

THE SECONDARY PRINCIPALSHIP: ADMINISTRATORS' PERCEPTIONS
OF PRE- AND POST-SERVICE BARRIERS TO EFFECTIVENESS

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The Secondary Principalship:
Administrators' Perceptions of
Pre- and Post-Service Barriers to Effectiveness

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ABSTRACT

This research was designed to (1) identify obstacles in the principal's environment that inhibit the successful discharge of duties; (2) identify demographic, experiential, or educational factors that may serve as indicators to barriers; (3) identify correlations between demographic factors and indicators of effectiveness; (4) identify tasks considered essential to the day-to-day operation of schools; and (5) determine the principal's level of satisfaction with her or his university-based preparation programs.

Survey research was the methodology used and the research design was a blend of descriptive and correlational studies. A three-part survey instrument was used to elicit the perceptions of Pennsylvania high school principals concerning the existence of barriers and to gather information on the emphasis placed on the eight job dimensions of the principalship identified by Smith and Andrew (1989). Leithwood and Montgomery's 1984 research was used as the basis for development of survey items dealing with barriers. The study was limited to Pennsylvania school districts with one high school.

Results of the study indicated that the demographic factors used in the survey do not serve as indicators of barriers and that barriers exist in the principal's environment regardless of setting, educational, or experiential background. A principal's attitude toward specific items does appear to serve as an indicator of barriers. Pennsylvania high school principals indicated that pre-service expectations of the principalship match their current duties and that university-based preparation programs did not adequately prepare them for the principalship. Further study is needed to determine the extent of the relationship between barriers and attitude.

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CHAPTER 1

The Problem

Introduction

Literature is replete with references (Daresh, 1990; Daresh, 1997; Ginty, 1995; Griffiths, Stout & Forsyth, 1988b; Kimbrough, 1990; Richardson, Lane, & Flanigan, 1996; Taylor (Meadley), 1984; Zellner & Erlandson, 1997) on the role and function of leadership in education and the inability of educational leaders to meet today's job demands. Cuban (1988) contended that the current organizational structure of schools prevents administrators from moving schools toward what they can be, and instead, creates circumstances where principals shape schools based on a set of needs that may not be related to the stated purpose and function of the school. The margin for practicing leadership is further shrunk, according to Cuban, by the roles created and by the manner in which public schools have been shaped over the last century and a half.

Schools have become challenging, ambiguous, and demanding organizations that are in a constant state of activity as the result of a “vast array of complex tasks, conflicting pressures, and thorny dilemmas” (Deal & Peterson, 1994, p. 48). Holland (1997) contended that “our society is going through intense social and political upheavals,” and as a result “virtually all institutions and institutional leaders” have been left “confused, isolated, and sometimes endangered” (p. 8). Curriculum guidelines developed by the National Council for Accreditation of Teacher Education (NCATE), an accrediting agency for higher education, suggested that

the changing school and community contexts create unusual demands as well as

exceptional opportunities for school leaders. Schools must adopt new missions, structures, and relationships in response to the changing environment. A better utilization of resources, especially human talent and initiative, is required. Under these conditions educational leaders must possess the capacity to manage change and to create collaborative action on behalf of student outcomes. Few principals, superintendents, curriculum directors, or supervisors are prepared for this formidable task. (Educational Leadership Constituent Council, 1995, p. 2)

With the seemingly endless number of initiatives calling for reform in the educational system and in the preparation of educational administrators (Daresh, 1990, 1997; Erlandson, 1986; Fullan, 1992; Griffiths, Stout & Forsyth, 1988a; Hall et al, 1984; National Policy Board for Educational Administration, 1990; Norris, 1990; Richardson et al., 1996; Sergiovanni, 1984; Sirotnik & Durden, 1996; Taylor (Meadley), 1994), it is important to understand the profile of the type of leader who can direct and produce meaningful change and to identify factors in the workplace that inhibit or prevent successful completion or performance of duties. Beckner (1990a) concluded that “[a] new breed of administrator is needed to help orchestrate and manage the reforms that are needed in education today” (p. 1).

The need to provide the appropriate leadership within an organization is an idea as old as civilization itself (Smith & Andrews, 1989). Programs designed to train leaders must address the requisite skills that will provide potential leaders with the “tools” required for success within the framework of the selected organization, educational or otherwise. Inadequate preparation or inadequate organizational structures—such as

excessively rigid and time-consuming policies and procedures, inadequate resources, or a conservative stance on the part of central administrators toward school-initiated change—result in school administrators who are ineffective or unable to perform their duties (Leithwood & Montgomery, 1984). As a result, a perception exists outside the school environment that schools lack quality and a corresponding loss of confidence in school leadership tends to occur. The loss of confidence fosters a belief that leadership ability is low among school principals and that school leaders are more concerned about personal gain than serving the needs of children or society. These conditions exist at a time when school leaders are working harder and longer than ever before, while at the same time they are besieged by greater and more-frequent calls for improved and more-effective leadership (English, Frase, & Arhar, 1992; Smith & Andrews, 1989).

Confusion exists concerning the role and function of school leaders. The role of the principal, according to Beckner (1990b) is to create school organizations where all students can be successful. Creating schools designed to help students succeed will require that educational leaders “develop the vision, knowledge and skills necessary to bring about holistic change in American schools” (p. 1). English, Frase, and Arhar (1992) described school administrators as “those people who occupy structural points in school organizations who are expected to lead others. Leadership within these roles depends upon how the role itself has been shaped legally and formally and also upon what aspects have been allocated by tradition and custom in localized settings” (p. 2). Leadership in schools can also be thought of in terms of forces that are available to “administrators, supervisors, and teachers to bring about or preserve changes needed to improve

schooling” (Sergiovanni, 1984, p. 6).

The confusion surrounding the leadership aspect of the principalship may be the result of the disparity that exists between what principals do and what they actually think they should be doing (Kimbrough & Burkett, 1990). A principal’s job, Sergiovanni (1991b) noted, “is open ended; that is, the job becomes largely what each principal wishes to make of it” (p. 23), and “the work of successful principals corresponds more closely to what principals themselves say they should emphasize” (p. 31). According to W. D. Greenfield (1988),

The question not being asked is “Why do school principals spend their time as they do?” Prescriptions calling for principals to be instructional leaders confound the issue by implying that the way they do spend their time is inappropriate. The thesis . . . is that principals are doing their work as they know it must be done, given the demand of the work situation. (p. 214)

Differing views of leadership and what it constitutes add to the confusion surrounding the principalship (English et al., 1992). The problem is complicated by management theorists and strategists who seek to provide schools with instant solutions to their complex problems (Sergiovanni, 1991b). Fullan (1998) believed that management techniques, provided to schools as answers to their diverse problems, are faddish and have terrible track records. He went on to state that “part of the problem lies in the nature of the advice. The most serious problem, however, is not that the advice is wrong, but there is no answer out there” (p. 6).

Researchers involved in the study of effective schools have reported a consensus

on correlates that are associated with those schools identified as effective (Pellicer, Anderson, Keefe, Kelley, & McCleary, 1990; Sergiovanni, Burlingame, Coombs, and Thurston, 1992). Among those correlates, strong instructional or administrative leadership is considered a requisite condition for a school to be effective, but it is not the only factor that separates effective schools from those classified as less effective. Conditions whose presence or absence is directly linked to the role and function of the principal found in effective schools are:

1. Strong instructional leadership
2. A safe and orderly school climate
3. High expectations for students' achievements by both teachers and administrators
4. High emphasis on the mastery of basic skills by all students in the areas of reading, writing, mathematics, and language arts
5. Monitoring of each student's progress coupled with regular feedback
6. Parent and community involvement. (Herman & Herman, 1994, pp. 48-49)

Efforts with the purpose of helping principals achieve these or other tasks associated with the successful operation of schools deserve serious consideration in university-based program planning and design.

Statement of the Problem

Effective operation of a school may depend more on the principal's ability to direct and guide the school and its programs than on any other person (Hallinger & Heck, 1996; Sirotnik & Durden, 1996). One measure of effectiveness as defined by Leithwood

(1987) is the principal's ability to direct school improvement initiatives and the extent to which "they have a well-defined set of legitimate purposes and the skill and knowledge to use even apparently unrelated opportunities to direct the school toward achieving them" (p. 65). In studying principals of schools recognized for their effectiveness, Valentine and Bowman (1991),

found that principals in recognized schools were perceived strongest in providing direction for the school; organizing tasks and personnel for the effective day-by-day management of the school; and promoting positive working relationships between the school, the community the school serves, and other educators and agencies which work with the school. (p. 5)

Lipham (1990) contended, "A substantial body of research has now accumulated suggesting that quality of teaching, school climate, student achievement, and public's confidence are directly related to the quality of school leadership" (p. 25). It is crucial that principals possess the skills and strategies required to perform their duties effectively and efficiently. Many prospective high school principals accept positions without having received appropriate university-based training and find that, once incumbent, barriers and obstacles exist that impede successful completion of essential tasks. If school principals are to discharge their duties successfully, identifying and removing obstacles to the effective and efficient operation of schools deserves serious consideration as an essential component of reform efforts.

The nature of the principal's environment and the principalship in general complicate the task of those who seek to successfully administer public high schools

(Cunard, 1990). Principals operate in environments that vary greatly and may have little, if anything at all, in common with the environments of their counterparts. The work of principals, according to Deal and Peterson (1994), “[is] extremely complex, and the way they conceive of their roles as managers or leaders shapes how they think, act, and feel” (p. xiii). Brent (1998) has concluded that “a principal’s skills are largely developed, if not exclusively, on an individual basis. The knowledge is difficult to earn and not transferable” (p. 5). There is, according to DeBevoise (1984), “a growing awareness of the complexity and uniqueness of each principal’s situation” (p. 20). The problems facing principals are complicated by the fact that principals “are under enormous pressure to hurry things along—to make visible progress within short, and often unrealistic, time frames” (Sergiovanni, 1996, p. 85). Factors within the principal’s environment over which the principal exercises little or no control contribute to the formation of barriers to effectiveness and efficiency.

Identifying and removing obstacles in the principal’s environment are complicated by the structure and content of the principal’s everyday work. Brent (1998) advanced the thesis that “there is nothing systematic or regular about a principal’s duties,” and under these circumstances it becomes “the principal’s responsibility to make sense out of his or her unique reality and discover ways to carry out the charge” (p. 5).

Administrative work is described by Pitner (1988) as follows:

The structure of administrative work is characterized by (1) a low degree of self-initiated tasks, (2) many activities of short duration, (3) discontinuity caused by interruptions, (4) the superseding of prior plans by the needs of others in the

organization, (5) face-to-face verbal contacts with one other person, (6) variability of tasks, (7) an extensive network of individuals and groups both internal and external to the school or district, (8) a hectic and unpredictable flow of work, (9) numerous unimportant decisions and trivial agendas, (10) few attempts at written communication, (11) events occurring in or near the administrative office, (12) interactions predominantly with subordinates, and (13) a preference for problems and information that are specific (rather than general), concrete, solvable and currently pressing (pp. 368-369).

Defining the role of the principal has become increasingly difficult, in part because of the rapid changes in the function of the position in the twentieth century.

According to Kimbrough and Burkett (1990),

The best way to summarize the functions of school principals is to consider the task areas of their responsibilities. The principal is responsible for (1) instruction and curriculum, (2) pupil personnel, (3) community and school relations, (4) staff personnel, (5) organization and structure of the school, and (6) school plant facilities. The principal is also accountable for the performance of tasks in accounting for internal funds, management of the school lunchroom, and the loading and unloading of buses. To put it succinctly, the principal is accountable for the entire operation of the school. (p. 6)

Those who suggest that the measure of administrative effectiveness is the function of a single concept, such as instructional leadership, severely limit the view of what school leaders do. Suggesting that working with teachers is the measure of an effective principal

is too restrictive (Griffiths et al., 1988b).

Today's principal faces an ever-expanding, complex set of demands and job requirements, and the problem is not likely to diminish. As we approach the twenty-first century, principals will encounter new problems and challenges, and their "responsibilities will continue to grow, and the principalship will become even more complex" (Zellner & Erlandson, 1997, pp. 45-46). While current research continues to indicate that principals must be instructional leaders, have the ability to manage change, and be adept at school site management, many principals find themselves immersed in a completely different set of demands. A gap exists between the exposure principals receive to the theoretical knowledge base that informs preparation programs and the realities of the workplace: "Although programs offer many courses on such topics as finance and politics of education, principals spend much of the time on the job with discipline, extracurricular activities, service, pupil control, organizational maintenance, and noninstructional matters" (Griffiths, 1988b, p. 8). Schön (1983) wrote that "professional knowledge is mismatched to the changing characteristics of the situation of practice" (p. 4). The inconsistency between theory and practice leads to the question "Does the inability of administrative preparation programs to provide realistic experiences contribute to the ineffectiveness of principals?"

Criticism directed at the preparation of principals suggests that university-based programs may actually serve as barriers to administrative effectiveness. Studies from the 1960s point to the lack of relationship between university-based preparation programs and success as an administrator. Murphy (1992) described what he considered serious

flaws in programs intended to prepare principals and noted that programs have been found wanting in nearly every aspect. Critics have contended that serious problems exist in preparation programs and that these problems permeate all aspects of the programs from recruitment to certification requirements. Preparation programs, however, are not solely responsible for the principal's inability to succeed.

Leithwood and Montgomery (1984) conducted a study whose focus was identifying the existence of obstacles outside the formal preparation program that inhibit the effectiveness of principals. Many administrators are prevented by obstacles, real or perceived, from performing tasks identified as informing effectiveness and efficiency. Five distinct cluster or problem areas associated with the successful discharge of duties were identified by Leithwood and Montgomery. The problems identified were related to "teachers, to the role of the principal, to those persons occupying the role, to the board-level administration and to the community (including parents)" (p. 75).

Helping principals identify and remove obstacles is hindered by the complexity and ambiguity associated with issues surrounding the principalship. Leithwood and Montgomery (1984) described the complexity of the issue as follows:

First, only a few studies directly link identified obstacles to the principal's efforts at program improvement, although such links seem plausible in most cases.

Second, the obstacles that have been identified might best be considered the symptoms of more fundamental problems yet uncovered. This is an especially serious limitation for those who would assist principals in their program improvement efforts; the identification contributes only modestly to the design of

actions helpful to the principal's efforts. (p. 74)

The ambiguity is created by the principal's inability to properly identify obstacles or by the principal's unawareness of critical obstacles that impede performance. Additionally, other factors initially identified as obstacles or barriers to effectiveness diminish in importance under extended scrutiny, and these factors may be best described as "perceived obstacles." The importance of these perceived obstacles should not be underestimated, and, according to Leithwood and Montgomery (1984),

[N]evertheless perceived obstacles are psychologically real; for example, they constitute the subjective reality for in-service participants with which trainers constantly grapple, usually in unsystematic ways. Failure to recognize these subjective realities often leads in-service participants to the view that the program is not relevant or is not addressing their needs, even when a more objective view would suggest otherwise. (p. 85)

Purpose of the Study

Through the use of survey research, the purpose of this study is to identify barriers (perceived or real) to the high school principalship. Barriers create circumstances whose presence subsequently results in the inability of the administrator to perform her or his duties. Leithwood and Montgomery (1984) noted that barriers exist in the principal's environment that can be classified as perceived. Perceived barriers result from, or are symptomatic of, barriers that principals are unable to identify. The unidentified barriers may be more significant than those identified by the principal and may serve as serious impediments to effectiveness. Barriers may be related to the role and function of

“teachers, to the role of the principal, to those persons occupying the role of principal, to the board-level administration, and to the community” (Leithwood and Montgomery, 1984, p. 75). The current study will also include principals’ perceptions regarding state-mandated and other initiatives that may function as barriers.

Current practices of Pennsylvania high school principals in public schools will be examined with respect to the emphasis placed on each of eight job dimensions (see survey, Appendix A) identified by Smith and Andrews in a 1989 Association for Supervision and Curriculum Development (ASCD) publication. The eight job dimensions are related to the “160 tasks (Appendix B) identified by the National Association of Secondary School Principals (NASSP) as activities that principals perform on a day-to-day basis in order to do the job normally assigned to them in their school district” (Smith & Andrews, 1989, p. 135). Job dimensions can be further reduced into four major categories, which Smith and Andrews identify as educational program improvement, community relations activities, student-related services and activities, and building management operations and district relations. Principals will be asked to compare the emphasis placed on each of the eight job dimensions with the adequacy of university-based preparation received.

In conjunction with the identification of barriers, the study seeks to identify specific environmental or experiential variables that may serve as indicators of the existence of the aforementioned barriers or as indicators of success. The following variables will be examined to determine if such connections exist: (a) gender, (b) varying amounts of university-based preparation (level of education), (c) years in education, (d)

years of administrative experience, (e) years incumbent in current position, (f) years of teaching experience, (g) school size (small, medium, large, or extra large), (h) setting (district type: rural, urban, suburban, or metropolitan), (I) number of on-site administrators, (j) grade configuration, and (k) years in education.

Research Questions

The perceptions of high school principals will be solicited and analyzed to answer the major and subordinate research questions posed by the current study. Research questions are as follows:

What are the perceived environmental or experiential barriers to successful completion of the duties of a high school administrator?

- A. Are there specific environmental or experiential factors that serve as indicators of a principal's perceived ability to successfully discharge his or her duties or that correlate with a principal's level of satisfaction with his or her university-based preparation program?
- B. Does the pre-service, university-based preparation received by high school principals in essential knowledge and skill areas align with the requirements of the principalship?
- C. Do pre-service expectations and perceptions of the high school principalship match the reality of the position?
- D. Is there a difference in the reported degree of success by administrators who regularly attend workshops or who regularly update skills through university-based programs and by those who do not?

- E. Do principals whose university-based preparation program included either a field experience, internship, or mentor program report a greater degree of success than those whose programs do not?
- F. Does a principal's perception of the emphasis placed on the eight job dimensions or the adequacy of the university-based preparation received serve as an indicator of success?

Methods

Survey research was chosen as the methodology to gather the data necessary to fulfill the requirements of the study. High school principals from school districts in Pennsylvania containing a single high school were mailed copies of the survey, a cover letter, and instructions. Districts with more than one high school were not included, in an effort to eliminate the collection of conflicting data that may have resulted from factors that the survey instrument was not designed to measure. A pilot test of the survey was conducted using current and former principals. Revisions to the survey were made based on the suggestions of the pretest participants.

Participants in the study were asked to respond to a variety of questions related to the role and function of the high school principal. Survey questions, with the exception of two, were closed-end with 39 of the questions (44 items) relating to one of the five barrier types identified by Leithwood and Montgomery (1984) as contributing to the inability of principals to successfully discharge their duties.

Descriptive statistics were generated as a means of fully describing the sample. Independent t-tests and analysis of variance (ANOVA) were performed to identify

significant differences between and among the sample's various sub-groupings. Post hoc procedures were performed when appropriate.

Survey results are reported in Chapter 4.

Significance of the Study

Literature and research suggest that no one position has more influence on the quality and effectiveness of public schools than that of the principal (Kaiser, 1995). The impact that the principalship has on the school and its programs has caused some to advance the thesis that the survival of public schools as a viable component of the American social and political systems hinges on changes in behavior of principals (Beckner, 1990). The changing nature of schools, however, has added to the responsibilities of the principal and has created a role overload. Principals face increasing pressure from school boards, parents, faculties, and superintendents, along with calls for greater accountability. Fullan (1998) described the situation as "out there" now being "in here," and stated that "governmental policy, parent and community demands, corporate interests, and ubiquitous technology have all stormed the walls of schools" (p. 6). Significant changes have occurred in the principal's workload and the nature of the position, and as a result the principal is now required to assume responsibility for overseeing all aspects of the school. Principals must contend with relentless pressure, which interacts with their complex environment to intensify overload (Fullan, 1998).

Zellner and Erlandson (1997) contended that principals who have been on the job over the past 30 years would attest to the increased intensity now associated with the principalship. Documentation to support Zellner and Erlandson's contention was

provided “by a review of the tasks that have been added to the principalship, the environmental pressures that operate on the school, and the emerging interpersonal relationships by which the school is governed and does its daily work” (p. 45).

Additionally, a perception now exists among practicing principals and prospective candidates that “the principal’s job has gotten too hard” (Farrace, 1997, p. 1). The inherent nature and increasing undesirability of the position contribute significantly to what appears to be a shortage of qualified individuals willing to enter the principalship.

Effective-schools research described the principal as being a “strong leader who emphasizes instruction, maintains discipline, and clearly articulates goals” (Mauriel, 1989, p. 234). Mauriel added, however, “The specific behaviors that the principal should engage in to improve school performance are not entirely clear from the research” (p. 234). The principalship is described as having “a dual and sometimes contradictory mission: to preserve tradition and to be agents of change” (Foster, 1988, p. 68). Principals must perform in a setting that W. D. Greenfield (1988) described as being normatively complex and existing in a social situation that is characterized by ambiguity and multiple standards that frequently conflict. Additionally, W. D. Greenfield believed that “the school work situation reflects a social order negotiated within a complex set of professional, organizational, cultural, and environmental constraints and opportunities” (p. 207). Effectiveness or ineffectiveness as a principal is affected by the unique environment in which the principal works. The principal’s environment is described as being subject to renegotiation and susceptible to threats both internally and externally. Ubben and Hughes (1987) stated that working in such a unique environment creates a

situation where “the difference between the effective and ineffective leader is often not the behavior itself but rather the appropriateness of the behavior in a particular situation” (p. 13).

A need exists to alter the principal’s environment and improve her or his ability to attend to the inordinate number of essential tasks related to the position. Various scholars have commented on the context of school leadership as one of constant crisis. After studying eight school principals, Blumberg and Greenfield (1984) called the context a “setting of immediacy” in which “most of a principal’s day is spent reacting to situations that arise, in most cases unpredictably” (p. 172). Efficiency as a manager is no longer the standard used to measure success as a principal, because of the expanded mission now facing schools. Ground rules for managing schools have been altered by the school’s expanded mission, and principals “must now respond to the needs of all the school stakeholders—students, teachers, parents, and community members—and include them in the decision making process” (Zellner & Erlandson, 1997, p. 45). Sirotnik and Durden (1996) maintained that, “a substantial body of research has now accumulated suggesting the quality of teaching, school climate, student achievement, and the public’s confidence are directly related to the quality of school leadership” (p. 539). Reform efforts should concentrate on those activities that will allow principals to perform tasks identified as being essential to the successful operation of the school (Shivetts, 1999). The focus must be on the knowledge, skills and attitudes principals identify as informing the effective operation of schools (Ginty, 1995).

Success as a school administrator is contingent on more than completing a

prescribed series of courses, certification, and placement. Consideration must be given to intangibles, which combine with other factors to influence or affect the ability of a principal to guide and direct the school, its programs, and staff. The nature of the principalship creates an environment where there is a constant press for decisions, which results in the principal's day being "characterized by confrontation and problem solving, by reaction and proaction" (Ubben & Hughes, 1987, p. 38). "In some situations, principals often complain they have no time to plan effectively or perform tasks of any length given the constant interruptions and unforeseen demands of their day-to-day responsibilities" (Griffiths, Stout, & Forsyth, 1988b, p. 286). Administrative experience plays an important role in how principals respond to their environment and may be the directing force in determining the course of action that best serves the organization's needs. Sergiovanni (1991a) asserted that principals are "more interested in results than in theory, and in making decisions about practice they trust their own accumulated experiences more than they do abstract principles" (pp. 40-41).

Being an effective public school administrator requires that a principal possess the knowledge, skills, and attitudes that inform the successful operation of schools (Krepeil, 1987). The ability to identify and perform tasks directly associated with the educational needs of students correlates directly with effectiveness as a principal. Within the public school setting, however, barriers and obstacles exist that inhibit the successful operation of schools (Leithwood & Montgomery, 1984; Sergiovanni, 1995).

In a 1984 study, Leithwood and Montgomery attempted to identify obstacles preventing principals from becoming more effective. Within their study the authors

described what they considered to be two serious limitations of such studies. One of the limitations identified dealt with a deficiency in establishing links between obstacles and efforts by principals to improve programs. The second limitation, noted as especially serious, exists in fundamental problems that remain unidentified and which may be potentially more significant than those detected by the study. Identified obstacles, in essence, may only be symptomatic of more fundamental problems. More extensive research is needed to reveal barriers or obstacles that in actuality may be more fundamental and for which we have only been able to identify the symptom. Simply knowing that obstacles exist will lead only to modest gains by those who attempt to assist principals in program improvement efforts. The current study will attempt to identify significant relationships between obstacles and traits or factors, within the principal's experiential base and environment, and thereby establish links as suggested by Leithwood and Montgomery.

Principals' perceptions of barriers present in their environment are important to the efforts of those who aspire to improve the overall quality of educational programs. Although barriers may exist that principals are unable to identify and whose presence may be more significant than those identified, perceived obstacles for principals are nonetheless psychologically real. Perceived obstacles

constitute the subjective reality of in-service participants with which trainers constantly grapple, usually in unsystematic ways. Failure to recognize explicitly and build upon these subjective realities often leads in-service participants to the view that the program is not relevant or is not addressing their needs, even when a

more objective view would suggest otherwise. (Leithwood & Montgomery, 1984, p. 85)

To be successful, reform efforts purported to improve the overall quality of education need to concentrate on factors in the principal's environment or experiential background that inhibit or prevent the principal from meeting the educational and organizational needs of the school and its students. Through the collection and analysis of data, this study has the purpose of contributing to the knowledge base upon which such efforts can be developed or directed. The study specifically seeks to

1. identify work-related factors as perceived by high school principals to be barriers or obstacles to the successful discharge of duties and the successful operation of the school.
2. identify connections between demographic factors and principals' behaviors and perceptions regarding barriers in the work environment.
3. identify job dimensions principals consider essential to the successful and effective operation of schools.
4. identify the level of satisfaction among principals with university-based preparation programs and level of preparedness for the principalship.

