHING EXPERIENCE: Years employed as a certified, full-time teacher in an accredited school;
- b. COLLEGE DEGREE: Level of degree awarded by an accredited college or university;
- c. POST-DEGREE STUDY: Credit-hours, relating to job, achieved beyond a degree, taken at an accredited college or university;
- d. ADDITIONAL DUTIES: Time spent beyond that which is recognized as a standard work day in additional school-related responsibilities, assigned by the principal or other administrator;
- e. CRITICAL PERSONNEL SHORTAGES: Curriculum areas in which there are fewer teachers than positions available, notably in those demanding longer and/or more rigorous training;
- f. EDUCATIONAL NEEDS OF SPECIAL POPULATIONS
  TAUGHT BY THE TEACHER: Populations such as low
  achievers, the handicapped, the economically
  disadvantaged, and those with language deficiencies;
- g. CLASS ENROLLMENT: Class enrollment size which is significantly above that of the rest of the school or of the district average;

- h. STUDENT ACHIEVEMENT AND ABILITY LEVEL:

  Deviation from average academic performance, either below or above;
- i. TEACHER JOB PERFORMANCE: Effectiveness with which the teacher carries out duties, as for example, average, below average, above average, or outstanding performance;
- j. MILITARY SERVICE: Prior years of military
  duty recognized by a state education agency;
- k. TEACHING FIELD RELATED EXPERIENCE: Prior employment in business or industry which relates to teaching assignment.
- 3. To investigate what authorities in the field have written concerning differentiated salary plans for teachers.
- 4. To determine whether there was any thrust toward a differentiated salary plan and the source or sources of such thrust.
- 5. To construct and rationally to defend a model for one or more differentiated salary plans.

After professional journals, books, monographs, research bulletins, and research studies were examined, the assistance of the following groups was solicited to identify significant studies and related research: (1) the Educational Resources Information Center (ERIC)

Search Service, North Texas State University; (2) the ERIC Search Service, Education Service Center, Region 10; (3) Dissertation Abstracts (DATRIX, Service of University Microfilms, Ann Arbor, Michigan); (4) The School of Research Information Service (SRIS) of Phi Delta Kappa; (5) Educational Research Service, Inc. (Arlington, Va.); (6) Coordinating Information for Texas Educators (CITE) Resource Center (Austin, Texas); and (7) Bibliographies Retrieval Services, Inc. (Scotia, New York).

This review, in addition to numerous interviews with acknowledged experts in school finance, preceded the development of the questionnaire, "Perceptions

Concerning Differential Salary Compensation for Teachers."

A panel of ten members participated in validation procedures. Reliability was established using the test-retest method. A representative group of all populations in the study was administered the questionnaires twice over a three-week period of time.

Following a demographic section, the questionnaires had four major sections designed to obtain the views of the respondents on these subjects: (1) whether a multifactor teacher salary structure should be developed; (2) which factors should be included in such a structure; (3) what amount of monetary compensation should be

awarded for each factor; and (4) if teacher job performance is a factor, what criteria should be used to evaluate teachers and who should conduct the evaluations. For the questions in Sections II and III, the views only of the respondents in favor of a multi-factor schedule were included, and for Section IV the views only of those in favor of both a multi-factor schedule and the use of job performance as a factor were included.

A total of 479 questionnaires were distributed to school district superintendents, school board members, principals, classroom teachers, and parents in a PTA organization in the eight largest school districts in Texas; Houston, Dallas, Austin, San Antonio, Corpus Christi, Fort Worth, El Paso, and Ysleta. Of this number, 368 completed questionnaires were returned from 8 superintendents, 24 school board members, 107 principals, 189 teachers, and 39 local unit PTA presidents, for a total response rate of 77 per cent.

Analyses of the data were conducted according to the following demographic variables: school district; position, sex, and ethnicity of the respondents; whether the respondents owned homes in the school districts; and whether the respondents had children enrolled in the district schools. The results were presented for the

respondents as a whole, and where significant, the views of demographic groups were identified.

#### Findings and Conclusions

As a result of an analysis of the data from items on the survey instrument, the following research questions are answered.

#### Research Question 1

"Should factors other than the traditional ones, training and experience, be considered in the determination of teachers' salaries?"

In the first section of the questionnaire, which is included in the Appendix, respondents strongly favored the adoption of a multi-factor teacher salary schedule. Eighty-four per cent of the respondents approved of the action, while only 16 per cent opposed it. Preference for a multi-factor salary system and the belief that it could be implemented appear to be directly related to one's authority in the district in terms of school personnel. The percentage of approval was highest among superintendents, 100: PTA and school board members followed with 93 per cent and 92 per cent, respectively. Principals followed with 84 per cent preferring a multi-factor schedule, and 80 per cent of the teachers indicated preference. Those with responsibilities beyond

the classroom most firmly viewed the multi-factor salary schedule as advantageous.

Eighty per cent of all respondents further stated they thought a multi-factor structure could be implemented within their school districts. Percentages of individuals that believed a multi-factor salary schedule could be implemented were superintendents, 100; PTA members, 98; school board members, 87; principals, 76; and teachers, 76. It should be noted that although many respondents believed such a system could be implemented, superintendents, school board members, and PTA members were significantly higher in their belief than other respondents.

Based on the findings of this study, it can be concluded that there is strong support for differentiated salary schedules among all populations surveyed in the eight largest school districts of Texas. Furthermore, the belief that differentiated salary schedules can be successfully implemented is strongly supported.

## Research Question 2

"If other than the traditional factors of training and experience are to be considered, what should they be?"

The second section of the questionnaire was concerned with the specific factors to be included in

a multi-factor schedule. The views only of respondents favoring such a plan (N = 301) were included. Table XIX lists the various factors considered, the percentage of respondents favoring the use of each factor, and specific demographic groups supporting the inclusion of the factor.

The two traditional factors of teaching experience and college degree received the strongest support. There was very strong support also for post-degree study. Strong support was evidenced for performing additional duties, teacher job performance, and areas of personnel shortage. Support was seen for teaching special populations, class enrollment, and business experience. The use of student achievement and military experience as factors were not supported.

Statistically significant differences were found in the responses of participants to several of the factors. Most differences occurred in the position variable. Superintendents, principals, and teachers were significantly higher than school board and PTA members in their acceptance of teaching experience as a factor in salary determination. School board members and teachers were significantly higher than other respondents in favoring the factor post-degree study. With reference to the factor additional duties, superintendents were

TABLE XIX

RESPONDENTS' PREFERENCE FOR FACTORS
IN SALARY SCHEDULES

	-		
Factor	N	9	Most Supportive Groups
Teaching Experience	295	98.0	All respondents
College Degree	291	96.7	All respondents
Post-Degree Study	286	94.7	All respondents
Performing Additional Duties	253	84.1	All respondents, espe- cially superintendents
Teacher Job Performance	233	79.2	All respondents, especially PTA and board members, females, home owners, those with children in district
Areas of Personnel Shortage	231	76.5	All respondents, espe- ecially superintendents
Teaching Special Populations	203	68.I	Teachers, females, Blacks, Hispanics
Class Enrollment	196	65.1	Females, Blacks, Hispanics, home owners
Business Experience	173	57.9	Board members
Student Achievement	139	46.5	Females, Blacks, Hispanics
Military Experience	90	30.0	Principals, males, Blacks
	<del></del>		

significantly higher in their acceptance than other respondents. All groups were significantly higher than board members in their acceptance of class enrollment as a factor in salary determination. Statistically significant differences occurred in respondents' acceptance of job performance as a factor. School board members and PTA members rated this factor significantly higher than other respondents.

Differences of statistical significance were seen among school districts with reference to military experience as a factor. Although there was little support for this factor, Houston, Dallas, Fort Worth, Austin, and El Paso were significantly higher in their acceptance than San Antonio and Ysleta.

Two significant differences occurred in the demographic variable of ethnicity. Blacks and Hispanics were significantly higher than Whites in their acceptance of the two factors, teaching special populations and student achievement. With reference to the variable of sex, females were significantly higher than males in their preference for job performance.

It should be noted that respondents regarded the teachers' length of experience and level of education more crucial than the adequacy of performance and student accomplishment in the teacher's class. Such

findings run counter to the currently popular conception that teacher accountability and student achievement are paramount.

A definite similarity of opinions toward the top six factors by all respondent groups emerges when the data are reviewed. The respondents in all positions rated highest the identical six factors, though not precisely in the same order, with only one exception. All groups showed preference for the factors of teaching experience, college degree, post-degree study, additional duties, job performance, and personnel shortages. Teachers, however, preferred limited class size to rewarding teachers in areas of personnel shortages. By school district, the six factors favored most strongly were identical with the few exceptions of Fort Worth, which included class size in the top six rather than personnel shortages; Austin, which included special populations rather than personnel shortages; and Corpus Christi, which included the factors of special populations and class enrollment, rated the same, rather than job performance in the top six. The consistencies, even among the few exceptions, are notable.

