This is to certify that the

dissertation entitled

AN ANALYSIS OF THE FACTORS THAT INFLUENCE SUPERINTENDENTS' RECOMMENDATIONS FOR PROFESSIONAL-DEVELOPMENT PROGRAMS

presented by

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has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Administration and Curriculum

Major professor

Date October 17, 1983

AN ANALYSIS OF THE FACTORS THAT INFLUENCE SUPERINTENDENTS' RECOMMENDATIONS FOR PROFESSIONAL-DEVELOPMENT PROGRAMS

By

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum

1983

ABSTRACT

AN ANALYSIS OF THE FACTORS THAT INFLUENCE SUPERINTENDENTS' RECOMMENDATIONS FOR PROFESSIONAL-DEVELOPMENT PROGRAMS

By

Timothy R. Jenney

Teacher education does not end with completion of the certification process. Inservice activities continue to be a part of every teacher's professional development.

Superintendents recommend professional-development programs based on the information that is available to them in the daily operation of the school system. Many researchers, educators, and consultants have devoted vast amounts of time, energy, and money to studying professional-development programs. The superintendent recommends the commitment to be made for particular programs, and more was to be learned about factors influencing recommendations for professional-development programs.

The Professional Development Survey was constructed, tested, and then mailed to all K-12 and intermediate public school superintendents in Michigan. The superintendents provided information regarding their year of birth, the number of years of teaching experience, the number of years as superintendent, the number of years as superintendent in the present district, the highest graduate degree completed, and the university from which their most recent graduate

degree had been attained. They also responded to the extent that the 34 factors listed in the survey influenced their recommendations for professional-development programs.

A variety of descriptive and inferential techniques were employed to analyze the data. Descriptive statistics included frequencies, means, and percentages. Inferential statistical tests were t-tests performed with a .05 alpha level.

As a result of the data analysis, the researcher found that

1. There was a difference among superintendents with respect to the factors that influenced their recommendation.

2. There was no significant difference among superintendents, based on age, in regard to the factors that influenced their recommendation.

3. There was a significant difference among superintendents, based on their graduate education, in regard to the factors that influenced their recommendation.

4. There was no significant difference among superintendents, based on their experience as a superintendent, in regard to the factors that influenced their recommendation.

5. There was a significant difference among superintendents, based on their length of experience in the present district, in regard to the factors that influenced their recommendation.

6. There was a significant difference among superintendents, based on their years of teaching experience, in regard to the factors that influenced their recommendation.

To Becki, for without her total dedication, sacrifice, and belief in me, this would not have transpired. To my children--Theresa, Tim, and Jeff--for their enduring an experience not normally expected of children. And to my parents, for their unwavering and unquestionable support.

My appreciation is also extended to Dr. Richard Featherstone for his guidance and ability to pave the way. And to committee members Dr. Banks Bradley, Dr. James McKee, and Dr. Louis Romano. Their cooperation and assistance were outstanding.

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CHAPTER I

THE PROBLEM

Introduction

Teacher education does not end with completion of the certification process or with the individual teacher deciding not to continue with additional formal course/degree work. Inservice activities continue to be a part of every teacher's professional development. In fact, professional-growth activities are considered essential in maintaining teachers' skills (Barth, 1979). Furthermore, Dillon (1978) stated that because

> 85% or more of the average district's operating budget is spent on staff salaries . . . , staff development designed to maintain or increase the efficiency and effectiveness of teachers, administrators, and classified personnel is a kind of insurance on that investment in salaries. (p. 4)

The present study was undertaken to investigate the factors that might influence superintendents to recommend expenditures for professional-growth activities. One important influencing factor is the current financial crisis being faced by educational institutions across the country. Because of declining enrollments and reductions in revenues, many districts have had to reduce the size of their teaching staffs. Such staff reductions have brought about considerable changes in the responsibilities of the remaining teachers. McLaughlin and Berman (1977) reported that teachers frequently have larger classes and are often assigned classes that previously had

been assumed by support personnel, such as art, music, and physical education. Staff reductions have also resulted in the reassignment of teachers to positions for which they have had little or no training. Thus the conditions resulting from declining enrollments and reductions in revenues may enhance the need for teacher inservice and other professional-growth activities.

Another important factor that might influence superintendents to recommend professional-development activities is the increased mean age of currently employed teachers. The mean age has increased because of the limited number of teaching positions available for young beginning teachers. There might also be an increased amount of time since formal training for the older, currently employed teachers.

The financial crisis that has contributed to the need for inservice training has also jeopardized the continuation and improvement of inservice programs. Saracen (1971) stated that the amount of funding and upgrading of teaching skills depends largely on the school board and administration's viewpoint regarding the relationship between staff professional-growth activities and the quality of the students' educational experiences.

The superintendent is responsible for recommending to the board of education the most productive use of available funds. Superintendents recommend professional-development programs based on the information that is available to them in the daily operation of the school system. Some of the factors that influence such recommendations are school district financial records, enrollment

statistics, faculty profiles, advice and input from constituents, students' test results, and knowledge gained from the professional literature and college courses. Inservice programs are developed, funded, and implemented to the extent that the superintendent is influenced by these factors.

Purpose and Importance of the Study

The purpose of the present study was to determine the amount of influence and interrelatedness of selected factors on superintendents' decisions to recommend expenditures for professional-development programs. In addition, the researcher sought to establish whether a superintendent's age, graduate education, experience as a superintendent, longevity in the present district, and/or length of teaching experience affected the recommendation of professional-development programs.

The investigation is important for at least three reasons.

1. Many researchers, educators, and consultants have devoted vast amounts of time, energy, and money to studying how teachers and principals deal with professional-development programs. Delivery systems and program effectiveness are under scrutiny. However, little time and money have been invested in studying what factors influence superintendents in their recommendation of professional-development programs. Because the superintendent recommends the commitment to be made for particular programs, more should be learned about the factors that influence these recommendations.

2. A recognition of the factors that affect the superintendent's recommendation for professional-development programs may increase the possibility of inservice education being considered an integral part of the school district's operation.

3. As professional-development programs become an integral part of the school-district operation, teacher productivity and quality may be improved because of increased motivation and reduced anxiety.

Research Questions and Hypotheses

Professional staff-development programs are undertaken in school districts partially because of the superintendent's leadership and his/her recommendation to invest district capital for such purposes (Farquhar, 1978). One would expect that certain factors that are common to every school district would influence superintendents with regard to setting priorities for professional-development programs.

In addition, superintendents with similar age, education, experience as a superintendent, longevity in the present district, and length of teaching experience would be expected to be influenced by essentially the same factors. The superintendents' responses to those factors may help in understanding their attitudes toward and recommendations for professional staff-development programs.

Research Questions

The investigator sought to answer the following research questions in the present study.

1. Do superintendents differ in regard to the factors that influence their recommendation for professional-development programs?

2. Based on a superintendent's age, do the factors that influence the recommendation for professional-development programs differ among superintendents?

3. Based on a superintendent's graduate education, do the factors that influence the recommendation for professional-development programs differ among superintendents?

4. Based on a superintendent's experience as a superintendent, do the factors that influence the recommendation for professional-development programs differ among superintendents?

5. Based on a superintendent's length of experience in the present district, do the factors that influence the recommendation for professional-development programs differ among superintendents?

6. Based on a superintendent's length of teaching experience, do the factors that influence the recommendation for professional-development programs differ among superintendents?

Research Hypotheses

From the research questions regarding the factors affecting superintendents' recommendation for professional-development programs, the following six research hypotheses, stated in the null form, were formulated for testing:

Ho 1: There will be no difference among superintendents in regard to the factors that influence their recommendation for professional-development programs.

Ho 2: There will be no significant difference among superintendents, based on age, in regard to the factors that influence their recommendation for professional-development programs.

Ho 3: There will be no significant difference among superintendents, based on graduate education, in regard to the factors that influence their recommendation for professional-development programs.

Ho 4: There will be no significant difference among superintendents, based on experience as a superintendent, in regard to the factors that influence their recommendation for professional-development programs.

Ho 5: There will be no significant difference among superintendents, based on length of experience in the present district, in regard to the factors that influence their recommendation for professional-development programs.

Ho 6: There will be no significant difference among superintendents, based on length of teaching experience, in regard to the factors that influence their recommendation for professional-development programs.

The Study Population

The population for the study comprised the superintendents of the 529 K-12 public school districts and 57 intermediate school districts in Michigan, as listed in Bulletin 1014, published by the Michigan State Board of Education (1981-82). The population and the sampling procedures used in the study are described more fully in Chapter III.

Generalizability of the Findings

Findings of this study should be generalized only to school districts in Michigan. It is reasonable to assume that differences in other states' public educational structure, funding sources, financial structures, and demographics would influence the

recommendations of superintendents in those states. Therefore, generalizing the results to superintendents in other states should be done with caution.

Another factor affecting the generalizability of the conclusions of this study is the manner in which the sample was drawn. The conclusions of this study apply only to the superintendents who completed and returned the questionnaire. A personal bias might have influenced whether a survey was completed and returned.

Definitions of Important Terms

The following terms are defined in the context in which they are used in this dissertation.

Decreased enrollment--a decrease in pupil membership to the extent that it seriously affects school-district revenues.

Delivery system--the method of providing professional-development programs.

District statistics--the financial data collected on a school system, which allow comparison for reporting purposes. The following statistics are presented in the annual 1014 Bulletin published by the Michigan State Board of Education and were included among the influential factors used in the survey developed for the present study: Total General Fund Expenditures per Pupil, State Aid Membership, S.E.V. Per State Aid Member, Total Operating Millage Rate, Debt Retirment, and Average Teacher Salary.

Increased enrollment--an increase in pupil membership to the extent that it seriously affects the revenues of the school system.

Overview

Chapter I included an introduction to the study, the purpose and importance of the investigation, research questions and hypotheses, and definitions of key terms used in the dissertation.

Chapter II contains a review of literature related to the study, a description of the important components of a comprehensive professional-development program, and the results of previous research on staff development.

An explanation of the study design and methodology may be found in Chapter III. Also included is a brief description of questions found in the survey instrument.

Results of the data analysis are contained in Chapter IV. A summary of the entire study, conclusions, and recommendations for further research are found in Chapter V.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter contains a review of literature and research in five areas related to the present study. Those areas are (1) the need for professional development, (2) professional-development studies, (3) the financial investment in professional development, (4) the role of the teacher and principal, and (5) the superintendent and staff development.

The Need for Professional Development

Johnson (1980) emphasized that continuing staff development is "recognized by all professions as a necessity for keeping practitioners abreast of new knowledge and developments in their field" (p. vii). In Michigan, this need has been intensified by societal, economic, and legislative demands made on school districts in recent years. The present situation requires a coordinated effort on the part of all components of the educational community and the profession to meet the challenge of the 1980s (Johnson, 1980).

Johnson listed 12 major forces that have affected American public schools in recent years:

1. The movement among minorities, women, and the handicapped for equal educational opportunity, bringing significant

changes in the student population and necessitating attendant changes in curriculum, instruction, facilities, and extracurricular activities;
2. Public distrust of government, generating cries for more efficient management of education and "greater productivity" from schools;
3. An economic slowdown, causing retrenchment in school spending;
4. The spread of social ills (drug abuse and pollution), prompting new school services and courses;
5. Violence in America, spawning violence in schools;
6. The explosion of knowledge, putting severe stress on educators to keep up with their fields;
7. Instructional technology, promising more individual attention to students but demanding changes in the roles and functions of educators;
8. Television, often influencing children negatively and competing (unnecessarily) with schools for children's time and attention;
9. Declining enrollments and a teacher surplus, contributing to more educated, more experienced, and more costly faculties with fewer external incentives for self-improvement;
10. The growth of teacher power, bringing assertions of the need for more involvement of teachers in matters affecting them;
11. Research and experience pointing to the importance of the teacher in curriculum reform and instructional improvements; and
12. The realization that four years of undergraduate preparation make only a beginning teacher. (p. ix)

In 1975, a change in the Education for All Handicapped Children Act (Public Law 94-142) was mandated. This change was part of the federal government's response to the campaign for the full participation of handicapped individuals in society. The law has been called the "most important piece of educational legislation in this country's history" (Corrigan, 1978, p. 10). However, a recent survey of nationally accredited teacher-training institutions revealed that even with mandated legislation and emphasis on mainstreaming handicapped children in the schools, regular classroom teachers lack preservice preparation to work with these children (Vacc, 1978, p. 42). Of 174 reporting institutions of higher education with elementary

education programs, only 34% required a special-education course. Of 175 institutions with secondary education programs, just 24% required such a course.