The current study by identifying perceived obstacles and connections between obstacles and other factors, may aid in the creation of more effective in-service and in the establishment of new or altered training programs. Confirming a relationship between specific demographic factors and perceived obstacles may result in identification of target groups for whom specific programs may be developed. Beckner (1990a) asserted that for

today's educational reforms to be successful a "new breed" of school administrator is "required to help orchestrate and manage the reforms" (p.1). This new breed of administrator will be culled from practicing or pre-service candidates, but regardless of source, meaningful preparation and professional development programs are critical to success. Designing training programs or in-service around the identified needs of pre-service or practicing administrators will have more meaning and ultimately prove more effective in school improvement programs (Ginty, 1995).

Meaningful improvement to current educational programs is at best a difficult undertaking and can be achieved only by identifying and removing obstacles within the principal's environment and through the alignment of training programs, pre-service or in-service, and actual practice. Currently, a need exists to develop initiatives designed to bring meaningful change to the public school system. The current study seeks to gather data that will inform those initiatives with such a stated purpose and goal.

Limitations of the Study

Data collected will represent the perceptions and experiences of principals and as such are subject to variations. The study does not attempt to standardize the sample in any way other than by current administrative assignment. The level of satisfaction reported by any respondent may be the result of variables or circumstances not measured by the instrument used for data collection.

Delimitations of the Study

Participation in the study is limited to high school principals from Pennsylvania.

Only those school districts in Pennsylvania containing a single high school were included in the population.

Definition of Terms

Generic Skill: skills required for the performance of various roles but which are not unique to any one role; for example, skills included in the NASSP Assessment Center, such as oral or written communication, organizational ability, sensitivity, and so forth (NASSP, 1985).

High School: Any school with grade 12 as the terminal grade.

Instructional Leadership: those actions that a principal takes, or delegates to others, to promote growth in student learning. Generally such actions focus on setting school-wide goals, defining the purpose of schooling, providing the resources needed for learning to occur, supervising and evaluating teachers, coordinating staff development programs, and creating collegial relationships with and among teachers. (DeBevoise, 1984)

Internship: a variety of substantial experiences in diverse settings planned and supervised cooperatively by university and school district personnel and conducted in schools and school districts. It involves the application and integration in a workplace environment of knowledge and skills learned in four broad areas (Educational Leadership Constituent Council, 1995).

Leadership: ability to get others involved in solving problems; ability to recognize when a group requires direction, to interact with a group effectively, and to guide them to the accomplishment of task (NASSP, 1985).

Organizational Leadership: the knowledge, skills and attributes to understand and improve the organization, implement operational plans, manage financial resources, and apply decentralized management processes and procedures.(Educational Leadership Constituent Council, 1995).

Principal: when used in the current study, the term generally refers to the principal of a high school.

School administrators: those people who occupy positions at structural points in school organizations who are expected to lead others. Leadership within these roles depends on how the role itself has been shaped legally and formally and also on what aspects have been allocated to by tradition and custom in localized settings (English et. al., 1992).

School leader: anyone occupying a role in a school or a school system who, by formal job title and content, is expected to (a) make sanctioned decisions or interpretations that affect other people in the organization who receive the services of that organization directly or indirectly; (b) allocate resources, both human and material, based on criteria approved by the system in which he or she works; (c) be involved in decisions regarding employment (recruitment, assignment, job performance, retention, or dismissal); (d) formally represent the place in which she or he works as the official representative and spokesperson for its mission and purpose as well as operational effectiveness in attaining overt and covert goals and objectives; and (e) establish meaning and purpose for the work of the organization and assist in its design and implementation as well as the orientation and attitude of the people in his or her job area toward the

nature of the work itself (English et. al., 1992).

Organization of the Dissertation

The basic organizational design of the dissertation includes five chapters followed by a list of references and appendices, which can be used as supporting evidence for the study. The introductory chapter provides an overview and rationale for the study. Chapter 2 is designed to provide a review of the relevant literature and comprises three major sections: principal's role and expectations, preparation programs, and the leadership paradox. Chapter 3 details the procedures that were employed to gather and analyze the data required to fulfill the intent and purpose of the dissertation. An analysis of the collected data is provided in chapter 4. The final chapter describes the conclusions drawn from the study and also includes a discussion of the implications of the study and makes recommendations for future studies.

Summary

The major focus of the current study is to identify barriers to effectiveness and efficiency in the principal's environment. Barriers may be described as circumstances or factors whose presence subsequently results in the inability of an administrator to perform her or his duties. Additionally, the study seeks to identify variables that may serve as indicators of the aforementioned barriers. It is anticipated that the data derived from the study will contribute to the knowledge base of programs intended to provide pre-service or practicing administrators with skills that have practical application in the workplace. Current programs are described as being incongruent with the principals' needs, and efforts need to be directed at programs that have greater applicability in the workplace.

CHAPTER 2

Review of Related Literature

Introduction

Chapter 2 provides a detailed review of the relevant literature that supports the current study. The chapter comprises three major sections. They are the principal's role and expectations, preparation programs, and the leadership paradox. A theoretical framework for the principalship is developed in the section that deals with the principal's role. The relevancy and appropriateness of university-based preparation programs are explored in the second section. The unique and often conflicting nature of the principalship is discussed in the final section of the chapter. Chapter 2, in addition to providing a review of the literature, will serve to establish a foundation and rationale for the research being undertaken in the current study.

The Principal's Role and Expectations

The role and responsibilities associated with the job description of a public school principal are increasingly expanded and altered. This continual shift and expansion of responsibilities has created what Richardson et al. (1996) described as the dynamic nature of the principalship. Principals are required to operate in a society that is "more complex, more chaotic, more nonlinear than ever before" (Fullan, 1997, p. 231). The current nature of society creates demands on schools that are multiple and fragmented, and as a result the boundaries between schools, communities, and society are increasingly more permeable. The ever-present demands for educational reform and public accountability have had a major effect on the field of educational administration. In spite of these

complex demands and shifts in society, principals are confronted with increased criticism of their performance and preparation. Griffiths (1988a) stated:

There is, then, pressure either to get rid of administrators as we now know them, or take people untarnished by departments of educational administration. While this is the rumbling, the criticism of present-day administrators and their preparation are loud and clear and the demand for reform is heard on all sides. While some of the criticism is overstated, and certainly all does not apply to everyone, I find the central thrust to be accurate, and, in fact, to coincide with what so many in the profession have been saying in private for years. (p. 8)

As stated in Chapter 1, studies have indicated that effective school administrators are critical to the success of students and the health of the organization and that the skills required to be effective and successful as an administrator are many and varied. A substantial body of research has accumulated suggesting that the quality of teaching, school climate, student achievement, and public confidence are all directly related to the quality of school leadership (Leithwood, 1987). Holland (1997) included “maintaining a vision, focusing on learning, building capacity in others, building and refining skills to lead and manage change, creating a risk-taking climate, and sharing leadership” (p. 94) as responsibilities associated with the principalship. Standards by which effectiveness is determined intermingle with perceptions of the duties that inform the principalship to further complicate attempts to define the position.

Ubben and Hughes (1987) described the principal as being the one person within

the school who has the ability and responsibility of overseeing the school's entire program. They also contended that within that context the principal is positioned to provide direction and meaning to all the various aspects of the school. Despite the nature, responsibility, and influence of the principalship, Pitner (1988) concluded that the principal's work does not include involvement in the "technical core issues of the school" (p. 369). Principals, according to Blumberg (1989), are required only to master a few hard technical skills to be considered competent. The few skills principals are required to master are considered the nuts and bolts of the principalship and "are represented in the mastery and practice of budgeting and scheduling" and, more recently, "curriculum alignment, group dynamics knowledge, and technology have been added to this list of survival skills/techniques for school administrators" (p. 14).

In a survey of effective schools literature, Haller, Brent, and McNamara (1997) found that although the list of attributes that informs effective schools varies from study to study, there is a consensus on certain attributes that describe effective schools. Such schools

have a principal who is viewed by his or her staff as an instructional leader; a faculty that is directly involved in the decision-making process; a principal who is able to provide guidance, support, and encouragement when requested; students who treat teachers and one another with respect; and a staff that shares a commitment to specific instructional goals, priorities, assessments and procedures. (p.224)

Worth noting is that each of the attributes found to be common among effective schools is directly influenced by the action or inaction of a principal.

There appears to be an awareness and a general consensus that leadership in curriculum and instruction should be given priority by the school principal. Success as an instructional leader, however, is contingent on efficient and effective performance of tasks in other areas (Kimbrough & Burkett, 1990). Donmoyer and Wagstaff (1990) identified six managerial tasks that have significant impact on teaching and learning and that can influence instruction. Success or lack of success in the six areas, which include “scheduling; articulating policies, rules, and norms; hiring and supervising personnel; coordinating pupil services; managing staff development; and budgeting” (p. 23), has the potential to impact significantly on students opportunities to learn. The conclusion drawn was that instructional leadership does not function independently from other managerial duties performed on a routine basis by school administrators (Donmoyer & Wagstaff, 1990).

Educational institutions develop and maintain lists of duties, job descriptions, that detail what an organization believes a principal should be doing. Although job descriptions generally are constructed to reflect current theory, the duties and expectations outlined in them are not necessarily consistent with or representative of what principals actually do (Kimbrough & Burkett, 1990). Day-to-day responsibilities and pressures have altered the nature of the principalship, causing principals to become more reactive, and, as a result, there is a corresponding decrease in the principal’s ability

to plan effectively and perform tasks of any length: “Office and office-area activities such as writing reports, making or revising schedules, planning, phone calls, and drop-in visits occupy a major part of their [principals’] days” (English et al., 1992). Studies indicate principals spend more time on administrative duties than they would prefer, and they do not always spend their time doing what they think they should be doing (Kimbrough & Burkett, 1990). What results is that job descriptions become the official list of duties but are not representative of what principals actually do, and, at the same time, their actions are not reflective of what they should be doing or what they think they should be doing.

Additionally, preparation programs are characterized as being incongruent with both the principal’s job description and actual practice (Quantz, Cambron-McCabe, & Dantley, 1991). Questions and criticisms concerning the appropriateness of programs designed to prepare school administrators deal with the gap that exists between the practice of administrators and what literature and theory suggests they should do (Milstein, 1993). Studies of administrative practices indicate that these “contradictions between coursework and practice should be given serious attention since current research suggests that student outcomes seem related to administrative behaviors that are not commonly identified through observational studies in schools or taught in preparation programs” (Griffiths, et al., 1988b). Coursework in many programs deals with topics that are important to the knowledge base school administrators should possess, but the design of the coursework is not necessarily relevant to the administrator’s actual duties. Although principals spend much time in their daily routine dealing with discipline,

extracurricular activities, service, pupil control, organizational maintenance, and noninstructional matters, coursework in preparation programs continues to be built around issues such as politics and finance. At the same time, literature, critics, and practitioners all suggest that what is needed in education are principals who deal with instructional leadership and change and are adept at school-site management.

A leadership profile that has been suggested as being capable of meeting the demands placed on educational leaders is transformational leadership. Transformational leadership focuses on second-order change. Building a shared vision, improving communication, and developing collaborative decision-making processes are examples of second-order change. Transformational leadership empowers those who participate in the process. “In essence, transforming leadership is a leadership that facilitates the redefinition of a people's mission and vision, a renewal of their commitment and the restructuring of their system for goal accomplishment” (Leithwood, 1992). Transformational leaders continuously pursue three fundamental goals: maintaining a collaborative culture, fostering teacher development, and improving group problem solving. Mitchell and Tucker (1992) described transformational leaders as ones who are people-oriented and stated that rather than focusing “on tasks and performance, they build relationships and help followers develop goals and identify strategies for their accomplishments” (p.32). There is a large body of evidence suggesting that to better serve schools and students in a rapidly changing society, today's educational leaders require knowledge, skills, and attitudes different from those reflected in educational

administrative curricula of the past.

One of the major forces creating a need for a new type of educational leader is the restructuring of schools. Proponents of this type of movement argue that success is incumbent on altering the current power relationships. Failure is almost guaranteed if the current relationships among teachers and administrations, parents and school staffs, students and teachers are not modified. Included within many of the efforts to restructure and reform schools are school-site management, increased parent and teacher participation in decision making, and enhanced opportunities for the exercising of teacher leadership. “In these respects, the restructuring of schools is analogous to the groundshift in large businesses and industries begun more than a decade ago from Type A toward Type Z organizations” (Leithwood, 1992, p. 8). Type A schools would include traditional schools concerned with the power to control and top-down decision making. Type Z schools are those that emphasize participation decision making as much as possible: “They [Type Z schools] are based on a radically different form of power that is ‘consensus’ and ‘facilitative’ in nature, a form of power manifested through other people, not over other people” (Leithwood, 1992, p. 9).

Education has moved beyond the point where leadership can simply be viewed as instructional leadership. The role of the school leader has been expanded to include “expectation of school-based management, choice, vision, and community involvement in schools. There has also been a flurry of new instructional approaches: interdisciplinary teaming and teaching, cooperative learning; literature and primary source instruction;

writing across the curriculum; thematic approaches to content area; and authentic assessment” (Poplin, 1992, p.10). As a result of these changes, our basic assumptions about leaders and their roles have been altered.

Administrative effectiveness is at times measured by the principal’s ability to successfully manage a singular task. An example of one such measure would be to characterize success or failure as a principal based solely on the principal’s performance as an instructional leader. Extremely narrow interpretations of the role and function of school leaders evolve when circumstances are such that a single task gains favor with researchers or theoreticians and is subsequently promoted and supported in research or literature or within institutional preparation programs (Griffiths et al., 1988b).

Sergiovanni (1991b) suggested that researchers are looking for easy solutions for improving schools and later cautioned that “when enterprises are managed and led the same way, none are managed and led very well” (1996, p. 47). Preparation programs and actual practice appear to be unsynchronized and incongruent for defining the principal’s role and responsibilities (Johnston, 1991). Aligning training with practice is integral to the success of those preparing for a career as a public school administrators.

NCATE (Educational Leadership Constituent Council, 1995) has identified eleven knowledge and skill domains integrated under four broad areas essential for successful preparation as an administrator. Strategic leadership, organizational leadership, instructional leadership, and political and community leadership are the four broad areas identified by NCATE as being essential to the preparation of school leaders. The eleven

knowledge and skill domains found with the broad areas are (1) professional and ethical leadership; (2) information management and evaluation; (3) curriculum, instruction, supervision, and the learning environment; (4) professional development and human resources; (5) student personnel services; (6) organizational management; (7) interpersonal relationships; (8) financial management and resource allocation; (9) technology and information systems; (10) community and media relations; and (11) educational law, public policy, and political systems. The extensive list of duties associated with the principal's position makes it obvious that traditional leadership may no longer be adequate and that tomorrow's leaders must be more involved in the development of participatory management and in devising strategies for problem solving and decision making.

Reform efforts and new management techniques are, at times, introduced into schools with little or no regard for the complex and varied nature of the school culture and climate. What results is that the attempt to reform contributes to the inability of school administrators to practice their craft and inhibits the effective and orderly operation of the school. Principals with what may be best described as insufficient training are expected to incorporate new techniques into a complex environment with a seemingly unrestricted set of expectations. Effectively introducing new demands and initiatives into the workplace requires that principals have the opportunity to develop strategies for implementing and institutionalizing those demands and initiatives (Richardson et al., 1996). New demands bring with them the need for additional training

as well as the implicit demand that principals possess the ability to manage change. Training programs that are ineffective or inappropriate compound the problems confronting principals and contribute to their ineffectiveness. Gerritz, Koppich, and Guthrie's (1984) contention that "the knowledge and skills needed to become an effective educational leader and school manager are generally not those provided by current administrative Service Credential Programs" (p. 1) underscores the need to develop training programs designed specifically for incumbent administrators. Specialized training programs will assist administrators in their attempts to create more effective and efficient schools and permit to move from being just leaders to leaders of change.

The inability of school administrators to control the flow of new initiatives into public schools contributes to the failure of many reform movements. Principals function in an environment that may be described as a magnified fishbowl, in which "they are bombarded by changing expectations and responsibilities and often find themselves without the knowledge to address such challenges" (Richardson et al., 1996, p. 290). Input from those most responsible for overseeing and managing the day-to-day operations of a school is often overlooked in the development of school reform initiatives. Successfully implementing a new initiative depends not only on the principal receiving the appropriate training but also on the principal's ability to manage the change associated with the initiative and on a belief in the efficacy of the initiative.

Descriptions and accounts of what "effective and successful" public school

administrators need to do to insure the quality of instruction and success of each student fill today's educational literature. According to Richardson et al. (1996), "Educational reform literature abounds with articles that describe the ideal school headed by a strong, visionary leader who promotes an atmosphere of collegiality and participation in the learning environment" (p. 290). These accounts include a broad range of administrative and managerial tasks that present a formidable challenge to the most experienced and talented administrator and ostensibly render completion incomprehensible. DeBevoise (1984) described the principal's role as never being positively defined and evolving over a period of years into an accumulation of tasks that teachers were unwilling or unable to do. As characterized by Richardson et al. (1996),

The principal assumes the awesome responsibility for all aspects of school life and often has difficulty rationalizing his or her changing role and the increased demands of the position. In fact, those changes in the nature of the principalship were a prime reason that large numbers of principals left the profession during the last decade. (p. 290)

Studies completed during the 1980s affirmed the notion that excellent schools are contingent on excellent leadership. To date, a systematic body of research has yet to disprove this notion (Sirotnik & Durden, 1996). Schmocker and Wilson (1993) described the principal's position as follows:

[T]he school or district administrator has a special role as the person in the most high-leverage position to formalize priorities, use symbols, confer legitimacy, and

to marshal resources in the service of goal-centeredness. If we have learned anything, it is that the likelihood of success depends more on this than on any other factor. There is no way around it. If we want continuous improvement in schools, leaders must create, with the help of their staff, a setting where team leaders and team members feel empowered and encouraged to strive and stretch for better results which they know reflect the institution's highest priorities, its core values. (p. 146)

In a study of successful school administrators Wendel, Hoke, and Joekel (1993) identified 11 factors reported by administrators as contributing to their success. The eleven factors included “(1) hard work, (2) putting students first, (3) high expectations, (4) community outreach, (5) positive staff relations, (6) professional growth, (7) clear personal philosophy, (8) risk taking, (9) effective communications, (10) vision setting and (11) collaborative leadership” (p. 53). The authors of the study pointed out there is no definitive list or set of guidelines that, when adhered to by administrators, guarantees success. They (Wendel et al.) commented:

No single respondent had a corner on success. What we ascertained is that outstanding high school principals have definite ideas about what has contributed to their success. Perhaps each of these principals has acted on the advice of the ancient Greeks—“Know Thyself”—and has capitalized upon personal strengths. What better way for principals to be a role model for students than to strive personally to be better in all things “persistently and carefully,

habitualized; compounded together, added up over time.” (p. 54)

What the study suggests is that effectiveness as an educational leader is more personalized than some studies or preparation programs contend. Individuals who are successful as administrators define the requisite skills needed according to their perception and conceptualization of the role and function of the principal, job requirements, and their individual strengths and weaknesses.

Attempting to develop a definitive list of duties and descriptors that could be used to define and characterize the principalship is a difficult task for researchers. In a review of the literature on leadership in education, Taylor (1994) asserted,

It is apparent in the literature that no one definition, list of descriptors, or theoretical model provides a complete picture of either the theory or practice of leadership in education. It is equally apparent that many connections exist between and among the definitions, descriptors and theories; that generally, the seeds for current thinking were sown in the writings of earlier theorists; and that, increasingly, writers and practitioners are concerned with synthesizing ideas rather than with operationalizing the extremes found in some of the literature. (p. 9)

Educational theorists, therefore, need to exercise caution when describing what they perceive to be the “one best way” to administer a school. Preparation programs will produce effective alternative methods and modes of administrative practice only when the current knowledge base is examined and refined to include all elements that inform administrative practice.

Developing a body of knowledge whose intent is to inform the discipline of educational administration requires an understanding and fluidity of both the knowledge base and the principalship. The fluidity of the theoretical knowledge base is demonstrated by personal characteristics once again gaining favor among some researchers as being more important in the success of principals than previously thought. In an examination of research on the principal as instructional leader, DeBevoise (1984) cited studies by Blumberg and Greenfield (1980), Huff, Lake, and Schaalman (1982), and Persell et al. (1982) as concluding that personal characteristics contribute significantly to the success or failure of public school administrators. DeBevoise's examination of the research supports the conclusion that personal characteristics, which were previously thought to be unreliable predictors of administrative success, are in essence of significant importance to administrative success. DeBevoise stated, "After enduring a period of disfavor, studies of principals' personal characteristics have recently resurfaced with a new slant" (p. 15). A 1993 study by Wendel et al., similarly concluded that personal characteristics contribute significantly to the success of those principals identified as being outstanding school administrators.

Blumberg and Greenfield (1984) placed credence in the notion that personal characteristics may be more important to the success of educational leaders than previously thought. From their analysis of eight case studies, they concluded that most people can learn the necessary attitudes and skills that enable a group of people to function adequately. And it seems to be true that groups can learn to

accept influence from a variety of people and to assign group function accordingly. What seems not to be true, is that anyone can assume the role of leading an organization- a school - in the direction of making itself better than it is. Other things besides democratic functioning have to occur and the suggestion here is that these other things start with the character of the person involved. (p. 254)

DeBevoise's analysis of the research generated a list of personal characteristics associated with principals identified by their colleagues as effective. Included in the list are

- A propensity to set clear goals and to have these goals serve as a continuous source of motivation
- A high degree of self-confidence and openness to others
- A tolerance for ambiguity
- A tendency to test the limits of interpersonal and organizational systems
- A sensitivity to the dynamics of power
- An analytical perspective
- The ability to be in charge of their jobs. (pp. 15-16)

DeBevoise (1984) summarized the case for consideration of personal characteristics as being a determinant of success of public school administrators as follows:

Perhaps the important lesson to be learned from an examination of the characteristics of effective principals relevant to instructional leadership is the

diversity of styles that appear to work. Rather than seeking a prescription for principal behavior, research needs to clarify how different styles of personalities interact with specific contexts to produce either desirable or undesirable consequences. (p. 17)

Preparation Programs

As previously noted, preparation programs for prospective school administrators are described as being incongruent with the needs and skills essential for success in the public schools. This situation exists in spite of the long history that public school administration enjoys. Gregg (1969) noted that public school administration has been in existence at least a couple of hundred years but that its “importance as an essential component of school operations has received very little attention until recently” (p. 993). Additionally, studies of preparation programs reveal that although preparation programs have a stated purpose, they continue to lack structure and clarity and fail to meet the objectives of their stated purpose. Goldhammer (1983) described preparation programs as ones “that depended heavily on individual perceptions and the vagaries of individual experience” (p. 250). Terms such as “‘dismal montage,’ ‘dysfunctional structural incrementalism,’ and ‘zombie programs’ all have been coined to describe what is perceived as the dismal failure [of university-based preparation programs] in preparing candidates to assume positions of responsibility with a school district” (Murphy, 1992, p. 79).

Criticism of preparation programs is not limited to a single area and is both

widespread and ongoing. The system used to prepare school leaders has been characterized as being seriously flawed and wanting in nearly every aspect. Specifically, critics have uncovered serious problems in:

- (a) the way students are recruited and selected into training programs;
- (b) the education they receive once there—including the content emphasized and the pedagogical strategies employed;
- (c) the methods used to assess academic fitness; and
- (d) the procedures developed to certify and select principals and superintendents. (Murphy, 1992, p. 79)

Gregg (1969) cited two studies in the 1960s, one by Hemphill in 1962 and the other by Gross and Herriott in 1965, that highlighted the failure of preparation programs and confirmed the long period of criticism directed at the programs. The major finding of these studies was that there was no positive significant relationship between the amount of professional preparation received by elementary principals and their effectiveness.

Haller et al. (1997) also used data derived from studies by Maher and Schnur to support the notion that principals are generally dissatisfied with the training received through university-based programs. Maher found that administrators were generally dissatisfied with their training programs and Schnur's results found a correlation between the level of dissatisfaction and tenure. Schnur also found that the longer an individual had served in a position the greater the level of dissatisfaction. It may be concluded that the latter findings are indirect supporting evidence for the need to provide not only more but

better and more relevant in-service training for administrators.

In addition to the inferential evidence concerning the lack of efficacy of university-based training programs, Haller et al. (1997) also used data from what they described as a few studies that “have attempted to assess directly the effects of graduate training on the performance of administrators” (p. 224). Just as with the inferential evidence, studies by Gross and Herriott (1965); Hemphill, Griffiths, and Fredriksen (1962); and Bauck (1987) also concluded that there was either a negative or zero correlation between graduate training and effectiveness as an administrator. “The issue,” according to Brent (1998), “is not whether aspiring principals require training beyond classroom teaching experience to be effective leaders. But why should we expect that graduate school is the most effective place to receive this training” (p. 1).

“Typical administration programs,” according to Quantz and Cambron-McCabe (1991) “are not particularly sophisticated theoretically or technically. . . . they really occupy a middle ground that is neither theoretically strong nor technically adequate” (p. 52). Sergiovanni (1991a) stated that the inadequacies of preparation programs cause principals to “rely on their own firsthand experience and on the experience of other professionals with whom they work in similar settings” (p. 41). In spite of the increased awareness of the importance of the high school principal, “little effort has been directed at improving the ways in which people have been made ready for this critical role” (Daresh, 1990, p. 3). Administrators have voiced dissatisfaction for a number of years with university-based preparation programs and how the programs have

prepared them for the “realities of life in school administration. . . . The central problem, many contend, is that most university programs present knowledge about school administration, but do not help students develop skills that translate knowledge into practice” (p. 36).

In 1991 Ashe, Haubner, and Troisi reported the results of a survey whose purpose was to gather information from New York high school principals and assistant principals concerning their level of satisfaction with their university-based preparation programs. Survey respondents provided information on nine of the 12 generic skill domains used in National Association of Secondary School Principals (NASSP) Assessment Centers. Skill domains included in the survey were problem analysis, written communication, sensitivity, judgement, oral communication, stress tolerance, decisiveness, organizational ability, and leadership. One of the questions on the survey was “To what extent was the domain developed in your administration program?” Survey results provided the following information on attitudes associated with preparation programs: (1) 15% was the greatest percentage of principals in any of the skill domains who believed that they had been highly prepared by their program, and (2) in six of the nine domains, over 50% responded that they had been only slightly prepared or not prepared at all. Only 13% reported that their specific program was good at providing formal academic training, and only 15% believed that they were well prepared for their current position.