It can be concluded that educators and citizens associated with public schools, regardless of position or school district location agree in their thinking and

preferences, making movement toward a multi-factor salary system a worthy goal. The high per cent of agreement, from all people in every position and school district, suggests that changes in the present salary system be promptly initiated.

#### Research Question 3

"What are the different perceptions of the various groups in the study concerning the factors believed to be significant in a differential salary compensation plan for teachers?"

For this study, the respondents were asked to rate possible factors for salary determination in the order of their value and importance. Acceptability of salary factors was based on a four-point scale. Table VI presents the ranking of respondent preferences for the various factors and the mean score value of each.

An analysis of each demographic variable revealed that a large percentage of all population groups in the study favor a multi-factor salary schedule. The two factors of teaching experience and college degree received very strong support (98.0 and 96.7 per cent) from all respondents regardless of the various demographic characteristics. In the opinion of the respondents, these factors should definitely be included in a teacher

salary schedule. According to rank preference, the third factor, post-degree study, received very strong support (94.7 per cent), but somewhat less than the two traditional factors of teaching experience and college degree as evidenced by a greater number of probably should be a factor as contrasted to definitely a factor. Whereas all respondents favored this factor, superintendents did not favor it as strongly as other respondents. Additional duties, the fourth factor, was also strongly favored (84.1 per cent) by all respondents. It should be noted, however, that superintendents were very high in their acceptance of additional duties, rating this factor first in preference along with teaching experience.

There was strong, consistent support for the inclusion of the fifth factor, job performance (79.2 per cent) in a teacher salary schedule. If the traditional factors of experience and training had not been included in this study because of their widespread and common acceptance, job performance would have rated surprisingly high considering that the proportional sample included a very high per cent of teachers. Had the two standard factors been omitted, job performance would have rated number one for school board and PTA members in terms of acceptability.

It is important to acknowledge that although strong preference for teacher job performance existed among all respondent groups, there was a significant difference between the responses of professional educators and non-educators. Teachers, principals, and superintendents showed less preference for this factor than did school board members and PTA members. This difference could be attributed to the reality that though the theoretical concept of measuring and rewarding teacher job performance has strong appeal, the practical aspects of its implementation are perceived by school personnel to be exceedingly difficult and complex.

The sixth factor, personnel shortages, had the acceptance of most respondents, but their enthusiasm for it appeared to be less than the aforementioned factors (76.5 per cent). It is notable, also, that preference for including this factor seems to be directly proportional to the hierarchial status of one's position in the district. There was strong support for the seventh factor, teaching special populations (68.1 per cent). The differences, however, were not significant between the population groups surveyed.

Overall support for the eighth factor, class enrollment, was strong (65.1 per cent). Preference for this factor seemed to be inversely favored according to the respondents' plateau of authority in the school district. The factor was favored most strongly by teachers. It is interesting to note that those faced with the task of developing and implementing school budgets, superintendents and school board members, favored this factor less, probably because they know the enormous cost that occurs when class size is reduced by even one student per class across a large district.

The factor rated ninth by all respondents in this study was previous experience in business or industry related to the teaching field. This factor received support (57.9 per cent) from a wide range of respondents. With respect to demographic consideration, school board members were the only respondents demonstrating particularly strong support for the inclusion of business related experience as a factor in a teacher salary schedule.

The inclusion of student achievement, the tenth factor, was not favored by any respondent groups (46.5 per cent). This lack of support was fairly consistent among most respondents regardless of their demographic characteristics. This is surprising and disappointing in view of the present strong emphasis on accountability in education. The eleventh and final

factor, military experience, was widely disapproved by the respondents (30.0 per cent).

The contact with a vast number of respondents makes it clear that a substantial majority would favor the inclusion of factors for salary determination other than the traditional two: formal training and number of years experience. There are some real differences in the judgment of the various categories of respondents. But the average adjustments in a given salary pattern, based on this study, would be as follows:

Doctor's Degree	\$1,488
Master's Degree	1,023
16-30 Credits Beyond Degree	562
Teaching Low Achievement Students	452
Job Performance	437
Personnel Shortages	430
Teaching Special Populations	423
Additional Duties	391
1-15 Credits Beyond Degree	387
Class Enrollment	312
Teaching High Achievement Students	205

A given school district could include or omit any one or more salary factors. If there are three acceptable factors, teaching experience, job performance, and

additional duties, the basic salary would be increased by the following amounts: \$437 for job performance, \$391 for the performance of additional duties, besides the customary increment for continuing teaching experience.

It must be stressed that an apparent discrepancy existed between what respondents said they thought was important and the amount of money they recommended funding. Such was true particularly with the factor of performing additional duties. It rated high as a potential factor, but was not funded accordingly, probably because the people are trapped by their traditions, even when these traditions no longer fit changing circumstances.

When assigning dollar values to each factor, consistently across the factors there were statistically significant differences in regard to the demographic variable of the respondent's position. PTA members, principals, and teachers approved higher amounts of money for various factors considered for salary determination. Specifically, these groups designated higher amounts for post-degree study, for additional duties, for teaching special populations, for class enrollment, and for teaching both high- and low-achievement students. Significantly, those charged with the task of developing and directing school district budgets, the superintendents and board members, generally designated fewer dollars per

salary factor. A notable exception is that, based upon the amount of money deemed appropriate for salary factors, superintendents valued the master's degree above those in all other positions.

In summary, it can be concluded that nine factors received strong support from all respondent groups. In the order of preference, these are teaching experience, college degree, post-degree study, additional duties, job performance, personnel shortages, teaching special populations, class enrollment, and business-related experience.

### Research Question 4

"Is a departure from the single salary schedule considered desirable by one or more of the groups surveyed; and, if so, what is the nature of the departure?"

Research Questions 1 and 2 worked in tandem with Question 4 to reveal that not only did individual groups in this study agree, but all groups were in agreement that a differentiated salary schedule is desirable. The consensus is that extra pay is strongly merited for the six factors of teaching experience, college degree, post-degree study, additional duties, job performance, personnel shortages, and supported by three others as

follows: teaching special populations, class enrollment, and business-related experience.

It can be concluded that there is strong support for a multi-factor salary schedule for teachers in all eight urban districts in this study regardless of the individual positions. Although there appears to be acceptance of the concept of differentiated salary plans, there is little thrust toward them.

## Research Question 5

"What would constitute acceptable models for a differentiated salary plan?"

The following models are a concise and concrete distillation of the attitudinal responses of this study. If a differentiated salary schedule were to be adopted for all the urban school districts of Texas, the rank preference for the nine factors receiving over 50 per cent approval would lend itself to this model:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 4. Additional Duties
- 5. Job Performance
- 6. Personnel Shortages
- 7. Special Populations
- 8. Class Enrollment
- 9. Business Experience

The model for the Houston schools, with ten supported factors ranked in the order of preference, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 3. Additional Duties
- 5. Job Performance
- 6. Personnel Shortages
- 7. Special Populations
- 8. Class Enrollment
- 9. Business Experience
- 10. Student Achievement

Similarly, for Dallas schools, the model with ten supported factors, ranked in the order of preference, looks like this:

- 1. College Degree
- 2. Teaching Experience
- 3. Post-Degree Study
- 4. Additional Duties
- 5. Job Performance
- 6. Personnel Shortages
- 7. Special Populations
- 8. Class Enrollment
- 9. Business Experience
- 10. Student Achievement

Based upon the data, the model for Fort Worth schools, with nine supported factors ranked in the order of preference, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 4. Job Performance
- 5. Additional Duties
- 6. Class Enrollment
- 7. Personnel Shortages
- 8. Special Populations
- 9. Business Experience

Adjusted for the data, the model for schools in San Antonio, with nine supported factors according to rank, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 4. Additional Duties
- 5. Personnel Shortage
- 6. Job Performance
- 7. Special Populations
- 8. Business Experience
- 9. Class Enrollment

In like fashion, the model for El Paso schools, based on nine ranked factors, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 4. Additional Duties
- 5. Personnel Shortage
- 6. Job Performance
- 7. Special Populations
- 7. Class Enrollment
- 9. Business Experience

The model for Austin schools, with factors ranked in order of preference, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Additional Duties
- 4. Post-Degree Study
- 5. Job Performance
- 6. Special Populations
- 7. Personnel Shortage
- 7. Class Enrollment

Likewise, the model for Ysleta, with eight supported factors in rank order, is as follows:

- 1. Teaching Experience
- 2. College Degree
- 2. Post-Degree Study
- 4. Additional Duties
- 5. Personnel Shortage
- 6. Job Performance

- 6. Class Enrollment
- 8. Special Populations

In parallel fashion, the model for Corpus Christi schools, with eight supported factors, follows:

- 1. Teaching Experience
- 2. College Degree
- 3. Additional Duties
- 4. Post-Degree Study
- 5. Personnel Shortage
- 6. Special Populations
- 6. Class Enrollment
- 8. Job Performance