Many of the regular classroom teacher's inservice-education needs relative to Public Law 94-142 are shared by special-education teachers and supervisors, administrators, and instructional support personnel. Although school personnel may have had training and experience in working with handicapped children, the law has established new responsibilities and requires new work patterns.

Violence in America and vandalism in America's schools are fixtures of society (U.S. Congress, 1977). The Violent Schools--Safe Schools study commissioned by the U.S. Congress generated descriptive statistics on violence and vandalism in the schools. The following are examples of the findings of that study:

1. About 8% of the nation's schools (6,700) have a serious problem with crime. Secondary schools are more likely to have a serious problem than elementary schools.
2. About 2.4 million secondary school students (11%) have something stolen from them in a typical month. About 1.3% of the students (282,000) report being attacked in a month. Relatively few are injured seriously enough to need medical attention.
3. Among secondary school teachers, about 12% (130,000) have something stolen at school in a month's time. Some 5,200 are physically attacked, about 1,000 of whom are seriously enough injured to require medical attention. Around 6,000 have something taken from them by force, weapons, or threats.
4. Over 25% of all schools are subject to vandalism in a given month. The average cost of an act of vandalism is $80. Ten percent of schools are burglarized, at an average cost per burglary of $183. The annual cost of school crime is estimated to be around $200 million. Most offenses are committed by current students. (National Institute of Education, 1978, p. iii)

An investigation by the U.S. Senate Judiciary Committee dealt in detail with the kinds of teacher training needed to cope with school violence and vandalism. It was noted that discipline, violence, and vandalism are not often subjects of instruction in teacher-training programs (U.S. Congress, 1977). Thus it seems that inservice education would be an important strategy in helping to alleviate this school problem.

At one time, most of the substance of a field could be learned with some effort, when the slate and the book were the teacher's only aids, and when children passed evenings conversing with family, listening to stories, or studying for the next day's lesson. Such a time no longer exists (Postman, 1970). A knowledge explosion has occurred in the last 150 years and has increased most dramatically since World War II. Postman (1970) described the knowledge explosion:

> Imagine a clock face with 60 minutes on it. Let the clock stand for the time men have had access to writing systems. The clock would thus represent something like 3,000 years, and each minute on the clock, fifty years. On this scale, there were no significant communication or technological changes until about nine minutes ago. At that time, the printing press came into use in Western culture. About three minutes ago, the telegraph, photograph, and locomotive arrived. Two minutes ago: the telephone, rotary press, motion pictures, automobile, airplane, and radio. One minute ago, the talking picture. Television has appeared in the last ten seconds, the computer in the last five, and communication satellites in the last second. The laser beam appeared a fraction of a second ago. (p. 2)

Traditionally functioning as society's transmitters of learning, schools and teachers have been caught short by the explosion in knowledge. Most are still trying to dispense facts as if facts in today's world were immutable and condensable. The basic curriculum of the school has changed little in the last 50 years, despite the birth

of many new disciplines and problems in the larger world (Postman, 1970). As Mead (1970) stated, "Education has been built on accumulated past knowledge and experience. It must now include articulate ignorance of the emerging future combined with a determination to master the skills necessary to shape the future for the well-being of mankind" (p. 20). Professional-development programs can increase the capability of teachers to obtain more knowledge with which to pass on and cope with new, revitalized curriculum.

The teacher market is directly affected by growth and decline in the school-age population. The 1950s and 1960s were decades of substantial growth in the American population, largely because of the postwar baby boom. This growth was dramatically reflected in the school-age population, which grew from about 30.9 million pupils in 1950 to about 52.5 million in 1970--a 70% increase (National Center for Education Statistics, 1978). The population boom then began to wane, necessitating layoffs and reductions in teacher force. Such measures have tended to affect newer teachers and minorities because of their shorter tenure. Fewer beginning teachers and more early- and mid-career teachers are now employed (Wilken, 1978).

Having a more experienced professional staff carries a number of implications for inservice education. Educators have traditionally regarded new recruits as a major source of innovations and fresh ideas. Yet the number of new teachers has been shrinking. Professional development might provide the fresh ideas and innovations once supplied by early- and mid-career employees.

With an experienced professional staff, the old incentives for participation in inservice education--standard credentials, tenure, salary increments, and advanced degrees--are blunted. State departments of education and local school districts must resort to other means of securing teacher participation in inservice education (Johnson, 1980).

Another reason inservice education is receiving increased attention is the recent realization that four years of undergraduate preparation provides skills for a beginning teacher, not an accomplished one (Johnson, 1980). For decades, teacher educators focused their attention on raising the level of teacher preparation from the depths of normal-school standards (at one time, six weeks of preparation) to the current requirement of four years and a bachelor's degree (in some states, five years and a master's degree). Not until these standards were reached did the public become aware that some teaching knowledge and skills are better learned on the job and that others cannot be learned anywhere else (Howey, 1978).

In summary, professionals have always needed inservice education to keep up with developments in their fields. Now they also need such education to help them cope with social progress, economic disruption, demographic developments, and technological advances. An array of forces in these areas has compelled a new look at inservice education for school staffs after they have been functioning as full professionals (Johnson, 1980).

Professional-Development Studies

The Bing Foundation, under the direction of Les Birdsell, surveyed a number of operational staff-development programs. As a result of this survey, Birdsell enumerated the following requirements for staff development:

1. The organization and operation of the school should encourage staff to work together to improve the instructional process.
2. The principal, staff and parents should view staff development as a major component of instructional improvement.
3. The roles of school site personnel should contribute to staff development.
4. The resources of the school site should contribute to staff development.
5. Training activities should be designed to reflect individual and school needs.
6. The administrative and teaching staff should have a system for keeping abreast of the latest developments.
7. The administrative and teaching staff should continually monitor, evaluate, and revise the inservice programs and change processes at the school. (Cited in Oliver, 1977)

A National Inservice Teacher Education Study directed by Bruce Joyce for Stanford University considered staff development from two perspectives: what it is and what it should be. Some highlights of the study findings are as follows:

1. Many teachers are over age forty and they have a strong desire to remain in teaching. This suggests fewer and fewer new teachers will be coming into the system, especially in these days of declining enrollments and program reductions.
2. In response to a question asking, "How much inservice help do you receive?", it is interesting to note the diversity of responses. From the set of feedback, it appears there are a number of educators in California who receive plenty of staff development input while nearly an equal number of other educators suggest they receive too little help with too little quality.
3. Most teachers indicate they get most of their ideas and suggestions for improving classroom operations from other teachers--as opposed to administrators, supervisors, professors, others. At least at first glance, respondents indicated

they got little but desired more assistance from principals. Professors and central office personnel seemed to rank very poorly when "teacher help" was analyzed; apparently the farther away from the classroom the lower the teacher perceptions that help is available.

4. The survey revealed that well over half of the educators said they got themselves engaged in inservice activities to improve teaching performances--as opposed, say, to taking inservice for the purpose of advancing higher on the salary schedule. (Cited in Oliver, 1977)

A third project, the Rand Study, offered considerable insight into means for effective staff-development programs. The researchers examined the components of inservice programs and also analyzed the results of effective and ineffective efforts. Operational programs were studied within the regular context of the school day, and then it was determined how the inservice activity contributed to or detracted from the success of the school's goals and objectives. The major findings of this study were:

1. Local schools should define the staff development program through continuous school-level planning. Too often, according to the study, central office or other well-meaning agencies "laid on" outside designs which more often than not were not seen by those individuals as particularly relevant.
2. Commitment of appropriate time and energy by a majority of the staff was essential. The positive attitude of a critical mass of the staff helped assure continuation and follow-through.
3. Ongoing release time allowed staff to participate when the energy level is high. People can't be expected to put their best abilities into the staff development exercises at the close of a hard school day. There are a number of factors to consider with this issue, but time to contemplate, think, and relax is imperative. For example, many teachers feel guilty if they are away from their students for any appreciable length of time; too, parents and students aren't always excited about having teachers out of the classroom and a less talented substitute attempting to uphold expected instructional quality.
4. Joint governance in the development, implementation and evaluation of inservice programs. This point shouldn't come as a surprise to any of today's educators; people who are

> affected by decisions not only expect--they insist--to be involved in the decision-making process. (McLaughlin & Berman, 1977, p. 54)

The Rand Study also reported that schools generally had either no staff-development model or only a sketchy concept of one. The researchers pointed out that unsuccessful projects consistently relied on outside consultants, who made a one-time presentation to the staff with little or no consistent follow-up. Although such presentations may be effective for transmitting information, there is little likelihood that they will do much to improve teachers' effectiveness in the classroom (Oliver, 1977).

Although researchers have been somewhat vague about the effectiveness of inservice training, McLaughlin and Berman (1977) suggested that inservice is a positive component in improving instruction. Writers seem to be in general agreement about several things: (1) those who will receive the training should be involved in planning such inservice, (2) incentives for inservice participation should be intrinsic rather than extrinsic, (3) the school campus should be the focal point for inservice training activities, and (4) inservice should be based on a developmental rather than a deficit program (Farnsworth, 1981; Howey, 1978; McLaughlin & Berman, 1977; Miller, 1977).

Smith (1980) wrote that since the heart of staff development is the individual training program, the steps in the process of planning, implementing, and evaluating such a program are vitally important. He recommended using the following steps as a guide to

establishing a quality training program. However, he did not intend that this list be used as an inflexible step-by-step plan.

1. Review staff-development activities.
2. Establish needs.
3. Establish priorities.
4. Identify target group.
5. Plan the content.
6. Select training strategies.
7. Identify fiscal considerations.
8. Select trainers.
9. Select training site.
10. Arrange for released time for participants.
11. Design and implement evaluation strategy.
12. Implement activities.

According to Smith, individuality within each school district complicates the assimilation of the appropriate information for purposes of growth. Leadership is imperative in promoting and guiding the training endeavor to its ultimate goal.

The Financial Investment in Professional Development

Because of millage votes, educational programs are directly linked to the economic mood of the people. Keough (1978) stated that compounding the problems faced by educational institutions has been a decline in school enrollment, which began at the elementary level in 1971 and moved to the secondary level in 1977. Widespread publicity about enrollment declines has affected the public's voting behavior. Voters expected fewer students to mean lower school costs. Also, in many suburbs that grew rapidly in the postwar years, the decline in school enrollment has coincided with stabilization and aging of the community; the priority of education is often lower for those voters (Keough, 1978).

Rogus and Martin (1979) reported that administrators have used different strategies to manage budget cutbacks and enrollment declines. Some of these strategies are consolidation of services, elimination of whole programs, across-the-board cuts in all programs, permanent closing of schools, and early retirement programs. Ultimately and inevitably, though, staffs have been affected by the retrenchment efforts because education relies so heavily on people. In some cases, retrenchment has meant reassignment of tenured teachers from positions that are judged expendable to positions in which a need remains. According to Rogus and Martin, some teachers do not readily take such changes in stride.

Howey (1978) stated that some individuals restrict the purpose of professional-development activities to job- or school-related improvement, with largely public benefit. Others embrace professional-growth activities that have some public benefit but also significant individual value. Still others include personal growth, with largely individual merit.

One kind of inservice education aims to improve teachers' job performance or the school program; according to Johnson (1980), this kind of education should be publicly financed. Van Ryn and Santelli (1979) asserted that investment in the competence of employees is good business practice, especially for an enterprise like education, which depends heavily on people, not machines.

Much of the current need for professional development has arisen from court orders, legislative mandates, and financial incentives. Legal decisions have changed many of the conditions and

assumptions under which most present school personnel were trained and employed, conditions such as separate education of the handicapped and the assumption that all children come from similar socioeconomic backgrounds. Yet, as Van Ryn and Santelli (1979) noted, when industries introduce new equipment, they do not make their employees responsible for learning how to operate the equipment, nor do they hire a new group of employees to work the equipment. They retrain their present employees; it is a company responsibility.

The problem of finding an appropriate combination of financial resources for professional development is compounded by a lack of information on the present mix. According to Floria and Koff (1977), there is no big picture but only fragments of many pictures. For example:

1. Some support is indirect and hence unreported. A prime example is the millions of dollars that districts give each year in salary increments and promotions to staff members who have earned a specified number of credits. The benefit of this investment to the school program is often left to chance (Floria & Koff, 1977).

2. Some support is categorical--that is, tied to improvement of personnel working with target populations, such as handicapped or bilingual. It is one part of many programs and hence widely scattered. Much state and federal money is of this sort. Coordination becomes critical with such funding because the potential for duplication of effort and for other inefficiencies is great. Also, perspectives are fragmented. For example, needs assessments may focus on special

education rather than all education, and planning occurs within categories, not across them (Johnson, 1980).