The structure and content of preparation programs have been severely criticized as being ineffective, inappropriate, and poorly planned. And those charged with the

delivery of the curriculum are no less subject to criticism and are blamed for what is perceived as the current dismal state of university-based preparation programs. According to McCarthy, Kuh, Newell, and Iacona (1988),

Critics have charged that the educational administration curriculum has remained essentially unchanged for decades. This is not surprising since educational administration programs are bastions of conservatism in tolerant but risk-averse universities. . . . Nothing less than a fundamental reordering in what is covered in graduate programs can respond to the current crisis in educational leadership. . . . [However,] systemic curriculum revision demands a level of commitment and effort from faculty members that they do not presently seem prepared to give. (p.172)

In reporting the results of their study, Haller et al. (1997) criticized the efficacy of university-based preparation programs as follows: “One does not need to compute effect sizes to suspect that graduate training in educational administration may have little practical significance for school effectiveness,” (225) and “All these analyses, then, suggest that graduate training in educational administration has little impact on the effectiveness of U.S. schools” (p. 226).

Administrative preparation programs across the United States are characterized as being strikingly similar (Cooper & Boyd, 1988). The similarity has resulted in the development of what is described as a “one best model” preparation program for educational administration (Foster, 1988; T. B. Greenfield, 1988; Haller et al, 1997).

According to Foster (1988), “[T]he requirements for licensure are amazingly similar both in process and content, throughout the United States” (p. 251), in spite of efforts to decentralize the 400 educational administration programs that serve the nation’s system of 15,500 public schools. Development of the “one best model” training program has its roots in the “supposition of the efficacy of training programs”; there is, however, “a paucity of evidence regarding the efficacy of training programs” (Haller et al., 1997, p. 233). Pitner (1988) similarly concluded that there is very little evidence to support the effectiveness of programs designed to prepare candidates for a career in educational administration. She wrote, “Thus, we do not have much conclusive evidence about the relationship among administrator training, work and effectiveness” (p. 373).

Clark and Astuto (1988) contended that “graduate and in-service programs for administrators reflect the confusion of practice”(p. 129). They also asserted that some of the problems currently being experienced by administrators are the consequence of a reluctance “to confront and deal with the conflicts in our knowledge base” (p. 128). As previously noted, a review of studies by Haller et al. (1997) concluded that there is little evidence to support the contention that administrative preparation programs are effective. Their review also revealed that the correlation that exists between graduate training programs and administrative effectiveness was either zero or negative.

Criticism continues to be generated regarding the skills principals bring to the workplace and the system used to prepare those who aspire to such positions. Educational administration programs are cited as contributing to the failure of school administrators.

Critics contend that both the faculty and method of preparation contribute to the inability of administrators to function productively within the public school setting. According to Griffiths (1988b),

[P]robably more school administrators fail because of poor skills than any other single reason, yet program and faculty in educational administration fail to do anything about it. It's as though a baseball team in spring training gave the player books to read and lectures on the theory of baseball and did not have the player practice hitting and fielding. Administrators have to perform, and in order to perform well they must have the basic skills of administration. (p. 17)

In addition to the criticism directed at the faculty and mode of preparation, criticism of the evolution of the knowledge base for educational administration programs also exists. T. B. Greenfield (1988) described the evolution of the knowledge base for educational administration programs as “a knowledge base that, as we have seen, was little more than practitioners’ prescriptive judgements on their experience” (p. 133). And Silver (1982) reported that “most of the preparation for administrative practice that educators experience is informal in nature and obtained at the school and district site” (p. 49). Murphy (1992) contended that “the curriculum for these programs [educational administration] is neither useful nor intellectually challenging for those who aspire to practice as educational administrators” (p. 88), and according to Pepper (1988), “School administration as practiced by superintendents and principals bears little resemblance to school administration as taught in graduate schools of education” (p. 360).

Studies attempting to enumerate the attributes or skills of effective principals demonstrate the complexity of the position and variety of skill required for success as a principal (Richardson et al., 1996). Surprisingly, until recently little attention has been paid to the qualifications and preparation of those charged with the responsibility of leading and managing schools. Murphy (1992) and Willower (1996) describe the concern over the qualifications and credentialing of administrators as a relatively new phenomenon and the end of World War II is cited as a significant point of demarcation for the training and credentialing of public school administrators. In the post-World War II era, according to Murphy, “States had begun to require prospective administrators to engage in formal training and earn a certificate indicating their fitness to work in their chosen profession” (p. 23). He also noted that “the formal training of school administrators is a recent development, and one for which the information repository for the early decades is quite thin” (Murphy, 1992, p. 21).

Murphy’s observations concerning preparation programs for administrators support those of Gregg, who in a 1969 study noted that “although administration in the public schools enjoys a relatively long history dating back at a least couple of hundred years, its importance as an essential component of school operations was unrecognized in its early years” (p. 993). Peterson and Finn (1985) similarly concluded that as late as 1985, “at a time when the nation is deeply concerned about the performance of its schools, and near-to-obsessed with the credentials and careers of those who teach in them, scant attention has been paid to the preparation and qualifications of those who lead

them” (p. 42). Although concern over the manner in which school administrators are prepared may be a relatively new and emerging concept, the same cannot be said about criticism of this facet of educational administration:

Criticism of the ways in which men and women are prepared for school leadership positions enjoys a long history. Perhaps the only thing more depressing than an honest appraisal of current educational administration programs is the knowledge that so little progress has been made in resolving the deeply ingrained weaknesses that have plagued training systems for so long. (Murphy, 1992, p. 79)

There currently exists an unsettling reality associated with ineffective preparation programs for educational administrators and a widespread perception that public school administrators are ill-prepared and ineffective.

The knowledge base upon which preparation programs are constructed is subject to criticism no less severe than that directed at the programs themselves. Muth (1989) contended that there is a serious problem with the cognitive base currently associated with educational administration preparation programs and that it “does not reflect the realities of the workplace, does not provide the kind of experiences or knowledge that practitioners feel they need” (p. 5). The problems that exist with the knowledge base render training irrelevant to actual job experiences (Mulkeen & Cooper, 1989), and, as described by Sergiovanni (1989), the knowledge base is “dysfunctional in the actual world of practice” (p. 18). T.B. Greenfield (1988) made an argument against administrative science by stating that it “has not helped to understand or control

organizations, that the substantive (content) issues of education have been ignored, that the focus has been wrong, and that it has ignored the value-laden characteristics of choice making” (p. 110). And Foster (1988) commented on organizational and administrative theory as being in disarray and went on to state, “One of the notable failures of educational administrative theory has been its inability to come up with a theory of administration that has a truly educational rather than business character” (p. 75).

Consideration needs to be given to new models for administrative training programs in an effort to meet the needs of administrators. These new models must stress responsibility, right judgment, and reflection as being legitimate components of training programs as well as an integral part of administrative action (Griffiths et al., 1988b; T. B. Greenfield, 1988). As new programs are sought, educational administration programs need to move away from the “one best model” approach and toward programs whose outcomes inform practice and effectiveness. Foster (1988) believed the “one best model encourages inbreeding, and probably mediocrity more often than brilliance” (p. 253). He also asserted “It is virtually impossible, with this model in place, to be an administrator without coming through the proper door, with the common certificate, after having climbed the same professional ladder” (p. 252). Additionally, Griffiths, Stout, and Forsyth (1988b) noted that dissatisfaction exists among principals about the training received through university-based programs, and they too concluded, that “[a]mong the most telling of the criticisms is that preparation programs for school administrators are of low quality and irrelevant for practice” (p. 285).

Sergiovanni (1991b) maintained that “[t]he major issue in professional practice is deciding what to do. What purposes should be pursued? What strategies should be used? What should be emphasized and when? In what ways should resources be deployed?” (p. 10). Principal effectiveness can be improved only through a better understanding of how professional practice is informed. Preparation programs and in-service programs provide the key to understanding and enhancing the informing process. Within preparation programs and in-service programs three interrelated components of administrative practice need to be examined: “practice episodes, theories of practice, and antecedents” (Sergiovanni, 1991a, p. 43). “However, proposed changes in the professional preparation of principals and the ways school are administered will be effective only to the extent that they are responsive to the actual demands of the work situation” (W. D. Greenfield, 1988, p. 212).

The Leadership Paradox

The need to provide leadership for effective schools and their programs is undeniable. Questions such as “What is the nature of the leadership position?” and “What behaviors should the individual who occupies the position manifest?” however, remain unanswered. Recently, the principal’s position has been defined as that of instructional leader (Ubben and Hughes, 1987; W. D. Greenfield, 1988; Griffiths et al., 1988b; Pitner, 1988a; Mauriel, 1989; Kaiser, 1995; Haller et al., 1997). Descriptions of principals as instructional leaders flourish in what is described as effective schools literature. However, those who describe the position in singular or narrow terms, instructional leader or

otherwise, may not be defining the position accurately.

Achilles (1988) described administration as being amorphous and diverse, and Griffiths et al. (1988b) stated that administrations work on a variety of levels, with multiple agendas that are continually shifting and that they are faced with “difficult, complex, and continually changing problems” (p. 284). Those who desire to define the principal’s position as instructional leader have called for a “prescription that reflects virtually no understanding or recognition of the realities of the school principal’s work situation” (W. D. Greenfield, 1988, pp. 209-210). Deal and Peterson (1994) asserted that calls for leaders to spend more time with staffs or instructional matters are misleading and based on a normative rather than empirical conception of a principal’s work. According to Deal and Peterson, principals who attempt to follow the instructional leader formula may frustrate themselves and ultimately do themselves and their teachers a disservice.

W. D. Greenfield (1988) cited 14 studies of what principals do that support the notion that principals spend very little time directly supervising or observing teachers. Holland (1997) suggested “high school principals spend much time (too much time) attending to lunchroom supervision, discipline, building maintenance, union demands, and bureaucratic paperwork” (p. 96). English et al. (1992) supported both Greenfield’s and Holland’s contentions with their findings of how principals spend their time:

Office and office area activities such as writing reports, making and revising schedules, planning, phone calls, and drop-in visitors occupy a major part of their days, as shown below:

<u>Location of Activity</u>	<u>Percentage of Principal's Day</u>
In the office area	40-80
In hallways and on the grounds	10-23
Off Campus	11
In classrooms	2.5-10 (p. 80)

Additional supporting evidence was provided by Griffiths et al. (1988a), who cited the results of eight researchers who studied what principals actually do. The eight researchers found that it was never really established what principals do:

Invariably, the researchers suggested that such persons sit at their desks, go on tours, walk up and down corridors, write, attend meeting, talk, and so on. . . . The question still remained: What do administrators *do* at their desks, *do* with their talk, *do* in the corridor, *do* on tours, and *do* with their writing (p. 24).

Effective schools result from the activities of effective principals (Ubben & Hughes, 1987). Depicting the principal's role and responsibilities as that of instructional leader is both misleading and ambiguous and reveals very little of what is required of a principal to be effective. The key to effectiveness as a principal may be the ability to respond appropriately to the demands of the school situation and to recognize that "understanding the nature of the school situation holds the key to understanding why principals behave as they do, and why some schools and some principals are more effective than others" (W. D. Greenfield, p. 209, 1988).

The setting that frames the principalship is an example of a factor that plays an

important part in or even dictates how well a principal will perform or whether the principal will succeed (W. D. Greenfield, 1988; Griffiths et al. 1988a; and English et al., 1992). There are settings, according to Griffiths et al. (1988b), within which almost any principal will succeed, and other settings are structured so that very few will be effective and reach their desired goals. Leadership in a school is a function of not only how the role is defined “legally and formally” but also how the role has been shaped by “traditions and custom in localized settings” (English et al., 1992, p. 2). W. D. Greenfield (1988) added, “[O]ne’s effectiveness in a work role, such as that of school principal, is primarily a function of the degree of match or ‘fit’ between one’s personal qualities and the demands of the work situation itself” (p. 207).

Principals are required to contend with a variety of activities in order to successfully administer the school, and many of the activities are not directly associated with the role of instructional leader. The principal by his or her actions sets the stage so that others in the building can teach and learn. Grennfied (1988) wrote,

There is much that a school principal must do in order to administer a school well, and relatively little of that is related to working directly (one on one) with teachers in classrooms. What the school principal does spend most of his or her time doing is what might be called responding to ‘situational imperatives’—events and activities that demand immediate attention— which if not attended to have a high potential to threaten the stability of the school situation (including the capacity of teachers to teach and the opportunities for youngsters to learn).

Developing a complete understanding of what principals who have been identified as effective do is hampered by what Pitner (1988) described as a paucity of research on what principals actually do to administer the school. Additionally, Pitner (1988) was critical of the knowledge derived from studies of the principal's activities. Both contended that studies will report minute details such as the number of phone calls made, salaries earned to the penny, number of meetings attended, and the number and locations of interactions with other individuals, but these same studies fail to report what impact, if any, these activities have on the school or student achievement. Principals who attempt to use the results of research to direct school improvement initiatives may find their efforts thwarted by the nature of research findings and how the principal's role is defined.

W. D. Greenfield (1988) stated, "The demands placed on the school principal are frequent and varied, and call for quick responses. This fosters a reactive stance on the part of the principal, and much that occurs does so unpredictably" (p. 210). "There is," according to Buenger (as cited in English et al., 1992), "a great deal of confusion about school leadership" (p. 64); English et al. (1992) added that "there are different views of leadership and what it constitutes" (p. 2) and that "new demands on school principals. . . have caused a reshaping of the demands for leadership" (p. 24). Spencer Maxcy (as cited in English et al.) believed that "the problem with educational leadership is that it has become subordinate to and subsumed by management[,]. . . and it [management] has been chiefly concerned with improving control, predictability, and accountability at the expense of real leadership" (p. 7). Pitner (1988) concluded that studies that describe the

effective school principal as an instructional leader contradict the findings of many descriptive studies of administrative work. She added that the contradiction has resulted in what can be described as an “ambiguous definition of instructional leader” (p. 373). Schön (1983) characterized the principalship as a “logical process of problem solving with the application of standard techniques to predictable problems, [although] a more accurate view may be a process of ‘managing messes’” (p. 5). Management demands now facing principals have expanded to the point that they would challenge anyone, regardless of her or his leadership expertise (Holland, 1997).

As previously noted, the form of leadership being called for most frequently in principals is that of instructional leader. English et al. (1992) maintained that although instruction leadership is the most sought-after competency in principals, “there is a good deal of experience showing that few of them possess the skills and knowledge to actually exercise any guidance in this area” (p. 24). They added that the function of leadership is to blend two perspectives: “human growth and organizational purposes and goals” (p. 3). The preponderance of concepts and descriptors competing to adequately define the role of the principal caused Ubben and Hughes (1987) to ask, “[H]ow should an administrator behave in order to assure a productive teaching-learning environment[?]” (p. 11).

The absence of a consensus on a concept that adequately defines the principalship, according to Griffiths et al. (1988b), opens the door to all comers, and what is needed, are highly qualified, well-prepared administrators who can place . . . daily administrative problems in the context of a long-term vision of what excellence

can be and find solutions to nagging problems. But more than that, education needs administrators who can create the environments and secure resources to release the creative talents of teachers. (p. 284)

From his analysis of 14 studies, W. D. Greenfield (1988) ascertained that a “principal’s work is largely social in character, occurs outside classrooms, and involves a lot of verbal, face-to-face interaction with multiple actors on the school scene” (p. 209). English et al. (1992) noted that the purpose of leadership is not to control people but to emancipate them, thus using their full human potential. They went on to state:

Successful school administration is not a romantic venture that aims to cast aside all organizational rules and structures. It is far more complicated than that, it is learning how to adapt the organization to maximize human productivity. In schools, that means bringing together the best learning theory, motivational psychology, and human growth and development principles into a work structure and culture that require, recognize, and reward human achievement as defined and measured by authoritative officials and agencies. (p. 25)

An appropriate description and definition of effective leadership is continually being sought through literature and research. Safire and Safir (as cited in English et al., 1992) maintained “The very essence of leadership is that you have to have a vision. It’s got to be a vision you articulate clearly and forcefully on every occasion. You can’t blow an uncertain trumpet” (p. 240). An effective leader was described by English et al. (1992) as the person who sets the organizational climate and works to develop its culture. They

wrote that effective leadership requires the ability to develop a communal vision and to translate that vision into a mission for the organization. To be effective, a leader, as defined by Bennis and Nanus (1985), must have the ability to influence others to adopt the leader's point of view or to act in the manner he or she perceives as being beneficial to the organization. The aforementioned views of leadership require the leader to be the focal point of the organization and base success or failure on what the leader does or does not do.

Conversely, Clark and Astuto (1988) questioned focusing organizational success or failure on what an individual does or does not do. They concluded, "The complexities of causality in organizations are such that linear causality, focusing on an individual, is the exception, not the rule" (p. 113) and "The organizational leader who feels he or she needs to reinforce the regularity of an organizational behavior setting has to be wholly unfamiliar with studies of the change process in organizations" (p. 126). Fullan (1992) and Sergiovanni (1991b) suggested that we are inundated with research seeking simple answers and solutions for improving schools. What this research says is that all will be well if you follow a specific set of correlates, manage or supervise a specific way, or teach using some newly developed technique. Sergiovanni expressed his fear that this searching "drives us to think in the rationalistic tradition about our work, to make unwarranted assumptions about the linearity and predictability that exist in the world, and to overestimate the tightness of links between research and practice" (p. ix).

In the actual workplace, administrators are faced with dealing with paradoxes

rather than a single set of factors. Each of the elements in the paradox is embraced by a body of research or literature that extols its administrative efficacy. As a result of the existence of these paradoxes, leaders must learn to make strategic choices and should not consider decision making to be a series of trade-offs or accommodations.

Clark and Astuto (1988) contended that paradoxes have developed from the work done in the areas of organization theory and organizational studies. They have identified what they believe are seven paradoxes each consisting of two paired elements with each element supported by a body of research and theory. Each element within the pair continuously vies for primacy within the institutional setting. The seven paradoxical pairs identified by Clark and Astuto are (1) activity vs. stability, (2) distinction vs. intention, (3) variability vs. regularity, (4) efficacy vs. accountability, (5) facilitation vs. intervention, (6) empowerment vs. control and (7) disaggregation vs. holism. Basic tenets of each element in a pair are frequently in opposition to those of the other element. Leaders grapple with deciding which element in the pair best serves or meets the needs of the organization and its constituents.

In their discussion of paradoxical choice options existing within organizations, Clark and Astuto (1988) developed three central arguments. Their first argument centered on the notion that administrators both within and outside the educational setting receive conflictual and confusing advice about their roles. Clark and Astuto contended, that the ambiguity of the knowledge base is responsible for the lack of consistency in advice to administrators. In their second argument, they made a case for the existence of conflicts

or paradoxes creating an atmosphere in which completely different strategies can exist. Finally, their third argument suggested that administrators can opt for various strategies, while achieving consistency and avoiding anarchy. The nature of Clark and Astuto's argument suggests that university-based preparation programs may also be dealing with paradoxes in their efforts to adequately prepare individuals for the high school principalship. If true, it may help explain the inability to devise programs designed to meet the needs of prospective principals.

Deal and Peterson (1994) stated that the nature of a principal's work creates paradoxes and that, as a result, principals find themselves in the predicament of determining who they should be like, what they should emphasize, and how they should behave. Consequently, future leaders in schools will require a completely different set of characteristics than did their predecessors (Fullan, 1998). Principals will be required to master the art of managing complexity in order to succeed (Sergiovanni, 1991b). Mastering the work environment depends on "knowing the difference between effective, efficient, and good practice and the differences that exist between ideal views of administrative work as proposed by theorists and actual descriptions of work that evolve from the world of practice" (Sergiovanni, 1991b, p. 15). By embracing paradoxes and puzzles in their work environment, principals have the ability to create new approaches to leadership (Deal & Peterson, 1994). Educational leaders in the 21st century, "paradoxically, will find greater peace of mind by looking for answers close at hand and reaching out, knowing that there is no clear solution" (Fullan, 1998, p. 6).

Summary

A principal has been described as being the one person within a school who has the ability and responsibility of overseeing and improving the school's programs. The leadership provided by principals is seen to be directly linked to the quality of a school and its educational programs. Current conditions in secondary public schools, however, prevent principals from becoming involved in the many critical core issues associated with their schools. These conditions exist despite the nature, responsibility, and influence of the principal.

Public school principals are faced with an ever-expanding set of responsibilities within an environment that is becoming increasingly more complex. Additionally, within the principal's environment a variety of factors exists over which the principal exercises little or no control. An example of such a factor is when reform movements or attempts to overlay new management techniques in schools are introduced into the principal's environment with little or no regard for the complexity or varied nature of the current school culture and climate. The apparent inability of school administrators to control the flow of new initiatives into public schools contributes to the failure of many reform movements.

The nature of the principal's environment and the principalship in general complicates the task of those who seek to successfully administer public high schools. Day-to-day responsibilities and pressures have necessitated that the principal's role become more reactive, and as a result there is a decrease in the ability to plan effectively

and perform tasks of any length. Researchers' attempts to standardize the responsibilities associated with the principalship are generally unsuccessful, because of the unique nature of the position. Confusion surrounding the duties performed by principals may be the result of the discrepancy that exists between what principals do and what they actually think they should be doing. A principal's job, as previously noted, "is open ended; that is, the job becomes largely what each principal wishes to make of it" (Sergiovanni, 1991b, p. 23), and "the work of successful principals corresponds more closely to what principals themselves say they should emphasize" (Sergiovanni, 1991b, p. 31).

Narrow interpretations of the principal's role and a tendency in literature and research to focus on a singular task as a measure of effectiveness inhibit attempts to accurately define the principalship. Coupled with the manner in which the principal's role is interpreted is what some may suggest is a proclivity by researchers to suggest simple solutions to difficult, complex problems. Expectations of those responsible for structuring the principal's position and hiring administrators to lead their schools are also characterized as being inconsistent with what principals actually do or need to do. The confusion surrounding the nature of the principalship fosters a lack of trust in the ability of those chosen to lead the school and results in criticism of the skills principals bring to the workplace.

University-based preparation programs for administrators are also described as being incongruent with the principal's job description, and skills required in actual practice, or both. Questions and criticisms directed at university-based preparation

programs deal not only with the relevance and applicability of the curriculum but also with the design of those same programs and the manner in which the curriculum is delivered. The one-best-method of preparing principals has been described as being anachronistic.

Research findings have indicated that there is no positive significant relationship between the amount of professional preparation received by principals and their effectiveness. Other studies have indicated that although university-based preparation programs are fraught with documents describing their programs and purpose, such programs ultimately lack structure and clarity and as a result fail to meet their objectives. These findings may be interpreted as evidence of the need to provide not only more but better and more relevant in-service training for administrators.

The unique and often ambiguous nature of the principal's workplace creates an atmosphere in which, rather than contending with a structured set of problems, the administrator is faced with situations that are multiple and fluid. The realities of the principal's workplace require that an administrator have the ability to deal with paradoxes rather than a single set of factors. Due to the amorphous nature of a principal's work, an administrator must have the ability to work on a variety of levels with multiple agendas. Effectiveness as a principal may be depend on understanding the nature of the school and the ability to respond appropriately to the demands of the school situation.

It can be said with certainty that the quality of teaching, school climate, student achievement, and public confidence are all directly related to the quality of school

leadership. The significance of the principal's role in the overall quality of the school underscores the need to give serious consideration to the development of new models for administrative training programs and other activities specifically designed to meet the needs of pre-service and practicing administrators. Newly designed training programs will augment administrative attempts aimed at producing more effective and efficient schools. Input from those most responsible for overseeing and managing the day-to-day operations of a school cannot be overlooked in generating new school reform initiatives.

The current study, in surveying practicing secondary school administrators, seeks to identify elements in the principal's environment that inhibit the principal's ability to successfully administer the school. The study also seeks to contribute to the knowledge base of agencies that seek to improve or implement programs aimed at enhancing the skills of pre-service or practicing secondary principals. Input from those most closely associated with the operation and programs of the school is essential to the success of any such undertaking.

The next chapter, "Methodology", describes the procedures employed to meet the stated objectives of the current study.

CHAPTER 3

Methodology

Introduction

This chapter focuses on the procedures employed to gather and analyze the data required to fulfill the intent and purpose of the study. The study is designed to identify obstacles in the high school principal's environment that inhibit the successful discharge of duties and the successful operation of the school. Additionally, the study seeks to establish correlations between specific demographic factors and the two indicators of effectiveness. The indicators of effectiveness were designed to assess the effectiveness of university-based preparation programs and to elicit information on the principal's perceived level of effectiveness. Finally, the study will identify tasks high school principals consider essential to the day-to-day operation of the school and will establish a level of satisfaction with university-based preparation programs and the level of preparedness for the principalship.

The composition of the target population for the study was high school principals from school districts in Pennsylvania with a single high school. Principals were asked to respond to a series of questions designed to assess their perceptions of the principalship in high schools. Also included in the chapter are a description of the procedures implemented to ensure reliability and validity and a discussion of the survey instrument.

Design of the Study

The methodology employed in the current study is survey research whose recent development is attributed to the field of sociology. Survey research is "considered a

method of systematic data collection” (Borg and Gall, 1979, p. 283) that uses statistical procedures to analyze the collected data.

The research design is a blend of two approaches, descriptive studies and correlational studies. A descriptive study is one whose primary function focuses on finding out “what is,” whereas a correlational study focuses on discovering and clarifying relationships. The study will not attempt to identify cause-and-effect relationships but rather will concentrate on discovering what relationships exist and the magnitude of those relationships. Establishing a cause-and-effect relationship through the use of survey research is generally considered an unacceptable practice. Data collected will be analyzed using statistical procedures considered appropriate for the type of research and data collected. Statistical procedures are described later in this chapter.

Only principals in Pennsylvania school districts containing a single high school were included in the study. Schools were classified by size according to the Pennsylvania Interscholastic Athletic Association (PIAA) guidelines. High schools were categorized as follows: Small (Class A), Medium (Class AA), Large (Class AAA) and Extra Large (Class AAAA). The differentiation in size was used to establish a basis of comparison for demographic information. All public high schools in Pennsylvania meeting the study’s selection criteria were included in the data collection process. Subjects for the study were all mailed identical survey instruments and cover letters.