Based on the findings of this study, models appropriate for each position, ranked in order of preference, follow. The superintendents' model, with nine supported factors in rank order, looks like this:

- 1. Teaching Experience
- 1. Additional Duties
- 3. College Degree
- 4. Personnel Shortage
- 5. Post-Degree Study
- 6. Job Performance
- 6. Special Populations
- 8. Class Enrollment
- 8. Student Achievement

Likewise, the model for board members, with ten supported factors given according to rank preference, is as follows:

- 1. College Degree
- 2. Post-Degree Study
- 3. Job Performance
- 3. Teaching Experience
- 5. Additional Duties
- 6. Personnel Shortage
- 7. Business Experience
- 8. Special Populations

- 8. Student Achievement
- 10. Class Enrollment

The model for PTA members, with ten factors based according to rank preference, is as follows:

- 1. College Degree
- 2. Teaching Experience
- 3. Job Performance
- 3. Post-Degree Study
- 5. Additional Duties
- 6. Personnel Shortage
- 7. Special Populations
- 8. Class Enrollment
- 9. Business Experience
- 10. Student Achievement

The following model for principals, with nine supported factors according to rank, is presented:

- 1. Teaching Experience
- 2. College Degree
- 3. Post-Degree Study
- 4. Additional Duties
- 5. Job Performance
- 6. Personnel Shortage
- 7. Special Populations
- 8. Class Enrollment
- 9. Business Experience

Based upon the findings of the study, this is the model for teachers, with factors given according to rank:

- 1. Teaching Experience
- 2. College Degree
- Post-Degree Study
- 4. Additional Duties
- 5. Class Enrollment
- 6. Job Performance
- 7. Personnel Shortages
- 8. Special Populations
- 9. Business Experience

Study of the various models leads to the conclusion that there is vast similarity in all the models, regardless

of school district or position. Therefore, it can be presumed that the model proposed for the state would be acceptable for all school districts in large urban areas in Texas.

The following additional question and answer was generated by the responses on the questionnaires. "If respondents favored teacher job performance as a factor to be considered in salary consideration, what criteria should be used to evaluate teachers and who should conduct the evaluations?"

There was a strong, consistent support among respondents (79 per cent) for the inclusion of this factor in a teacher salary schedule. Section IV of the questionnaire was concerned with criteria and evaluations of teacher job performance. If teacher job performance were to be included as a factor for salary determination, this section sought to determine which criteria and which evaluations of job performance should be used. For this section the views of only the respondents in favor of a multi-factor schedule and in favor of teacher job performance as a factor (N = 233) were included. The ensuing table enumerates the criteria included in the questionnaire and reveals the percentages of respondents in favor and the groups most in support of the criteria.

TABLE XX

CRITERION ADVOCACY BY RESPONDENT GROUPS

Criteria	N	Ş	Most Supportive Groups
Classroom Management	165	70.8	All respondents, espe- cially teachers
Teaching Techniques	<b>1</b> 50	64.4	All respondents, espe- cially superintendents
Principal Commendations	147	63.1	Superintendents, principals, teachers
Gain in Rate of Student Learning	144	61.8	Superintendents, school board, and PTA members. Those with property in the district, minority race members
Participation in Projects	123	52.8	Females
Adherence to School Policy	117	50.2	Females
Student Achievement (Standardized Tests)	94	40.3	Superintendents, Blacks, Hispanics, those with children in district schools
Professional Leadership	64	27.5	None
Student Achieve- ment (Teacher Tests)	57	24.5	Blacks

Table XX demonstrates that classroom management, teaching techniques, principal commendations, gain in learning rate of students, participation in projects,

and adherence to school district policy received support as criteria on which to base teacher performance evaluation. Although there is no strong support for any of these criteria, classroom management comes close to being strongly supported.

Statistically significant differences were found in the respondents' acceptance of the criterion, student achievement as measured by standardized tests. Dallas and Houston were significantly higher in their acceptance of this criterion than other school districts. In the position variable, it was noted that superintendents and PTA members were stronger in their preference for this criterion than other populations surveyed. Significant differences were also noted among school districts in the acceptance of gain in the learning rate of students as a criterion. Houston, San Antonio, and Corpus Christi were significantly higher in their acceptance of this criterion.

With reference to student achievement as measured by teacher-made tests, Blacks supported this criterion to a significantly higher degree than other ethnic groups. Statistically significant differences were found in the classroom organization and management criterion. Both those with property in the district and those without property favored this criterion, but there was a

statistically higher proportion of respondents without property who favored it. Females were seen to prefer the criterion of participation in school projects over males. This difference was statistically significant.

It should be noted that a discrepancy exists between the per cent of respondents preferring gain in the rate of student learning (61.8 per cent) as a criteria for evaluation and standardized achievement tests (40.3 per cent). The two criteria given which could measure the gain in rate of student learning did not receive support, namely standardized achievement tests receiving 40.3 per cent approval and teacher-made tests receiving only 24.5 per cent approval.

In summary, it can be stated that six criteria on which to base teacher job performance received support, as follows: classroom management, teaching techniques, principal commendations, gain in learning rate of students, participation in school projects, and adherence to school policy. The three criteria that did not receive support were student achievement as measured by standardized tests, professional leadership in activities beyond the local building, and student achievement as measured by teacher-prepared tests.

The second part of Section IV sought to determine who the evaluators of teacher job performance should be.

The following table specifies the evaluators identified in the questionnaires, the percentages of respondents favoring, and the demographic groups most in support of each evaluator.

TABLE XXI

EVALUATOR ADVOCACY BY RESPONDENT GROUPS

Evaluators	N	90	Most Supportive Groups
Principals	191	82.0	All respondents, especially principals,
Teacher Supervisors	149	63.9	All respondents, especially superinten- dents, principals, males, and Hispanics
Self	123	52.8	Teachers, females, Blacks, Hispanics, those without homes in the school district
Other Teachers	91	39.1	Whites
Parents	64	27.5	PTA members
Students	58	24.9	Respondents with political power
Superintendents	45	19.3	None
Average Citizens	16	6.9	None

Table XXI shows that the respondents strongly support having principals conduct the evaluations of teacher job performance. There is also support for

teacher supervisors and self-evaluation. No other possible evaluator is posited. The respondents were asked whether the appraisals of teacher job performance should be weighted when the views of more than one evaluator are included. Overwhelmingly, 91.6 per cent of the respondents favored a weighted teacher evaluation system.

Significant differences were found in participants' responses concerning the use of a teacher supervisor as an evaluator of teacher job performance. It was noted that superintendents and principals were significantly higher in favoring the teacher supervisor. Respondents in El Paso, San Antonio, Fort Worth, and Austin were significantly higher in their acceptance of a teacher supervisor. In the case of students as evaluators, significant differences were found between males and females. Males favored the student as an evaluator more strongly than females. Responses regarding other teachers as evaluators showed statistically significant differences. Whites favored these evaluators more than other ethnic groups.

Principals were preferred by most respondents as chief evaluators of teacher job performance. Curiously, however, principals as a group did not strongly favor any one of the nine criteria given as possible standards

by which to evaluate job performance. Principals, therefore, remain in the ambiguous role of chief evaluators who have no mutually agreeable criteria by which to evaluate.

Based on the findings of this study, it can be concluded that there is no support for the participation of superintendents, other teachers, parents, students, or average citizens in the evaluation process. There is strong support for principals to be evaluators.

Support for teacher supervisors and self-evaluation is also shown.

### Implications

The following implications are based on the findings of this study.

- 1. As an immediate goal, large-city school districts are encouraged to delineate alternative plans including multi-factors for teacher salary determination. Perhaps modifications of the Houston Second Mile Plan, refined to each district's unique priorities and policy objectives, are appropriate;
- 2. As a long-range goal, consideration could well be given to the total restructuring of the present salary system in the state which would articulate more factors on which to base salary compensation. Such a salary

revision should include a component of flexibility in order

- a. that individual school districts can formulate certain salary decisions that reflect their priorities and policy objectives;
- b. that more decisions affecting education can be made at the local level to reflect purely local needs;
- c. that local districts can be both creative and innovative in determining the best utilization of their teacher resources;
- d. that salary dollars can flow to where there is the greatest need;
- e. that cost-effectiveness as it relates to teaching personnel can be maximized;
- f. that school districts can personalize their professional relationships with personnel;
- g. that the uniqueness of individual districts can be recognized;
- h. that the special needs of individual districts can be answered;
- i. that modifications can be made in salary practices as needed to encompass changes in school district priorities and objectives;

j. that modifications can be made aligned to the changing financial resources of the individual school district.

One plan, based on the findings demonstrated in Table VI, might be to make the total number of acceptable factor ratings the basis of a theoretically possible 100 per cent salary increase, above an established base salary. Thus, any number of the total ratings of forty-four would add that many forty-fourths to existing salaries. The same principal would apply to any lesser number of acceptable ratings.