3. Some support is not regularly or consistently reported and hence is not properly weighed. Thus, a 1976 study pegged federal expenditures for staff training, as reported by a representative sample of local districts, at $48.9 million in the 1972-73 academic year and succeeding summer (National Center for Education Statistics, 1976), and a 1980 report identified about $356 million appropriated within the Office of Education in fiscal year 1979 for the support of both preservice and inservice personnel development (Feistritzer, McMillon, & Lewis, 1979).

Such confusion about financial support underscores the need for leadership in funding inservice education. The most recent impetus for such leadership is a federal-government requirement that for states to receive funds under Titles IV and V-B of the Elementary and Secondary Education Act, they must submit

> a comprehensive plan for the coordination of Federal and State funds for training activities for educational personnel in the State including preservice and inservice training, [which] shall be developed with the involvement of teachers, professional associations, institutions of higher education, and other interested individuals" (U.S. Congress, 1978).

After several years of discussions with a variety of professional groups, Michigan adopted a state plan in 1979 for developing and implementing professional-development programs. Underlying the plan is an entitlement program, which earmarked $3.2 million in 1979-80 to fund inservice education at $25 per professional in districts or consortia with fewer than 750 professionals and $35 per professional

in districts or consortia with 750 professionals or more. To receive such funds, local program planners must assess needs for inservice education, identify the most urgent needs, decide on objectives, identify agencies that might help carry out the proposal, and develop a plan for evaluation.

Although education cannot be compared directly to private business or industry, it is sometimes useful to draw parallels between the two fields. No physical product is involved in the educational process, but results are expected nevertheless. Product-improvement costs in industry are comparable to staff-development costs in education, yet there is great disparity between the two. A successful American business may spend 10% of its annual gross on product improvement, yet very few school districts earmark as much as one one-hundredth of that amount specifically for staff development, which is solely designed to improve job performance (Dillon, 1978). Many criticisms leveled at schools concern imperfections or inadequacies of the product. Dillon concluded that one of the best ways to improve the performance of students is to enhance the skills of those who work with them.

The Role of the Teacher and Principal

The most important persons in a professional-development program typically are professional personnel--that is, teachers and principals. Several studies have identified the characteristics of elementary schools and school personnel that foster effective basic-skills instruction. Hersh et al. (1978) reviewed these studies and

concluded that the following factors are positively associated with school productivity:

1. Strong administrative leadership by the school principal, especially in regard to instructional matters;
2. A school climate conducive to learning, i.e., safe and orderly;
3. School-wide emphasis on basic skills instruction, which entails agreement among the professional staff that instruction in the basic skills is the primary goal of the school;
4. Teacher expectations that students can reach high levels of achievement; and
5. A system for monitoring and assessing pupil performance that is tied to instructional objectives. (p. 12)

The school unit is an important context in which to consider school effectiveness. Howey (1978) stated that attributes such as schoolwide discipline, high teacher expectations for pupils, homework assignments, and high academically engaged time reveal an important structural theme: that schools are social institutions, collectives of professionals and students. In more effective schools, students and staff engage in particular behaviors and create a set of norms, values, rules, and expectations that are different from those in less effective schools. Hersh et al. (1978) stated that even if one were to assume identical and optimal preservice education programs for teachers and administrators, some schools are more effective social entities than others because of a special combination of technically competent professionals who arrange and order school life differently than others.

Eiken (1977) reported that effective inservice requires strategies for reaching agreement at the school-building level on such topics as goals and expectations. However, these strategies

have not yet been identified. Eiken also noted that inservice should be undertaken to help teachers whose skills need to be enhanced. It would do little good for an inservice program to achieve schoolwide teacher and administrator agreement on particular goals and strategies if teachers were incapable of implementing such strategies in the classroom.

For inservice education to help implement school policy on basic-skills instruction, educators must know how inservice education affects teacher productivity. The present knowledge in this area is weak. Previous research on inservice education has focused primarily on descriptions of isolated, individual inservice programs and their immediate effects on teacher knowledge and attitudes (Johnson, 1980). Hersh et al. (1978) stated that very few studies have examined the possible links between inservice education and enhanced teacher productivity, even though such links provide the ultimate justiciation for devoting school-system resources to inservice education. Furthermore, according to these authors, there do not appear to be any studies that have explored the interrelationships between the inservice experiences of individual teachers over a specific time.

McLaughlin and Berman (1977) asserted that teachers are dissatisfied with traditional professional-development programs. Teachers' dissatisfaction has been documented in at least two fairly recent surveys: a representative national teacher sample and a sample of teachers from California, Georgia, Michigan, and 21 urban/rural projects across the nation (Bartholomew, 1976). Bartholomew reported that

1. Inservice education has not addressed teachers' urgent day-to-day needs. [It has] tended to focus upon the theoretical fads of the moment, giving little attention to the basic problems of the classroom world.
2. Inservice education has been required of teachers and imposed and delivered by others. The bulk of the programs are sporadic and disorganized.
3. Inservice education has been fragmented, unsystematic, and devoid of a conceptual framework. (p. 80)

Bhaerman (1976) characterized inservice as lacking integrated activities developed on the basis of assessed priorities. According to a number of writers, there has never been a broad scheme of inservice education with a clear concept of purpose, appropriate undergirding of policy, legitimacy in commitment, and fixed responsibility for attaining agreed-upon goals (Bartholomew, 1976; Bhaerman, 1976; Edelfelt & Lawrence, 1975; Howey, 1978; Rubin, 1976).

Jansen, Betz, and Zigarmi (1978) reported that the degree of involvement and control afforded the planning group depends on the principal's leadership style, the past experiences of the staff in similar situations, and the degree of trust existing between the principal and the faculty. Ideally, the principal can maintain a lower profile in the decision-making process as the program and the process skills of the teaching staff develop. Rogus and Martin (1979) concurred with this view:

> The key to the potential effectiveness of any professional development program identified is the spirit with which it is carried out. The principal's bearing and attitude, both in his/her daily interactions and within the process of program planning and implementation, set the limits of staff development program potential. (p. 31)

In La Plant's (1979) view, the quality of an educational program largely depends on the school principal. He said that the

principal's role is an important element in the schooling process and that despite the lack of a research-proven relationship between formal preservice preparation and job effectiveness, a case can be made for inservice education as a means of improving principals' performance and ultimately the quality of pupil education. According to La Plant, importance of inservice education for principals is underscored by the following notions: (1) the principal is cast as the preserver of tradition, yet some of these traditions may not serve today's educational needs; and (2) there are fewer young principals today because fewer new positions are being created, as a result of declines in the school-age population.

Another set of materials that provided insight into the principal's role was "The Remaking of the Principalship," a series of articles that was the major content of four issues of the NAESP publication (La Plant, 1979). These articles revealed two major concerns: (1) the inadequacies of the preparation program and the lack of opportunities for continuing education and (2) the widespread agreement on the need for inservice training for principals but considerable disagreement over what such training should accomplish. The report indicated that no startling new methods for inservice training for principals had been introduced in the five years preceding the study.

According to La Plant, there is little evidence that any serious consideration has been given to the experiences that will develop introspective principals--the knowledge, skills, and critical insights they need. Therefore, it should not be surprising that so many principals

are so ill-prepared to assume leadership of externally funded projects. Le Plant found that principals had difficulty even thinking about what kind of inservice would be useful to them.

The Superintendent and Staff Development

Miller (1977) contended that perhaps one reason staff development has not been particularly successful is that the requisite leadership qualities have not existed. In brief, he said that at least four keys to change are essential for those who are responsible for providing effective inservice. These keys to change include involvement, philosophy, communication and problem solving, and modeling direction. Certainly other leadership talents are required, but these four are so common they should not be ignored. Oliver (1977) stated that leadership today requires that different audiences be involved in the staff-development process; often this may mean that groups with competing interests will be seeking the same scarce resources. Maintaining the status quo in this setting calls for creative and imaginative leadership.

The superintendent is the educational leader of the community and is able to view the school system as a whole. Farquhar (1978) wrote,

> Because his accountability is to laymen rather than to senior professionals, he must play a heavy role in educating them about education and in generating policy recommendations or alternatives for their consideration. In order to maintain credibility with the board, the chief executive must spend enough time with his staff in the schools to know, with confidence, what is going on out there. On the other hand, the relationship between the superintendent and his staff may often be under-emphasized. Spending time in the field could

> enhance his potential to lead, the staff recognizing that his primary accountability is not to a remote bureaucracy . . . but rather to elected representatives of the public in his jurisdiction, that is, board members who are close to the parents of students with whom the staff members interact daily. (p. 7)

To have a successful staff-development plan, staff members must perceive that the district officials are truly committed to professional growth. According to Farquhar, such a perception is enhanced by at least some of the following actions:

1. District office leaders illustrate by their modeling behavior that they are willing to learn and grow.
2. The district office supports with money, time and policy plans for growth.
3. The district offers incentives for those who participate.

Farquhar listed some qualities of an effective superintendent:

> [The superintendent] must have the skill to inspire confidence to support, to steer, and to effect a professional and personal growth in others. He must be able to motivate, to stimulate, and to challenge. In sum, he requires the ability to recognize and meet the individual needs of others, while at the same time, tapping their full potential to contribute to the achievement of the school system's objectives. (p. 9)

Summary

Literature on five topics relevant to the study was reviewed in this chapter. Those topics were (1) the need for professional development, (2) professional-development studies, (3) the financial investment in professional development, (4) the role of the teacher and principal, and (5) the superintendent and staff development.

The importance of knowing more about the factors that influence superintendents' recommendations for professional-development programs was supported by this review. A substantial knowledge base concerning the necessity for professional development was established,

and the research findings in the area were summarized. Inservice education must be considered an integral part of the school-district operation. Improved teacher productivity and student achievement are mltimately the result of effective professional-development programs.

CHAPTER III

RESEARCH DESIGN AND PROCEDURES

Introduction

This study was conducted to determine whether superintendents differ in their responses to selected factors thought to influence the recommendation for professional-development programs. Relationships based on age, education, experience as a superintendent, longevity in the present district, and length of teaching experience were also examined.

Research Procedures

Construction of the Professional Development Survey

Because no suitable instrument for evaluating the factors that influence superintendents' recommendations for professional-development programs was available, the researcher developed the Professional Development Survey. (See Appendix A.) The instrument was developed in four steps, all of which preceded the test administration.

The first step was to construct statements of factors thought to influence superintendents' recommendations for professional-development programs, based on pertinent literature and the advice of experts in the field. Each statement had to meet two criteria: (1) it had to reflect a common factor a superintendent is exposed to

in the daily operation of a school system, and (2) it had to be expressed in both a terminology and in a context that would be understandable and relevant to a superintendent. The statements so constructed constituted the major portion of the Survey.

The second step was to validate the instrument. To accomplish this task, the Survey was administered to three recognized experts in the field of inservice education. (See Appendix B for the names of these individuals.) Each expert was asked to decide whether the statements in the Survey were actually factors influencing superintendents to make recommendations for professional-development programs. New and revised questions were integrated into the instrument as recommended by the professionals. The final Survey contained 34 statements concerning influential factors.

The third step was to field test the revised instrument by administering it to two superintendents. Field testing was done to determine whether superintendents understood and could respond properly to the instrument. (See Appendix B for the names of the two superintendents.) They completed the Survey and verbally commented on the statements about which they had questions.

The fourth step was the final revision of the instrument. Some words and the order of statements were changed to improve readability and to make the sequence more logical. The changes were approved by the experts involved in the preliminary assessment of the instrument.

Data-Collection Procedures

The population comprised the 586 superintendents of Michigan's K-12 public school districts and intermediate school districts. The survey instrument was mailed to the entire superintendent population. A cover letter of introduction requested their participation in the study. Each copy of the Survey was numerically coded to allow follow-up of those who had not returned completed instruments within two weeks, should a second mailing be needed. The cover letter assured the superintendents that individual responses would remain confidential and that participants could not be identified by name.

Responses were received from 343 superintendents, for a return rate of 59%. Before computerizing the data, the researcher reviewed all surveys for completeness; only those instruments containing sufficient responses were included in the analysis. Thirty-six surveys were rejected because they did not contain sufficient information. With a population size of 586, 234 completed surveys were needed to attain a 95% confidence level (Krejcie & Morgan, 1970). Therefore, the 307 usable surveys received in this study did constitute a reliable sample. A summary of data-collection results is shown in Table 1.

Table 1.--Summary of data-collection results.