Data Collection

Participants in the study responded to a variety of questions related to the role and function of the high school principal. A survey instrument was used to gather information

from the target population that could then be generalized to high school principals with similar educational experiences and work environments. In general, the survey items measured the attitudes and perceptions of high school principals in relation to a series of items that Leithwood and Montgomery (1984) identified as barriers or obstacles to the principalship. Demographic information gathered via the survey was used to standardize the collection and analysis of data and to provide a basis for correlating the collected data.

Instrumentation

A three-part survey (Appendix A) instrument was designed to collect the data required for the study. The first part consisted of 17 questions designed to collect demographic, experiential, educational, and background information. Responses in Part I were used to establish a foundation upon which the sample could be described, compared, and correlated.

Part II of the survey consisted of 41 questions , 46 items, 39 of which were culled from Leithwood and Montgomery's 1984 study dealing with barriers to the principalship. Each of the 39 questions related to one of the five distinct clusters Leithwood and Montgomery identified as problem areas associated with the successful discharge of duties. Specific barriers identified by Leithwood and Montgomery were used as the basis for the development of questions. The problems identified were related "to teachers, to the role of the principal, to those persons occupying the role, to the board-level administration and to the community (including parents)" (Leithwood & Montgomery, 1984, p. 75). The two other questions in this section were labeled as indicators of effectiveness. One of which asked high school principals to assess the effectiveness of

their university-based preparation program and the other elicited information on their own effectiveness. A Likert-type scale was developed to collect data in this section of the survey.

Questions in Part III were designed to collect information from principals concerning the emphasis placed on each of the eight job dimensions of the principalship identified by Smith and Andrews (1989) and to assess the adequacy of the university-based preparation received in seven of the eight job dimensions. Principals were also asked to provide information regarding their expectations and perceptions of the duties related to their position, and the time available to complete their duties.

Content Validity

Procedures were employed to insure the content validity of the survey instrument. Content validity “is sometimes referred to as logical or sampling validity, or validity by definition” (Roscoe, 1975, p. 136). Unlike reliability, it is not necessary to employ empirical methods to ensure the validity of the instrument.

Six, current and former, principals from Western Pennsylvania participated in a pretest of the survey instrument. Participants were selected for their varied backgrounds and administrative experience. Pretest participants were not included in the study. A copy of the survey and a questionnaire used to solicit comments were provided to each of the pretest participants. Each of the questions was reviewed for content, ambiguity, appropriateness and relevance to the high school principalship. Revisions were incorporated into the original survey based on the suggestions of the pretest participants. A copy of the questionnaire is found in Appendix C.

Content validity was insured through the jury-of-experts methodology. Panel members included the principals involved in the pretest of the instrument and selected members of the researcher's dissertation committee. The panel appraised the overall content of the instrument and verified its adherence to the purpose the study. Each of the survey items was assessed by the jury members to insure that it measured what it was purported to measure.

Reliability

Reliability can be defined as the level of internal consistency or stability. Borg and Gall (1979) described reliability of an instrument as the consistency of measure or the degree to which it can be expected to produce stable, consistent measurements. Roscoe (1975) described reliability as precision of measurement. Reliability is expressed as a coefficient (alpha, α) between 0.00 and 1.00. A coefficient of 1.00 indicates perfect reliability and an alpha value of 0.00 indicates no reliability. A reliability coefficient (Cronbach's Alpha) was calculated to ensure the consistency of measure of the survey instrument. The 44 barriers to effectiveness had a reliability coefficient of .9416 and the reliability coefficient for the entire survey was .9335.

Procedures

McNamara (1994) identified "five of the more common ethical problems that are encountered in conducting surveys and polls" (p. 141) and provided guidelines and sample ethical solutions for each. McNamara provides guidelines for dealing with ethical dilemmas in survey research in the following areas: voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose and sponsor, and

analysis and reporting. Procedures were employed in survey development and research design in accordance with McNamara's suggestions. In order to insure adherence to the ethical guidelines for survey research, the survey instrument was submitted to the Human Subjects Research Committee of Youngstown State University for its approval. The approval letter received from the Human Subjects Research Committee is found in Appendix D.

Participants for the study were mailed a cover letter, instructions, and a copy of the survey instrument. Included in the packet were materials needed to return the survey. An initial return between 50 and 60 percent was expected. McNamara (1994) "suggest[ed] that a response between 50 and 60 percent is *adequate*, a response rate of at least 60 percent is considered *good*, and a response rate of 70 percent or more is *very good*" (p. 151). Follow-up procedures were employed to ensure a return rate of at least 60 percent. The follow-up included a reminder and a second copy of the survey. A copy of the cover letter is found in Appendix E along with a copy of the follow-up letter. The letters were signed by Dr. David Ruggles of Youngstown State University, director of the study.

Data Analysis

Descriptive statistics were generated to describe the sample, and independent t-tests and analysis of variance tests (ANOVA) were performed to determine whether significant differences existed between groups. Demographic, experiential and educational data were used as the basis for analysis, along with principals' perceptions regarding the emphasis placed on the eight dimensions of the principalship, the

university-based preparation received in each of the dimensions, and principals' expectations and perceptions of the principalship and the availability of time to complete their duties. Post hoc procedures were utilized when appropriate. Data was correlated to determine the strength of relationships that existed between specific demographic factors and the two indicators of effectiveness.

Summary

This purpose of this chapter was to outline procedures employed for collection and analysis of data. Survey research was chosen as the methodology to collect data via a three-part questionnaire. The target population for the study was high school principals, from school districts in Pennsylvania with a single high school, who responded to a series of questions designed to assess their perceptions of the principalship. Also included in the chapter are a description of the statistical procedures used. The next chapter provides a detailed discussion of the results of the analysis of the data.

CHAPTER 4

Analysis of the Data

Introduction

This chapter provides a description of the procedures followed in the analysis of the data collected via the survey instrument. Surveys were mailed to senior high school principals in 470 of Pennsylvania's 501 school districts. Principals were grouped according to their responses to the various survey questions (see survey, Appendix A). Statistical analysis of principals' responses to the two indicators of effectiveness and the 44 barriers was accomplished using those groupings as the basis for analysis. Significant findings are reported based on those same groupings.

Survey Return Rates

Surveys were mailed to senior high school principals in 470 of Pennsylvania's 501 school districts. Principals in school districts containing more than one high school were not included in the sample. The return rate for the first mailing was 46.2% which equates to 217 surveys being returned. Since the anticipated return rate of 60% was not achieved, a second letter and survey were mailed to the 253 nonrespondents. The second mailing resulted in a 32.4% return rate, which equates to 82 of the 253 surveys being returned. The combined return rate for the two mailings was 63.6%. Return rates can be found in Table 1. (See Appendix E for a copy of the letters used for the first and second mailings.)

Table 1
Survey Return Rates

	First Mailing	Second Mailing	Totals
Possible respondents	470	253	470*
Surveys returned	217	82	299
Percent returned	46.2	32.41	63.6*

* Totals are based on the possible number of respondents.

Description of Sample

Principals responding to the survey were predominantly male with 265 of the 299 who responded being men. Advanced degrees (master's or beyond) were held by 294 of the individuals who responded. Only 1.3%, 4 principals, reported not having an advanced degree. A majority, 59.1%, completed course work beyond a master's; 19.1% held a master's degree with no course work beyond; and 20.5% of the respondents had a doctorate. Survey respondents also described themselves as having a high level of educational experience, with 88.2% having spent 20 or more years in education. Of the years spent in education, 73.2% have 15 years or less of classroom experience and 53.8% reported having 10 years or more of administrative experience. The number of administrative positions held were as follows: One, 10.1%; two, 43.2%; three, 28.7%; and four or more, 17.9%. A majority of the principals, 56.4%, have been in their current positions five years or less, while 15.2 % have more than 10 years of experience in their current positions.

Principals were asked to report school size according to how their school had been classified by the Pennsylvania Interscholastic Athletic Association (PIAA). School size

was distinguished by classification as follows: PIAA Single A, small; PIAA Double A, medium; PIAA Triple A, large; and PIAA Quad A, extra-large. Each PIAA classification contains approximately 25% of the high schools in Pennsylvania. Responses were distributed fairly evenly across school size. Small schools comprised 23.1 % of returns, medium schools 26.1%; large schools, 27.8 %; and extra-large schools, 23.1 %. The predominant grade configuration was 9-12, which constituted 63.5 % of the returns. High schools with grade configurations of 10-12 or 11-12 made up 9.3% of the returns. More than one fourth, 27.1%, of the principals described their grade configuration as “other,” which for the purpose of the study is defined as a school whose entry grade level is prior to grade 9 and terminal grade level is grade 12. District type was generally described as either rural, 52.8%, or suburban 38.8%. Urban and metropolitan districts constituted 8.4% of the sample. Schools with two administrators accounted for approximately one-half (46.8%) of the sample, while schools with one administrator (19.9%) or three administrators (20.9%) constituted about one-fifth of the sample each. High schools with 4 or more administrators constituted 12.5% of the sample respondents.

Additional information concerning the professional habits of principals and their perceptions of their formal preparation programs was used to describe the sample and analyze responses. Participants in the study were asked whether they are currently enrolled in a university program; whether they regularly attend workshops; and whether their university-based preparation included a field experience, internship, or work with a mentor. Principals were also asked to respond to this question: Given the opportunity again, would you choose to become a high school principal? A summary of principals’

responses to each of the items described in this section is found in the narrative and table for each item.

Reliability

Survey reliability is presented in Table 2. A total of 299 surveys were returned, with the number of responses to each of the items included in the calculation ranging from 297 to 299. Reliability coefficients were calculated for items grouped by category. The number of items in each category can be found in the column labeled N. Low reliability coefficients for the indicators of effectiveness and the emphasis placed on the eight dimensions of the principalship may be the result of the number of items in the groups or how principals viewed the relationships among the items in the groups. The 44 barriers to effectiveness had a reliability coefficient of 0.94 and the reliability coefficient for the full survey was 0.93.

Table 2

Reliability of Survey Instrument

Item	N	Alpha
Effectiveness	2	0.3034
Barriers	44	0.9416
Dimensions of principalship		
Emphasis	8	0.4588
Preparation	7	0.7796
Combined emphasis and preparation	15	0.6445
Full Survey	62	0.9335

Statistical Procedures

The following sections describe the statistical procedures used to analyze the data collected via the survey. Demographic factors, professional habits, job dimension emphasis and preparation received, and the principals' perceptions of their duties and the time available to complete them were used as the basis upon which the two indicators of effectiveness and 44 barriers (also referred to as the 46 items) were analyzed. Statistical procedures used to identify significant differences and relationships include: independent t-tests, analysis of variance (ANOVA), and Spearman's correlation. Descriptive data are included to better describe the sample and findings. Principal's responses to the 44 barriers are summarized in Table 3.

Demographic Factors and Professional Habits

Seventeen items, each of which can be classified as either a demographic factor or professional habit, were used to describe the sample (see survey, Appendix A) and as a basis for analyzing responses to survey questions concerning the indicators of effectiveness and the barriers to effectiveness. Tests used to analyze responses were independent t-tests and analysis of variance (ANOVA). Specific tests were selected based upon the number and type of valid responses. Significant findings are reported in subsequent sections of this chapter.

Independent T-Tests

Tables included in the body of this chapter report significant findings based on independent t-tests for the following demographic factors and professional habits: gender; whether the principal is currently enrolled in a college or university program; whether the

Table 3
Descriptive Statistics for Barriers to Effectiveness

Barrier	N	Mean	S.D.
1 ¹ : Teachers' lack of knowledge/skill about new practices	299	2.44	0.79
2: Varied professional training among teachers	298	2.24	0.81
3 ^{2,3} : Teachers' lack of motivation or willingness to change	297	2.97	1.02
4: Teachers' unwillingness to participate in training	297	2.36	1.02
5: Teachers' resistance to collaborate in planning	299	2.29	0.98
6 ¹ : Teacher autonomy	299	2.41	0.91
7 ¹ : Program constraints created by bargaining & contracts	299	2.56	1.08
8 ^{2,4} : Conflicting responsibilities for principal	298	2.86	1.23
9: Inadequate preparation for role and responsibilities	298	1.66	0.76
10 ^{2,4} : Inordinate amount of time spent on non-essential tasks	299	3.15	1.03
11 ^{1,5} : Too many tasks assigned to principal	299	3.59	1.07
12 ^{2,4} : Constituencies considered during decision-making	298	2.96	1.10
13: Unwillingness by principal to take risks	297	1.54	0.73
14: Hostile political environment	299	2.19	1.16
15: Too much parental involvement	299	1.82	0.90
16 ^{1,3} : Too little parental involvement	299	2.59	1.14
17: Inadequate resources	299	2.41	1.11
18: Excessively rigid policies and procedures	299	1.95	0.96
19 ¹ : Excessively time-consuming policies and procedures	299	2.38	0.98
20: Pressure created by special interest groups	299	2.30	0.98
21 ¹ : Bureaucratic inhibitors to change	298	2.46	0.95
22: Insufficient information on new programs or initiatives	298	1.90	0.90

(continued)

Table 3

Descriptive Statistics for Barriers to Effectiveness (continued)

Barrier	N	Mean	S.D.
23: Low expectations set by teachers	299	2.24	0.99
24 ¹ : Low expectations set by parents	299	2.36	1.04
25: Resistance to change by central administration	299	1.87	1.06
26A: Unrealistic view of principal's role by community	299	2.18	1.08
26B ^{1,3} : Unrealistic view of principal's role by school board	298	2.49	1.19
26C: Unrealistic view of role by central administration	299	2.09	1.11
26D: Unrealistic view of principal's role by teachers	299	2.26	1.02
27A: Inappropriate standards established by school board	299	2.12	1.10
27B: Inappropriate standards set by central administration	299	2.03	1.09
28A: Unclear expectations established by school board	299	2.12	1.18
28B: Unclear expectations set by central administration	299	1.99	1.10
29 ^{1,4} : Micro managing of schools by board of education	299	2.75	1.42
30: Misconception of school and principal's role	297	2.13	1.02
31 ^{2,4} : State mandated programs	299	3.06	1.00
32 ^{2,5} : Mandated programs for special student populations	298	3.71	1.04
33 ^{1,3} : Inadequate number of professional staff members	299	2.56	1.12
34 ^{2,3} : Insufficient administrative staff	299	2.68	1.26
35: District initiated programs with insufficient input	298	2.03	1.08
36: District initiated programs with insufficient training	299	2.19	1.03
37 ¹ : District initiated programs with insufficient funding	299	2.38	1.11
38 ¹ : Integration of technology into educational programs	299	2.33	1.04
39 ¹ : Principal required to assume non-traditional duties	299	2.54	1.23

Note: ¹ = at least 40% of respondents reported that the barrier represented a moderate difficulty, large degree of difficulty, or extreme degree of difficulty; ² = at least 50% of

respondents reported that the barrier represented a moderate difficulty, large degree of difficulty, or extreme degree of difficulty; ³ = at least 20% of respondents reported that the barrier represented a large degree of difficulty, or extreme degree of difficulty; ⁴ = at least 30% of respondents reported that the barrier represented a large degree of difficulty, or extreme degree of difficulty; and ⁵ = at least 50% of respondents reported that the barrier represented a large degree of difficulty, or extreme degree of difficulty. See survey Appendix A.

principal regularly attends workshops; whether the principal's formal preparation include a field experience, internship, or work with a mentor; and whether, if provided the opportunity again, the individual would choose to become a principal. With the exception of gender, responses to this group of factors were coded as either Yes or No. A complete matrix of the significant findings for the demographic factors and professional habits described in this section can be found in Appendix F.

Significant independent t-test findings are also provided for the reported emphasis placed on the eight dimensions of the principalship and the preparation received in each (see survey, Appendix A, page 4). Findings for emphasis and preparation are discussed in greater detail in subsequent sections of this chapter.

Independent t-tests were used to examine principals' responses based on their expectations and perceptions of the principalship and the time available to complete their duties. Principals selected one of four responses (see survey, Appendix A, page 4). Data were regrouped in order to identify significant differences using an independent t-test for analysis. Two distinct groupings were used. The first was based on the principals' current duties and their expectations and perceptions of the principalship. The other grouped principals according to the availability of time. More detailed information is provided later in this chapter.

Gender

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 4 . The level of significance (p) was set at .05. The difference in means was found to be significant for 1 of the 46 items, Barrier 32. The possible range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean difference between the two groups indicates that one barrier presented a significantly greater degree of difficulty for principals in Group I, males.

Table 4

Gender: Significant Findings

Item	Group		T
	I	II	
Barrier 32: Mandated programs designed for special student populations			2.064*
Mean	3.76	3.37	
<u>S.D.</u>	1.03	1.11	
<u>N</u>	263	35	

Note. I = Male, II = Female. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

Currently Enrolled

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 5. The level of significance (p) was set at .05. The difference in the means of the two groups was found to be significant for 7 of the

Table 5

Currently Enrolled in a College or University Program: Significant Findings

Item	Group		T
	I	II	
Barrier 25: Resistance to change by central administration			-3.018**
Mean	1.77	2.21	
<u>S.D.</u>	.99	1.21	
<u>N</u>	233	66	
Barrier 26A: Unrealistic view of principal's role by community			-1.985*
Mean	2.11	2.41	
<u>S.D.</u>	1.05	1.15	
<u>N</u>	233	66	
Barrier 26D: Unrealistic view of principal's role by teachers			-2.133*
Mean	2.20	2.50	
<u>S.D.</u>	1.00	1.08	
<u>N</u>	233	66	
Barrier 28A: Unclear expectations established by school board			-2.859**
Mean	2.02	2.48	
<u>S.D.</u>	1.09	1.39	
<u>N</u>	233	66	
Barrier 28B: Unclear expectations established by central administration			-2.351*
Mean	1.91	2.27	
<u>S.D.</u>	1.02	1.32	
<u>N</u>	233	66	

(continued)

Table 5

Currently Enrolled in a College or University Program: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 30: Misconception of function of school and principal's role			-2.707**
Mean	2.05	2.43	
<u>S.D.</u>	0.95	1.20	
<u>N</u>	232	65	
Barrier 34: Insufficient administrative staff			-2.959**
Mean	2.56	3.08	
<u>S.D.</u>	1.25	1.23	
<u>N</u>	233	66	

Note. I = Currently Not Enrolled, II = Currently Enrolled. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

46 items. Included in the seven significant items are seven barriers to effectiveness. In each item found to be significant, the mean of Group II, those principals currently enrolled in a formal program, was significantly greater than the mean of Group I. The range of responses for each of the 46 items was 1 to 5.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean differences between the two groups indicate that 7 of the 44 barriers presented a significantly greater degree of difficulty for principals in Group II.

Regularly Attend Workshops

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 6. The level of significance (p) was set at .05. The difference in the means of the two groups was found to be significant for 8 of the 46 items. Included in the eight significant items were one indicator of effectiveness and seven barriers. In each item found to be significant, the mean of Group I, those principals who indicated they do not regularly attend workshops, was significantly greater than the mean of Group II. The range of responses for each of the 46 items was 1 to 5.

Table 6

Regularly Attend Workshops: Significant Findings

Item	Group		T
	I	II	
University Effectiveness			2.525*
Mean	2.61	1.99	
<u>S.D.</u>	1.16	0.85	
<u>N</u>	23	276	
Barrier 2: Varied professional training among teachers			1.982*
Mean	2.57	2.22	
<u>S.D.</u>	0.79	0.81	
<u>N</u>	23	275	
Barrier 8: Conflicting responsibilities for principal			2.184*
Mean	3.39	2.81	
<u>S.D.</u>	1.27	1.22	
<u>N</u>	23	275	

(continued)

Table 6

Regularly Attend Workshops: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.857**
Mean	2.09	1.62	
<u>S.D.</u>	0.73	0.75	
<u>N</u>	23	275	
Barrier 11: Too many tasks assigned to principal			2.051*
Mean	3.96	3.56	
<u>S.D.</u>	0.88	1.08	
<u>N</u>	23	276	
Barrier 17: Inadequate resources			2.461*
Mean	2.96	2.37	
<u>S.D.</u>	1.26	1.09	
<u>N</u>	23	276	
Barrier 22: Insufficient information on new programs or initiatives			2.014*
Mean	2.26	1.87	
<u>S.D.</u>	0.96	0.89	
<u>N</u>	23	275	
Barrier 38: Integration of technology into the educational programs			1.992*
Mean	2.74	2.29	
<u>S.D.</u>	1.29	1.01	
<u>N</u>	23	276	

Note. I = Does not regularly attend workshops, II = Regularly attends workshops. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean difference between the two groups indicates that principals in Group I believed that their university program was less effective than that of their counterparts. Analysis of the data also indicates that seven of the barriers presented a greater degree of difficulty for that same group of principals.

Field Experience

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 7 . The level of significance (p) was set at .05. Differences in means were found to be significant for 1 of the 46 items, barrier 15. The possible range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an

Table 7

Field Experience: Significant Findings

Item	Group		T
	I	II	
Barrier 15: Too much parental involvement			2.362*
Mean	1.94	1.70	
<u>S.D.</u>	0.98	0.80	
<u>N</u>	142	157	

Note. I = Program did not include a field experience, II = Program did include a field experience. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

increase in difficulty. The mean difference between the two groups indicates that one barrier presented a significantly greater degree of difficulty for principals in Group I, principals whose formal preparation did not include a field experience.

Internship

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 8. The level of significance (p) was set at .05. The difference in the means of the two groups was found to be significant for 2 of the 46 items. Included in the two significant items are one indicator of effectiveness and one barrier. The range of responses for each of the 46 items was 1 to 5.

For the two indicators of effectiveness, an increase in the mean indicates a decrease

Table 8

Internship: Significant Findings

Item	Group		T
	I	II	
University Effectiveness			2.824**
Mean	2.25	1.92	
<u>S.D.</u>	1.06	0.77	
<u>N</u>	103	196	
Barrier 26B: Unrealistic view of principal's role by school board			1.986
Mean	2.31	2.59	
<u>S.D.</u>	1.06	1.24	
<u>N</u>	102	196	

Note. I = Program did not include an internship, II = Program did include an internship. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean difference between the two groups indicates that principals in Group I believed that their university program was less effective than that of their counterparts. Analysis of the data also indicates that 1 of the 44 barriers presented a greater degree of difficulty for the principals in Group II.

Mentor

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 9. The level of significance (p) was set at .05. The difference in the means of the two groups was found to be significant for 2 of the 46 items. Included in the two significant items are one indicator of effectiveness and

Table 9

Mentor: Significant Findings

Item	Group		T
	I	II	
University Effectiveness			2.688**
Mean	2.15	1.88	
<u>S.D.</u>	0.92	0.83	
<u>N</u>	168	131	
Barrier 31: State mandated programs			1.938*
Mean	3.16	2.93	
<u>S.D.</u>	0.95	1.06	
<u>N</u>	168	131	

Note. I = Did not work with a mentor, II = Did work with a mentor. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

one barrier. In each item found to be significant, the mean of Group I, those principals whose formal preparation program did not include work with a mentor, was significantly greater than the mean of Group II. The range of responses for each of the 46 items was 1 to 5.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean difference between the two groups indicates that principals in Group I believed that their university program was less effective than that of their counterparts. Analysis of the data also indicates that 1 of the 44 barriers presented a greater degree of difficulty for that same group of principals.

Do Again

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 10. The level of significance (p) was set at .05. The difference in the means of the two groups was found to be significant for 22 of the 46 items. Included in the 22 significant items were 2 indicators of effectiveness and 20 barriers. In each item found to be significant, the mean of Group I, those principals who indicated they would not choose to become a principal again if given the opportunity, was significantly greater than the mean of Group II. The range of responses for each of the 46 items was 1 to 5.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The mean difference between the two groups indicates

Table 10

Do Again: Significant Findings

Item	Group		T
	I	II	
University Effectiveness			2.829**
Mean	2.48	1.96	
<u>S.D.</u>	1.13	0.83	
<u>N</u>	42	257	
Level of Effectiveness			3.592**
Mean	2.00	1.57	
<u>S.D.</u>	1.01	0.66	
<u>N</u>	42	257	
Barrier 3: Teachers' lack of motivation or willingness to change			2.333*
Mean	3.31	2.92	
<u>S.D.</u>	0.90	1.03	
<u>N</u>	42	255	
Barrier 4: Unwillingness by teachers to participate in inservice training			2.438*
Mean	2.71	2.30	
<u>S.D.</u>	0.89	1.03	
<u>N</u>	42	255	
Barrier 7: Program constraints created by bargaining and contracts			2.249*
Mean	2.90	2.50	
<u>S.D.</u>	1.12	1.07	
<u>N</u>	42	257	

(continued)

Table 10

Do Again: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 8: Conflicting responsibilities for principal			2.461*
Mean	3.29	2.79	
<u>S.D.</u>	1.25	1.22	
<u>N</u>	42	256	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.744*
Mean	1.95	1.61	
<u>S.D.</u>	0.88	0.73	
<u>N</u>	42	256	
Barrier 10: Inordinate amount of time spent on non-essential tasks			3.229**
Mean	3.62	3.07	
<u>S.D.</u>	0.96	1.02	
<u>N</u>	42	257	
Barrier 11: Too many tasks assigned to principal			2.704**
Mean	3.93	3.53	
<u>S.D.</u>	0.84	1.10	
<u>N</u>	42	257	
Barrier 12: Number of constituencies considered during decision-making			2.713**
Mean	3.38	2.89	
<u>S.D.</u>	1.13	1.08	
<u>N</u>	42	256	

(continued)

Table 10

Do Again: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			2.241*
Mean	2.76	2.32	
<u>S.D.</u>	1.23	0.92	
<u>N</u>	42	257	
Barrier 20: Pressure created by special interest groups			2.134*
Mean	2.60	2.25	
<u>S.D.</u>	1.01	0.97	
<u>N</u>	42	257	
Barrier 26B: Unrealistic view of principal's role by school board			3.320**
Mean	3.05	2.40	
<u>S.D.</u>	1.21	1.16	
<u>N</u>	42	256	
Barrier 26D: Unrealistic view of principal's role by teachers			2.611**
Mean	2.64	2.20	
<u>S.D.</u>	1.12	1.00	
<u>N</u>	42	257	
Barrier 27A: Inappropriate standards established by school board			2.872**
Mean	2.57	2.05	
<u>S.D.</u>	1.11	1.09	
<u>N</u>	42	257	

(continued)

Table 10

Do Again: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 27B: Inappropriate standards established by central administration			2.267*
Mean	2.45	1.96	
<u>S.D.</u>	1.33	1.04	
<u>N</u>	42	257	
Barrier 28A: Unclear expectations established by school board			2.982**
Mean	2.62	2.04	
<u>S.D.</u>	1.27	1.14	
<u>N</u>	42	257	
Barrier 28B: Unclear expectations established by central administration			2.453*
Mean	2.45	1.92	
<u>S.D.</u>	1.35	1.04	
<u>N</u>	42	257	
Barrier 29: Micro managing of schools by board of education			3.645**
Mean	3.48	2.63	
<u>S.D.</u>	1.42	1.38	
<u>N</u>	42	257	
Barrier 30: Misconception of function of school and principal's role			3.927**
Mean	2.69	2.04	
<u>S.D.</u>	1.07	0.98	
<u>N</u>	42	255	

(continued)

Table 10

Do Again: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 35: District initiated programs with insufficient input			2.545*
Mean	2.50	1.95	
<u>S.D.</u>	1.33	1.02	
<u>N</u>	42	257	
Barrier 37: District initiated programs with insufficient funding			2.861**
Mean	2.83	2.31	
<u>S.D.</u>	1.23	1.07	
<u>N</u>	42	257	

Note. I = Would not choose to become a principal again, II = Would choose to become a principal again. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

that principals in Group I believed that their university program was less effective than that of their counterparts and that they also found themselves to be less effective than their counterparts. Analysis of the data also indicates that 20 of the barriers presented a greater degree of difficulty for that same group of principals.