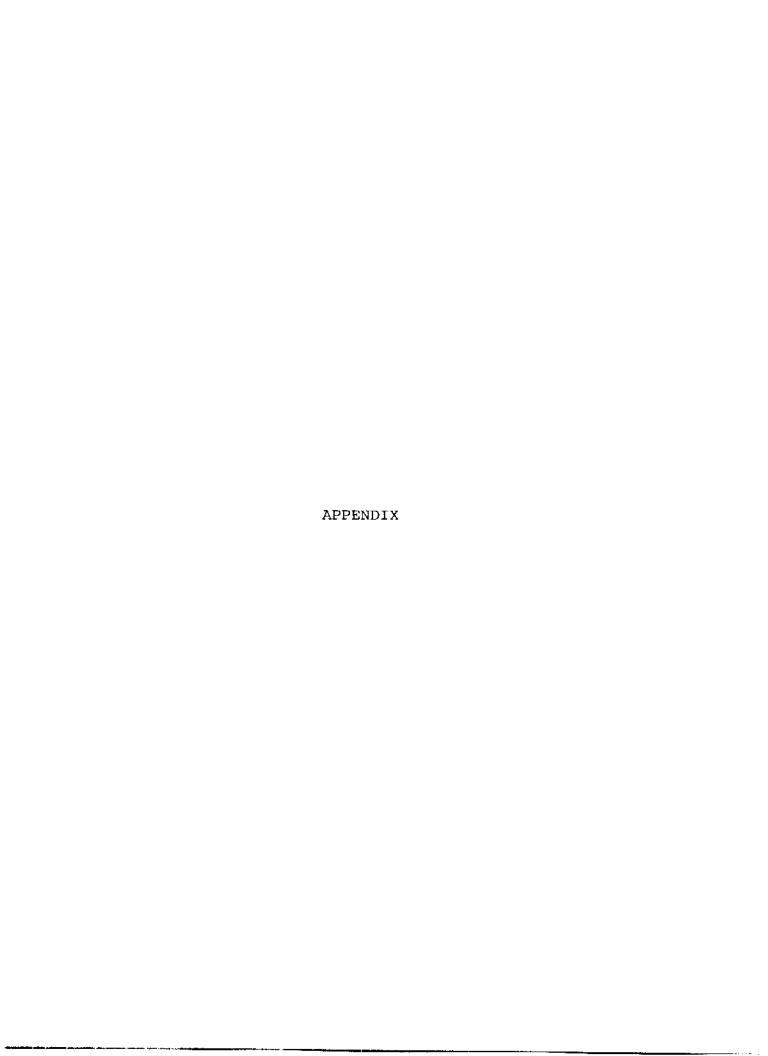
#### Recommendations

Based on the findings of this study, the following recommendations are made.

- l. Research similar to the present study could be initiated for suburban, small town, and rural school districts alike. A variety of presently unknown factors might well contribute to a different statistical outcome;
- 2. Since the factor, teacher job performance, was favored by such a large per cent of respondents (79 per cent), an accurate, scientific job analysis for all positions in every school district could profitably be undertaken. This analysis would indicate the relative

difficulty of positions in terms of effort, skill, and responsibility so that teachers can be paid accordingly;

- 3. Increased attention could appropriately be given to developing concrete and explicit evaluation techniques and instruments to meet the decided thrust toward the inclusion of job performance in salary consideration:
- 4. In view of the limited usefulness of information gained from the demographic variables of ethnicity, sex, homeowners in the school district, and children in the public schools, a subsequent study might find more valuable the inclusion of demographic items that would identify subject(s) taught by teachers and professional affiliations of teachers and administrators.



### OPINIONNAIRE \*

# PERCEPTIONS CONCERNING DIFFERENTIAL SASHOAST NOT MOST SASHOAS ACCORDED TO A CONCERNING DIFFERENTIAL CONCERNING CONCERNING DIFFERENTIAL CONCERNING CONCERNI

### DEMOGRAPHIC INFORMATION

Please complete the following:
Occupation:
Sex:
Male
Female
Ethnicity:
Black
Hispanic
White
Other
Educational Level:
Less than high school graduation
High school graduate
Some college
Collage graduate
Moreowner in this school district:
Yes
№0
Children presently attending public school in this district:
Yes
No
SECTION [
PRESENTLY, DIFFERENCES IN TEACHERS' SALARIES ARE BASED SOLELY ON TWO FACTORS:
<ol> <li>College Degree the Teacher Has Earned</li> <li>Number of Years of Teaching Experience</li> </ol>
A. Do you believe that factors in addition to college degree and years of service <u>should</u> be considered in determining teacher salary rates?
YES NO
8. Do you believe that a system for determining teacher sularies which takes into account factors other than degree held and years of ser- vice could be implemented and administered in our public schools?
YESNO

\*Used for board members and local PTA presidents only.

### OPINIONNAIRE \*

# PERCEPTIONS CONCERNING DIFFERENTIAL SALARY COMPENSATION FOR TEACHERS

### DEMOGRAPHIC INFORMATION

Please complete the following by placing a check mark () on the appropriate lines.

Position:	Years Employed in the Field of Education Prior to Current Year:
Superintendent or designee	None
Principal	1 - 3
Elementary Secondary	4 - 10
Classroom Teacher Elementary Secondary	More than 10
Sex:	Ethnicity:
Female	Śłack
Male	Hispanic
	White
	Other-Specify [
Are you a homeowner in this school district?	Do you have children in the public schools of this district?
Yes	Yes
No	No
SECTION I	
PRESENTLY, DIFFERENCES IN TH ARE BASED SOLELY ON TH	EACHERS' SALARIES WO FACTORS:
<ol> <li>College Degree the Tea</li> <li>Number of Years of Tea</li> </ol>	cher Has Earned ching Experience
A. Do you believe that factors in add of service <u>should</u> be considered in	ition to college degree and years determining teacher salary rates?
YES NO	
B. Do you believe that a system for di takes into account factors other ti vice <u>could</u> be implemented and admin	han degree held and years of ser-
YES NO	
Used for superintend teachers only.	lents, principals, and

#### SECTION II

The following list contains factors on which a classroom teacher salary schedule could be based. You may wish to add factors to the list. Please indicate with a check mark  $(\checkmark)$  on the scale below the degree to which you believe each of these factors should be included in the determination of a teacher salary schedule for this school district.

TEACHING EXPERIENCE	Definitely should be a factor	Probably should be a factor	Probably should not be a factor	Definitely should not be a factor
<pre>(Years employed as a certificated, full-time teacher in an accredited school)</pre>				
COLLEGE DEGREE (Type of degree awarded by an accredited college or university)				
POST-DEGREE STUDY (Credit-hours, relating to job, achieved beyond a degree, taken at an accredited college or university)				
ADDITIONAL DUTIES (Time spend beyond that which is recognized as a standard work day in additional school-related responsibilities, assigned by the principal or other administrator)	•			
CRITICAL PERSONNEL SHORTAGES  (Curriculum areas in which there are fewer teachers than positions available, frequently those demanding longer and/or more rigorous training)				
EDUCATIONAL NEEDS OF SPECIAL POPULATIONS TAUGHT BY THE TEACHER  (Populations such as those of low achievement, handicapped, Tow income, language deficient)				
<pre>CLASS ENROLLMENT   (Class enrollment which is significantly above that   of the rest of the school or of the district aver-   age)</pre>	<del></del>			
STUDENT ACHIEVEMENT AND ABILITY LEVEL (Deviation from average academic performance, either below or above)		_		
TEACHER JOB PERFORMANCE  {Effectiveness with which the teacher carries out duties, as for example average, below average, above average, or outstanding performance}				
MILITARY SERVICE (Prior years of military duty recognized by a state education agency)		7		
TEACHING FIELD RELATED EXPERIENCE (Prior employment in business or industry which relates to teaching assignment)				
OTHER FACTORS	<del></del>			

### SECTION 111

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### SECTION IV

A.	It is felt by many citizens and school personnel that a teacher's job performance should be at least part of the basis for the determination of that teacher's salary. However, one difficulty in using job performance as a basis for salary determination has been that of specifying what evidence will be used to determine outstanding or above average performance as opposed to average or below average performance. Please indicate the factors you believe to be fair and important in determining the quality of job performance.
	Achievement of students as measured by standardized tests
	Achievement of students as measured by teacher tests
	Gain in learning rate of individual students
	Evaluation based on classroom organization and management
	Evaluation based on teaching techniques
	Participation in curriculum development or short-term projects to advance knowledge in a particular area
	Commendation from principal as a master teacher
	Leadership role in professional activities beyond the local building
	Adherence to district's policies
	Other
В.	Another major problem in the use of performance for determination of teacher salaries has been the matter of who will judge performance. At the present time in Texas, principals are responsible for assessing performance of teachers. Please indicate others, if any, you believe should be involved in this appraisal.
	Principals
	Superintendents
	Parents
	Non-parent Citizens
	Students
	Supervisors/Consultants
	Peers (Other teachers)
	The Teacher Himself/Herself
	Other
С.	If you have indicated that there are others you would like to see have input in the process of appraising performance, do you believe this should be weighted in relation to the opportunities each group would have to observe or determine teacher performance?
	YES NO

# dallas independent school district

October 1, 1980

Linus Wright, General Superintendent

Dear (Superintendent's name):

A research study is being pursued in the Dallas Independent School District which we feel will provide useful information for making future decisions relative to salary compensation for teachers. As you know, inflationary trends, tax resistance and budgetary constraints make it imperative that we examine the area of teacher salaries to determine whether there are viable alternatives to the present salary system in the state.