Surveys mailed	586	
Surveys returned		343
Surveys rejected		-36
Surveys accepted for analysis		307

Research Design

The Survey included 34 statements concerning influential factors. Participants responded to each statement by indicating the degree to which they agreed or disagreed that each factor influenced their recommendation for professional-development programs. Point values were assigned to each response in the following manner:

Agree to a great extent	1
Agree to a certain extent	2
Neutral or unsure	3
Disagree to a certain extent	4
Disagree to a great extent	5

Each of the 34 statements represented a single cell. The statements concerned five major topics: (1) school district statistics, (2) changes in enrollment, (3) faculty profiles, (4) communication networks, and (5) tests and printed materials.

Participants were also asked to answer questions regarding (1) year of birth, (2) the number of years of teaching experience, (3) the number of years as superintendent, (4) the number of years as superintendent in the present district, (5) the highest graduate degree completed, and (6) the university from which their most recent graduate degree had been attained.

Hypotheses

The following research hypotheses were constructed to analyze the data collected in this study.

Ho 1: There will be no difference among superintendents in regard to the factors that influence their recommendation for professional-development programs.

Ho 2: There will be no significant difference among superintendents, based on age, in regard to the factors that influence their recommendation for professional-development programs.

Ho 3: There will be no significant difference among superintendents, based on graduate education, in regard to the factors that influence their recommendation for professional-development programs.

Ho 4: There will be no significant difference among superintendents, based on experience as a superintendent, in regard to the factors that influence their recommendation for professional-development programs.

Ho 5: There will be no significant difference among superintendents, based on length of experience in the present district, in regard to the factors that influence their recommendation for professional-development programs.

Ho 6: There will be no significant difference among superintendents, based on length of teaching experience, in regard to the factors that influence their recommendation for professional-development programs.

Hypothesis 1 was tested by means of descriptive statistics, including frequencies, means, and percentages. This technique was chosen as a means of summarizing and reducing to a manageable form an otherwise unwieldy mass of data.

Hypotheses 2 through 6 were tested with independent t-tests. The data gathered through the Survey were dichotomized for each hypothesis to approximate 50% in each group. The Statistical Package for the Social Sciences (SPSS) subprogram provided inferential statistical data that tested each of the five hypotheses at the $\alpha = .05$ level with the corresponding statistical null hypothesis. Any differences that were found were determined by inspection. Where there were two levels, the direction of the differences was determined by the same procedure.

Summary

The research design and procedures were described in this chapter, and the hypotheses were stated. The steps involved in the construction of the instrument were described, as were the data-collection techniques.

The Professional Development Survey was constructed because no existing instrument was available to obtain data to answer the research questions posed in the study. Validity of the instrument was supported by three education professionals and two intermediate superintendents. The population for the study comprised the 586 K-12 public school and intermediate school district superintendents in Michigan. Of that group, 307 returned usable instruments that were acceptable for analysis. Generalization of the findings of this study to superintendents in other states should be done with caution, taking into account the demographic characteristics of the sample and Michigan's educational structure.

A variety of descriptive and inferential techniques were employed to analyze the data. Descriptive statistics included frequencies, means, and percentages. Inferential statistical tests were the t-tests. All tests were performed with a .05 alpha level. The results obtained from the statistical analyses are reported in Chapter IV.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

Analysis of the data collected regarding the factors that influence superintendents' recommendation for professional-development programs is reported in this chapter. Included are the results of hypothesis testing and of a supplementary analysis.

Demographic Data

Six questions in the Survey concerned the superintendents' age, experience, and training. Respondents were asked to indicate their age, highest graduate degree obtained, number of years as a superintendent, number of years as a superintendent in the present school district, number of years of teaching experience, and the university from which their most recent degree had been obtained.

Three hundred five superintendents responded to the question concerning age. (See Table 2.) Respondents' ages ranged from 30 to 64 years. The ages appeared to be evenly distributed, with no more than 6.2% (19) of the respondents in any one age group. The mean age of the superintendents was 48.6 years, and the modal age was 53 years.

Table 3 shows the number of years of teaching experience of superintendents in the study. Three hundred five superintendents responded to this question. Teaching experience ranged from none at

Table 2.--Ages of superintendents in the study (N = 305).

Age	Number	Percent
30	1	0.3
32	2	0.7
33	2	0.7
34	4	1.3
35	7	2.3
36	5	1.6
37	5	1.6
38	8	2.6
39	13	4.3
40	8	2.6
41	9	3.0
42	11	3.6
43	12	3.9
44	12	3.9
45	9	3.0
46	12	3.9
47	12	3.9
48	12	3.9
49	10	3.3
50	19	6.2
51	11	3.6
52	11	3.6
53	22	7.2
54	11	3.6
55	13	4.3
56	19	6.2
57	5	1.6
58	9	3.0
59	6	2.0
60	8	2.6
61	6	2.0
62	8	2.6
63	1	0.3
64	2	0.7

Table 3.--Number of years of teaching experience of superintendents in the study (N = 305).

Years of Experience	Number	Percent
0	1	0.3
1	5	1.6
2	13	4.3
3	35	11.5
4	32	10.5
5	45	14.8
6	39	12.8
7	28	9.2
8	12	3.9
9	13	4.3
10	20	6.6
11	10	3.3
12	10	3.3
13	8	2.6
14	3	1.0
15	5	1.6
16	3	1.0
17	1	0.3
18	2	0.7
19	2	0.7
20	4	1.3
21	1	0.3
22	2	0.7
24	2	0.7
27	1	0.3
28	1	0.3
31	2	0.7
32	3	1.0
33	2	0.7

all to 33 years. The mean was 7.9 years of teaching experience, and the mode was five years.

Table 4 provides the data relative to the number of years the respondents had been a superintendent. Three hundred four superintendents responded to this question. The range of experience was from one year to 32 years. The mean years of experience was 10.2, and the mode was two years. More than half of the respondents had been superintendents fewer than eight years.

Table 5 shows the number of years the respondents had been superintendents in their present districts. Three hundred four superintendents responded to this question. The experience in the most recent school district ranged from less than one year to 32 years. The mean years of experience within the district was 6.9 years, and the mode was two years. More than half of the respondents had been in their present districts for five years or less. When comparing the data in Tables 4 and 5, it appears that the majority of the respondents had been superintendents longer overall than they had served within the present district. Thus, to a great extent, superintendents were probably not in their original positions.

Table 6 contains a tabulation of data relative to the superintendents' educational level. Three hundred two superintendents responded to this question. The respondents varied in terms of educational level, but the group seemed to be clustered primarily at the master's-degree level. Slightly below 40% had earned a master's degree. Several respondents indicated they had taken college classes beyond the M.A. but had not received a specialist or doctorate degree.

Table 4.--Number of years as a superintendent (N = 304).

Years	Number	Percent
1	19	6.3
2	33	10.9
3	16	5.3
4	22	7.2
5	16	5.3
6	16	5.3
7	12	3.9
8	19	6.3
9	9	3.0
10	13	4.3
11	8	2.6
12	18	5.9
13	10	3.3
14	7	2.3
15	14	4.6
16	9	3.0
17	10	3.3
18	7	2.3
19	8	2.6
20	8	2.6
21	3	1.0
22	1	0.3
23	6	2.0
24	3	1.0
25	2	0.7
26	4	1.3
27	3	1.0
28	3	1.0
30	1	0.3
31	1	0.3
32	3	1.0

Table 5.--Number of years as a superintendent in the present district (N = 304).

Years	Number	Percent
1	1	0.3
1	38	12.5
2	46	15.1
3	23	7.6
4	32	10.5
5	22	7.2
6	20	6.6
7	18	5.9
8	14	4.6
9	8	2.6
10	16	5.3
11	4	1.3
12	11	3.6
13	8	2.6
14	4	1.3
15	8	2.6
16	5	1.6
17	5	1.6
18	1	0.3
19	5	1.6
20	5	1.6
21	2	0.7
23	5	1.6
25	1	0.3
26	1	0.3
32	1	0.3

Table 6.--Educational level of superintendents in the study (N = 302).

Degree Level	Number	Percent
B.A.	3	1.0
M.A.	119	39.4
Specialist	81	26.8
Ed.D.	53	17.5
Ph.D.	46	15.2

Three hundred three superintendents responded to the question regarding the university from which they had obtained their most recent degree. (See Table 7.) Ninety-four percent of the respondents had received their most recent degree from a Michigan institution. Of those, nearly 30% had received their most recent degree from Michigan State University.

Results of Hypothesis Testing

Ho 1: There will be no difference among superintendents in regard to the factors that influence their recommendation for professional-development programs.

Hypothesis 1 was formulated to answer the first research question, which asked whether superintendents differed in regard to the factors that influence their recommendation for professional-development programs. To analyze the data for this hypothesis, the researcher used descriptive statistics, including frequencies, means, and percentages.

Table 8 provides data relative to the 34 influential factors listed in the Survey. A complete breakdown by factor is given,

Table 7.--University from which the superintendents' most recent degrees had been received (N = 303).

University	Number	Percent
Michigan State University	86	28.4
Central Michigan University	48	15.8
University of Michigan	44	14.5
Wayne State University	35	11.6
Western Michigan University	32	10.6
Eastern Michigan University	28	9.2
Northern Michigan University	10	3.3
University of Toledo	3	1.0
Ball State University	2	0.7
Columbia University	2	0.7
Andrews University	1	0.3
Arizona State University	1	0.3
East Coast University	1	0.3
Indiana University	1	0.3
Kent State University	1	0.3
Mankato State University	1	0.3
Ohio State University	1	0.3
St. Louis University	1	0.3
Syracuse University	1	0.3
Waldon University	1	0.3
Western Kentucky University	1	0.3
Western Reserve	1	0.3
University of Wisconsin	1	0.3

Table 8.--Extent to which individual factors influenced superintendents' recommendation for professional-development programs.

Factor	Responses										$\bar{X}$	SD
	1		2		3		4		5			
	N	%	N	%	N	%	N	%	N	%		
Advice and input from teachers	183	60.0	108	35.4	9	3.0	3	1.0	2	0.7	1.5	.7
Advice and input from principals	178	58.9	109	36.1	10	3.3	2	0.7	3	1.0	1.5	0.7
Advice and input from board of education	104	34.4	150	49.7	34	11.3	8	2.6	6	2.0	1.9	0.9
Advice and input from central office admin.	91	31.0	154	52.4	34	11.6	8	2.0	9	3.1	1.9	0.9
Advice and input from conferences	59	19.7	180	60.2	46	16.1	6	2.0	6	2.0	2.1	0.8
Achievement tests	62	20.8	163	54.7	50	16.8	12	4.0	11	3.7	2.2	0.9
Advice and input from parents	55	18.5	167	56.2	49	16.5	19	6.4	7	2.4	2.2	0.9
Mean years of experience of teachers on staff	74	24.7	141	47.2	49	16.4	17	5.7	18	6.0	2.2	1.1
Knowledge from professional literature	45	15.0	173	57.7	64	21.3	9	3.0	9	3.0	2.2	0.8
Advice and input from pupils	50	16.9	155	52.4	64	21.6	18	6.1	9	3.0	2.3	0.9
Michigan Education Assessment Program	49	16.4	160	53.5	62	20.7	18	6.0	10	3.3	2.3	0.9
Advice and input from business and industry	46	15.4	154	51.7	73	24.5	12	4.0	13	4.4	2.3	0.9
Advice and input from professional organiz.	43	14.3	159	53.0	73	24.3	11	3.7	14	4.7	2.3	0.9
Mean age of teachers on staff	57	19.2	123	41.4	78	26.3	18	6.1	21	7.1	2.4	1.1
Significant decrease in enrollment	59	19.9	101	34.1	72	24.3	29	9.8	35	11.8	2.6	1.2
Knowledge from college courses	17	5.8	118	40.0	117	39.7	25	8.5	18	6.1	2.7	0.9
Advice and input from university consultants	22	7.4	128	43.1	86	29.0	38	12.8	23	7.7	2.7	1.0
Advice and input from state gov't. sources	18	6.1	125	42.2	98	33.1	32	10.8	23	7.8	2.7	1.0
Total general fund expenditure per pupil	42	14.7	102	35.8	66	23.2	38	13.3	37	13.0	2.7	1.2
Advice and input from unions	39	13.2	107	36.3	80	27.1	27	9.2	42	14.2	2.7	1.2
Number of "special teachers" on staff	20	6.7	102	34.0	113	37.7	36	12.0	29	9.7	2.8	1.0
Total operating millage rate	41	13.7	93	31.1	79	26.4	39	13.0	47	15.7	2.9	1.3
Significant increase in enrollment	32	11.0	93	32.1	88	30.3	26	9.0	51	17.6	2.9	1.2
Impact from news media	9	3.1	103	34.9	122	41.4	30	10.2	31	10.5	2.9	1.0
Average teacher/pupil ratio	8	.7	107	35.9	94	31.0	40	13.4	49	16.4	3.0	1.1
State aid membership	35	11.8	78	26.4	75	25.3	43	14.5	65	22.0	3.1	1.3
Percentage of B.A. degreed personnel	13	4.4	68	22.9	120	40.4	43	14.5	53	17.8	3.2	1.3
Percentage of M.A. degreed personnel	10	3.4	61	20.5	124	41.8	48	16.2	54	18.2	3.3	1.1
S.E.V. per state aid member	17	5.7	68	22.9	93	31.3	44	14.8	75	25.3	3.3	1.2
Percentage of Specialist degreed personnel	7	2.4	37	12.5	139	47.1	50	16.9	62	23.5	3.4	1.0
Percentage of Ed.D. degreed personnel	6	2.0	33	11.3	134	45.7	51	17.4	69	23.5	3.5	1.0
Percentage of Ph.D. degreed personnel	12	4.1	33	11.2	116	39.3	51	17.3	83	28.1	3.5	1.1
Average teacher salary	1	0.3	7	2.4	104	35.1	44	14.9	140	47.3	4.1	.97
Debt retirement	7	2.4	31	10.6	136	46.4	48	16.4	71	24.2	3.5	1.0

Key to Responses: 1 = Agree to a great extent
2 = Agree to a certain extent
3 = Neutral or unsure
4 = Disagree to a certain extent
5 = Disagree to a great extent

including the number and percentage of respondents indicating the extent to which the individual factor influenced their recommendation for professional-development programs, the mean score, and the standard deviation for that factor.