Dimensions of the Principalship

Principals responded to questions in two different categories related to the eight job dimensions of the principalship identified by Smith and Andrews (1989). For each of the eight job dimensions, principals were first asked about the emphasis placed on the dimension, given the demands and expectations of their current position. The other category concerned the adequacy of the university-based preparation received for the

given job dimension. Principals did not respond about the adequacy of their university-based preparation in the dimension of professional development.

Responses for both emphasis and the preparation received were recoded because of the disparity in the number of responses in each of the three categories. Principals originally responded to the emphasis placed on each of the eight dimensions as follows: (1) too great an emphasis, (2) appropriate emphasis, or (3) not enough emphasis. Original responses were recoded as either appropriate emphasis or inappropriate emphasis, with responses 1 and 3 combined into the category described as inappropriate emphasis (See Appendix G).

The number of response categories for preparation received was likewise reduced from three to two. Preparation received, originally described as adequate, inadequate, or none received, was recoded to adequate or inadequate. Responses originally identified as inadequate or none received were recoded and combined into the category described as inadequate preparation (See Appendix H).

Independent t-tests were used to analyze principals' responses to the 46 items, 2 indicators of effectiveness and 44 barriers. Recoded responses to the emphasis placed on the eight job dimensions and the university-based preparation received were used as the basis for comparison. A matrix of significant findings for the 46 items and the emphasis placed on each can be found in Appendix I, and Appendix J contains the significant findings for the 46 items and the adequacy of the university-based preparation received.

Dimension One Emphasis

Table 11 contains item means, standard deviations, and independent t-tests for each

Table 11

Title: Dimension 1 Emphasis: Significant Findings

Item	Group		T
	I	II	
University effectiveness			2.400*
Mean	2.27	1.97	
<u>S.D.</u>	0.91	0.88	
<u>N</u>	64	234	
Level of effectiveness			4.890**
Mean	2.02	1.53	
<u>S.D.</u>	0.95	0.63	
<u>N</u>	64	234	
Barrier 7: Program constraints created by bargaining and contracts			2.272*
Mean	2.83	1.23	
<u>S.D.</u>	2.48	1.03	
<u>N</u>	64	234	
Barrier 8: Conflicting responsibilities for principal			2.101*
Mean	3.14	2.78	
<u>S.D.</u>	1.18	1.24	
<u>N</u>	64	233	
Barrier 9: Inadequate preparation for role and responsibilities of principal			3.163**
Mean	1.92	1.59	
<u>S.D.</u>	0.80	0.73	
<u>N</u>	64	233	

(continued)

Table 11

Dimension 1 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 10: Inordinate amount of time spent on non-essential tasks			3.506**
Mean	3.55	3.05	
<u>S.D.</u>	1.07	0.99	
<u>N</u>	64	234	
Barrier 12: Number of constituencies considered during decision-making			3.084**
Mean	3.33	2.86	
<u>S.D.</u>	1.15	1.07	
<u>N</u>	63	234	
Barrier 14: Hostile political environment			2.392*
Mean	2.50	2.11	
<u>S.D.</u>	1.08	1.17	
<u>N</u>	64	234	
Barrier 17: Inadequate resources			2.525*
Mean	2.72	2.32	
<u>S.D.</u>	1.16	1.09	
<u>N</u>	64	234	
Barrier 18: Excessively rigid policies and procedures			2.250*
Mean	2.19	1.88	
<u>S.D.</u>	1.07	0.92	
<u>N</u>	64	234	

(continued)

Table 11

Dimension 1 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			2.548*
Mean	2.66	2.31	
<u>S.D.</u>	1.10	0.93	
<u>N</u>	64	234	
Barrier 20: Pressure created by special interest groups			3.473**
Mean	2.67	2.20	
<u>S.D.</u>	0.98	0.96	
<u>N</u>	64	234	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			4.386**
Mean	2.91	2.34	
<u>S.D.</u>	0.99	0.90	
<u>N</u>	64	234	
Barrier 25: Resistance to change by central administration			2.302*
Mean	2.14	1.80	
<u>S.D.</u>	1.23	1.00	
<u>N</u>	64	234	
Barrier 26A: Unrealistic view of principal's role by community			2.477*
Mean	2.50	2.09	
<u>S.D.</u>	1.20	1.03	
<u>N</u>	64	234	

(continued)

Table 11

Dimension 1 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26B: Unrealistic view of principal's role by school board			4.728**
Mean	3.09	2.33	
<u>S.D.</u>	1.23	1.12	
<u>N</u>	64	234	
Barrier 26C: Unrealistic view of principal's role by central administration			2.542*
Mean	2.41	2.01	
<u>S.D.</u>	1.19	1.07	
<u>N</u>	64	234	
Barrier 27A: Inappropriate standards established by school board			4.185**
Mean	2.63	1.99	
<u>S.D.</u>	1.12	1.06	
<u>N</u>	64	234	
Barrier 27B: Inappropriate standards established by central administration			3.179**
Mean	2.45	1.92	
<u>S.D.</u>	1.22	1.03	
<u>N</u>	64	234	
Barrier 28A: Unclear expectations established by school board			3.440**
Mean	2.61	2.00	
<u>S.D.</u>	1.30	1.11	
<u>N</u>	64	234	

(continued)

Table 11

Dimension 1 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 28B: Unclear expectations established by central administration			3.454**
Mean	2.45	1.87	
<u>S.D.</u>	1.23	1.03	
<u>N</u>	64	234	
Barrier 29: Micro managing of schools by board of education			3.200**
Mean	3.25	2.62	
<u>S.D.</u>	1.51	1.36	
<u>N</u>	64	234	
Barrier 30: Misconception of function of school and principal's role			3.013**
Mean	2.50	2.03	
<u>S.D.</u>	1.13	0.97	
<u>N</u>	64	232	
Barrier 33: Inadequate number of professional staff members			2.073*
Mean	2.81	2.49	
<u>S.D.</u>	1.07	1.12	
<u>N</u>	64	234	
Barrier 34: Insufficient administrative staff			3.015**
Mean	3.09	2.56	
<u>S.D.</u>	1.31	1.23	
<u>N</u>	64	234	

(continued)

Table 11

Dimension 1 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 35: District initiated programs with insufficient input			3.698**
Mean	2.52	1.90	
<u>S.D.</u>	1.23	1.00	
<u>N</u>	63	234	
Barrier 36: District initiated programs with insufficient training			3.738**
Mean	2.61	2.08	
<u>S.D.</u>	1.12	0.98	
<u>N</u>	64	234	
Barrier 37: District initiated programs with insufficient funding			3.513**
Mean	2.81	2.27	
<u>S.D.</u>	1.21	1.05	
<u>N</u>	64	234	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$ significant item of the 46 items analyzed. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05, and the range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 28

of the 46 items. In each of the 28 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 17 of the 28 items were significant at the .01 level. Included in the 28 significant items are 2 indicators of effectiveness and 26 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university program was less effective, and they also perceived themselves to be less effective than their counterparts. Results of the data analysis also indicate that 26 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Two Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 12. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05, and the range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 14 of the 46 items. In each of the 14 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 4 of the 14 items were significant at the

Table 12

Dimension 2 Emphasis: Significant Findings

Item	Group		T
	I	II	
Barrier 7: Program constraints created by bargaining and contracts			2.497*
Mean	2.89	2.49	
<u>S.D.</u>	1.18	1.05	
<u>N</u>	54	245	
Barrier 16: Too little parental involvement			2.418*
Mean	2.93	2.51	
<u>S.D.</u>	1.21	1.11	
<u>N</u>	54	245	
Barrier 17: Inadequate resources			2.976**
Mean	2.81	2.32	
<u>S.D.</u>	1.23	1.07	
<u>N</u>	54	245	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.135*
Mean	2.70	2.40	
<u>S.D.</u>	1.00	0.93	
<u>N</u>	54	244	
Barrier 22: Insufficient information on new programs or initiatives			2.287*
Mean	2.19	1.84	
<u>S.D.</u>	1.05	0.85	
<u>N</u>	54	244	

(continued)

Table 12

Dimension 2 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 25: Resistance to change by central administration			2.102*
Mean	2.20	1.80	
<u>S.D.</u>	1.35	0.97	
<u>N</u>	54	245	
Barrier 26C: Unrealistic view of principal's role by central administration			3.138**
Mean	2.56	1.99	
<u>S.D.</u>	1.22	1.06	
<u>N</u>	54	245	
Barrier 27B: Inappropriate standards established by central administration			2.958**
Mean	2.48	1.93	
<u>S.D.</u>	1.27	1.03	
<u>N</u>	54	245	
Barrier 28B: Unclear expectations established by central administration			2.351*
Mean	2.35	1.91	
<u>S.D.</u>	1.28	1.05	
<u>N</u>	54	245	
Barrier 31: State mandated programs			2.032*
Mean	3.33	3.00	
<u>S.D.</u>	1.12	0.97	
<u>N</u>	54	245	

(continued)

Table 12

Dimension 2 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 32: Mandated programs designed for special student populations			1.968*
Mean	3.96	3.66	
<u>S.D.</u>	1.05	1.04	
<u>N</u>	54	244	
Barrier 33: Inadequate number of professional staff members			2.145*
Mean	2.85	2.49	
<u>S.D.</u>	1.22	1.08	
<u>N</u>	54	245	
Barrier 34: Insufficient administrative staff			1.980*
Mean	2.98	2.61	
<u>S.D.</u>	1.38	1.23	
<u>N</u>	54	245	
Barrier 35: District initiated programs with insufficient input			2.838**
Mean	2.47	1.93	
<u>S.D.</u>	1.30	1.01	
<u>N</u>	53	245	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

.01 level. Included in the 14 significant items are 14 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Results of the data analysis indicate that 14 of

the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Three Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 13. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 14 of the 46 items. In each of the 14 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 4 of the 14 items were significant at the .01 level. Included in the 14 significant items are 1 indicator of effectiveness and 13 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed they were less effective than their counterparts. Results of the data analysis also indicate that 13 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Four Emphasis

Item means, standard deviations, and independent t-tests for each significant item

Table 13

Dimension 3 Emphasis: Significant Findings

Item	Group		T
	I	II	
Level of effectiveness			2.538*
Mean	1.85	1.58	
<u>S.D.</u>	0.80	0.71	
<u>N</u>	55	244	
Barrier 3: Teachers' lack of motivation or willingness to change			2.594**
Mean	3.29	2.90	
<u>S.D.</u>	1.03	1.00	
<u>N</u>	55	242	
Barrier 4: Unwillingness by teachers to participate in inservice training			2.300*
Mean	2.65	2.30	
<u>S.D.</u>	1.14	0.99	
<u>N</u>	54	243	
Barrier 10: Inordinate amount of time spent on non-essential tasks			2.893**
Mean	3.51	3.07	
<u>S.D.</u>	1.02	1.02	
<u>N</u>	55	244	
Barrier 11: Too many tasks assigned to principal			2.332*
Mean	3.89	3.52	
<u>S.D.</u>	1.01	1.08	
<u>N</u>	55	244	

(continued)

Table 13

Dimension 3 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.461*
Mean	2.74	2.39	
<u>S.D.</u>	1.05	0.91	
<u>N</u>	54	244	
Barrier 26B: Unrealistic view of principal's role by school board			2.263*
Mean	2.82	2.42	
<u>S.D.</u>	1.23	1.17	
<u>N</u>	55	243	
Barrier 26C: Unrealistic view of principal's role by central administration			2.287*
Mean	2.40	2.02	
<u>S.D.</u>	1.18	1.08	
<u>N</u>	55	244	
Barrier 27B: Inappropriate standards established by central administration			2.083*
Mean	2.31	1.97	
<u>S.D.</u>	1.07	1.09	
<u>N</u>	55	244	
Barrier 28A: Unclear expectations established by school board			2.325*
Mean	2.45	2.05	
<u>S.D.</u>	1.17	1.17	
<u>N</u>	55	244	

(continued)

Table 13

Dimension 3 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 28B: Unclear expectations established by central administration			2.790**
Mean	2.36	1.91	
<u>S.D.</u>	1.16	1.07	
<u>N</u>	55	244	
Barrier 29: Micro managing of schools by board of education			2.186*
Mean	3.13	2.67	
<u>S.D.</u>	1.47	1.39	
<u>N</u>	55	244	
Barrier 38: Integration of technology into the educational programs			-2.031*
Mean	2.07	2.39	
<u>S.D.</u>	0.96	1.05	
<u>N</u>	55	244	
Barrier 39: Principal required to assume non-traditional duties			2.950**
Mean	2.95	2.45	
<u>S.D.</u>	1.10	1.24	
<u>N</u>	55	244	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

of the 46 items analyzed are presented in Table 14. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed

Table 14

Dimension 4 Emphasis: Significant Findings

Item	Group		T
	I	II	
Level of effectiveness			2.838**
Mean	1.85	1.56	
<u>S.D.</u>	0.94	0.65	
<u>N</u>	71	227	
Barrier 2: Varied professional training among teachers			2.341*
Mean	2.44	2.19	
<u>S.D.</u>	0.83	0.80	
<u>N</u>	70	227	
Barrier 4: Unwillingness by teachers to participate in inservice training			2.516*
Mean	2.63	2.28	
<u>S.D.</u>	1.05	1.01	
<u>N</u>	70	226	
Barrier 7: Program constraints created by bargaining and contracts			3.505**
Mean	2.94	2.44	
<u>S.D.</u>	1.15	1.04	
<u>N</u>	71	227	
Barrier 8: Conflicting responsibilities for principal			3.724**
Mean	3.32	2.71	
<u>S.D.</u>	1.13	1.23	
<u>N</u>	71	226	

(continued)

Table 14

Dimension 4 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.930**
Mean	1.89	1.59	
<u>S.D.</u>	0.92	0.69	
<u>N</u>	71	226	
Barrier 10: Inordinate amount of time spent on non-essential tasks			2.811**
Mean	3.45	3.06	
<u>S.D.</u>	1.09	0.99	
<u>N</u>	71	227	
Barrier 11: Too many tasks assigned to principal			2.675**
Mean	3.89	3.50	
<u>S.D.</u>	1.02	1.07	
<u>N</u>	71	227	
Barrier 12: Number of constituencies considered during decision-making			2.581**
Mean	3.25	2.87	
<u>S.D.</u>	1.14	1.07	
<u>N</u>	71	226	
Barrier 18: Excessively rigid policies and procedures			2.074*
Mean	2.15	1.89	
<u>S.D.</u>	1.04	0.93	
<u>N</u>	71	227	

(continued)

Table 14

Dimension 4 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			2.788**
Mean	2.66	2.30	
<u>S.D.</u>	1.01	0.95	
<u>N</u>	71	227	
Barrier 20: Pressure created by special interest groups			3.205**
Mean	2.62	2.20	
<u>S.D.</u>	1.01	0.95	
<u>N</u>	71	227	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.318*
Mean	2.69	2.39	
<u>S.D.</u>	0.96	0.94	
<u>N</u>	70	227	
Barrier 24: Low expectations set by parents			1.969*
Mean	2.58	2.30	
<u>S.D.</u>	1.04	1.04	
<u>N</u>	71	227	
Barrier 25: Resistance to change by central administration			2.204*
Mean	2.11	1.80	
<u>S.D.</u>	1.19	1.01	
<u>N</u>	71	227	

(continued)

Table 14

Dimension 4 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26A: Unrealistic view of principal's role by community			2.334*
Mean	2.46	2.09	
<u>S.D.</u>	1.22	1.02	
<u>N</u>	71	227	
Barrier 26B: Unrealistic view of principal's role by school board			3.339**
Mean	2.90	2.37	
<u>S.D.</u>	1.30	1.12	
<u>N</u>	71	226	
Barrier 26C: Unrealistic view of principal's role by central administration			2.686**
Mean	2.44	1.99	
<u>S.D.</u>	1.27	1.03	
<u>N</u>	71	227	
Barrier 26D: Unrealistic view of principal's role by teachers			2.128*
Mean	2.51	2.19	
<u>S.D.</u>	1.13	0.98	
<u>N</u>	71	227	
Barrier 27A: Inappropriate standards established by school board			2.864**
Mean	2.45	2.03	
<u>S.D.</u>	1.08	1.09	
<u>N</u>	71	227	

(continued)

Table 14

Dimension 4 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 27B: Inappropriate standards established by central administration			3.482**
Mean	2.45	1.91	
<u>S.D.</u>	1.18	1.03	
<u>N</u>	71	227	
Barrier 28A: Unclear expectations established by school board			3.475**
Mean	2.59	1.98	
<u>S.D.</u>	1.35	1.08	
<u>N</u>	71	227	
Barrier 28B: Unclear expectations established by central administration			3.851**
Mean	2.46	1.85	
<u>S.D.</u>	1.22	1.02	
<u>N</u>	71	227	
Barrier 29: Micro managing of schools by board of education			3.136**
Mean	3.21	2.62	
<u>S.D.</u>	1.47	1.37	
<u>N</u>	71	227	
Barrier 30: Misconception of function of school and principal's role			4.194**
Mean	2.62	1.99	
<u>S.D.</u>	1.15	0.93	
<u>N</u>	69	227	

(continued)

Table 14

Dimension 4 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 33: Inadequate number of professional staff members			2.229*
Mean	2.82	2.48	
<u>S.D.</u>	1.02	1.14	
<u>N</u>	71	227	
Barrier 34: Insufficient administrative staff			3.045**
Mean	3.07	2.56	
<u>S.D.</u>	1.22	1.25	
<u>N</u>	71	227	
Barrier 35: District initiated programs with insufficient input			2.527*
Mean	2.31	1.94	
<u>S.D.</u>	1.16	1.05	
<u>N</u>	70	227	
Barrier 36: District initiated programs with insufficient training			2.611**
Mean	2.46	2.10	
<u>S.D.</u>	1.01	1.03	
<u>N</u>	71	227	
Barrier 39: Principal required to assume non-traditional duties			3.643**
Mean	3.00	2.41	
<u>S.D.</u>	1.31	1.16	
<u>N</u>	71	227	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

on the dimension was appropriate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 30 of the 46 items. In each of the 30 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 20 of the 30 items were significant at the .01 level. Included in the 30 significant items are 1 indicator of effectiveness and 29 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed they were less effective than their counterparts. Results of the data analysis also indicate that 29 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Five Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 15. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05 and the range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 1 of

Table 15

Dimension 5 Emphasis: Significant Findings

Item	Group		T
	I	II	
Barrier 2: Varied professional training among teachers			2.418*
Mean	2.56	2.20	
<u>S.D.</u>	0.70	0.82	
<u>N</u>	34	264	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$ the 46 items. In the item identified as significant, the mean of Group I was significantly greater than the mean of Group II. Barrier 2 was the item identified as having a significant difference in the means of the two groups.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Results of the data analysis indicate that one barrier presented a greater degree of difficulty for the principals in Group I.

Dimension Six Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 16. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05. The range

Table 16

Dimension 6 Emphasis: Significant Findings

Item	Group		T
	I	II	
Level of effectiveness			3.628**
Mean	1.83	1.52	
<u>S.D.</u>	0.85	0.64	
<u>N</u>	107	192	
Barrier 1			1.970*
Mean	2.56	2.38	
<u>S.D.</u>	0.81	0.76	
<u>N</u>	107	192	
Barrier 2: Varied professional training among teachers			2.524*
Mean	2.40	2.16	
<u>S.D.</u>	0.87	0.77	
<u>N</u>	107	191	
Barrier 3: Teachers' lack of motivation or willingness to change			2.383*
Mean	3.16	2.87	
<u>S.D.</u>	1.07	0.98	
<u>N</u>	107	190	
Barrier 7: Program constraints created by bargaining and contracts			2.498*
Mean	2.77	2.44	
<u>S.D.</u>	1.16	1.02	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 8: Conflicting responsibilities for principal			3.230**
Mean	3.16	2.69	
<u>S.D.</u>	1.23	1.20	
<u>N</u>	107	191	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.457*
Mean	1.80	1.58	
<u>S.D.</u>	0.81	0.72	
<u>N</u>	106	192	
Barrier 10: Inordinate amount of time spent on non-essential tasks			3.322**
Mean	3.41	3.01	
<u>S.D.</u>	0.99	1.03	
<u>N</u>	107	192	
Barrier 11: Too many tasks assigned to principal			4.286**
Mean	3.93	3.40	
<u>S.D.</u>	0.99	1.07	
<u>N</u>	107	192	
Barrier 12: Number of constituencies considered during decision-making			3.746**
Mean	3.27	2.79	
<u>S.D.</u>	1.06	1.08	
<u>N</u>	107	191	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 13: Unwillingness by principal to take risks			2.738**
Mean	1.70	1.45	
<u>S.D.</u>	0.81	0.68	
<u>N</u>	106	191	
Barrier 14: Hostile political environment			2.047*
Mean	2.37	2.09	
<u>S.D.</u>	1.16	1.15	
<u>N</u>	107	192	
Barrier 16: Too little parental involvement			2.890**
Mean	2.84	2.45	
<u>S.D.</u>	1.17	1.11	
<u>N</u>	107	192	
Barrier 17: Inadequate resources			3.642**
Mean	2.72	2.24	
<u>S.D.</u>	1.14	1.07	
<u>N</u>	107	192	
Barrier 18: Excessively rigid policies and procedures			3.150**
Mean	2.18	1.82	
<u>S.D.</u>	1.02	0.91	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			3.878**
Mean	2.68	2.21	
<u>S.D.</u>	1.06	0.89	
<u>N</u>	107	192	
Barrier 20: Pressure created by special interest groups			4.057**
Mean	2.60	2.13	
<u>S.D.</u>	1.00	0.93	
<u>N</u>	107	192	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			4.153**
Mean	2.75	2.29	
<u>S.D.</u>	0.98	0.89	
<u>N</u>	106	192	
Barrier 22: Insufficient information on new programs or initiatives			3.800**
Mean	2.16	1.76	
<u>S.D.</u>	1.01	0.80	
<u>N</u>	106	192	
Barrier 23: Low expectations set by teachers			3.747**
Mean	2.52	2.08	
<u>S.D.</u>	1.06	0.92	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 24: Low expectations set by parents			2.369*
Mean	2.55	2.26	
<u>S.D.</u>	1.08	1.01	
<u>N</u>	107	192	
Barrier 26A: Unrealistic view of principal's role by community			4.273**
Mean	2.54	1.97	
<u>S.D.</u>	1.17	0.97	
<u>N</u>	107	192	
Barrier 26B: Unrealistic view of principal's role by school board			4.765**
Mean	2.92	2.26	
<u>S.D.</u>	1.24	1.09	
<u>N</u>	107	191	
Barrier 26C: Unrealistic view of principal's role by central administration			3.065**
Mean	2.36	1.94	
<u>S.D.</u>	1.20	1.02	
<u>N</u>	107	192	
Barrier 26D: Unrealistic view of principal's role by teachers			2.586*
Mean	2.47	2.15	
<u>S.D.</u>	1.06	0.99	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 27A: Inappropriate standards established by school board			3.086**
Mean	2.38	1.98	
<u>S.D.</u>	1.07	1.10	
<u>N</u>	107	192	
Barrier 27B: Inappropriate standards established by central administration			3.536**
Mean	2.33	1.87	
<u>S.D.</u>	1.14	1.03	
<u>N</u>	107	192	
Barrier 28A: Unclear expectations established by school board			3.427**
Mean	2.44	1.95	
<u>S.D.</u>	1.23	1.11	
<u>N</u>	107	192	
Barrier 28B: Unclear expectations established by central administration			3.422**
Mean	2.28	1.83	
<u>S.D.</u>	1.11	1.07	
<u>N</u>	107	192	
Barrier 29: Micro managing of schools by board of education			3.065**
Mean	3.08	2.57	
<u>S.D.</u>	1.42	1.38	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 30: Misconception of function of school and principal's role			3.750**
Mean	2.44	1.96	
<u>S.D.</u>	1.14	0.90	
<u>N</u>	107	190	
Barrier 31: State mandated programs			4.006**
Mean	3.36	2.89	
<u>S.D.</u>	0.99	0.97	
<u>N</u>	107	192	
Barrier 32: Mandated programs designed for special student populations			4.264**
Mean	4.04	3.53	
<u>S.D.</u>	0.95	1.05	
<u>N</u>	107	191	
Barrier 33: Inadequate number of professional staff members			4.723**
Mean	2.95	2.34	
<u>S.D.</u>	1.13	1.05	
<u>N</u>	107	192	
Barrier 34: Insufficient administrative staff			3.583**
Mean	3.02	2.48	
<u>S.D.</u>	1.25	1.23	
<u>N</u>	107	192	

(continued)