A survey instrument has been developed in Dallas to ascertain the perceptions of various groups regarding differential salary compensation for teachers. Those to be surveyed include the superintendent or designee, all school board members, and randomly selected principals, teachers, and local-unit PTA presidents. Our Personnel Department, with the help of the Research and Evaluation Department, will oversee the implementation of the survey.

This study will have far greater significance if all districts in the Texas Council of Orban School Districts participate. If you concur, please forward the name of your designee who will coordinate your district's efforts to my office at 3700 Ross Avenue, Dallas, Texas 75204. We will then send your designee the packet of materials and instructions for dissemination and collection in October. When the materials are returned to us we will study the responses, process the data statistically and make this information available to you.

Sincerely,

General Superintendent

# dallas independent school district

November 11, 1980

Linus Wright, General Superintendent

Dear (Superintendent's name):

Under seperate cover you will be receiving the survey materials for your distribution and return. From ISD we will need completed questionnaires from the Superintendent or designee, all School Board Members, Principals, Teachers, and Local Unit PTA Presidents. You will need to randomly select the Principals, Teachers, and PTA Presidents. Since the questionnaire is color-coded, it is important that each group receive the appropriate forms as follows:

Superintendent or Designee--Tan School Board Members--Goldenrod Principals--Green Teachers--Blue PTA Presidents--Canary Yellow

Enclosed, also, is a copy of instructions to participants for completing the survey. The format is such that it can be reproduced on the letterhead of your district.

Procedures for the return of the questionnaires to you will need to be added along with a deadline date and the appropriate signatures. When all of the completed surveys have been returned to you, please send them to my office at 3700 Ross Avenue, Dallas, Texas 75204. We hope to process the data statistically as soon as possible so you are encouraged to send the completed materials promptly. If you have any questions, please call Robby Collins at 214/824-5360.

November 11, 1980 Page 2

Thank you for your assistance in this effort. We anticipate receiving information that will be useful for making future decisions relative to salary compensation for teachers. This, of course, we will share with you.

Sincerely,

Linus Wright Goneral Superintendent

Enclosures

TABLE XXII

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RAW DATA OBTAINED FROM SECTIONS I AND II ON QUESTIONNAIRE BY SCHOOL DISTRICT			Yes	Yes	<b>9</b>				_	s c
ez.			Should There Be	Could There Be	Teaching Experience Yes Probably Yes Probably No No	College Degree Yes Probably Yes Probably No No	Post-Degree Study Yes Probably Yes Probably No No	Additional Duties Yes Probably Yes Probably No No	Critical Personnel Shortages Yes Probably Yea Probably No No	Special Populations Yes Probably Yes Probably No No

TABLE XXII--Continued

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		Class Enrollment Yes Probably Yes Probably No No	Student Achievement Yes Probably Yes Probably No No	Teacher Job Performance Yes Probably Yes Probably No No	Military Service Yes Probably Yes Probably No No	Frevious Business Experience Yes Probably Yes Probably No

TABLE XXIII

RAW DATA OBTAINED FROM SECTIONS I AND II ON QUESTIONNAIRE BY POSITION

	o di Location	o recorded to	Board	Board	PTA Presidents	h Jents	Principals	ipals	Teac	Teachers
	z	-	z		z	<b>3</b> 0	z	•	×	-
Should There Be Yes	7 0	100	22	92 8	37	93	88 17	84 16	37	80 20
Could There Be Yes	۰.0	100	3.0	13	35 1	98	79	76	140	76 24
Teaching Experience yes Probably Yes Probably No	<b>6000</b>	100	150	27 27 0	27 0 0	75 25 0	2 2 2 6 9	90	133 12 2 0	18 4 0
College Degree Yes Probably Yes Probably No No	9-100	886 114 00	67 7 7 0	8000	32 0 0	88 11 0 0	75 10 2 1	122	120 22 4	15
Post-Degree Study Yes Probably Yes Probably No No	малл	29 14 14	17 8 0	77 14 9	25 11 0	67 30 0	314	61 35 2	108	76 21 5
Additional Duties Yes Probably Yes Probably No No	r	100	1001	0.4 0.30 ru	21 10 10 6	27 27 16 0	0.00 € 8 € 4	32	20 A B C C	29 62 0
Critical Personnel Shortages Yes Probably Yes Probably No No	4.000	7.84 0.00	10 10 0	4 4 4 0	115	46 49 11 0	8 E E E E	34 17 11	52 55 30	23.7
Special Populations Yes Probably Yes Probably No No	2844	9 K 4 4	<b>4</b> 1191	18 50 57 5	E1 101	27.55	33 29 17 9	38 33 10	23 139 14	29 27 10

TABLE XXIII -- Continued

	Superintendents	dents	Board	ird	PTA Presidents	A dents	Princ	Principals	Teac	Teachers
	Z		z	æ	z	<b>8</b>	z		Z	-
Class Enrollment									i	
Yes	2	59	7	5	10	27	7	27	26	æ :
Probably Yes	~	14		39	7	36	56	<u>۾</u>	4	
Probably No	m -	43	13	90	٦0 ٣	23 8	27	31	10	7 7
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Student Achievement	•	;			:	;	-	-	,	9
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Probably Yes		• ·	11	20	00)	22	97	7	÷ :	B 9
Probably No	<b>-</b>	22	σ-	<b>.</b>	10	58	30	4.6	4	35
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Teacher Job Performance										
Yes	m	<b>6</b>	15	Ľ	24	65	40	46	53	38
		71	4	61	=	30	<b>58</b>	32	23	8
Probably No	m	₹	N ·	10	<b>~</b>	m)	12	14	77	9
No	•	<del>.</del>	<u> </u>	o 	-	<b>-</b> ,	~	20	77	•
Military Service										
Yes	~	14	0	0	~	<b>a</b>	17	19	15	10
Probably Yes	-	7	œ	36	٠	16	20	23	13	13
Probably No	27	29	œ	36	13	35	75	25	7	30
ON	m	m T	φ	27	15	<b>4</b> 1	53	33	67	4
Previous Business										
Experience										
Yes	٥	0	*	61	<b>a</b>	22	12	7	52	17
	m	~	7.	67	*	38	40	40	52	9
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TABLE XXIV

RAW DATA OBTAINED FROM SECTIONS I AND II ON QUESTIONNAIKE BY DEMOGRAPHIC DATA

			ļ	Sex				ď	Race	į		.E.O.S.	8 S	Owner Distr	er in istrict	o eid	A PI	c - 1	in Schools
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Should There Be	Yes	105	181	197	85 15	66 15	82 18	Ĵ.	83	191 35	84 16	219	17	81 15	84 16	122	85 15	180	83 17
Could There Be	Yes	97	75	189	18	15	82	4.20	15	174	78	213	81	72 23	76 24	116 28	81 19	170	21
Teaching Experience Yes Probably Yes Probably No No			20.00	169 25 0	886 11 0	62	400	1,00	8 0 0 0	158 28	83 15 1	187 26 3	986	27.10	98.10	102 16 2	40.7 40.4	160 17 2	100
College Degree Yes Probably Yes Probably No No		11 2 5	11 02	166 27 3	85 14 0	5.5	98 7 7 7	36 4 2 1	42,10.0	157 29 4	83 15 2 0	181 29 20 20	83 10 10 10	5000	86 11 0	16 17 29 27 29 27	133	156 22 2 2 0	87 12 1
Post-Degree Study Yes Probably Yes Probably No No		3.25	31.25	142 46 7	227	50 15	76 23 0	6220	26. 28.20 0.00	128 50 10	67 26 2	148 58 9	644	5000	255	36.2	2 6 4 2	129 42 7	22 4 4 4 1
Additional Buties Yes Probably Yes Probably No No		24.2	31	121 58 14	30 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	# T E E	200	12 4 0	767	117 61 11	61 32 6	133 67 14	31 7 7 2 2	53 44	28 28 1	76 35 1	29	55	62 31 2
Critical Personnel Shortages Yes Probably Yes Probably No No		04 22 6	3.6	72 882 29	37 42 15	27 26 10 10	4.6 2.0 2.0 3.0	159	46.47	64 78 35	33 41 7	90 39 10	36 1.8	31 28 12 10	36 135 125	44 63 7	ы 4-н осы 2	68 33 13	37 37 18 7
Special Populations Yes Probably Yes Probably No No		32 28 28 28	30 37 37 32	44 44 44 44	73.83	3.2 2.2 3.2 3.2	252 26 18	13	4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	25.7	20 41 26 11	70 82 49 18	4 8 4 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	222	30 30 10	37 44 35 6	28.00	200	32 35 21 11