Four factors had means of less than 2.0, indicating that the majority of the respondents identified these factors as being important--to a great extent or to a certain extent--in influencing their recommendation for professional-development programs.

Three hundred five superintendents responded to the factor of advice and input from teachers, which had a mean score of 1.4689. This figure indicates that 60% of the respondents agreed to a great extent that teachers' advice and input influenced their recommendation for professional-development programs.

Three hundred two superintendents responded to the factor of advice and input from principals, which had a mean score of 1.4868. Nearly 59% of the respondents agreed to a great extent that principals' advice and input influenced their recommendation for professional-development programs.

Three hundred two superintendents responded to the factor of advice and input from the board of education, which had a mean score of 1.8808. Approximately 84% of the respondents agreed to a great or a certain extent that advice and input from the board of education influenced their recommendation for professional-development programs.

Two hundred ninety-four superintendents responded to the factor of advice and input from central office administration, which had a mean score of 1.9388. Approximately 83% of the respondents

indicated that they agreed to a great or a certain extent that advice and input from central office administration influenced their recommendation for professional-development programs.

One factor had a mean score greater than four, indicating that a majority of the respondents disagreed to a great extent that it influenced their recommendation for professional-development programs. This factor was the amount of debt retirement, which had a mean score of 4.0642. Nearly half of the respondents indicated that they disagreed to a great extent about its influential effect.

Fifty percent of the factors had mean scores from 2.5 to 3.5, indicating that the majority of respondents were not sure of or were neutral about the influence of these factors.

Based on the data shown in Table 8, differences existed among superintendents in terms of the factors that influenced their recommendation for professional-development programs. Therefore, the null hypothesis was rejected.

Ho 2: There will be no significant difference among superintendents, based on age, in regard to the factors that influence their recommendation for professional-development programs.

Table 9 shows a breakdown of the data concerning superintendents' responses to the 34 influential factors, relative to the age of the superintendents. To test Hypothesis 2, the researcher divided the respondents into two age groups: Superintendents 49 years old and below constituted 50.5% of the group, and those 50 years and above represented 49.5% of the group. The statistical technique used was independent t-tests with an alpha level of .05.

Table 9.--Comparison of superintendents' responses to factors, according to age group.

Factor	Age	N	$\bar{X}$	SD	T Value	P Value
Total general fund expenditure per pupil	Younger	144	2.85	1.22	1.45	0.15
	Older	139	2.64	1.25		
State aid membership	Younger	151	3.15	1.30	0.76	0.45
	Older	143	3.04	1.36		
S.E.V. per state aid member	Younger	151	3.33	1.23	0.27	0.79
	Older	144	3.29	1.25		
Total operating millage rate	Younger	150	2.91	1.25	0.57	0.57
	Older	147	2.82	1.29		
Debt retirement	Younger	150	3.99	0.97	-1.28	0.20
	Older	144	4.14	0.98		
Average teacher salary	Younger	150	3.58	1.05	0.63	0.53
	Older	143	3.50	1.22		
Significant increase in enrollment	Younger	145	2.82	1.17	-1.12	0.26
	Older	143	2.99	1.32		
Significant decrease in enrollment	Younger	149	2.65	1.16	0.78	0.44
	Older	145	2.54	1.33		
Average teacher/pupil ratio	Younger	150	2.97	1.06	-1.25	0.21
	Older	146	3.14	1.18		
Mean years of experience of teachers on staff	Younger	151	2.18	1.01	-0.60	0.55
	Older	146	2.25	1.13		
Mean age of teachers on staff	Younger	151	2.37	1.01	-0.64	0.52
	Older	144	2.45	1.16		
Number of "special teachers" on staff	Younger	150	2.81	1.01	-0.48	0.63
	Older	148	2.87	1.09		
Percentage of B.A. degreed personnel	Younger	149	3.26	1.06	1.18	0.24
	Older	146	3.11	1.16		
Percentage of M.A. degreed personnel	Younger	150	3.30	1.07	0.74	0.46
	Older	145	3.21	1.09		
Percentage of Specialist degreed personnel	Younger	149	3.46	1.02	0.73	0.47
	Older	144	3.38	1.04		
Percentage of Ed.D. degreed personnel	Younger	149	3.50	1.00	0.20	0.84
	Older	142	3.48	1.08		
Percentage of Ph.D. degreed personnel	Younger	149	3.50	1.00	0.03	0.98
	Older	142	3.49	1.10		

Table 9.--Continued.

Factor	Age	N	$\bar{X}$	SD	T Value	P Value
Advice and input from central office admin.	Younger	148	1.95	0.91	0.35	0.73
	Older	144	1.92	0.87		
Advice and input from principals	Younger	154	1.48	0.73	0.01	0.99
	Older	146	1.48	0.64		
Advice and input from teachers	Younger	153	1.45	0.68	-0.46	0.64
	Older	150	1.49	0.66		
Advice and input from unions	Younger	150	2.70	1.21	-0.74	0.46
	Older	144	2.81	1.24		
Advice and input from parents	Younger	151	2.17	0.88	-0.28	0.78
	Older	144	2.19	0.90		
Advice and input from pupils	Younger	150	2.26	0.89	-0.04	0.97
	Older	144	2.26	0.95		
Advice and input from board of education	Younger	152	1.88	0.88	-0.17	0.87
	Older	148	1.89	0.83		
Advice and input from business and industry	Younger	140	2.35	0.96	0.92	0.36
	Older	146	2.25	0.91		
Advice and input from state gov't. sources	Younger	149	2.75	0.99	0.47	0.64
	Older	145	2.70	1.03		
Advice and input from professional organiz.	Younger	152	2.32	0.93	0.13	0.90
	Older	146	2.31	0.94		
Advice and input from university consultants	Younger	148	2.70	1.00	-0.21	0.84
	Older	147	2.72	1.08		
Advice and input from conferences	Younger	151	1.99	0.72	-1.72	0.09
	Older	147	2.14	0.84		
Michigan Educational Assessment Program	Younger	151	2.23	0.84	-0.78	0.44
	Older	146	2.31	0.99		
Achievement tests	Younger	151	2.08	0.84	-1.39	0.17
	Older	145	2.23	1.00		
Knowledge from college courses	Younger	148	2.70	0.91	-0.01	1.00
	Older	145	2.70	0.96		
Knowledge from professional literature	Younger	152	2.13	0.84	-1.74	0.08
	Older	146	2.30	0.85		
Impact from news media	Younger	149	2.86	1.03	-0.73	0.46
	Older	144	2.94	0.97		

A review of Table 9 reveals that there was no statistically significant difference between age groups on any of the 34 influential factors. In terms of age, the superintendents can be considered a homogeneous group. The null hypothesis was accepted; therefore, there did not appear to be any differences between age groups regarding influential factors.

Ho 3: There will be no significant difference among superintendents, based on graduate education, in regard to the factors that influence their recommendation for professional-development programs.

Table 10 shows a breakdown of the data concerning superintendents' responses to the 34 influential factors, relative to the graduate education of the superintendent. To test Hypothesis 3, the researcher divided the respondents into two groups, according to level of graduate education. Superintendents possessing a master's degree or less comprised 40.4% of the sample, and those possessing a Specialist degree, an Ed.D., or a Ph.D. represented 59.6% of the group. In testing the hypothesis, the researcher used independent t-tests with an alpha level of .05.

Statistically significant differences between groups existed on four of the factors. (The lower the mean score, the more important the factor.) Of the four factors on which significant differences occurred, three were considered more important by those with a master's or a bachelor's degree; those factors were state aid membership, S.E.V. per state aid member, and average teacher salary. The fourth factor was considered more important by those with a Specialist, Ed.D., or Ph.D. degree; that factor was advice and input from central office administration.

Table 10.--Comparison of superintendents' responses to factors, according to graduate degree level.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Total general fund expenditure per pupil	Group 1	112	2.67	1.23	-1.09	0.28
	Group 2	168	2.83	1.23		
State aid membership	Group 1	113	2.88	1.33	-2.20	0.03
	Group 2	178	3.22	1.31		
S.E.V. per state aid member	Group 1	115	3.04	1.26	-3.20	0.00
	Group 2	177	3.51	1.18		
Total operating millage rate	Group 1	116	4.00	0.97	-1.14	0.25
	Group 2	175	4.13	0.95		
Debt retirement	Group 1	112	3.74	1.23	-1.83	0.07
	Group 2	173	3.66	1.26		
Average teacher salary	Group 1	116	2.47	1.18	-1.36	0.17
	Group 2	175	2.67	1.29		
Significant increase in enrollment	Group 1	112	3.74	1.23	-1.83	0.07
	Group 2	173	3.66	1.26		
Significant decrease in enrollment	Group 1	116	2.47	1.18	-1.36	0.17
	Group 2	175	2.67	1.29		
Average teacher/pupil ratio	Group 1	117	2.91	1.11	-1.89	0.06
	Group 2	176	3.16	1.14		
Mean years of experience of teachers on staff	Group 1	119	2.27	1.02	0.76	0.45
	Group 2	175	2.17	1.11		
Mean age of teachers on staff	Group 1	115	2.44	1.00	0.50	0.62
	Group 2	177	2.38	1.14		
Number of "special teachers" on staff	Group 1	118	2.78	1.03	-0.81	0.42
	Group 2	177	2.88	1.07		
Percentage of B.A. degreed personnel	Group 1	116	3.15	1.11	-0.44	0.66
	Group 2	176	3.20	1.12		
Percentage of M.A. degreed personnel	Group 1	115	3.22	1.06	-0.59	0.56
	Group 2	177	3.29	1.09		
Percentage of Specialist degreed personnel	Group 1	114	3.35	1.00	-1.02	0.31
	Group 2	176	3.48	1.05		
Percentage of Ed.D. degreed personnel	Group 1	112	3.46	1.03	-0.33	0.74
	Group 2	176	3.51	1.05		
Percentage of Ph.D. degreed personnel	Group 1	113	3.49	1.03	-0.08	0.94
	Group 2	175	3.50	1.07		

Table 10.--Continued.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Advice and input from central office admin.	Group 1	115	2.17	0.94	3.67	0.00
	Group 2	174	1.78	0.83		
Advice and input from principals	Group 1	120	1.53	0.77	1.07	0.29
	Group 2	177	1.45	0.63		
Advice and input from teachers	Group 1	121	1.45	0.65	-0.33	0.74
	Group 2	179	1.48	0.69		
Advice and input from unions	Group 1	115	2.89	1.22	1.43	0.15
	Group 2	176	2.68	1.23		
Advice and input from parents	Group 1	118	2.13	0.81	-0.80	0.42
	Group 2	174	2.21	0.95		
Advice and input from pupils	Group 1	118	2.22	0.90	-0.62	0.53
	Group 2	173	2.29	0.94		
Advice and input from board of education	Group 1	119	1.87	0.75	-0.19	0.85
	Group 2	178	1.89	0.92		
Advice and input from business and industry	Group 1	117	2.30	0.93	-0.12	0.91
	Group 2	176	2.31	0.94		
Advice and input from state gov't. sources	Group 1	117	2.70	1.02	-0.48	0.63
	Group 2	174	2.76	1.00		
Advice and input from professional organiz.	Group 1	118	2.27	0.88	-0.77	0.44
	Group 2	177	2.36	0.96		
Advice and input from university consultants	Group 1	117	2.75	1.03	0.44	0.66
	Group 2	175	2.70	1.05		
Advice and input from conferences	Group 1	119	1.99	0.70	-0.30	0.19
	Group 2	176	2.11	0.85		
Michigan Educational Assessment Program	Group 1	117	2.27	0.87	-0.11	0.91
	Group 2	177	2.28	0.96		
Achievement tests	Group 1	117	2.20	0.87	0.55	0.58
	Group 2	176	2.14	0.95		
Knowledge from college courses	Group 1	116	2.72	0.84	0.31	0.76
	Group 2	174	2.69	0.99		
Knowledge from professional literature	Group 1	117	2.31	0.78	1.39	0.17
	Group 2	178	2.17	0.88		
Impact from news media	Group 1	115	2.90	0.93	-0.30	0.76
	Group 2	175	2.93	1.03		

[a]Group 1 = Superintendents with a bachelor's or master's degree
Group 2 = Superintendents with a Specialist's, Ed.D, or Ph.D. degree

Based on the analysis, the null hypothesis was rejected. Significant differences existed between graduate-education groups regarding influential factors.