Table 16

Dimension 6 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 35: District initiated programs with insufficient input			5.013**
Mean	2.45	1.80	
<u>S.D.</u>	1.13	0.99	
<u>N</u>	107	191	
Barrier 36: District initiated programs with insufficient training			4.360**
Mean	2.53	1.99	
<u>S.D.</u>	1.05	0.97	
<u>N</u>	107	192	
Barrier 37: District initiated programs with insufficient funding			4.124**
Mean	2.75	2.18	
<u>S.D.</u>	1.21	1.00	
<u>N</u>	107	192	
Barrier 39: Principal required to assume non-traditional duties			5.125**
Mean	3.01	2.28	
<u>S.D.</u>	1.27	1.12	
<u>N</u>	107	192	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 39 of the 46 items. In each of the 39 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 31 of the 39 items were significant at the

.01 level. Included in the 39 significant items are 1 indicator of effectiveness and 38 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed they were less effective than their counterparts. Results of the data analysis also indicate that 38 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Seven Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 17. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 20 of the 46 items. In each of the 20 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 16 of the 20 items were significant at the .01 level. Included in the 20 significant items are 1 indicator of effectiveness and 19 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a

Table 17

Dimension 7 Emphasis: Significant Findings

Item	Group		T
	I	II	
Level of effectiveness			2.152*
Mean	1.75	1.56	
<u>S.D.</u>	0.80	0.69	
<u>N</u>	108	191	
Barrier 8: Conflicting responsibilities for principal			3.033**
Mean	3.14	2.69	
<u>S.D.</u>	1.23	1.21	
<u>N</u>	108	190	
Barrier 10: Inordinate amount of time spent on non-essential tasks			4.044**
Mean	3.46	2.97	
<u>S.D.</u>	0.98	1.02	
<u>N</u>	108	191	
Barrier 11: Too many tasks assigned to principal			3.362**
Mean	3.86	3.43	
<u>S.D.</u>	1.00	1.08	
<u>N</u>	108	191	
Barrier 12: Number of constituencies considered during decision-making			3.278**
Mean	3.23	2.81	
<u>S.D.</u>	1.09	1.08	
<u>N</u>	107	191	

(continued)

Table 17

Dimension 7 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			3.102**
Mean	2.61	2.25	
<u>S.D.</u>	1.02	0.93	
<u>N</u>	108	191	
Barrier 20: Pressure created by special interest groups			3.353**
Mean	2.55	2.16	
<u>S.D.</u>	0.99	0.95	
<u>N</u>	108	191	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.665**
Mean	2.65	2.35	
<u>S.D.</u>	0.94	0.93	
<u>N</u>	108	190	
Barrier 26B: Unrealistic view of principal's role by school board			2.220*
Mean	2.69	2.38	
<u>S.D.</u>	1.24	1.14	
<u>N</u>	108	190	
Barrier 27A: Inappropriate standards established by school board			2.551*
Mean	2.34	2.00	
<u>S.D.</u>	1.15	1.06	
<u>N</u>	108	191	

(continued)

Table 17

Dimension 7 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 27B: Inappropriate standards established by central administration			2.489*
Mean	2.24	1.92	
<u>S.D.</u>	1.12	1.06	
<u>N</u>	108	191	
Barrier 28A: Unclear expectations established by school board			3.570**
Mean	2.45	1.94	
<u>S.D.</u>	1.26	1.08	
<u>N</u>	108	191	
Barrier 28B: Unclear expectations established by central administration			3.828**
Mean	2.32	1.81	
<u>S.D.</u>	1.18	1.01	
<u>N</u>	108	191	
Barrier 29: Micro managing of schools by board of education			3.983**
Mean	3.18	2.51	
<u>S.D.</u>	1.44	1.35	
<u>N</u>	108	191	
Barrier 30: Misconception of function of school and principal's role			2.694**
Mean	2.35	2.01	
<u>S.D.</u>	1.06	0.98	
<u>N</u>	107	190	

(continued)

Table 17

Dimension 7 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 31: State mandated programs			3.477**
Mean	3.32	2.91	
<u>S.D.</u>	0.97	1.00	
<u>N</u>	108	191	
Barrier 32: Mandated programs designed for special student populations			4.678**
Mean	4.07	3.51	
<u>S.D.</u>	0.93	1.05	
<u>N</u>	107	191	
Barrier 34: Insufficient administrative staff			3.004**
Mean	2.96	2.51	
<u>S.D.</u>	1.27	1.23	
<u>N</u>	108	191	
Barrier 35: District initiated programs with insufficient input			3.363**
Mean	2.31	1.87	
<u>S.D.</u>	1.15	1.01	
<u>N</u>	108	190	
Barrier 36: District initiated programs with insufficient training			3.048**
Mean	2.43	2.05	
<u>S.D.</u>	1.03	1.01	
<u>N</u>	108	191	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed they were less effective than their counterparts. Results of the data analysis also indicate that 38 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Eight Emphasis

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 18. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed the emphasis placed on the dimension was inappropriate, and Group II comprised those principals who believed the emphasis placed on the dimension was appropriate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 24 of the 46 items. In each of the 24 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 11 of the 24 items were significant at the .01 level. Included in the 24 significant items are 1 indicator of effectiveness and 23 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed they were less effective than their

Table 18

Dimension 8 Emphasis: Significant Findings

Item	Group		T
	I	II	
Level of Effectiveness			2.449*
Mean	1.80	1.57	
<u>S.D.</u>	0.91	0.66	
<u>N</u>	80	218	
Barrier 2: Varied professional training among teachers			2.010*
Mean	2.40	2.19	
<u>S.D.</u>	0.88	0.78	
<u>N</u>	80	218	
Barrier 8: Conflicting responsibilities for principal			2.630**
Mean	3.16	2.74	
<u>S.D.</u>	1.29	1.19	
<u>N</u>	80	218	
Barrier 10: Inordinate amount of time spent on non-essential tasks			3.348**
Mean	3.48	3.03	
<u>S.D.</u>	1.01	1.02	
<u>N</u>	80	218	
Barrier 11: Too many tasks assigned to principal			2.572*
Mean	3.85	3.49	
<u>S.D.</u>	1.07	1.06	
<u>N</u>	80	219	

(continued)

Table 18

Dimension 8 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 12: Number of constituencies considered during decision-making			2.267*
Mean	3.21	2.87	
<u>S.D.</u>	1.21	1.04	
<u>N</u>	80	218	
Barrier 16: Too little parental involvement			2.530*
Mean	2.86	2.49	
<u>S.D.</u>	1.16	1.12	
<u>N</u>	80	219	
Barrier 17: Inadequate resources			3.465**
Mean	2.80	2.27	
<u>S.D.</u>	1.22	1.04	
<u>N</u>	80	219	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.153*
Mean	2.65	2.39	
<u>S.D.</u>	0.94	0.94	
<u>N</u>	80	218	
Barrier 22: Insufficient information on new programs or initiatives			2.797**
Mean	2.14	1.81	
<u>S.D.</u>	0.91	0.88	
<u>N</u>	80	218	

(continued)

Table 18

Dimension 8 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 25: Resistance to change by central administration			2.545*
Mean	2.13	1.78	
<u>S.D.</u>	1.14	1.01	
<u>N</u>	80	219	
Barrier 26B: Unrealistic view of principal's role by school board			2.960**
Mean	2.83	2.37	
<u>S.D.</u>	1.27	1.13	
<u>N</u>	80	218	
Barrier 26C: Unrealistic view of principal's role by central administration			2.805**
Mean	2.39	1.99	
<u>S.D.</u>	1.10	1.09	
<u>N</u>	80	219	
Barrier 27A: Inappropriate standards established by school board			2.154*
Mean	2.36	2.04	
<u>S.D.</u>	1.19	1.06	
<u>N</u>	80	219	
Barrier 27B: Inappropriate standards established by central administration			2.083*
Mean	2.25	1.95	
<u>S.D.</u>	1.06	1.10	
<u>N</u>	80	219	

(continued)

Table 18

Dimension 8 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 28A: Unclear expectations established by school board			2.350*
Mean	2.41	2.02	
<u>S.D.</u>	1.35	1.09	
<u>N</u>	80	219	
Barrier 28B: Unclear expectations established by central administration			2.454*
Mean	2.25	1.90	
<u>S.D.</u>	1.10	1.09	
<u>N</u>	80	219	
Barrier 29: Micro managing of schools by board of education			2.780**
Mean	3.13	2.62	
<u>S.D.</u>	1.44	1.38	
<u>N</u>	80	219	
Barrier 32: Mandated programs designed for special student populations			2.643**
Mean	3.97	3.62	
<u>S.D.</u>	0.96	1.06	
<u>N</u>	79	219	
Barrier 34: Insufficient administrative staff			2.291*
Mean	2.95	2.58	
<u>S.D.</u>	1.32	1.23	
<u>N</u>	80	219	

(continued)

Table 18

Dimension 8 Emphasis: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 35: District initiated programs with insufficient input			2.241*
Mean	2.28	1.94	
<u>S.D.</u>	1.18	1.03	
<u>N</u>	80	218	
Barrier 36: District initiated programs with insufficient training			3.571**
Mean	2.55	2.05	
<u>S.D.</u>	1.09	0.98	
<u>N</u>	80	219	
Barrier 37: District initiated programs with insufficient funding			3.857**
Mean	2.81	2.23	
<u>S.D.</u>	1.20	1.03	
<u>N</u>	80	219	
Barrier 39: Principal required to assume non-traditional duties			2.653**
Mean	2.85	2.43	
<u>S.D.</u>	1.21	1.21	
<u>N</u>	80	219	

Note. I = Inappropriate Emphasis, II = Appropriate Emphasis. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$ counterparts. Results of the data analysis also indicate that 23 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension One Preparation

Item means, standard deviations, and independent t-tests for each significant item

of the 46 items analyzed are presented in Table 19. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 25 of the 46 items. In each of the 25 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 14 of the 25 items were significant at the .01 level. Included in the 25 significant items are 2 indicators of effectiveness and 23 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university program was less effective, and they also perceived themselves to be less effective than their counterparts. Results of the data analysis also indicate that 23 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Two Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 20. Principals were divided into two

Table 19

Dimension 1 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			6.984**
Mean	2.52	1.76	
<u>S.D.</u>	1.03	0.66	
<u>N</u>	109	188	
Level of effectiveness			3.902**
Mean	1.84	1.51	
<u>S.D.</u>	0.88	0.61	
<u>N</u>	109	188	
Barrier 8: Conflicting responsibilities for principal			2.886**
Mean	3.12	2.70	
<u>S.D.</u>	1.25	1.20	
<u>N</u>	109	187	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.907**
Mean	1.83	1.56	
<u>S.D.</u>	0.86	0.68	
<u>N</u>	109	187	
Barrier 10: Inordinate amount of time spent on non-essential tasks			4.204**
Mean	3.47	2.96	
<u>S.D.</u>	0.96	1.02	
<u>N</u>	109	188	

(continued)

Table 19

Dimension 1 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 11: Too many tasks assigned to principal			3.341**
Mean	3.84	3.44	
<u>S.D.</u>	0.95	1.11	
<u>N</u>	109	188	
Barrier 17: Inadequate resources			2.125*
Mean	2.61	2.31	
<u>S.D.</u>	1.19	1.06	
<u>N</u>	109	188	
Barrier 19: Excessively time-consuming policies and procedures			2.389*
Mean	2.57	2.27	
<u>S.D.</u>	1.13	0.86	
<u>N</u>	109	188	
Barrier 22: Insufficient information on new programs or initiatives			2.564*
Mean	2.07	1.80	
<u>S.D.</u>	1.00	0.83	
<u>N</u>	109	187	
Barrier 24: Low expectations set by parents			3.194**
Mean	2.62	2.21	
<u>S.D.</u>	1.15	0.95	
<u>N</u>	109	188	

(continued)

Table 19

Dimension 1 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26B: Unrealistic view of principal's role by school board			4.141**
Mean	2.85	2.28	
<u>S.D.</u>	1.19	1.13	
<u>N</u>	108	188	
Barrier 26C: Unrealistic view of principal's role by central administration			2.243*
Mean	2.28	1.98	
<u>S.D.</u>	1.09	1.10	
<u>N</u>	109	188	
Barrier 27A: Inappropriate standards established by school board			3.037*
Mean	2.38	1.97	
<u>S.D.</u>	1.17	1.02	
<u>N</u>	109	188	
Barrier 27B: Inappropriate standards established by central administration			2.571*
Mean	2.24	1.90	
<u>S.D.</u>	1.11	1.06	
<u>N</u>	109	188	
Barrier 28A: Unclear expectations established by school board			2.765**
Mean	2.37	1.98	
<u>S.D.</u>	1.22	1.13	
<u>N</u>	109	188	

(continued)

Table 19

Dimension 1 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 28B: Unclear expectations established by central administration			2.088*
Mean	2.16	1.88	
<u>S.D.</u>	1.07	1.09	
<u>N</u>	109	188	
Barrier 29: Micro managing of schools by board of education			3.515**
Mean	3.12	2.53	
<u>S.D.</u>	1.44	1.36	
<u>N</u>	109	188	
Barrier 30: Misconception of function of school and principal's role			3.144**
Mean	2.38	1.99	
<u>S.D.</u>	0.98	1.02	
<u>N</u>	109	186	
Barrier 31: State mandated programs			4.143**
Mean	3.38	2.89	
<u>S.D.</u>	0.99	0.97	
<u>N</u>	109	188	
Barrier 32: Mandated programs designed for special student populations			2.239*
Mean	3.89	3.61	
<u>S.D.</u>	1.04	1.04	
<u>N</u>	109	187	

(continued)

Table 19

Dimension 1 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 34: Insufficient administrative staff			2.230*
Mean	2.90	2.56	
<u>S.D.</u>	1.25	1.25	
<u>N</u>	109	188	
Barrier 35: District initiated programs with insufficient input			2.784*
Mean	2.26	1.90	
<u>S.D.</u>	1.12	1.04	
<u>N</u>	108	188	
Barrier 36: District initiated programs with insufficient training			4.071**
Mean	2.51	2.00	
<u>S.D.</u>	1.10	0.95	
<u>N</u>	109	188	
Barrier 37: District initiated programs with insufficient funding			2.016*
Mean	2.55	2.28	
<u>S.D.</u>	1.17	1.07	
<u>N</u>	109	188	
Barrier 39: Principal required to assume non-traditional duties			4.324**
Mean	2.94	2.31	
<u>S.D.</u>	1.15	1.22	
<u>N</u>	109	188	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. *p ≤ .05, ** p ≤ .01

groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 7 of the 46 items. In each of the seven items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for two of the seven items were significant at the .01 level. Included in the seven significant items are two indicators of effectiveness and five barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university program was less effective, and they also perceived themselves to be less effective than their counterparts. Results of the data analysis also indicate that five of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Three Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 21. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I

Table 20

Dimension 2 Preparation: Significant Findings

Item	Group			T
	I	II		
University effectiveness				5.105**
Mean	2.32	1.80		
<u>S.D.</u>	0.97	0.76		
<u>N</u>	133	166		
Level of effectiveness				2.125*
Mean	1.73	1.55		
<u>S.D.</u>	0.77	0.70		
<u>N</u>	133	166		
Barrier 8: Conflicting responsibilities for principal				2.977**
Mean	3.09	2.67		
<u>S.D.</u>	1.26	1.18		
<u>N</u>	132	166		
Barrier 29: Micro managing of schools by board of education				2.395*
Mean	2.97	2.58		
<u>S.D.</u>	1.42	1.39		
<u>N</u>	133	166		
Barrier 30: Misconception of function of school and principal's role				2.150*
<u>Mean</u>	2.27	2.02		
<u>S.D.</u>	1.03	1.00		
<u>N</u>	132	165		

(continued)

Table 20

Dimension 2 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 31: State mandated programs			2.214*
Mean	3.20	2.95	
<u>S.D.</u>	1.02	0.98	
<u>N</u>	133	166	
Barrier 39: Principal required to assume non-traditional duties			2.191*
Mean	2.71	2.40	
<u>S.D.</u>	1.20	1.24	
<u>N</u>	133	166	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 22 of the 46 items. In each of the 22 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 12 of the 22 items were significant at the .01 level. Included in the 22 significant items are 1 indicator of effectiveness and 21 barriers to effectiveness.

Table 21

Dimension 3 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			5.422**
Mean	2.40	1.80	
<u>S.D.</u>	1.04	0.70	
<u>N</u>	115	184	
Barrier 7: Program constraints created by bargaining and contracts			2.634**
Mean	2.77	2.43	
<u>S.D.</u>	1.15	1.02	
<u>N</u>	115	184	
Barrier 9: Inadequate preparation for role and responsibilities of principal			2.377**
Mean	1.79	1.58	
<u>S.D.</u>	0.77	0.74	
<u>N</u>	114	184	
Barrier 11: Too many tasks assigned to principal			3.190**
Mean	3.83	3.44	
<u>S.D.</u>	0.95	1.12	
<u>N</u>	115	184	
Barrier 12: Number of constituencies considered during decision-making			3.380**
Mean	3.23	2.79	
<u>S.D.</u>	1.08	1.08	
<u>N</u>	115	183	

(continued)

Table 21

Dimension 3 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 15: Too much parental involvement			2.567*
Mean	1.98	1.71	
<u>S.D.</u>	0.90	0.88	
<u>N</u>	115	184	
Barrier 18: Excessively rigid policies and procedures			2.261*
Mean	2.10	1.85	
<u>S.D.</u>	0.93	0.97	
<u>N</u>	115	184	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.539*
Mean	2.63	2.35	
<u>S.D.</u>	1.01	0.89	
<u>N</u>	114	184	
Barrier 22: Insufficient information on new programs or initiatives			2.885**
Mean	2.09	1.78	
<u>S.D.</u>	0.95	0.85	
<u>N</u>	115	183	
Barrier 26A: Unrealistic view of principal's role by community			2.489*
Mean	2.37	2.05	
<u>S.D.</u>	1.10	1.05	
<u>N</u>	115	184	

(continued)

Table 21

Dimension 3 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26B: Unrealistic view of principal's role by school board			3.881**
Mean	2.82	2.29	
<u>S.D.</u>	1.23	1.12	
<u>N</u>	114	184	
Barrier 27A: Inappropriate standards established by school board			3.234**
Mean	2.39	1.96	
<u>S.D.</u>	1.20	1.00	
<u>N</u>	115	184	
Barrier 27B: Inappropriate standards established by central administration			2.096*
Mean	2.20	1.93	
<u>S.D.</u>	1.13	1.06	
<u>N</u>	115	184	
Barrier 28A: Unclear expectations established by school board			2.111*
Mean	2.30	2.01	
<u>S.D.</u>	1.17	1.17	
<u>N</u>	115	184	
Barrier 28B: Unclear expectations established by central administration			2.255*
Mean	2.17	1.88	
<u>S.D.</u>	1.11	1.08	
<u>N</u>	115	184	

(continued)

Table 21

Dimension 3 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 29: Micro managing of schools by board of education			2.236*
Mean	2.98	2.61	
<u>S.D.</u>	1.46	1.37	
<u>N</u>	115	184	
Barrier 31: State mandated programs			3.130**
Mean	3.29	2.92	
<u>S.D.</u>	0.92	1.03	
<u>N</u>	115	184	
Barrier 32: Mandated programs designed for special student populations			2.909**
Mean	3.93	3.57	
<u>S.D.</u>	1.01	1.05	
<u>N</u>	115	183	
Barrier 35: District initiated programs with insufficient input			2.194*
Mean	2.21	1.92	
<u>S.D.</u>	1.17	1.01	
<u>N</u>	115	183	
Barrier 36: District initiated programs with insufficient training			2.832**
Mean	2.41	2.05	
<u>S.D.</u>	1.15	0.93	
<u>N</u>	115	184	

(continued)

Table 21

Dimension 3 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 37: District initiated programs with insufficient funding			2.610**
Mean	2.60	2.25	
<u>S.D.</u>	1.18	1.05	
<u>N</u>	115	184	
Barrier 39: Principal required to assume non-traditional duties			2.103*
Mean	2.72	2.43	
<u>S.D.</u>	1.08	1.30	
<u>N</u>	115	184	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university-based preparation program was less effective than that of their counterparts. Results of the data analysis also indicate that 21 of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Four Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 22. Principals were divided into two

groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 10 of the 46 items. In each of the 10 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 4 of the 10 items were significant at the .01 level. Included in the 10 significant items are 1 indicator of effectiveness and 9 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university-based preparation program was less effective than that of their counterparts. Results of the data analysis also indicate that nine of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Five Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 23. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I

Table 22

Dimension 4 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			4.348**
Mean	2.28	1.83	
<u>S.D.</u>	0.96	0.78	
<u>N</u>	137	161	
Barrier 6: Teacher autonomy			2.121*
Mean	2.53	2.31	
<u>S.D.</u>	0.82	0.96	
<u>N</u>	137	161	
Barrier 8: Conflicting responsibilities for principal			2.305*
Mean	3.04	2.71	
<u>S.D.</u>	1.21	1.23	
<u>N</u>	136	161	
Barrier 9: Inadequate preparation for role and responsibilities of principal			4.189**
Mean	1.85	1.49	
<u>S.D.</u>	0.84	0.63	
<u>N</u>	137	160	
Barrier 11: Too many tasks assigned to principal			2.035*
Mean	3.73	3.48	
<u>S.D.</u>	0.99	1.12	
<u>N</u>	137	161	

(continued)

Table 22

Dimension 4 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 13: Unwillingness by principal to take risks			2.032*
Mean	1.63	1.46	
<u>S.D.</u>	0.81	0.66	
<u>N</u>	136	160	
Barrier 24: Low expectations set by parents			2.661**
Mean	2.54	2.22	
<u>S.D.</u>	1.10	0.97	
<u>N</u>	137	161	
Barrier 26B: Unrealistic view of principal's role by school board			2.500*
Mean	2.68	2.34	
<u>S.D.</u>	1.21	1.15	
<u>N</u>	136	161	
Barrier 26D: Unrealistic view of principal's role by teachers			2.131*
Mean	2.40	2.15	
<u>S.D.</u>	1.06	0.98	
<u>N</u>	137	161	
Barrier 39: Principal required to assume non-traditional duties			3.220**
Mean	2.79	2.34	
<u>S.D.</u>	1.11	1.28	
<u>N</u>	137	161	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 2 of the 46 items. In each item, the mean of Group I was significantly greater than the mean of Group II. Mean differences for both items were significant at the .01 level. Included in the two significant items are one indicator of effectiveness and one barrier to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university-based preparation program was less effective than that of their counterparts. Results of the data analysis also indicate that one of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Six Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 24. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed that the university-based preparation received in

Table 23

Dimension 5 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			3.817**
Mean	2.28	1.87	
<u>S.D.</u>	0.95	0.82	
<u>N</u>	119	180	
Barrier 9: Inadequate preparation for role and responsibilities of principal			3.284**
Mean	1.83	1.54	
<u>S.D.</u>	0.81	0.70	
<u>N</u>	119	179	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 5 of the 46 items. In each of the five items, the mean of Group I was significantly greater than the mean of Group II. The mean difference for one of the five items was significant at the .01 level. Included in the five significant items are one indicator of effectiveness and four barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a

Table 24

Dimension 6 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			5.117**
Mean	2.30	1.79	
<u>S.D.</u>	0.95	0.77	
<u>N</u>	142	157	
Barrier 7: Program constraints created by bargaining and contracts			2.100*
Mean	2.70	2.43	
<u>S.D.</u>	1.17	0.99	
<u>N</u>	142	157	
Barrier 15: Too much parental involvement			2.229*
Mean	1.94	1.71	
<u>S.D.</u>	0.91	0.87	
<u>N</u>	142	157	
Barrier 26A: Unrealistic view of principal's role by community			2.030*
Mean	2.31	2.06	
<u>S.D.</u>	1.05	1.09	
<u>N</u>	142	157	
Barrier 39: Principal required to assume non-traditional duties			2.095*
Mean	2.70	2.40	
<u>S.D.</u>	1.19	1.24	
<u>N</u>	142	157	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

decrease in perceived effectiveness, whereas an increase in the mean response for any

barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university-based preparation program was less effective than that of their counterparts. Results of the data analysis also indicate that four of the barriers presented a greater degree of difficulty for the principals in Group I.