TABLE XXIV -- Continued

Male   Female   Black   Hispanic   White	Sex		Ra	Race			Home School	U	Owner in District	ر د ہے	Dist	Children stricts'	벁성	18
Be	Femal	Black	Hisp	anic	Whit	re Fe	Yes		No		Уe	20	No	
ent 129 28 65 33 22 33 17 41 53 28 63 33 18 27 41 12 29 63 33 28 73 38 27 41 12 29 63 33 31 20 10 24 57 30 30 12 12 12 12 12 12 12 12 12 12 12 12 12	z	_	z	æ	Z	*	z	æ.	z	•	×	<b>*</b>	2:	<b>3</b>
ent.  12	u u	_	,	3		e	79	ş		3.5	3.3	7.6	19	75
## 12   13   45   23   13   20   10   24   57   30    ## 26   25   14   38   20   14   21   12   29   25   13    ## 26   25   60   31   15   23   14   34   71   38    ## 23   22   37   19   17   26   6   15   37   20    ## 23   22   37   19   17   26   6   15   37   20    ## 23   22   18   10   7   11   8   19   25   14    ## 23   22   31   16   16   24   6   14   32    ## 23   22   31   16   16   24   6   14   32    ## 24   25   25   24   25   24   35    ## 25   25   25   25   25   25    ## 26   25   63   25   25   25   25    ## 27   20   28   14   15   23   24   35    ## 26   25   25   25   25   25   25    ## 27   20   28   25   25   25    ## 28   25   25   25   25    ## 29   21   25   25    ## 21   20   28   25   25   25   25    ## 21   20   26   25   25   25    ## 25   25   25   25   25   25    ## 26   25   25   25   25   25    ## 27   20   25   25   25    ## 27   20   25   25   25    ## 27   20   25   25   25    ## 27   20   25   25    ## 27   20   25   25    ## 27   20   25    ## 28   25    ## 29   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20    ## 20   20   20    ## 20   20   20    ## 20   20   20    ## 20   20    ## 20   20   20    ## 20   20    ## 20   20    ## 20   2	5.5		17	29	16	33	75	35	22	3.5	38	53	67	1.5
ent.  15  14  38  20  14  21  12  29  25  13   26  25  60  31  20  30  9  22  57  30   23  22  37  19  17  26  6  15  37  20   23  37  19  17  26  6  15  37  20   24  92  48  25  39  17  41  56  30   25  35  14  77  11  2  56  30   26  35  25  39  17  41  56  30   27  18  17  18  9  15  25  39  17  41  56  30   28  25  63  32  16  16  24  6  14  32  17   28  26  27  31  16  16  24  6  14  32  17   29  20  20  20  20  20  20  20  20  20	45	~ =	2.	**.	53	22	62	78	<b>8</b> 8	77	40	, W	36	25
B 26 25 60 31 20 30 9 22 57 30 20 25 13 20 39 60 31 15 23 14 71 38 30 30 39 52 25 73 30 30 39 60 31 15 23 14 71 38 30 30 30 30 60 31 15 25 61 15 37 20 30 30 30 30 30 30 30 30 30 30 30 30 30	 -		1		·····			,	)	·			+	<u>;</u>
26         25         60         31         20         30         9         22         57         30           Drmance         39         60         31         15         23         14         71         38           Drmance         43         42         92         48         25         39         15         37         20           32         30         66         35         25         39         17         41         56         30         18           5         23         22         18         10         7         11         2         14         56         30         16         30         17         41         56         30         18         18         17         41         82         14         18         18         17         11         2         5         11         6         30         17         41         82         43         17         41         82         17         18         30         17         41         82         43         43         43         43         43         43         43         43         43         43         44         46         46 </td <td>38 20</td> <td></td> <td>12</td> <td>29</td> <td>25</td> <td>13</td> <td>38</td> <td>17</td> <td>1.5</td> <td>1.9</td> <td>22</td> <td>19</td> <td>31</td> <td>11</td>	38 20		12	29	25	13	38	17	1.5	1.9	22	19	31	11
Cumance 43 42 92 48 25 39 15 16 94 51 1	60 31	_	<u>ه</u> ج	22	55	2,5	6 4	32	2.5	43	2.0	29	50	29
6     43     42     92     48     25     39     15     36     94     51     1       8     23     30     66     35     25     39     17     41     56     30       8     23     22     18     10     7     11     8     19     25     14       1     18     17     18     9     15     23     6     14     32     17     6       8     23     22     31     16     16     24     6     14     32     17     41     82     43       8     21     20     28     14     15     23     9     21     25     13       8     45     42     79     41     24     36     18     43     82     43       8     26     25     49     25     14     21     10     24     49     26	37 19	_	1 40	12	37	20	4	50	16	50	22	19	8	::2
43     42     92     48     25     39     15     36     94     51     1       32     30     66     35     25     39     17     36     30     56     30       6     6     14     7     11     2     5     11     6       18     17     18     9     15     23     5     12     16       23     22     31     16     16     24     6     14     32     17       26     25     63     32     15     23     14     33     60     32       38     36     34     30     17     41     82     43       45     42     79     41     24     36     18     43     82     43       26     25     49     25     14     21     10     24     49     26					_	- , <del></del>								
32     30     56     35     25     39     17     18     17     18     19     25     30       6     6     6     14     7     7     11     25     30     14       18     17     18     9     15     23     5     12     16     9       23     22     31     16     16     24     6     14     32     17       26     25     63     32     15     23     14     33     60     32       38     36     32     15     23     14     33     60     32       45     42     79     41     15     23     9     21     25     13       45     42     79     41     24     36     18     43     82     43       26     25     49     25     14     21     10     24     49     26	92	ın ı	515	9:	8	5.5	901	20	53	9,	62	23	2:	42
6 6 14 7 7 11 2 5 11 6 2 1 1 6 2 1 1 1 6 2 1 1 1 6 1 1 1 1	90		` B	7 6	2 2	3.0	25.	22	2 5	e 61	15	10	26	15
18 17 18 9 15 23 5 12 16 9 12 23 22 31 16 16 24 6 14 32 17 18 36 32 15 23 14 33 60 32 36 33 43 20 30 17 41 82 43 45 42 79 41 24 36 18 43 82 43 26 25 49 25 14 21 10 24 49 26	   <del> </del>		7		1		13	9	<b>~</b>	σ.	*	m	16	6
1ly Yes 2 2 1 1 16 16 24 6 14 52 17 17 No. 26 25 63 32 15 23 14 33 60 32 17 18 18 18 18 18 18 18 18 18 18 18 18 18	~ <u>-</u>		ď	12			90	ĩ	4	α		9	24	=
1y No     26     25     63     32     15     23     14     33     60     32       1siness     21     20     83     43     20     30     17     41     82     43       1siness     21     20     28     14     15     23     9     21     25     13       1y Yes     45     42     79     41     24     36     18     43     82     43       1y No     26     25     49     25     14     21     10     24     49     26	31 16		·φ	14	32	17	; =	202		13.	55	8 8 3	33	18
Linesa 21 20 28 14 15 23 9 21 25 13 13 Yes 45 42 79 41 24 36 18 43 82 43 11 No 26 25 49 25 14 21 10 24 49 26	63 32 83 43	20	7.	£ £	85 87	2 <del>2</del>	83	37	39	£ 4	6 4 7		7 C	<b>7 8 7 1</b>
1) Yes 45 25 79 41 24 36 18 43 82 43 11 No. 26 25 49 25 14 21 10 24 49 26 26	: 	-				<del></del>								
45 42 79 41 24 35 18 43 82 43 42 25 49 25 14 21 10 24 49 26	26		•	1.6	7.		3.0	3.6	•	=	22	8.	2.2	5
26 25 49 25 14 21 10 24 49 26	79 41			4 5	28	; <del>C</del>	68	4.5	35,	4	, A	4.5	20	36
	49 25			24	65	56	<b>4</b> .	£ 5	56	33	27	23	8 .	27
13 38 20 13 20 5 12 33 18	38 20		'n	12	£.	8	0	6	07	 ~	_ <del>-</del>	•	Ť	â