Ho 4: There will be no significant difference among superintendents, based on experience as a superintendent, in regard to the factors that influence their recommendation for professional-development programs.

Table 11 contains a breakdown of the data concerning superintendents' responses to the 34 influential factors, relative to the length of experience as a superintendent. To test Hypothesis 4, the researcher divided the sample into two groups, based on years of experience as a superintendent. Respondents with eight years or less experience constituted 50.3% of the group, and those with nine years or more experience composed 49.7% of the group. Independent t-tests were used with an alpha level of .05.

No significant difference existed between the two groups regarding the factors that influenced them to recommend professional-development programs. Thus the sample can be considered a homogeneous group when considered on the basis of length of experience as a superintendent. The null hypothesis was accepted. Therefore, in terms of length of experience as a superintendent, there did not appear to be any difference between groups in terms of factors influencing recommendations for professional-development programs.

Ho 5: There will be no significant difference among superintendents, based on length of experience in the present district, in regard to the factors that influence their recommendation for professional-development programs.

Table 12 contains a breakdown of the data concerning superintendents' responses to the 34 influential factors, relative to the

Table 11.--Comparison of superintendents' responses to factors, according to experience as superintendent.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Total general fund expenditure per pupil	Group 1	142	2.77	1.22	0.36	0.72
	Group 2	140	2.72	1.27		
State aid membership	Group 1	149	3.13	1.31	0.51	0.61
	Group 2	144	3.06	1.34		
S.E.V. per state aid member	Group 1	150	3.26	1.25	-0.75	0.46
	Group 2	144	3.37	1.23		
Total operating millage rate	Group 1	149	2.91	1.26	0.65	0.52
	Group 2	147	2.82	1.29		
Debt retirement	Group 1	149	3.97	1.00	-1.83	0.07
	Group 2	144	4.17	0.93		
Average teacher salary	Group 1	149	3.54	1.12	0.04	0.97
	Group 2	145	3.54	1.15		
Significant increase in enrollment	Group 1	147	2.80	1.26	-1.49	0.14
	Group 2	144	3.01	1.23		
Significant decrease in enrollment	Group 1	140	2.68	1.27	1.19	0.24
	Group 2	144	2.51	1.22		
Average teacher/pupil ratio	Group 1	150	3.09	1.11	0.50	0.62
	Group 2	145	3.03	1.14		
Mean years of experience of teachers on staff	Group 1	151	2.23	1.08	0.09	0.93
	Group 2	145	2.21	1.06		
Mean age of teachers on staff	Group 1	151	2.46	1.08	0.68	0.50
	Group 2	143	2.37	1.09		
Number of "special teachers" on staff	Group 1	149	2.84	1.04	-0.10	0.92
	Group 2	148	2.85	1.06		
Percentage of B.A. degreed personnel	Group 1	148	3.24	1.06	0.82	0.41
	Group 2	146	3.14	1.16		
Percentage of M.A. degreed personnel	Group 1	149	3.29	1.06	0.54	0.60
	Group 2	145	3.22	1.12		
Percentage of specialist degreed personnel	Group 1	148	3.51	0.99	1.39	0.17
	Group 2	144	3.34	1.07		
Percentage of Ed.D. degreed personnel	Group 1	149	3.54	1.00	0.85	0.40
	Group 2	141	3.44	1.09		
Percentage of Ph.D. degreed personnel	Group 1	149	3.54	1.00	0.78	0.43
	Group 2	141	3.45	1.11		

Table 11.--Continued.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Advice and input from central office admin.	Group 1	148	1.93	0.90	0.02	0.98
	Group 2	143	1.93	0.87		
Advice and input from principals	Group 1	153	1.48	0.74	-0.12	0.91
	Group 2	146	1.49	0.64		
Advice and input from teachers	Group 1	153	1.44	0.65	-0.85	0.40
	Group 2	149	1.50	1.69		
Advice and input from unions	Group 1	148	2.69	1.19	-0.78	0.44
	Group 2	145	2.80	1.25		
Advice and input from parents	Group 1	150	2.17	0.89	-0.27	0.79
	Group 2	144	2.19	0.90		
Advice and input from pupils	Group 1	150	2.26	0.88	-0.05	0.96
	Group 2	143	2.27	0.96		
Advice and input from board of education	Group 1	151	1.87	0.86	-0.31	0.75
	Group 2	148	1.90	0.86		
Advice and input from business and industry	Group 1	150	2.29	0.92	-0.28	0.78
	Group 2	145	2.32	0.75		
Advice and input from state gov't. sources	Group 1	150	2.70	0.98	-0.41	0.68
	Group 2	143	2.75	1.05		
Advice and input from professional organiz.	Group 1	151	2.30	0.90	-0.22	0.82
	Group 2	146	2.33	0.96		
Advice and input from university consultants	Group 1	150	2.69	1.00	-0.41	0.69
	Group 2	144	2.74	1.10		
Advice and input from conferences	Group 1	149	1.99	0.75	-1.55	0.12
	Group 2	148	2.14	0.82		
Michigan Educational Assessment Program	Group 1	149	2.17	0.83	-1.68	0.09
	Group 2	147	2.35	1.00		
Achievement tests	Group 1	149	2.11	0.88	-0.85	0.40
	Group 2	146	2.20	0.97		
Knowledge from college courses	Group 1	148	2.66	0.94	-0.80	0.42
	Group 2	144	2.74	0.93		
Knowledge from professional literature	Group 1	151	2.15	0.81	-1.31	0.19
	Group 2	146	2.28	0.88		
Impact from news media	Group 1	148	2.81	0.99	-1.45	0.15
	Group 2	144	2.98	0.99		

[a]Group 1 = Superintendents with 8 years or less experience
Group 2 = Superintendents with 9 years or more experience

Table 12.--Comparison of superintendents' responses to factors, according to experience as a superintendent in the present district.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Total general fund expenditure per pupil	Group 1	151	2.90	1.27	2.23	0.03
	Group 2	131	2.57	1.18		
State aid membership	Group 1	158	3.13	1.36	0.43	0.67
	Group 2	135	3.06	1.29		
S.E.V. per state aid member	Group 1	159	3.36	1.28	0.68	0.49
	Group 2	135	3.26	1.18		
Total operating millage rate	Group 1	159	2.92	1.29	0.87	0.39
	Group 2	137	2.80	1.26		
Debt retirement	Group 1	159	4.05	1.00	-0.34	0.73
	Group 2	134	4.09	0.95		
Average teacher salary	Group 1	159	3.62	1.12	1.34	0.18
	Group 2	133	3.44	1.14		
Significant increase in enrollment	Group 1	155	2.85	1.24	-0.75	0.45
	Group 2	133	2.96	1.26		
Significant decrease in enrollment	Group 1	157	2.59	1.28	-0.04	0.97
	Group 2	137	2.60	1.22		
Average teacher/pupil ratio	Group 1	160	3.09	1.14	0.55	0.59
	Group 2	135	3.02	1.10		
Mean years of experience of teachers on staff	Group 1	159	2.18	1.04	-0.64	0.52
	Group 2	137	2.66	1.10		
Mean age of teachers on staff	Group 1	160	2.38	1.03	-0.58	0.56
	Group 2	134	2.46	1.14		
Number of "special teachers" on staff	Group 1	160	2.82	1.08	-0.47	0.64
	Group 2	137	2.88	1.02		
Percentage of B.A. degreed personnel	Group 1	159	3.32	1.08	2.20	0.03
	Group 2	135	3.04	1.13		
Percentage of M.A. degreed personnel	Group 1	159	3.35	1.09	1.56	0.12
	Group 2	135	3.15	1.08		
Percentage of Specialist degreed personnel	Group 1	158	3.51	1.02	1.59	0.11
	Group 2	134	3.32	1.03		
Percentage of Ed.D. degreed personnel	Group 1	159	3.56	1.02	1.20	0.23
	Group 2	131	3.41	1.07		
Percentage of Ph.D. degreed personnel	Group 1	159	3.53	1.04	0.68	0.50
	Group 2	131	3.45	1.07		

Table 12.--Continued.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Advice and input from central office admin.	Group 1	157	1.90	0.90	-0.56	0.58
	Group 2	134	1.96	0.86		
Advice and input from principals	Group 1	161	1.44	0.71	-1.10	0.27
	Group 2	138	1.53	0.66		
Advice and input from teachers	Group 1	162	1.44	0.68	-0.72	0.47
	Group 2	140	1.50	0.66		
Advice and input from unions	Group 1	156	2.69	1.22	-0.87	0.39
	Group 2	137	2.81	1.21		
Advice and input from parents	Group 1	156	2.18	0.94	-0.02	0.99
	Group 2	138	2.18	0.84		
Advice and input from pupils	Group 1	157	2.29	0.93	0.60	0.55
	Group 2	136	2.23	0.91		
Advice and input from board of education	Group 1	160	1.85	0.89	-0.71	0.48
	Group 2	139	1.92	0.83		
Advice and input from business and industry	Group 1	159	2.28	0.94	-0.37	0.71
	Group 2	136	2.32	0.93		
Advice and input from state gov't. sources	Group 1	160	2.69	1.02	-0.55	0.58
	Group 2	133	2.76	0.99		
Advice and input from professional organiz.	Group 1	160	2.28	0.93	-0.83	0.41
	Group 2	137	2.37	0.93		
Advice and input from university consultants	Group 1	160	2.65	1.02	-1.09	0.28
	Group 2	134	2.78	1.07		
Advice and input from conferences	Group 1	158	2.01	0.83	-1.20	0.23
	Group 2	139	2.12	0.74		
Michigan Educational Assessment Program	Group 1	159	2.14	0.88	-2.55	0.01
	Group 2	137	2.41	0.75		
Achievement tests	Group 1	159	2.08	0.91	-1.43	0.15
	Group 2	136	2.24	0.94		
Knowledge from college courses	Group 1	157	2.62	0.93	-1.60	0.11
	Group 2	135	2.79	0.93		
Knowledge from professional literature	Group 1	161	2.12	0.84	-2.03	0.04
	Group 2	136	2.32	0.84		
Impact from news media	Group 1	159	2.84	1.01	-1.08	0.28
	Group 2	133	2.96	0.97		

[a]Group 1 = Superintendents with 5 years or less experience in the present district
Group 2 = Superintendents with 6 years or more experience in the present district

respondents' length of experience as a superintendent in the present district. To test Hypothesis 5, the researcher divided the sample into two groups, based on years of experience as superintendent in the present district. Superintendents with five years or less experience in the present district constituted 53.3% of the group, and those with six years or more experience represented 46.7% of the group. Independent t-tests were used with an alpha level of .05.

Statistically significant differences were found between the two groups on four factors. (The lower the mean score, the more important the factors.) Of these four factors, two were considered to be significantly more important by the more experienced group; these factors were total general fund expenditure per pupil and the percentage of B.A. degreed personnel. The other two factors were considered significantly more important by the less experienced group; these factors were Michigan Educational Assessment Program and knowledge gained from professional literature.

The null hypothesis was rejected. Therefore, based on length of experience in the present district, significant differences existed between the two groups of superintendents in terms of factors influencing recommendations for professional-development programs.

Ho 6: There will be no significant difference among superintendents, based on length of teaching experience, in regard to the factors that influence their recommendation for professional-development programs.