Dimension Seven Preparation

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 25. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed that the university-based preparation received in the specific dimension was either inadequate or that there was none received. Group II comprised those principals who believed their university-based preparation for the specific dimension was adequate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 18 of the 46 items. In each of the 18 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 7 of the 18 items were significant at the .01 level. Included in the 18 significant items are 2 indicators of effectiveness and 16 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two

Table 25

Dimension 7 Preparation: Significant Findings

Item	Group		T
	I	II	
University effectiveness			4.737**
Mean	2.20	1.70	
<u>S.D.</u>	0.93	0.70	
<u>N</u>	198	100	
Level of effectiveness			2.192*
Mean	1.70	1.50	
<u>S.D.</u>	0.77	0.66	
<u>N</u>	198	100	
Barrier 1: Teachers' lack of knowledge and skill about new practices			2.087*
Mean	2.51	2.31	
<u>S.D.</u>	0.79	0.76	
<u>N</u>	198	100	
Barrier 7: Program constraints created by bargaining and contracts			2.128*
Mean	2.65	2.37	
<u>S.D.</u>	1.13	0.97	
<u>N</u>	198	100	
Barrier 9: Inadequate preparation for role and responsibilities of principal			3.353**
Mean	1.76	1.45	
<u>S.D.</u>	0.78	0.67	
<u>N</u>	198	99	

(continued)

Table 25

Dimension 7 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 10: Inordinate amount of time spent on non-essential tasks			2.758**
Mean	3.27	2.93	
<u>S.D.</u>	1.01	1.03	
<u>N</u>	198	100	
Barrier 11: Too many tasks assigned to principal			4.136**
Mean	3.78	3.23	
<u>S.D.</u>	0.97	1.14	
<u>N</u>	198	100	
Barrier 12: Number of constituencies considered during decision-making			2.105*
Mean	3.06	2.78	
<u>S.D.</u>	1.09	1.09	
<u>N</u>	197	100	
Barrier 20: Pressure created by special interest groups			2.484*
Mean	2.39	2.11	
<u>S.D.</u>	1.02	0.89	
<u>N</u>	198	100	
Barrier 22: Insufficient information on new programs or initiatives			2.256*
Mean	1.98	1.74	
<u>S.D.</u>	0.91	0.87	
<u>N</u>	197	100	

(continued)

Table 25

Dimension 7 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26A: Unrealistic view of principal's role by community			2.186*
Mean	2.28	1.99	
<u>S.D.</u>	1.10	1.02	
<u>N</u>	198	100	
Barrier 26B: Unrealistic view of principal's role by school board			2.918*
Mean	2.64	2.22	
<u>S.D.</u>	1.20	1.11	
<u>N</u>	197	100	
Barrier 26D: Unrealistic view of principal's role by teachers			2.154*
Mean	2.36	1.02	
<u>S.D.</u>	1.02	1.02	
<u>N</u>	198	100	
Barrier 29: Micro managing of schools by board of education			3.481*
Mean	2.95	2.36	
<u>S.D.</u>	1.43	1.31	
<u>N</u>	198	100	
Barrier 31: State mandated programs			3.273**
Mean	3.20	2.80	
<u>S.D.</u>	1.02	0.92	
<u>N</u>	198	100	

(continued)

Table 25

Dimension 7 Preparation: Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 32: Mandated programs designed for special student populations			3.203**
Mean	3.85	3.45	
<u>S.D.</u>	1.02	1.03	
<u>N</u>	197	100	
Barrier 36: District initiated programs with insufficient training			1.991*
Mean	2.27	2.03	
<u>S.D.</u>	1.06	0.96	
<u>N</u>	198	100	
Barrier 39: Principal required to assume non-traditional duties			3.541**
Mean	2.72	2.20	
<u>S.D.</u>	1.21	1.18	
<u>N</u>	198	100	

Note. I = Inadequate Preparation, II = Adequate Preparation. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

groups indicates that principals in Group I believed their university program was less effective, and they also perceived themselves to be less effective than their counterparts. Results of the data analysis also indicate that 16 of the barriers presented a greater degree of difficulty for the principals in Group I.

Duties and Time

The purpose of this section was to elicit the opinion of principals concerning their current duties and the time available to complete them. Principals were asked to select

one of four choices. Each choice dealt with whether the principals' current duties matched their expectations and perception of the principalship and whether there was sufficient time to complete those same duties. The four choices are

1. My current administrative duties match my expectations and perceptions of the principalship and sufficient time exists to complete them. (43)
2. My current administrative duties match my expectations and perceptions of the principalship and insufficient time exists to complete them. (176)
3. My current administrative duties do not match my expectations and perceptions of the principalship and sufficient time exists to complete them. (11)
4. My current administrative duties do not match my expectations and perceptions of the principalship and insufficient time exists to complete them. (68)

The number referenced parenthetically reflects the number of principals selecting that choice. For the purpose of data analysis, principals' responses were regrouped first according to whether their perceptions of the principalship matched their current duties (responses 3 and 4) and then according to availability of time (responses 1 and 3).

Analysis of Data Based on Current Duties and Perception of the Principalship

Table 26 contains item means, standard deviations, and independent t-tests for each item found to be significant of the 46 items analyzed. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believed their current administrative duties do not match their expectations and perceptions of the principalship, and Group II comprised those principals who believed their current administrative duties do match their

Table 26

Duties and Time (match vs. does not match): Significant Findings

Item	Group		T
	I	II	
University effectiveness			2.687**
Mean	2.27	1.95	
<u>S.D.</u>	0.93	0.87	
<u>N</u>	79	219	
Level of effectiveness			5.030**
Mean	1.97	1.51	
<u>S.D.</u>	0.88	0.64	
<u>N</u>	79	219	
Barrier 3: Teachers' lack of motivation or willingness to change			4.153**
Mean	3.33	2.85	
<u>S.D.</u>	0.82	1.05	
<u>N</u>	78	218	
Barrier 4: Unwillingness by teachers to participate in inservice training			2.513*
Mean	2.61	2.27	
<u>S.D.</u>	1.03	1.01	
<u>N</u>	79	217	
Barrier 6: Teacher autonomy			2.770**
Mean	2.66	2.33	
<u>S.D.</u>	0.97	0.86	
<u>N</u>	79	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 7: Program constraints created by bargaining and contracts			3.160**
Mean	2.89	2.44	
<u>S.D.</u>	1.15	1.04	
<u>N</u>	79	219	
Barrier 8: Conflicting responsibilities for principal			3.717**
Mean	3.29	2.70	
<u>S.D.</u>	1.26	1.19	
<u>N</u>	78	219	
Barrier 9: Inadequate preparation for role and responsibilities of principal			3.269**
Mean	1.90	1.58	
<u>S.D.</u>	0.83	0.72	
<u>N</u>	78	219	
Barrier 10: Inordinate amount of time spent on non-essential tasks			5.300**
Mean	3.66	2.97	
<u>S.D.</u>	0.93	1.00	
<u>N</u>	79	219	
Barrier 11: Too many tasks assigned to principal			5.402**
Mean	4.13	3.40	
<u>S.D.</u>	0.81	1.09	
<u>N</u>	79	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 12: Number of constituencies considered during decision-making			3.923**
Mean	3.37	2.82	
<u>S.D.</u>	1.12	1.06	
<u>N</u>	78	219	
Barrier 13: Unwillingness by principal to take risks			2.553*
Mean	1.72	1.47	
<u>S.D.</u>	0.80	0.70	
<u>N</u>	78	218	
Barrier 14: Hostile political environment			4.478**
Mean	2.73	2.00	
<u>S.D.</u>	1.32	1.04	
<u>N</u>	79	219	
Barrier 17: Inadequate resources			2.789**
Mean	2.73	2.30	
<u>S.D.</u>	1.23	1.05	
<u>N</u>	79	219	
Barrier 18: Excessively rigid policies and procedures			4.248**
Mean	2.38	1.79	
<u>S.D.</u>	1.11	0.85	
<u>N</u>	79	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 19: Excessively time-consuming policies and procedures			3.349**
Mean	2.72	2.26	
<u>S.D.</u>	1.10	0.90	
<u>N</u>	79	219	
Barrier 20: Pressure created by special interest groups			4.174**
Mean	2.68	2.16	
<u>S.D.</u>	0.99	0.94	
<u>N</u>	79	219	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			5.417**
Mean	2.99	2.27	
<u>S.D.</u>	1.07	0.82	
<u>N</u>	79	218	
Barrier 23: Low expectations set by teachers			3.731**
Mean	2.59	2.12	
<u>S.D.</u>	1.02	0.96	
<u>N</u>	79	219	
Barrier 25: Resistance to change by central administration			3.648**
Mean	2.30	1.72	
<u>S.D.</u>	1.32	0.90	
<u>N</u>	79	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26A: Unrealistic view of principal's role by community			2.810**
Mean	2.51	2.06	
<u>S.D.</u>	1.27	0.98	
<u>N</u>	79	219	
Barrier 26B: Unrealistic view of principal's role by school board			6.861**
Mean	3.23	2.23	
<u>S.D.</u>	1.23	1.05	
<u>N</u>	79	218	
Barrier 26C: Unrealistic view of principal's role by central administration			5.068**
Mean	2.70	1.88	
<u>S.D.</u>	1.31	0.94	
<u>N</u>	79	219	
Barrier 26D: Unrealistic view of principal's role by teachers			4.333**
Mean	2.68	2.12	
<u>S.D.</u>	1.08	0.96	
<u>N</u>	79	219	
Barrier 27A: Inappropriate standards established by school board			5.286**
Mean	2.71	1.92	
<u>S.D.</u>	1.19	0.99	
<u>N</u>	79	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 27B: Inappropriate standards established by central administration			5.572**
Mean	2.67	1.81	
<u>S.D.</u>	1.26	0.93	
<u>N</u>	79	219	
Barrier 28A: Unclear expectations established by school board			5.555**
Mean	2.78	1.89	
<u>S.D.</u>	1.29	1.04	
<u>N</u>	79	219	
Barrier 28B: Unclear expectations established by central administration			5.785**
Mean	2.65	1.76	
<u>S.D.</u>	1.23	0.95	
<u>N</u>	79	219	
Barrier 29: Micro managing of schools by board of education			5.463**
Mean	3.47	2.50	
<u>S.D.</u>	1.41	1.33	
<u>N</u>	79	219	
Barrier 30: Misconception of function of school and principal's role			6.924**
Mean	2.82	1.88	
<u>S.D.</u>	1.08	0.87	
<u>N</u>	79	217	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 31: State mandated programs			2.365*
Mean	3.29	2.98	
<u>S.D.</u>	1.03	0.99	
<u>N</u>	79	219	
Barrier 32: Mandated programs designed for special student populations			2.075*
Mean	3.92	3.64	
<u>S.D.</u>	1.02	1.04	
<u>N</u>	79	218	
Barrier 33: Inadequate number of professional staff members			2.671**
Mean	2.85	2.46	
<u>S.D.</u>	1.10	1.11	
<u>N</u>	79	219	
Barrier 34: Insufficient administrative staff			4.906**
Mean	3.25	2.47	
<u>S.D.</u>	1.28	1.19	
<u>N</u>	79	219	
Barrier 35: District initiated programs with insufficient input			6.580**
Mean	2.76	1.78	
<u>S.D.</u>	1.20	0.91	
<u>N</u>	78	219	

(continued)

Table 26

Duties and Time (match vs. does not match): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 36: District initiated programs with insufficient training			4.950**
Mean	2.73	2.00	
<u>S.D.</u>	1.22	0.88	
<u>N</u>	79	219	
Barrier 37: District initiated programs with insufficient funding			4.609**
Mean	2.91	2.20	
<u>S.D.</u>	1.23	1.00	
<u>N</u>	79	219	
Barrier 39: Principal required to assume non-traditional duties			4.041**
Mean	3.01	2.38	
<u>S.D.</u>	1.27	1.17	
<u>N</u>	79	219	

Note. I = Perceptions do not match views of principalship, II = Perceptions do match views of principalship. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

expectations and perceptions of the principalship. The level of significance (p) was set at .05, and the range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 38 of the 46 items. In each of the 38 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 34 of the 38 items were significant at the .01 level. Included in the 38 significant items are 2 indicators of effectiveness and 36

barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means of the two groups indicates that principals in Group I believed their university program was less effective, and they also perceived themselves to be less effective than their counterparts. Results of the data analysis also indicate that 36 of the barriers presented a greater degree of difficulty for the principals in Group I.

Analysis of Data Based on Availability of Time

Item means, standard deviations, and independent t-tests for each significant item of the 46 items analyzed are presented in Table 27. Principals were divided into two groups in order to analyze the data based on their responses to survey questions. Group I included those principals who believe insufficient time exists to complete their duties, and Group II comprised those principals who believe sufficient time exists to complete their duties. The level of significance (p) was set at .05, and the range of responses for each of the 46 items was 1 to 5.

The difference in the means of the two groups was found to be significant for 29 of the 46 items. In each of the 29 items, the mean of Group I was significantly greater than the mean of Group II. Mean differences for 22 of the 29 items were significant at the .01 level. Included in the 29 significant items are 1 indicator of effectiveness and 28 barriers to effectiveness.

For the two indicators of effectiveness, an increase in the mean indicates a

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings

Item	Group		T
	I	II	
Level of effectiveness			2.906**
Mean	1.69	1.37	
<u>S.D.</u>	0.77	.49	
<u>N</u>	244	54	
Barrier 1: Teachers' lack of knowledge and skill about new practices			2.101*
Mean	2.49	2.24	
<u>S.D.</u>	0.77	0.82	
<u>N</u>	244	54	
Barrier 2: Varied professional training among teachers			2.291*
Mean	2.30	2.02	
<u>S.D.</u>	0.82	0.81	
<u>N</u>	243	54	
Barrier 7: Program constraints created by bargaining and contracts			2.129*
Mean	2.62	2.28	
<u>S.D.</u>	1.10	0.96	
<u>N</u>	244	54	
Barrier 8: Conflicting responsibilities for principal			5.856**
Mean	3.02	2.15	
<u>S.D.</u>	1.24	0.92	
<u>N</u>	243	54	

(continued)

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 10: Inordinate amount of time spent on non-essential tasks			5.569**
Mean	3.30	2.48	
<u>S.D.</u>	0.98	1.07	
<u>N</u>	244	54	
Barrier 11: Too many tasks assigned to principal			6.978**
Mean	3.78	2.74	
<u>S.D.</u>	0.98	1.07	
<u>N</u>	244	54	
Barrier 12: Number of constituencies considered during decision-making			3.783**
Mean	3.07	2.46	
<u>S.D.</u>	1.08	1.04	
<u>N</u>	243	54	
Barrier 17: Inadequate resources			2.796**
Mean	2.50	2.04	
<u>S.D.</u>	1.11	1.06	
<u>N</u>	244	54	
Barrier 21: Bureaucratic inhibitors to change (structures and procedures)			2.231*
Mean	2.52	2.20	
<u>S.D.</u>	0.95	0.86	
<u>N</u>	243	54	

(continued)

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 22: Insufficient information on new programs or initiatives			3.001**
Mean	1.98	1.57	
<u>S.D.</u>	0.93	0.69	
<u>N</u>	243	54	
Barrier 24: Low expectations set by parents			2.140*
Mean	2.43	2.09	
<u>S.D.</u>	1.06	0.94	
<u>N</u>	244	54	
Barrier 26A: Unrealistic view of principal's role by community			5.625**
Mean	2.30	1.63	
<u>S.D.</u>	1.11	0.71	
<u>N</u>	244	54	
Barrier 26B: Unrealistic view of principal's role by school board			4.121**
Mean	2.63	1.91	
<u>S.D.</u>	1.18	1.04	
<u>N</u>	244	53	
Barrier 26C: Unrealistic view of principal's role by central administration			4.085**
Mean	2.19	1.67	
<u>S.D.</u>	1.15	0.78	
<u>N</u>	244	54	

(continued)

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 26D: Unrealistic view of principal's role by teachers			2.331*
Mean	2.33	2.00	
<u>S.D.</u>	1.04	0.91	
<u>N</u>	244	54	
Barrier 27A: Inappropriate standards established by school board			2.883**
Mean	2.21	1.74	
<u>S.D.</u>	1.11	0.90	
<u>N</u>	244	54	
Barrier 27B: Inappropriate standards established by central administration			3.071**
Mean	2.13	1.63	
<u>S.D.</u>	1.11	0.92	
<u>N</u>	244	218	
Barrier 28A: Unclear expectations established by school board			3.404**
Mean	2.22	1.70	
<u>S.D.</u>	1.20	0.96	
<u>N</u>	244	54	
Barrier 28B: Unclear expectations established by central administration			2.592**
Mean	2.07	1.65	
<u>S.D.</u>	1.13	0.89	
<u>N</u>	244	54	

(continued)

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings (continued)

Item	Group		T
	I	II	
Barrier 29: Micro managing of schools by board of education			3.649**
Mean	2.89	2.17	
<u>S.D.</u>	1.42	1.28	
<u>N</u>	244	54	
Barrier 30: Misconception of function of school and principal's role			3.504**
Mean	2.23	1.70	
<u>S.D.</u>	1.03	0.84	
<u>N</u>	242	54	
Barrier 33: Inadequate number of professional staff members			3.930**
Mean	2.67	2.07	
<u>S.D.</u>	1.11	0.99	
<u>N</u>	244	54	
Barrier 34: Insufficient administrative staff			5.748**
Mean	2.84	1.94	
<u>S.D.</u>	1.26	0.98	
<u>N</u>	244	54	
Barrier 35: District initiated programs with insufficient input			3.837**
Mean	2.12	1.63	
<u>S.D.</u>	1.12	0.78	
<u>N</u>	243	54	

(continued)

Table 27

Duties and Time (sufficient vs. insufficient time): Significant Findings (continued)

Item	Group			T
	I		II	
Barrier 36: District initiated programs with insufficient training				4.196**
Mean	2.29		1.74	
<u>S.D.</u>	1.05		0.83	
<u>N</u>	244		54	
Barrier 37: District initiated programs with insufficient funding				4.222**
Mean	2.50		1.89	
<u>S.D.</u>	1.12		0.92	
<u>N</u>	244		54	
Barrier 38: Integration of technology into the educational programs				2.185**
Mean	2.39		2.06	
<u>S.D.</u>	1.03		1.02	
<u>N</u>	244		54	
Barrier 39: Principal required to assume non-traditional duties				3.441*
Mean	2.66		2.04	
<u>S.D.</u>	1.21	1.16	1.33	
<u>N</u>	244		54	

Note. I = Insufficient time exists to complete duties, II = Sufficient time exists to complete duties. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The difference between the means for the indicator of effectiveness indicates that principals in Group I believed they were less

effective than their counterparts. Results of the data analysis also indicate that 29 of the barriers presented a greater degree of difficulty for the principals in Group I.

Analysis of Variance

Tables included in this section report significant findings based on analysis of variance tests (ANOVA) for the following demographic factors: school size, grade configuration, district type, education level, number of years in education, years of teaching experience, years of administrative experience, administrative positions held, years in current position, number of administrators in building, years since last class at a college or university, and number of workshops attended each year. For the purpose of analysis, seven of the aforementioned factors were recoded prior to analyzing principals' responses to the 46 items. Table 28 reports principals' original responses and the manner in which they were recoded for analysis. Questions pertaining to the number of administrators in the building and the number of years since the last formal education were open ended, with no choices provided. The manner in which the two items were grouped for the purpose of analysis is reported at the end of the table for each factor. A complete matrix showing the significant findings for the two indicators of effectiveness and 44 barriers to effectiveness can be found in Appendix K.

School Size

Item means, standard deviations, and independent F tests for each significant item of the 46 items analyzed are presented in table 29. Four school sizes were used as a basis of comparison for the analysis of data: Group I = small schools, Group II = medium schools, Group III = large schools, and Group IV = extra-large schools. The level of

Table 28

Recoded Demographic Factors

Demographic Factor	Original Values			Recoded Values		
	Code	Definition	N	Code	Definition	N
Grade Configuration	1	Grades 9-12	190	1	Grades 9-12	190
	2	Grades 10-12	24	2	10-12 + 11-12	28*
	3	Grades 11-12	4	2	10-12 + 11-12	28*
	4	Other	81	3	Other	81
District Type	1	Rural	158	1	Rural	158
	2	Suburban	116	2	Suburban	116
	3	Urban	23	3	Other	25*
	4	Metropolitan	2	3	Other	25*
Education Level	1	Master's	57	1	Master's+Other	61*
	2	Post-Master's	176	2	Post-Master's	176
	3	Doctorate	61	3	Doctorate	61
	4	Other	4	1	Master's+Other	61*
Years in Education	1	1-5	1	1	1-20	65*
	2	6-10	11	1	1-20	65*
	3	11-15	27	1	1-20	65*
	4	16-20	26	1	1-20	65*
	5	21-25	60	2	21-25	60
	6	26-30	102	3	26-30	102
	7	More than 30	71	4	More than 30	71

(continued)

Table 28

Recoded Demographic Factors (continued)

Demographic Factor	Code	Definition	N	Code	Definition	N
Teaching	1	1-5	44	1	1-5	44
Experience	2	6-10	93	2	6-10	93
(in years)	3	11-15	81	3	11-15	81
	4	16-20	49	4	More than 15	80*
	5	21-25	22	4	More than 15	80*
	6	26-30	5	4	More than 15	80*
	7	More than 30	4	4	More than 15	80*
Administrative	1	1-5	49	1	1-5	49
Experience	2	6-10	89	2	6-10	89
(in years)	3	11-15	59	3	11-15	59
	4	16-20	47	4	16-20	47
	5	21-25	36	5	More than 20	55*
	6	26-30	17	5	More than 20	55*
	7	More than 30	2	5	More than 20	55*
Years in Current	1	1-5	167	1	1-5	167
Position	2	6-10	84	2	6-10	84
	3	11-15	28	3	More than 10	45*
	4	16-20	11	3	More than 10	45*
	5	21-25	4	3	More than 10	45*
	6	26-30	0	3	More than 10	45*
	7	More than 30	2	3	More than 10	45*

Note: * indicates combined values after recoding.

significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the four classifications of school size were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 4 of the 46 items when school size was used as the basis of comparison. Included in the group identified as having significant F ratios are four barriers to effectiveness. The number of significant findings may suggest that school size does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between means in one item, Barrier 26C between small schools and extra-large schools.

Grade Configuration

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 30. Three grade configurations were considered in the analysis of data: Group I = grades 9-12, Group II = grades 10-12 or 11-12, and Group III = other grade configurations. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the three grade configurations were identified through the use of Scheffé post hoc procedures at the .05 level.

Table 29

School Size: Significant Findings

Item	Group				F
	I	II	III	IV	
Barrier 26C: Unrealistic view of principal's role by central administration					4.192**
Mean	1.77	2.05	2.13	2.42	
<u>S.D.</u>	0.97	1.18	1.02	1.17	
<u>N</u>	69	78	83	69	
Barrier 29: Micro managing of schools by board of education					2.778*
Mean	2.67	2.82	3.05	2.41	
<u>S.D.</u>	1.40	1.46	1.46	1.28	
<u>N</u>	69	78	83	69	
Barrier 35: District initiated programs with insufficient input					2.737*
Mean	1.75	1.97	2.14	2.23	
<u>S.D.</u>	1.04	1.09	1.04	1.13	
<u>N</u>	68	78	83	69	
Barrier 39: Principal required to assume non-traditional duties					2.696*
Mean	2.80	2.55	2.59	2.22	
<u>S.D.</u>	1.2	1.34	1.21	1.08	
<u>N</u>	69	78	83	69	

Note. I = Small, II = Medium, III = Large, IV = Extra-Large. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

Significant F ratios were identified for five the 46 items analyzed when using grade configuration as the basis of comparison. Included in the group identified as having significant F ratios are five barriers to effectiveness. The number of significant findings suggests that grade configuration does not serve as a major indicator of barriers to the

Table 30

Grade Configuration: Significant Findings

Item	Group			F
	I	II	III	
Barrier 9: Inadequate preparation for role and responsibilities of principal				4.123*
Mean	1.74	1.32	1.59	
<u>S.D.</u>	0.77	0.55	0.75	
<u>N</u>	189	28	81	
Barrier 16: Too little parental involvement				4.009*
Mean	2.49	2.39	2.89	
<u>S.D.</u>	1.13	0.99	1.17	
<u>N</u>	190	28	81	
Barrier 25: Resistance to change by central administration				4.257*
Mean	1.85	2.39	1.73	
<u>S.D.</u>	1.07	1.10	0.96	
<u>N</u>	190	28	81	
Barrier 26C: Unrealistic view of principal's role by central administration				6.059**
Mean	2.11	2.68	1.85	
<u>S.D.</u>	1.09	1.28	1.01	
<u>N</u>	190	28	81	
Barrier 34: Insufficient administrative staff				5.552**
Mean	2.49	3.04	2.98	
<u>S.D.</u>	1.19	1.45	1.28	
<u>N</u>	190	28	81	

Note. I = Grades 9-12, II = Grades 10-12 or 11-12, III = Other. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

principalship. Scheffé contrasts indicate that significant differences exist between means

in each of the five items as follows: Barrier 9 between Groups I and II, Barrier 16 between Groups I and III, Barrier 25 between Groups I and II and Groups II and III, Barrier 26C between Groups I and II and Groups II and III, and Barrier 34 between Groups I and III.

District Type

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 31. Analysis of data based on district type was accomplished through the use of three categories: Group I = rural, Group II = suburban, Group III = other (urban and metropolitan). The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the three district types were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 9 of the 46 items analyzed when using district type as the basis of comparison. Included in the group identified as having significant F ratios are nine barriers to effectiveness. The number of significant findings suggests that grade configuration may serve as an indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in eight of the nine items as follows: Barrier 2 between Groups I and III, Barrier 17 between Groups I and II and Groups II and III, Barrier 24 between Groups I and III and Groups II and III, Barrier 26C between Groups I and III, Barrier 31 between Groups I

Table 31

District Type: Significant Findings

Item	Group			F
	I	II	III	
Barrier 2: Varied professional training among teachers				4.011*
Mean	2.16	2.28	2.64	
<u>S.D.</u>	0.79	0.79	0.95	
<u>N</u>	157	116	25	
Barrier 10: Inordinate amount of time spent on non-essential tasks				3.753*
Mean	3.01	3.28	3.48	
<u>S.D.</u>	1.02	1.03	1.00	
<u>N</u>	158	116	25	
Barrier 17: Inadequate resources				8.384**
Mean	2.54	2.12	2.96	
<u>S.D.</u>	1.09	1.05	1.24	
<u>N</u>	158	116	25	
Barrier 24: Low expectations set by parents				5.998**
Mean	2.46	2.13	2.80	
<u>S.D.</u>	1.06	0.95	1.19	
<u>N</u>	158	116	25	
Barrier 26C: Unrealistic view of principal's role by central administration				4.000*
Mean	1.98	2.13	2.64	
<u>S.D.</u>	1.11	1.08	1.11	
<u>N</u>	158	116	25	

(continued)

Table 31

District Type: Significant Findings (continued)

Item	Group			F
	I	II	III	
Barrier 31: State mandated programs				5.354**
Mean	3.16	2.84	3.44	
<u>S.D.</u>	1.03	0.95	0.92	
<u>N</u>	158	116	25	
Barrier 32: Mandated programs designed for special student populations				3.851*
Mean	3.73	3.57	4.20	
<u>S.D.</u>	1.03	1.04	1.00	
<u>N</u>	158	115	25	
Barrier 35: District initiated programs with insufficient input				4.046*
Mean	2.01	1.93	2.60	
<u>S.D.</u>	1.11	0.95	1.35	
<u>N</u>	158	115	25	
Barrier 36: District initiated programs with insufficient training				4.293*
Mean	2.13	2.14	2.76	
<u>S.D.</u>	1.02	0.95	1.33	
<u>N</u>	158	116	25	

Note. I = Rural, II = Suburban, III = Other. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

and II and Groups II and III, Barrier 32 between Groups II and III, Barrier 35 between Groups I and III and Groups II and III, and Barrier 36 between Groups I and III and Groups II and III.