TABLE XXV RAW DATA OBTAINED FROM SECTION III(B) ON QUESTIONNAIRE BY SCHOOL DISTRICT

	<u> </u>	Dallac	, i	Howaton		Austin	~ ¥	Fort	<b>.</b>	San	85	Corpus	81	El Paso		Ysleta
Factor	z	\$ Avg	z	\$ Avg	z	\$ Avg	z	\$ Avg	Z	\$ Avg	N	\$ Avg	z	\$ Avg	z	\$ Avg
Master's Degree	09	958	8	1,129	52	922	33	992	26	1,000	18	972	23	1,032	27	1,146
Doctor's Degree	29	1,669	28	1,677	7.8	1,188	32	1,297	33	1,661	16	1,094	33	1,034	56	1,567
1-15 Credits Beyond Degree	63	35.7	5.9	483	59	319	33	333	31	346	17	500	23	380	28	366
16-30 Credits Beyond Degree	63	240	sa sa	647	88	464	33	538	8	525	17	632	23	522	28	598
Additional Duties	59	347	09	458	89	357	27	389	30	358	11	200	20	438	24	302
Personnel Shortages	55	373	09	513	58	362	8	525	30	458	51	400	23	381	27	371
Teaching Special Populations	09	367	09	529	27	324	33	470	32	461	15	400	23	424	25	240
Class Enrollment	85	237	09	433	2.7	222	Е -	331	32	273	18	347	22	295	25	310
Teaching LOW Achievement Students	62	315	- 61	414	29	198	32	304	32	234	8	319	23	283	26	250
Teaching High Achievement Students	62	145	19	299	29	103	33	242	32	212	18	222	23	174	56	212
Job Performance	59	466	61	520	28	34.8	32	553	33	386	18	403	21	286	25	350
										-						<u> </u>

TABLE XXVI RAW DATA OBTAINED FROM SECTION III(C) ON QUESTIONNAIRE BY SCHOOL DISTRICT

	st.	<b>,</b>		48
	Ysleta	z		15
	081	-		50
	El Paso	z		12
	Corpus	-		38
	Corp	z		30
	San	-		64 36
	Sa	z		21
	Fort	200		54
	, and	z		15
	5	1		43
	0114	z		13
i	no se non	10.01		32 68
	P	2		19
		4100		5.0
		Z	-	32
				Two or More Increments Yes No

TABLE XXVII

RAW DATA OBTAINED FROM SECTION III(B) ON QUESTIONNAIRE BY POSITION

	Superin	Superintendents	Board	Board Members	PTA	PTA Members	Prin	Principals	Tea	Teachers
Factor	z	\$ Avg	z	\$ Avg	z	\$ Avg	2	\$ Avg	z	\$ Avg
Master's Degree	,	1,142	15	006	31	968	8	1,033	142	1,053
Doctor's Degree	۲	1,000	14	840	30	943	83	1,100	138	1,198
1-15 Credits Beyond Degree	7	771	18	195	32	326	83	408	143	423
16-30 Credits Beyond Degree	7	285	17	278	31	458	83	565	142	613
Additional Duties	ъn	400	1.4	268	11	300	8	390	132	425
Personnel Shortages	^	605	12	415	33	475	82	365	139	450
Teaching Special Populations	<b>r</b> -	771	15	200	32	508	89	443	136	430
Class Enrollment	7	20	16	4.5	33	303	83	268	135	385
Teaching Low Achievement Students	٠	35	1.7	158	32	410	85	535	142	<b>46</b> 8
Teaching High Achievement Students	7	35	17	. 58 2	32	273	98	205	142	220
Job Performance	7	355	36	4 38	32	570	83 44	455	338	400

TABLE XXVIII

RAW DATA OBTAINED FROM SECTION III(C) ON QUESTIONNAIRE BY POSITION

Teachers	•	39
	Z	56
Principals	<b></b>	53
Pri	z	45
PTA Members	3	49 51
PTA	z	17
Board Members		55 45
Board	Ż	11.
perintendents		67 33
Superin	z	<b>3</b> 6
		Two or More Increments Yes No

TABLE XXIX

RAW DATA OBTAINED FROM SECTION III (B) ON QUESTIONNAIRE BY DEMOGRAPHIC DATA

						Home Owner in	er in	Children in	n in
	Sex	×		Race		School District	strict	Districts Schools	Schools
	Male	Female	Black	Hispanic	White	Xes	No	Yes	<u>ي</u>
Factor	\$ Avg	\$ Avg	\$ Avg	\$ Avg	\$ Avg	\$ Avg	\$ Avg	\$ Avg	\$ Avg
Master's Degree	1,025	1,023	1,015	886	1,025	1,003	1,078	983	1,050
Doctor's Degree	1,090	1,130	1,125	1,288	1,065	1,065	1,248	1,068	1,145
1-15 Credits Beyond Degree	360	403	438	373	368	395	373	340	418
16-30 Credits Beyond Degree	498	865	619	095	535	550	598	064	809
Additional Duties	433	370	405	403	378	388	410	343	423
Personnel Shortages	395	448	483	475	393	438	408	433	430
Teaching Special Populations	380	450	528	009	340	438	395	403	440
Class Enrollment	270	335	393	383	260	295	350	335	330
Teaching Low Achievement Students	305	305	433	398	233	313	283	288	318
Teaching High Achievement Students	175	198	313	250	150	213	185	205	208
Job Performance	445	433	453	373	448	450	<b>413</b>	460	425

TABLE XXX

RAW DATA OBTAINED FROM SECTION III(C) ON QUESTIONNAIRE BY DEMOGRAPHIC DATA

				Í	١					Ī			ĺ					
											HOIL	9	er i		Children in	ildre	n in	
		Se	×	_			5	Race			School District Districts Schools	ıl Di	stri	ot C	)istr	icts	Sch	0
	Ha	o o	Male   Female	Je.	Bla	Black (	HISE	12	White	9	Yes	:	No	-	Ye	-	ž	
	z	30	z	350	z	de	z	gar.	z	фP	#  Z.	qip.	z	o#	Z	-	2 X	
Two or More Increments Yes No	46	45 55	46 45 87 46 32 51 55 55 102 54 31 49	46 54	32	51 49	23 5	44	78 105	43	78 43 105 50 28 35 105 57 104 50 51 65	50	2.8 5.1	35	54 47 60 53	53	79 45 97 55	តិស

TABLE XXXI RAW DATA OBTAINED FROM SECTION IV(A) ON QUESTIONNAIRE BY SCHOOL DISTRICT

•					į				Ì		Ì				j		
					<b>†</b>			Fort	۳	San	_	Corpus					
		Dallas	or or	Houston	ton	Austin	in	Worth		Antonio	oru	Christi	ti	El Pa	Paso	Yaleta	
		z		z	*	z	20	z	<b></b>	z		z	-	z	*	Z .	ه د
	70.0	3.6	9	3,6	ű	,	,		24	12	5.2	7	20	5	26	œ	E
orest patthtenings	S O	27	5.5	23	14	18	72	22	92	11	8	œ	9	7	7	16	67
Teacher Sesta	Yes	10	-51	1.7	35	5	20	m	10	<b>a</b>	35	~	40	Ŋ	26	'n	21
	No.	4.3	83	32	9	20	08	3.6	90	15	9	9	09	7	4.	67	79
Gain in Learning	Yes	2.7	51	35	11	*	S S	3.8	62	2.0	8.7	<b>30</b>	80		42	53	54
	No.	26	4.9	1.4	59	=	4	1	38	_	<u>.</u>	Ωŧ	20			Ξ.	9
Classroom	Yes	37	0,2	33	67	20	0.3	20	69	17	74	<i>-</i> -	2:	12	63	19	67
Management	No	16	30	16	£	5	50	6	Ξ	vo.	56	m -	36		<del>-</del> -	^	17
Teaching Techniques	Yes	27	51	35	ı,	20	90	18	62	14	61	200	90	5	89	14	28
	No.	26	49	*	53	'n	20	:	æ	5	£	~	202	۵	77	<b>-</b>	7
Participation in	Yes	2.7	51	26	53	16	64	10	35	13	95	9	60	7	33	18	75
Projects	No	26	4.9	53	<b>4</b>	σ	36	67	93	2	4	4	<del>2</del>	2	 9	۰	52
Commendation	Yes	30	5.7	32	65	16	64	18	62	15	65	2	20	13	89	17	71
	No	23	\$	17	\$	<u>.</u>	36	77	38	2	38	'n	0.5	9	35		53
Drofeesional	4	6	95	12	24		32	~	24	9	26	~	9	~	16	9	25
Activities	No	<u> </u>	4	7.5	3,6	11	89	22	36	17	74	۲	5	91	84	8	75
Adherence to	Yes	24		23	4.7	12	48	14	8	70	4	~	20	7	37	50	83
Policy	No	29	55	26	53		25	15	22	13	26	~	e e	12	£9	<del>-</del>	-