Table 13 shows a breakdown of the data concerning superintendents' responses to the 34 influential factors, relative to length of teaching experience. To test Hypothesis 6, the researcher divided

Table 13.--Comparison of superintendents' responses to factors, according to years of teaching experience.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Total general fund expenditure per pupil	Group 1	162	2.67	1.20	-1.30	0.20
	Group 2	121	2.86	1.29		
State aid membership	Group 1	163	3.04	1.20	-0.76	0.45
	Group 2	131	3.16	1.14		
S.E.V. per state aid member	Group 1	164	3.23	1.19	-1.25	0.21
	Group 2	131	3.41	1.29		
Total operating millage rate	Group 1	165	2.81	1.20	-0.81	0.42
	Group 2	132	2.93	1.26		
Debt retirement	Group 1	165	4.05	0.97	-0.32	0.75
	Group 2	129	4.09	0.98		
Average teacher salary	Group 1	163	3.53	1.06	-0.20	0.84
	Group 2	130	3.55	1.22		
Significant increase in enrollment	Group 1	161	2.83	1.21	-1.17	0.24
	Group 2	127	3.00	1.30		
Significant decrease in enrollment	Group 1	164	2.53	1.23	-1.00	0.32
	Group 2	130	2.68	1.27		
Average teacher/pupil ratio	Group 1	165	3.01	1.08	-0.72	0.47
	Group 2	131	3.11	1.19		
Mean years of experience of teachers on staff	Group 1	165	2.19	1.12	-0.39	0.70
	Group 2	132	2.24	1.01		
Mean age of teachers on staff	Group 1	164	2.35	1.11	-1.00	0.32
	Group 2	131	2.48	1.05		
Number of "special teachers" on staff	Group 1	165	2.78	1.06	-0.89	0.38
	Group 2	133	2.90	1.03		
Percentage of B.A. degreed personnel	Group 1	164	3.12	1.06	-1.12	0.27
	Group 2	131	3.27	1.18		
Percentage of M.A. degreed personnel	Group 1	163	3.12	1.06	-2.34	0.02
	Group 2	132	3.42	1.09		
Percentage of Specialist degreed personnel	Group 1	162	3.28	1.01	-2.65	0.01
	Group 2	131	3.60	1.04		
Percentage of Ed.D. degreed personnel	Group 1	161	3.34	1.01	-2.89	0.00
	Group 2	130	3.68	1.04		
Percentage of Ph.D. degreed personnel	Group 1	161	3.34	1.02	-2.81	0.01
	Group 2	130	3.68	1.06		

Table 13.--Continued.

Factor	Group[a]	N	$\bar{X}$	SD	T Value	P Value
Advice and input from central office admin.	Group 1	161	1.87	0.81	-1.40	0.16
	Group 2	131	2.02	0.97		
Advice and input from principals	Group 1	169	1.41	0.58	-2.07	0.04
	Group 2	131	1.57	0.80		
Advice and input from teachers	Group 1	169	1.44	0.65	-0.73	0.47
	Group 2	134	1.50	0.60		
Advice and input from unions	Group 1	163	2.66	1.12	-1.40	0.16
	Group 2	131	2.86	1.34		
Advice and input from parents	Group 1	166	2.08	0.75	-2.10	0.04
	Group 2	129	2.30	1.04		
Advice and input from pupils	Group 1	165	2.18	0.86	-1.70	0.09
	Group 2	129	2.36	0.98		
Advice and input from board of education	Group 1	168	1.83	0.79	-1.14	0.25
	Group 2	132	1.95	0.93		
Advice and input from business and industry	Group 1	165	2.24	0.89	-1.28	0.20
	Group 2	131	2.38	0.98		
Advice and input from state gov't. sources	Group 1	163	2.76	0.99	0.69	0.49
	Group 2	131	2.68	1.07		
Advice and input from professional organiz.	Group 1	166	2.31	0.92	-0.05	0.96
	Group 2	132	2.32	0.94		
Advice and input from university consultants	Group 1	163	2.64	1.02	-1.18	0.24
	Group 2	132	2.79	1.07		
Advice and input from conferences	Group 1	167	2.07	0.80	0.20	0.84
	Group 2	131	2.05	0.78		
Michigan Educational Assessment Program	Group 1	166	2.16	0.84	-2.20	0.03
	Group 2	131	2.40	1.00		
Achievement tests	Group 1	166	2.01	0.85	-3.13	0.00
	Group 2	130	2.34	0.98		
Knowledge from college courses	Group 1	163	2.61	0.83	-1.71	0.09
	Group 2	130	2.80	1.04		
Knowledge from professional literature	Group 1	166	2.16	0.80	-1.19	0.23
	Group 2	132	2.28	0.90		
Impact from news media	Group 1	161	2.81	0.97	-1.66	0.10
	Group 2	132	3.01	1.02		

[a]Group 1 = Superintendents with 0-6 years of teaching experience
Group 2 = Superintendents with 7 or more years of teaching experience

the sample into two groups, based on years of teaching experience. Superintendents with 0-6 years of teaching experience constituted 55.7% of the group, and those with 7 or more years of teaching experience represented 44.3% of the group. The researcher used an independent t-test with an alpha level of .05 to test this hypothesis.

Statistically significant differences existed on 8 of the 34 influential factors. (The lower the mean score, the more important the factor.) The eight factors were: percentage of M.A. degreed personnel, percentage of Specialist degreed personnel, percentage of Ed.D. degreed personnel, percentage of Ph.D. degreed personnel, advice and input from principals, advice and input from pupils, Michigan Educational Assessment Program, and achievement tests. The group with the least teaching experience considered all of the eight factors to be significantly more important than did the group with more teaching experience.

The null hypothesis was rejected. Statistically significant differences existed between the two teaching-experience groups in terms of factors influencing recommendations for professional-development programs.

Supplementary Analysis

The researcher was interested not only in dividing the sample into two groups for use with t-tests, but also in investigating whether a linear relationship existed between the various demographic charistics of the superintendents and their responses to the influential factors. Pearson product-moment correlations were run on every variable.

Table 14 shows the data relative to the relationship between the superintendents' age and the responses given to the 34 factors in the Survey. Three factors were found to be significant at the .05 level and indicated a slight relationship with age. Older superintendents found the following factors to be significantly less important than others: significant increase in enrollment, advice and input from conferences, and achievement tests.

Table 15 depicts the data relative to the relationship between the superintendents' years of experience as a superintendent and the responses given to the 34 factors in the Survey. No significant relationships were found; thus there was no significant correlation between a superintendent's length of experience and the influential factors listed in the Survey.

Table 16 is a tabulation of the data relative to the relationship between the superintendents' years of experience in the present district and the responses given to the 34 factors included in the Survey. Two factors were found to be significant and indicated a slight relationship with years of experience in the present district. Superintendents with more experience in the district found the following factors to be significantly less important than did superintendents with less experience: advice and input from parents and advice and input from conferences.

Table 17 shows the data relative to the relationship between superintendents' length of teaching experience and the responses to the 34 factors listed in the Survey. One factor was found to be statistically significant and indicated a slight relationship with

Table 14.--Pearson product-moment correlation coefficients of 34 factors with superintendents' age.

Factor	$\bar{N}$	r_{xy}	P Value
Total general fund expenditure per pupil	283	-0.03	0.62
State aid membership	294	-0.05	0.40
S.E.V. per state aid member	295	0.01	0.83
Total operating millage rate	297	0.01	0.90
Debt retirement	294	0.10	0.08
Average teacher salary	293	-0.02	0.70
Significant increase in enrollment	288	0.12	0.04
Significant decrease in enrollment	294	-0.02	0.76
Average teacher/pupil ratio	296	0.07	0.26
Mean years of experience of teachers on staff	297	0.03	0.67
Mean age of teachers on staff	295	0.05	0.42
Number of "special teachers" on staff	298	0.09	0.13
Percentage of B.A. degreed personnel	295	-0.04	0.45
Percentage of M.A. degreed personnel	295	-0.03	0.56
Percentage of Specialist degreed personnel	293	-0.02	0.78
Percentage of Ed.D. degreed personnel	291	0.01	0.81
Percentage of Ph.D. degreed personnel	291	0.04	0.52
Advice and input from central office admin.	292	-0.01	0.90
Advice and input from principals	300	0.03	0.62
Advice and input from teachers	303	0.07	0.21
Advice and input from unions	294	0.06	0.34
Advice and input from parents	295	0.05	0.39
Advice and input from pupils	294	0.04	0.55
Advice and input from board of education	300	0.03	0.58
Advice and input from business and industry	296	0.02	0.78
Advice and input from state gov't. sources	294	-0.002	0.97
Advice and input from professional organiz.	298	-0.003	0.97
Advice and input from university consultants	295	0.03	0.61
Advice and input from conferences	298	0.11	0.05
Michigan Educational Assessment Program	297	0.04	0.48
Achievement tests	296	0.12	0.04
Knowledge from college courses	293	0.04	0.45
Knowledge from professional literature	298	0.11	0.06
Impact from news media	293	0.04	0.49

Table 15.--Pearson product-moment correlation coefficients of 34 factors with superintendents' length of experience as a superintendent.

Factor	$\bar{N}$	r_{xy}	P Value
Total general fund expenditure per pupil	282	-0.04	0.46
State aid membership	293	-0.05	0.42
S.E.V. per state aid member	294	0.02	0.70
Total operating millage rate	296	-0.02	0.72
Debt retirement	293	0.08	0.15
Average teacher salary	292	-0.05	0.37
Significant increase in enrollment	288	0.07	0.23
Significant decrease in enrollment	294	-0.04	0.53
Average teacher/pupil ratio	296	0.05	0.44
Mean years of experience of teachers on staff	297	-0.01	0.88
Mean age of teachers on staff	294	-0.03	0.64
Number of "special teachers" on staff	297	0.03	0.57
Percentage of B.A. degreed personnel	294	-0.07	0.23
Percentage of M.A. degreed personnel	294	-0.07	0.22
Percentage of Specialist degreed personnel	292	-0.10	0.08
Percentage of Ed.D. degreed personnel	290	-0.06	0.33
Percentage of Ph.D. degreed personnel	290	-0.03	0.59
Advice and input from central office admin.	291	0.02	0.75
Advice and input from principals	299	0.06	0.28
Advice and input from teachers	302	0.07	0.22
Advice and input from unions	293	0.08	0.20
Advice and input from parents	294	0.06	0.30
Advice and input from pupils	293	0.00	0.99
Advice and input from board of education	299	0.00	0.94
Advice and input from business and industry	295	-0.01	0.90
Advice and input from state gov't. sources	293	0.00	0.99
Advice and input from professional organiz.	297	-0.02	0.76
Advice and input from university consultants	294	0.00	0.96
Advice and input from conferences	297	0.11	0.06
Michigan Educational Assessment Program	296	0.09	0.11
Achievement tests	295	0.04	0.47
Knowledge from college courses	292	-0.01	0.90
Knowledge from professional literature	297	0.08	0.19
Impact from news media	292	0.06	0.28

Table 16.--Pearson product-moment correlation coefficients of 34 factors with superintendents' length of experience in the present district.

Factor	$\bar{N}$	r_{xy}	P Value
Total general fund expenditure per pupil	282	-0.10	0.08
State aid membership	293	-0.10	0.10
S.E.V. per state aid member	294	-0.05	0.41
Total operating millage rate	296	-0.02	0.75
Debt retirement	293	0.04	0.46
Average teacher salary	292	-0.08	0.15
Significant increase in enrollment	288	0.07	0.23
Significant decrease in enrollment	294	0.02	0.70
Average teacher/pupil ratio	295	-0.02	0.70
Mean years of experience of teachers on staff	296	0.02	0.68
Mean age of teachers on staff	294	0.04	0.54
Number of "special teachers" on staff	297	0.02	0.72
Percentage of B.A. degreed personnel	294	-0.09	0.12
Percentage of M.A. degreed personnel	294	-0.08	0.19
Percentage of Specialist degreed personnel	292	-0.10	0.10
Percentage of Ed.D. degreed personnel	290	-0.02	0.69
Percentage of Ph.D. degreed personnel	291	0.08	0.20
Advice and input from central office admin.	299	0.11	0.06
Advice and input from principals	302	0.09	0.11
Advice and input from teachers	293	0.10	0.10
Advice and input from unions	294	0.14	0.61
Advice and input from parents	293	0.03	0.02
Advice and input from pupils	299	0.08	0.16
Advice and input from board of education	295	0.09	0.11
Advice and input from business and industry	293	0.08	0.20
Advice and input from state gov't. sources	297	0.06	0.33
Advice and input from professional organiz.	294	0.06	0.30
Advice and input from university consultants	297	0.14	0.11
Advice and input from conferences	296	0.09	0.02
Michigan Educational Assessment Program	295	0.06	0.34
Achievement tests	292	0.06	0.35
Knowledge from college courses	297	0.08	0.16
Knowledge from professional literature	295	0.06	0.34
Impact from news media	292	0.04	0.48

Table 17.--Pearson product-moment correlation coefficients of 34 factors with superintendents' teaching experience.

Factor	$\bar{N}$	r_{xy}	P Value
Total general fund expenditure per pupil	283	-0.02	0.80
State aid membership	294	-0.05	0.40
S.E.V. per state aid member	295	0.00	0.98
Total operating millage rate	297	-0.02	0.67
Debt retirement	294	0.01	0.83
Average teacher salary	293	-0.07	0.23
Significant increase in enrollment	288	-0.02	0.71
Significant decrease in enrollment	294	-0.01	0.90
Average teacher/pupil ratio	296	0.00	0.96
Mean years of experience of teachers on staff	297	-0.05	0.40
Mean age of teachers on staff	295	-0.03	0.64
Number of "special teachers" on staff	298	0.03	0.60
Percentage of B.A. degreed personnel	295	-0.05	0.35
Percentage of M.A. degreed personnel	295	0.01	0.91
Percentage of Specialist degreed personnel	293	0.04	0.51
Percentage of Ed.D. degreed personnel	291	0.06	0.33
Percentage of Ph.D. degreed personnel	291	0.08	0.20
Advice and input from central office admin.	292	0.06	0.34
Advice and input from principals	300	0.03	0.60
Advice and input from teachers	303	0.02	0.74
Advice and input from unions	294	0.01	0.88
Advice and input from parents	295	0.11	0.07
Advice and input from pupils	294	0.06	0.32
Advice and input from board of education	300	0.02	0.79
Advice and input from business and industry	296	0.09	0.14
Advice and input from state gov't. sources	294	0.00	1.00
Advice and input from professional organiz.	298	-0.03	0.59
Advice and input from university consultants	295	0.03	0.67
Advice and input from conferences	298	-0.03	0.63
Michigan Educational Assessment Program	297	0.04	0.46
Achievement tests	296	0.14	0.02
Knowledge from college courses	293	0.08	0.16
Knowledge from professional literature	298	0.03	0.55
Impact from news media	293	0.00	0.96

length of teaching experience. The longer the superintendent had taught school, the less important was the factor of achievement tests.

Summary

The researcher's primary purpose was to determine whether differences existed among superintendents with respect to factors that influence their recommendation for professional-development programs. Of major interest was whether personal characteristics of the superintendents significantly affected their recommendation for professional-development programs. Significant differences were found on Hypotheses 3, 5, and 6, which were dichotomous analyses of the superintendents' level of graduate education, length of experience as superintendent in the present district, and length of teaching experience. No significant differences were discovered on Hypotheses 2 and 4, which concerned the superintendents' age and total length of experience as a superintendent. Finally, a slight linear relationship was discovered to exist between the superintndents' age, experience in the present district, and length of teaching experience and certain factors influencing recommendation for professional-development programs.

Chapter V contains a summary of the study, conclusions based on the research findings, recommendations for further research, and reflections.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

A rapidly increasing number of educational leaders are concluding that future success of the public-school educational system within a continuously changing society will depend more and more on providing the necessary training for professional personnel to enable them to implement appropriate instruction (Rubin, 1976). Professional-development programs and inservice education are believed to be the key to such training (Barth, 1979).

The effectiveness of staff-development programs, including their cost effectiveness, has been severely limited by inconsistent approaches to professional development and teachers' lack of knowledge and understanding of the superintendent's rationale for planning and/or implementing professional-development programs. Most research has been conducted with the teacher and the principal as the focus of the study. Generalizing results from such research to superintendents is risky, at best. Many suppositions about how a superintendent is motivated to pursue a program for professional development have been voiced, but these theories have been based on logical inference rather than on systematic investigation in controlled situations.

The Professional Development Survey developed for this study was sent to superintendents from all of the K-12 public school

districts and intermediate school districts in Michigan. Superintendents were chosen for study because of the lack of research reflecting the superintendent's importance in professional development.

Survey participants provided information regarding their age, highest graduate degree, length of experience as a superintendent, length of experience as a superintendent in the present district, length of teaching experience, and the university from which their most recent graduate degree had been received. Respondents also indicated the extent to which individual factors influenced their recommendation for professional-development programs. Data obtained from 307 superintendents were analyzed, using frequencies, means, and percentages, as well as t-tests with an alpha level of .05.

As a result of the data analysis, the researcher found that

1. There was a difference among superintendents with respect to the factors that influenced their recommendation for professional-development programs.

2. There was no significant difference among superintendents, based on age, in regard to the factors that influenced their recommendation for professional-development programs.

3. There was a significant difference among superintendents, based on their graduate education, in regard to the factors that influenced their recommendation for professional-development programs.

4. There was no significant difference among superintendents, based on their experience as a superintendent, in regard to the

factors that influenced their recommendation for professional-development programs.

5. There was a significant difference among superintendents, based on their length of experience in the present district, in regard to the factors that influenced their recommendation for professional-development programs.

6. There was a significant difference among superintendents, based on their years of teaching experience, in regard to the factors that influenced their recommendation for professional-development programs.

In addition, the researcher examined whether a linear relationship existed between the various independent measures and the superintendents' responses to the 34 factors by using the Pearson product-moment correlation. A relationship was found to exist between superintendents' age and the factors of significant increase in enrollment, advice and input from conferences, and achievement tests; between superintendents' experience in the present district and the factors of advice and input from parents as well as advice and input from conferences; and between superintendents' length of teaching experience and the factor of achievement tests.

Conclusions

Based on the findings of this study, it appeared that superintendents did, in fact, accept the advice of those individuals who are directly involved with the receipt of, or who will sanction the policy for, professional development--specifically, teachers,

principals, board members, and central office administrators. This conclusion appears to be compatible with the findings of the Rand Study, as discussed in Chapter II. Support for these four influential factors was evident in the mean scores for these factors, which indicated that superintendents participating in this study believed that the advice and input from teachers, administrators, and board members influenced their recommendation for professional-development programs. This finding led the researcher to conclude that among the factors that could influence the superintendent, the suggestions from these four groups of people were most important.

Some evaluators of professional-development programs would theorize that older superintendents, because of their orientation to a different era, might be influenced by other factors than would their younger counterparts. However, this was not found to be true in the present study. The researcher suggests that professional-development programs may be recommended, regardless of the age of the superintendent.

Continuing education for a superintendent appeared to have the effect of alleviating financial concerns with regard to professional development. The higher the superintendent's degree, the less important were finances and the more important were people in influencing the recommendation for professional-development programs. These findings might suggest that universities have the capability of instilling methods of dealing with situations in a more humanistic style, as opposed to looking primarily at data.

Pressure from the community to produce with measurable results, as well as scrutiny of school superintendents by the media, provide

hints as to why the Michigan Educational Assessment Program was an influential factor, as was the up-to-date information that can be gleaned from the professional literature. The findings of the study seemed to suggest that as a superintendent gained more seniority in a district, his need to rely on specific measurable instruments declined. These results are potentially useful for young superintendents and for school boards as they evaluate their new and experienced superintendents.

The effect of length of experience as a teacher appeared to be consistently meaningful. The group of superintendents with the fewest years of teaching experience apparently valued a more extensive education among teachers and looked to results from tests. These data indicate that the longer an individual is a teacher, the less likely he/she is to be influenced by external forces. This conclusion could be extremely important to colleges and publishers of professional literature in targeting a heterogeneous group such as this one.

Three trends in the demographic characteristics of the superintendents in the study had additional importance because of the research findings. First, the mean years of experience as superintendent in the present district were fewer than the mean years of experience as a superintendent altogether. This led the researcher to believe that many superintendents were not in their first job, which implies less seniority in the district, and consequently were subjected to those factors that affect superintendents with less experience in a district. Second, the ages of the superintendents

were fairly evenly distributed. Because age had no effect on the influential factors, it might be concluded that recommendations by young superintendents would be as credible as those by older superintendents. Third, the length of teaching experience appeared to be low overall, leading the researcher to conclude that organizations are likely to be subject to external manipulation.

Michigan superintendents indicated that they believed teachers, administrators, and board members should be involved to a certain degree in professional-development programs. They did not indicate, as a group, that age or experience as a superintendent would make a measurable difference in their recommendation for professional-development programs. Teaching experience and longevity in the district, however, did make a difference between the dichotomous groups.

In summary, this researcher believes that, based on responses to the Professional Development Survey, superintendents, for the most part, appeared to rely on the advice and input of people. Nonetheless, when differences did appear, typically it was the younger or least-experienced superintendents who moved from relying on input from people to relying on numerical data or evidence.

Recommendations for Further Research

Based on the study findings, the researcher recommends that further research be conducted in the following three areas.

1. Research could be done to provide a description of superintendents' perceptions of the need for professional-development programs. These perceptions may affect the recommendations for

professional development as it related to the personnel of a given school district.

2. Superintendents delegate various administrative tasks in many different ways. Research could be conducted to determine the degree of delegation involved in recommending professional-development programs, and specifically, to whom the task is assigned.

3. The Professional Development Survey could be employed with a random sample of superintendents across the nation to validate the results of the present study in areas other than Michigan. The data could be used to compare various aspects of the Michigan educational structure to those of other states.

Reflections

This research was conducted to determine the factors that influence superintendents' recommendation for professional-development activities. The study findings supported the contention that decisions concerning professional-development programs are heavily influenced by the advice and input of the people closely involved with the school system's operation: teachers, principals, central office administrators, and board members. Knowledge of this fact should help superintendents be aware of the influencing factors as they relate to the superintendent's own age, experience, and education, ultimately leading to logical and conscious decisions with regard to recommendations for professional-development programs.

APPENDICES

APPENDIX A

THE PROFESSIONAL DEVELOPMENT SURVEY

PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT YOURSELF:

Please fill in the blanks

I was born in 19_____.

I taught school for _____ years.

I have been a Superintendent for _____ years.

I have been a Superintendent in this district for _____ years.

Please check (X) one

Highest Level of Schooling Completed:

( ) Bachelor's Degree

( ) Master's Degree

( ) Specialist's Degree

( ) Educational Doctorate (Ed.D)

( ) Doctor of Philosophy (Ph.D.)

Please fill in the blank

The University I attended where I received my highest degree was

_____

For each statement indicate with an "X" whether you:

The following factors influence my recommendation for professional development programs:	1--Agree to a great extent	2--Agree to a certain extent	3--Neutral or unsure	4--Disagree to a certain extent	5--Disagree to a great extent
Total General Fund Expenditure Per Pupil					
State Aid Membership					
S.E.V. Per State Aid Member					
Total Operating Millage Rate					
Debt Retirement					
Average Teacher Salary					
Significant Increase in Enrollment					
Significant Decrease in Enrollment					
Average Teacher/Pupil Ratio					
Mean Years of Experience of Teachers on Staff					
Mean Age of Teachers on Staff					
Number of "Special Teachers" on Staff					
Percentage of B.A. Degreed Personnel					
Percentage of M.A. Degreed Personnel					
Percentage of Specialist Degreed Personnel					
Percentage of Ed.D. Degreed Personnel					
Percentage of Ph.D. Degreed Personnel					
Advice and Input From Central Office Administration					
Advice and Input From Principals					
Advice and Input From Teachers					
Advice and Input From Unions					
Advice and Input From Parents					
Advice and Input From Pupils					
Advice and Input From Board of Education					
Advice and Input From Business and Industry					
Advice and Input From State Government Sources					
Advice and Input From Professional Organizations					
Advice and Input From University Consultants					
Advice and Input From Conferences					
Michigan Educational Assessment Program					
Achievement Tests					
Knowledge From College Courses					
Knowledge From Professional Literature					
Impact From News Media					

APPENDIX B

THE EXPERTS AND SUPERINTENDENTS EMPLOYED IN DEVELOPING AND PRETESTING THE PROFESSIONAL DEVELOPMENT SURVEY

Experts Employed in Developing the Professional Development Survey

Dr. Donna Wanous

Associate Professor, Department of Teacher Education and
Senior Researcher, Institute for Research and Teaching
Michigan State University

Paula Tissot

Director of the Office of Professional Development,
Michigan Department of Education

Margo Johnson

Director--Office of Professional Development
511 G Street
Washington, D.C. 20024

Superintendents Employed in Pretesting the Professional Development Survey

James Pavelka
Superintendent, Allegan County Intermediate School District
Allegan, Michigan

Henry Gudith
Superintendent, Van Buren County Intermediate School District
Lawrence, Michigan

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