TABLE XXXII

RAM DATA OBTAINED FROM SECTION IV(B) ON QUESTIONNAIRE BY SCHOOL DISTRICT

		Dal	las	Houston	ton	Austin	tin	Fort Worth	Fort	San Antonio	nio —	Corpus	us eti	E1 P	Paso	Ysleta	ta
		Z	N G	z	<b>"</b>	z	æ	z	-	z	-	z	-	Z	a#	z	*
Principals	Yes	40	76	4	8	23	95	24	8.3	119	83	6	06	14	7	21	88
•	No	77	24	000	16	7	æ	'n	17	₹	17	~	9	ι.	98	~	12
Superintendents	Yes	7- 9	2.6	12	24	23	1.6 8.4	23	79	7	88	~ &	20	2 17	040	5	21
Parents	Yes	£ 5	24	16	33	91	36	118	38	7	30	70 44	0.4	17	10	24	100
Citizens	Yes	51	96	<b>4</b> 3	12	25	100	25	14 86	21	91	10	100	18	95	23	<b>4</b> 96
Students	Yes	Q. 44	17	35	29	1,7	32 68	507	31	17	26	w.	30	15	21	19	21 79
Consultants	Yes	30	57	27	<b>ស.</b> សស	19	76	21	72 28	18	78	(n in	50	16	84 16	12	50
Peers	Yes No	3.5	36	19 30	39	1,7	32	14	52	15	35	4.0	60	11	42 50	11	5.46 5.4
Self	Yes	27	51 49	21	53	17	32	1181	38	16	5 8	νο <del>-4</del>	99	61	53	36	33
							7		7	_	_	7	٦				_

TABLE XXXIII

RAW DATA OBTAINED FROM SECTION IV(C) ON QUESTIONNAIRE BY SCHOOL DISTRICT

		- E	86	HO H	Dallas Houston Austin	Aug	4	Fort	ţţ.	San Corpus Antonio Christi	n Oio	Corp	19 Sti	E1 P	El Paso	Ysleta	in Th
		z	-	z	<b>a</b>	z	æ	z	æ	z	-	z	-	z	<b>3</b>	2	٣
Weight	Yes	32	32 97 23 1 3 6	23	79 21	16	89	7 T	89	17 94 1 6	94		7 100 15 100 0 0 0 0	15	100	14 1	6.

TABLE XXXIV
RAW DATA OBTAINED FROM SECTION IV(A) ON QUESTIONNAIRE BY POSITION

				8	Board	PTA	× 7		1	4000	3
		Superintendents N %	endents	N	Members	Presi.	N &	N N	N 8	N	n 1
		,	2		;	,	6.3	3.5		1,	ž
Standardized Tests	res No	<b>₹</b> →	202	12	69	14	4.0	÷÷	63	69	65
Teacher Tests	Yes	0	0	ω,	26	10	29	6.5	19	29	27
	No No	'n	001	4	4	52	7.	55	<b>.</b>		?
Gain in Learning	Yes	₩	80 20	15	79	. 56 9	74 26	42 26	62 38	57	υ 4.6
Classroom Management	Yes	F 64	60	12	37	24 11	69	45	34	91 25	76
Teaching Techniques	Yes	₹	80	12	63	21 14	60 40	2 4 4 4	355	37	35
Participation in Projects	Yes		20 80	11 8	58 42	22 13	63	26	38 62	63	59
Commendation	Yes	4	80	11 8 8	58	20 15	57	22	68 32	66 40	38
Professional Activities	Yes	0.5	100	15	21 79	12	34	32 56	18	36	34
Adherence to Policy	Yes	ИM	60	11	42 58	17	44 70 47 34	35	51	5. 6.	5.4 4.6

TABLE XXXV
RAW DATA OBTAINED FROM SECTION IV(B) ON QUESTIONNAIRE BY POSITION

				, m	Board	Da -	PTA				1
		Superintendents N *	endents	Z We	Members N *	Presidents N %	dents	N .	t Pat s	N Cachera	0 0
	2		5	-	7.4	2.2	7.0	19	0.6	8.6	. 2
risicipata	N OR	) (I	2 4	'n	56	- 00	23		10	20	13
Superintendents	Yes	<b>→ </b> ₹	20 80	12	37 63	12 23	9.4	12	18 82	13	12 88
Parents	Yes	~ 4	20	13	32 68	18 17	51 4.9	14 54	21 79	25 81	24
Citízens	Yes	0.6	100	17	0 T O O O O O O O O O O O O O O O O O O	332	9 4	67	1 99	11 95	10
Students	Yes	2 m	40 60	B 1.1	42 58	28	20 80	17 51	25 75	24 82	23
Consultants	Yes	4.4	80	12	63	20 15	57	53 15	78 22	60	57 43
Peers	Yea	<b>⊣</b> •	20	12	37	119	51	2.5 2.5 3.0	34	63	59
Self	Yes No	26	6.0	10	53	10 25	29	32	53	40	62 66
		]									

TABLE XXXVI
RAW DATA OBTAINED FROM SECTION IV(C) ON QUESTIONNAIRE BY POSITION

ers		39
Teachers	2	5.8
ipals		88 12
Principals	N	44 5
PTA Presidents		96
Presid	z	23 1
Board Members	صو	86 14
Mer Mer	z	12
endents	مو	100
Superintendents	Z	40
		Yes
		Weight

TABLE XXXVII RAW DATA OBTAINED PROM SECTION IV(A) ON QUESTIONNAIRE BY DEMOGRAPHIC DATA

			Sex				,	Race	نة			# 50	_ ~	Owner in District	in ciet	Ct	Children Districts'	i S	ols
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		z		z	•	Z		Z	*	z	<b></b>	z	æ	z		2	<b></b>	z	<b></b>
Standardized Tests	Yes	32	43 57	96 29	19 6£	24	48	15 17	47 53	55 95	36 64	76 98	£ 50	17	29 71	47	53	47	35
Teacher Tests	Yes	1.7 5.8	22	40 118	25 75	23	582	23.9	28	26 124	1.7 83	1133	24 76	16	28 72	19 81	19	96	29 71
Gain in Learning	Yes	46 29	38	09 86	62 38	35	30	E 00	72 28	85 65	56	113	35	30 28	52	34	34	97	41
Classroom Management	Yes No	51 24	68 32	114	72 28	33	346	20	363	111	75	117	68 32	108	83 17	34	33	35	75
<b>Tea</b> ching <b>Techniques</b>	Yes	2.6	34	101	36	31	38	21	34	53	64 36	113	65 35	37	36	39	39	90	93
Participation in Projects	Yes	29	38	46	41	25 25	500	15	4 c	6.8	5.5	91	53	31 27	53	53	54	70	53
Commendation	Yes	49 26	34	9.6	38	31	62 38	17	5.7	52	35	109	62 38	38	34	56	43	43	32
Professional Activities	Yes	13	2.7 83	51	32	14	28	5 ę	13 81	107	29	47	27	17 41	29 71	28 72	28	36	27 73
Adherence to Policy	Xes No	32	42 58	73	4.0	23	54	14	5.6 4.6	75	50	03.00 72.00	49 51	32 26	พ. <b>ส.</b> พ. พ.	53	5.2 5.2	70	53

TABLE XXXVIII

RAW DATA OBTAINED FROM SECTION IV(8) ON QUESTIONNAIRE BY DEMOGRAPHIC DATA

												ř	Home Owner	ner in		5	Children	27 1	
			Sex					89	Race			SC	School District	istri	t	Districts'	icts,	Sch	018
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	<del></del>	z	<b>37</b>	z		z	-	z	-	Z.		z		z		z	بد	z	40
Principals	Yes	62	83	129	82	38	7.6	27	4.	125	84	143	83	47	81	80	9.1	111	8
	o <sub>N</sub>	13	17	53	12	12	24	'n	16	25	16	₹	11	=	61	13	19	23	16
Superintendents	Yes	17	22	28 130	3.8 82 82	13	26 74	27	16	27	18 82	3.99	23	52	10	75	24 76	113	3.6 B4
Parents	X Yes	24 51	31	118	25	17	34	23	28 72	112	26 75	52 122	30	11	19	36	36	28 106	21 79
Citizens	Yes	7.2	36	12 .	85 8	24 0.00	90	29	9 H	142	25	111	9.6 4.0	កក្	91	92	93	125	93
Students	Yes	25 50	33	33	21 79	12 38	24	27	16 84	109	28	130	25 75	₽ <del>0</del> 4	24 76	27 72	27	103	23
Consultants	Yes	223	72 28	96	1967	158	38	25	78 22	92 5 B	61	113	35	36	62 38	61 38	62 38	46	35
Peers	Yes	28	37	63	60	12	24 76	10 22	31	69	5 4 6 5 4 6	601 109	38 62	32	55	43 56	57	48 86	36
Self	si o	¥.4	45 55	69	5.6 4.4	30	60	20.	37	72	52	988	50 50	36	62 38	47 52	48 53	36	57 43

TABLE XXXIX

RAW DATA OBTAINED FROM SECTION IV(C) ON QUESTIONNAIRE BY DEMOGRAPHIC DATA

														H				
	-										Home	Owne	ri i		Chil	dren	ū	Children in
		ŭ	×				Race	a)			Schoo	School District	trict	1	Istric	ts, 5	chool	
	N N	Mala	ā	P. B. B. B.	ŀ	Black	Ħ		White	e	Yes		Š		Yes	•	ž	
	z	_	z	<b>50</b>	!		z		z		z		z		Z		z	
Yes	46	85 15	95	94	94 23	84 16	23	96	46 8	92 B	92 105 93 8 8 7	w.	35	38	59 5 8	26.88	62 B	91
	-			]	1			1	1	1	ļ							

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