Level of Education

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 32. Analysis of data based on the principal's education level was accomplished through the use of three categories: Group I = master's or other, Group II = post master's, and Group III = doctorate. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the three levels of education were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 2 of the 46 items analyzed when using the principal's education level as the basis of comparison. Included in the group identified as having significant F ratios are two barriers to effectiveness. The number of significant findings suggests that grade configuration does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in each of the two items as follows: Barrier 23 between Groups I and II, and Barrier 24 between Groups I and II and I and III.

Number of Years in Education

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 33. Analysis of data based on the number of years in education was accomplished through the use of four categories: Group I = 1 to 20

Table 32

Level of Education: Significant Findings

Item	Group			F
	I	II	III	
Barrier 23: Low expectations set by teachers				7.501**
Mean	2.66	2.10	2.26	
<u>S.D.</u>	1.03	0.93	1.03	
<u>N</u>	61	176	61	
Barrier 24: Low expectations set by parents				9.242**
Mean	2.85	2.20	2.34	
<u>S.D.</u>	1.03	0.95	1.18	
<u>N</u>	61	176	61	

Note. I = Master's or Other, II = Post-Master's, III = Doctorate. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

years, Group II = 21 to 25 years, Group III = 26 to 30 years, and Group IV = more than 30 years of experience in education. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the four categories were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 5 of the 46 items analyzed when using the total number of years of educational experience as the basis of comparison. Included in the group identified as having significant F ratios are one indicator of effectiveness and

Table 33

Number of Years in Education: Significant Findings

Item	Group				F
	I	II	III	IV	
Level of effectiveness					3.866**
Mean	1.83	1.75	1.53	1.48	
<u>S.D.</u>	0.86	0.79	0.69	0.58	
<u>N</u>	65	60	102	71	
Barrier 26D: Unrealistic view of principal's role by teachers					3.034*
Mean	2.45	2.50	2.16	2.07	
<u>S.D.</u>	1.03	1.24	0.89	0.95	
<u>N</u>	65	60	102	71	
Barrier 28B: Unclear expectations established by central administration					2.686*
Mean	2.14	2.25	1.79	1.93	
<u>S.D.</u>	1.20	1.19	0.94	1.13	
<u>N</u>	65	60	102	71	
Barrier 29: Micro managing of schools by board of education					4.169**
Mean	2.63	3.28	2.74	2.45	
<u>S.D.</u>	1.36	1.39	1.39	1.44	
<u>N</u>	65	60	102	71	
Barrier 31: State mandated programs					2.693*
Mean	2.78	3.07	3.08	3.27	
<u>S.D.</u>	0.86	1.06	1.01	1.04	
<u>N</u>	65	60	102	71	

Note. I = 1- 20, II = 21-25, III = 26-30, IV = More than 30. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

four barriers to effectiveness. The number of significant findings suggests that grade

configuration does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in three of the five items as follows: Level of Effectiveness between Groups I and IV, Barrier 29 between Groups II and IV, and Barrier 31 between Groups I and IV.

Teaching Experience

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 34. Analysis of data based on the number of years of teaching experience was accomplished through the use of four categories: Group I = 1 to 5 years, Group II = 6 to 10 years, Group III = 11 to 15 years, and Group IV = more than 15 years experience. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the four categories were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 3 of the 46 items analyzed when using years of teaching experience as the basis of comparison. Included in the group identified as having significant F ratios are three barriers to effectiveness. The number of significant findings suggests that grade configuration does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in two of the three items as follows: Barrier 3 between Groups III and IV, and Barrier 6 between Groups II and IV.

Table 34

Teaching Experience: Significant Findings

Item	Group				F
	I	II	III	IV	
Barrier 3: Teachers' lack of motivation or willingness to change					3.576*
Mean	3.00	3.03	3.17	2.67	
<u>S.D.</u>	1.05	0.93	1.00	1.07	
<u>N</u>	43	93	81	79	
Barrier 6: Teacher autonomy					3.289*
Mean	2.39	2.56	2.52	2.16	
<u>S.D.</u>	0.95	0.93	0.88	0.85	
<u>N</u>	44	93	81	80	
Barrier 26D: Unrealistic view of principal's role by teachers					2.729*
Mean	2.05	2.43	2.37	2.08	
<u>S.D.</u>	1.10	0.98	1.09	0.92	
<u>N</u>	44	93	81	80	

Note. I = 1-5 years experience, II = 6-10 years experience, III = 11-15 years experience, IV = More than 15 years experience. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

Administrative Experience

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 35. Analysis of data based on the number of years of administrative experience was accomplished through the use of five categories: Group I = 1 to 5 years, Group II = 6 to 10 years, Group III = 11 to 15 years, Group IV = 16 to 20 years, and Group V = more than 20 years experience. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two

indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the five categories were identified through the use of Scheffé post hoc procedures at the .05 level.

Significant F ratios were identified for 6 of the 46 items analyzed when using years of administrative experience as the basis of comparison. Included in the group identified as having significant F ratios are two indicators of effectiveness and four barriers to effectiveness. The number of significant findings suggests that grade configuration does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in three of the six items as follows: Level of Effectiveness between Groups I and IV and I and V, Barrier 31 between Groups II and V, and Barrier 39 between Groups I and II.

Administrative Positions Held

Table 36 contains item means, standard deviations, and F tests for each item found to be significant of the 46 items analyzed. Four categories representing the number of administrative positions held were used in the analysis of data: Group I = 1, Group II = 2, Group III = 3, and Group IV = 4 or more. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the four categories were identified through the use of Scheffé post hoc procedures at the .05 level.

Table 35

Administrative Experience: Significant Findings

Item	Group					F
	I	II	III	IV	V	
University effectiveness						2.875*
Mean	1.88	1.84	2.20	2.09	2.25	
<u>S.D.</u>	0.75	0.78	0.94	0.72	1.16	
<u>N</u>	49	89	59	47	55	
Level of effectiveness						5.345**
Mean	2.00	1.66	1.61	1.47	1.40	
<u>S.D.</u>	0.96	0.69	0.74	0.65	0.49	
<u>N</u>	49	89	59	47	55	
Barrier 18: Excessively rigid policies and procedures						2.525*
Mean	2.31	1.80	1.86	2.02	1.89	
<u>S.D.</u>	1.26	0.93	0.80	0.85	0.90	
<u>N</u>	49	89	59	47	55	
Barrier 31: State mandated programs						3.344*
Mean	2.96	2.85	3.00	3.19	3.44	
<u>S.D.</u>	1.02	1.11	0.99	1.08	0.93	
<u>N</u>	49	89	59	46	55	
Barrier 34: Insufficient administrative staff						3.086*
Mean	3.04	2.52	2.98	2.45	2.47	
<u>S.D.</u>	1.22	1.27	1.29	1.16	1.23	
<u>N</u>	49	89	59	47	55	

(continued)

Table 35

Administrative Experience: Significant Findings (continued)

Item	Group					F
	I	II	III	IV	V	
Barrier 39: Principal required to assume non-traditional duties						2.530*
Mean	2.96	2.28	2.61	2.51	2.55	
<u>S.D.</u>	1.21	1.20	1.23	1.28	1.17	
<u>N</u>	49	89	59	47	55	

Note. I = 1-5 years experience, II = 6-10 years experience, III = 11-15 years experience, IV = 16-20 years experience, V = More than 20 years experience. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

Significant F ratios were identified for 9 of the 46 items analyzed when using the number of administrative positions held as the basis of comparison. Included in the group identified as having significant F ratios are one indicator of effectiveness and eight barriers to effectiveness. The number of significant findings suggests that the number of administrative positions held may serve as an indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between means in eight of the nine items as follows: Level of Effectiveness between Groups I and IV, Barrier 6 between Groups II and IV, Barrier 7 between Groups I and III and I and IV, Barrier 32 between Groups I and III, Barrier 33 between Groups I and II, Barrier 34 between Groups I and IV, Barrier 38 between Groups I and IV, and Barrier 39 between Groups II and III.

Years in Current Position

Item means, standard deviations, and F tests for each significant item of the 46

Table 36

Administrative Positions Held: Significant Findings

Item	Group				F
	I	II	III	IV	
Level of effectiveness					2.838*
Mean	1.97	1.60	1.65	1.49	
<u>S.D.</u>	1.19	0.61	0.77	0.61	
<u>N</u>	30	128	85	53	
Barrier 6: Teacher autonomy					4.094**
Mean	2.20	2.27	2.54	2.70	
<u>S.D.</u>	0.92	0.86	0.81	1.08	
<u>N</u>	30	128	85	53	
Barrier 7: Program constraints created by bargaining and contracts					4.633**
Mean	2.07	2.45	2.73	2.85	
<u>S.D.</u>	0.98	1.05	1.13	1.06	
<u>N</u>	30	128	85	53	
Barrier 26A: Unrealistic view of principal's role by community					2.868*
Mean	2.43	2.04	2.12	2.49	
<u>S.D.</u>	1.25	1.10	0.92	1.14	
<u>N</u>	30	128	85	53	
Barrier 32: Mandated programs designed for special student populations					2.868*
Mean	3.20	3.76	3.82	3.74	
<u>S.D.</u>	1.21	1.04	0.95	1.04	
<u>N</u>	30	127	85	53	

(continued)

Table 36

Administrative Positions Held: Significant Findings (continued)

Item	Group				F
	I	II	III	IV	
Barrier 33: Inadequate number of professional staff members					3.129*
Mean	3.10	2.47	2.46	2.68	
<u>S.D.</u>	1.32	1.08	1.01	1.17	
<u>N</u>	30	128	85	53	
Barrier 34: Insufficient administrative staff					2.903*
Mean	3.20	2.73	2.62	2.38	
<u>S.D.</u>	1.32	1.23	1.27	1.23	
<u>N</u>	30	128	85	53	
Barrier 38: Integration of technology into the educational programs					3.819*
Mean	1.93	2.35	2.24	2.68	
<u>S.D.</u>	0.91	1.06	0.95	1.11	
<u>N</u>	30	128	85	53	
Barrier 39: Principal required to assume non-traditional duties					3.423*
Mean	2.73	2.72	2.20	2.58	
<u>S.D.</u>	1.14	1.37	1.01	1.13	
<u>N</u>	30	128	85	53	

Note. I = 1, II = 2, III = 3, IV = 4 or more. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

items analyzed are presented in Table 37. Analysis of data based on the number of years a principal has served in his or her current position was accomplished through the use of three categories: Group I = 1 to 5 years, Group II = 6 to 10 years, and Group III = more than 10 years. The level of significance (p) was set at .05. The range of responses for each

of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the three categories were identified through the use of Scheffé post hoc procedures at the .05 level.

A significant F ratio was identified for 1 of the 46 items analyzed when using the number of years a principal has served in her or his current position as the basis of comparison. The item identified as having a significant F ratio is a barrier to effectiveness. The number of significant findings suggests that the length of incumbency in a position does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that a significant difference exists between the means in the item identified as follows: Barrier 8 between Groups II and III.

Administrators in Building

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 38. Analysis of data based on the number of administrators in a building was accomplished through the use of four categories: Group I = 1, Group II = 2, Group III = 3, and Group IV = 4 or more. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant contrasts between the means of each of the four categories were identified through the use of Scheffé post hoc procedures at the .05 level.

Table 37

Years in Current Position: Significant Findings

Item	Group			F
	I	II	III	
Barrier 8: Conflicting responsibilities for principal				4.115*
Mean	2.79	3.17	2.58	
<u>S.D.</u>	1.22	1.22	1.23	
<u>N</u>	167	83	45	

Note. I = 1-5 years, II = 6-10 years, III = More than 10 years. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

Significant F ratios were identified for 4 of the 46 items analyzed when using the number of administrators in a building as the basis of comparison. Included in the group identified as having significant F ratios are four barriers to effectiveness. The number of significant findings suggests that the number of administrators in a building does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that significant differences exist between the means in each of the four items as follows: Barrier 8 between Groups I and III; Barrier 30 between Groups I and III; Barrier 34 between Groups I and II, Groups I and III, and Groups I and IV; and Barrier 39 between Groups I and III and Groups II and III.

Years Since Taking a Class

Item means, standard deviations, and F tests for each significant item of the 46 items analyzed are presented in Table 39. Analysis of data based on the number of years since taking a class was accomplished through the use of four categories: Group I = currently enrolled in a program, Group II = 1 to 4 years, Group III = 5 to 9 years, and

Table 38

Administrators in Building: Significant Findings

Item	Group				F
	I	II	III	IV	
Barrier 8: Conflicting responsibilities for principal					2.865*
Mean	3.22	2.83	2.57	2.81	
<u>S.D.</u>	1.33	1.26	1.04	1.17	
<u>N</u>	59	139	61	37	
Barrier 30: Misconception of function of school and principal's role					3.287*
Mean	2.48	2.07	1.94	2.16	
<u>S.D.</u>	1.22	0.96	0.90	0.99	
<u>N</u>	58	138	62	37	
Barrier 34: Insufficient administrative staff					5.662**
Mean	3.24	2.63	2.40	2.43	
<u>S.D.</u>	1.33	1.21	1.26	1.12	
<u>N</u>	59	139	62	37	
Barrier 39: Principal required to assume non-traditional duties					4.405**
Mean	2.86	2.65	2.13	2.38	
<u>S.D.</u>	1.28	1.25	1.06	1.14	
<u>N</u>	59	139	62	37	

Note. I = 1, II = 2, III = 3, IV = 4 or more. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A. * $p \leq .05$, ** $p \leq .01$

Group IV = 10 or more years. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. Significant

contrasts between the means of each of the four categories were identified through the use of Scheffé post hoc procedures at the .05 level.

A significant F ratio was identified for 1 of the 46 items analyzed when using the number of years since a principal has taken a class as the basis of comparison. The item identified as having a significant F ratio is a barrier to effectiveness. The number of significant findings suggests that the number of years since a principal has been involved in a formal education program does not serve as a major indicator of barriers to the principalship. Scheffé contrasts indicate that no significant differences exist between the means in the item identified.

Workshops Attended per Year

No significant F ratios were identified for any of the 46 items analyzed when using the number of workshops attended per year as the basis of comparison. Analysis of data based on the number of workshops attended per year was accomplished through the use of six categories: Group I = 0, Group II = 1, Group III = 2, Group IV = 3, Group V = 4, and Group VI = 5 or more. The level of significance (p) was set at .05. The range of responses for each of the 46 items was 1 to 5. For the two indicators of effectiveness, an increase in the mean indicates a decrease in perceived effectiveness, whereas an increase in the mean response for any barrier indicates an increase in difficulty. The absence of significant findings may suggest that the number of workshops a principal attends does not serve as an indicator of barriers to effectiveness.

Correlations

Survey items were examined to determine the nature of the relationships that exist

Table 39

Years Since Taking A Class: Significant Findings

Item	Group				F
	I	II	III	IV	
Barrier 34: Insufficient administrative staff					3.103*
Mean	3.03	2.77	2.45	2.51	
<u>S.D.</u>	1.19	1.32	1.23	1.25	
<u>N</u>	76	75	58	65	

Note. I = Currently Enrolled, II = 1-4 years, III = 5-9 years, IV = 10 or more years. Item refers to two indicators of effectiveness and 44 barriers. See survey, Appendix A.

* $p \leq .05$, ** $p \leq .01$

between the items. The items examined included seven demographic factors and the two indicators of effectiveness. Items were selected based on the appropriateness of the test and the significance of the information provided from test results. Data were analyzed using Spearman's rho (ρ) as the test for significance. In each instance, a two-tailed test was performed and the level of significance was established at .05.

A total of 36 correlations resulted from the number of items selected. Thirteen of the comparisons were found to be significant; 11 of the 13 were significant at the .01 level. Table 40 contains the significant correlation findings. Data displayed in the table includes variable name, correlation coefficient (ρ), and level of significance.

Summary

This chapter described the analysis of the data collected via the survey instrument. Surveys were mailed to 470 senior high school principals in Pennsylvania, with a return rate of 63.6%. The survey had an overall reliability of 0.9335. Statistical analysis of the

Table 40

Selected Demographic Factors and Indicators of Effectiveness: Significant Correlations

Item	Significant Correlations		
	Correlated with	ρ	Significance
School Size	Education Level	.214	.01
	Administrative Positions Held	.190	.01
	Administrators in Building	.731	.01
Education Level	School Size	.214	.01
	Teaching Experience	-.183	.01
	Administrative Positions Held	.126	.05
	Administrators in Building	.246	.01
Years in Education	Teaching Experience	.268	.01
	Administrative Positions Held	.135	.05
	Years in Current Position	.395	.01
	Administrators Effectiveness	-.179	.01
Teaching Experience	Education Level	-.183	.01
	Years in Education	.268	.01
	Administrative Positions Held	-.303	.01
Administrative Positions Held	School Size	.190	.01
	Education Level	.126	.05
	Years in Education	.135	.05
	Teaching Experience	-.303	.01
	Administrators in Building	.194	.01
Years in Current Position	Years in Education	.395	.01

(continued)

Table 40

Selected Demographic Factors and Indicators of Effectiveness: Significant Correlations

Item	Significant Correlations		
	Correlated with	ρ	Significance
Administrators in Building	School Size	.731	.01
	Education Level	.246	.01
	Administrative Positions Held	.194	.01
University Effectiveness	Administrative Effectiveness	.164	.01
Administrative Effectiveness	Years in Education	-.179	.01
	University Effectiveness	.164	.01

Note: Correlations are repeated in the table in order to display the total number of significant relationships for each item. The number of significant relationships is 13. Twenty-six items are displayed in the table.

data was achieved through the use of independent t-tests, analysis of variance and correlations. Principals' responses to the two indicators of effectiveness and the 44 barriers were analyzed based on a variety of demographic factors and principals' responses to questions regarding their perceptions of the principalship.

The next chapter provides a summary of the results of the current study.

Conclusions and recommendations for future studies will also be presented.

CHAPTER 5

Summary, Conclusions, and Recommendations

Summary of Study

Studies continue to reinforce the critical nature of the role and responsibilities associated with the position of high school principal. Shivetts (1999) wrote that “[f]indings from a number of lines of research, particularly the investigation of effective schools and successful school change, highlight the importance of the school-building principal’s leadership” (p. 15). He also noted that “[r]esearch on the cause and effect relationship between good schools and good principals is overwhelming” (p. 15). In spite of the pivotal nature of the position, high school principals continue to face what has been described as role explosion and are required to operate in environments in which barriers exist that impede their effectiveness.

In a 1984 study, Leithwood and Montgomery identified barriers in the principals’ environment that function to limit the principals’ ability to be effective. Barriers were related to “teachers, to the role of the principal, to those persons occupying the role, to the board-level administration and to the community (including parents)” (p. 75). Leithwood and Montgomery’s work was used to construct the survey instrument for the current study. The survey was designed to elicit the perceptions of Pennsylvania high school principals concerning the existence of barriers in the workplace and to gather information concerning the emphasis placed on each of the eight job dimensions of the principalship identified by Smith and Andrew (1989).

Identifying and removing barriers from the work environment is essential to

efforts intended to provide high school principals with the opportunity to successfully discharge their duties. The current study was designed to (1) identify obstacles in the principal's environment that inhibit the successful discharge of duties; (2) identify demographic, experiential, or educational factors that may serve as indicators to barriers; (3) identify correlations between demographic factors and indicators of effectiveness; (4) identify tasks considered essential to the day-to-day operation of schools; and (5) determine the principal's level of satisfaction with her or his university-based preparation programs.

Survey research was chosen as the methodology for the study, and the design was a blend of two approaches, descriptive and correlational studies. The target population was high school principals from school districts in Pennsylvania containing a single high school. All schools in Pennsylvania meeting the selection criteria were included in the data collection. High school principals were mailed identical survey instruments and cover letters. The initial mailing did not result in the anticipated 60% return, so a second mailing was required to achieve anticipated return.

A three-part survey instrument was developed to collect data (see survey, Appendix A). The first part consisted of 17 questions designed to collect demographic, experiential, and educational information. Part II consisted of 41 questions (46 items), two of which were designed to collect information on the high school principals' perception of the effectiveness of their university-based preparation program and their own level of effectiveness. The remaining items in Part II were designed to measure the degree of difficulty each of the barriers presented to the principals. Questions in Part III

were structured to gather information concerning the emphasis placed on each of the eight job dimensions of the principalship identified by Smith and Andrews (1989) and to assess the adequacy of the university-based preparation received in seven of the eight dimensions. Principals also responded to a question designed to determine if their current duties correspond to pre-service expectations and perceptions of the principalship, and if sufficient time is available to complete them.

High school principals' responses were grouped according to the answers provided for the various survey items as follows:

1. responses to demographic, educational, and experiential items;
2. responses to the emphasis placed on the dimensions of the principalship;
3. responses to the adequacy of their university-based preparation program; and
4. responses to expectations and perceptions of the principalship and to the availability of time.

The four groups were used as the basis for analyzing the data. Descriptive statistics were generated to describe the sample, and independent t-tests and ANOVA were used to identify significant differences between groups of high school principals. Post hoc procedures were utilized when appropriate. Spearman's correlation was used to identify significant relationships between demographic factors and the principal's reported level of satisfaction with his or her university-based preparation program.

Conclusions of the Study

This section provides a detailed discussion of the conclusions drawn from the analysis of the data. The sample is described using narrative and descriptive statistics.

Discussion of the conclusions of the study is sequenced as follows:

1. results of independent t-tests and analysis of variance using demographic factors as the basis for comparison and a summary of associated descriptive data;
2. results of independent t-tests using principals' perceptions of the emphasis placed on each of the eight job dimensions as the basis for comparison; and results of independent t-tests using as the basis for comparison principals' responses regarding the adequacy of the university-based preparation received in seven of the eight job dimensions;
3. results of independent t-tests using principals' responses to the question about the match between their expectations and perceptions of the principalship and their current duties and about the availability of time to complete them; and
4. results of significant findings using Spearman's correlation to analyze the relationship between specific demographic factors and the reported effectiveness of university-based preparation programs.

In addition to narrative, descriptive statistics and tables are used to support, explain, and clarify relationships.

Description of Sample

Pennsylvania high school principals responded to 17 questions in Part I of the survey. Questions were designed to gather demographic, educational, and experiential data. Table 41 provides a summary of the data used to describe the sample and as the

Table 41

Description of Sample: Demographic, Educational, and Experiential Factors

Factor	Descriptor	Percent
Surveys Returned	299 of 470 mailed	63.6
Gender	Female:	11.4
	Male:	88.6
School Size	Small:	23.1
	Medium:	26.1
	Large:	27.8
	Extra Large:	23.1
Grade Configuration	Grades 9-12	63.5
	Grades 10-12 or 11-12	9.3
	Other	27.1
District Type	Rural	52.8
	Suburban	38.8
	Metropolitan or Urban	8.4
Degree Held	No advanced degree	1.3
	Master's	19.1
	Course work beyond Master's	59.1
	Doctorate	20.5
Years in Education	1 to 20 years	21.8
	21 to 25 years	20.1
	26 to 30	34.2
	more than 30 years	23.8

(continued)

Table 41

Description of Sample: Demographic, Educational, & Experiential Factors (continued)

Factor	Descriptor	Percent
Teaching Experience	1 to 5 years	14.8
	6 to 10 years	31.3
	11 to 15 years	27.3
	More than 15 years	26.9
Administrative Experience	1 to 5 years	16.4
	6 to 10 years	29.8
	11 to 15 years	19.7
	16- 20 years	15.7
	More than 20 years	18.4
Administrative Positions Held	1	10.1
	2	43.2
	3	28.7
	4 or more	17.9
Years in Current Position	1 to 5 years	56.4
	6 to 10 years	28.4
	More than 10 years	15.2
Currently Enrolled in Program	Yes	22.1
	No	77.9
Attend Workshops	Yes	92.3
	No	7.7
Field Experience	Included in preparation program: Yes	52.5
	Included in preparation program: No	47.5

(continued)

Table 41

Description of Sample: Demographic, Educational, & Experiential Factors (continued)

Factor	Descriptor	Percent
Internship	Included in preparation program: Yes	65.8
	Included in preparation program: No	34.2
Work with a mentor	Included in preparation program: Yes	43.8
	Included in preparation program: No	56.2
Become a principal again	Yes	86.0
	No	14.0

basis for analysis.

The sample was evenly distributed across school size with a difference of less than five percentage points between the category with the smallest percentage of schools responding (23.1%) and the category with the greatest percentage of schools responding (27.8%). High school principals in the sample were predominantly male (88.6%). The level of education for survey respondents was similar to that reported for Pennsylvania principals by Shivetts. Principals with a master's or doctorate accounted for 74.9% and 18.9% respectively in his study, while the current study had reported rates of 78.2% for high school principals with a master's degree and 20.5% for high school principals with a doctorate. Average years of experience for administrative and supervisory personnel in Pennsylvania was 24.3 years in Shivetts's study, while the current study found that 58% of the high school principals in Pennsylvania reported having 26 or more years of educational experience. A 1993-94 study by the National Center for Educational Statistics (NCES) determined that nationwide 53.6% of the principals were between the ages of 40

and 49 and that 37% were over age 50 (Shivetts, 1999). Although data for the current study were not collected in the same manner, an interpolation of the data would place similar percentages of high school principals in the two categories. Overall, the high school principals responding to the survey appear to share demographic characteristics similar to those described in Shivetts's 1999 report commissioned by the Pennsylvania Educational Leadership Foundation in association with the Pennsylvania Associations of Elementary and Secondary School Principals.

Demographic Factors

High school principals were asked to respond to a series of questions categorized as demographic factors, which included experiential and educational background. These factors were used as the basis on which the sample was standardized and as one of the measures for the analysis of data. Based on the number and type of responses provided, either an independent t-test or ANOVA was used to identify significant differences or relationships. Significant findings for independent t-tests are presented in Table 42, and significant findings for ANOVA tests are displayed in Table 43.

With the exception of one demographic factor, independent t-tests failed to identify factors that could be described as significant indicators of barriers to the high school principalship. The single major finding was in the comparison of the data based on the responses of principals who indicated that if provided the opportunity to become high school principals again, they would not choose to do so, as opposed to those who said they would. Of the 46 items analyzed, based on principals' responses to the question concerning becoming a principal again, 22 items presented a significantly greater barrier

Table 42

Demographic Factors: Independent T-Tests Significant Findings

Factor	Significant Findings
Gender	1
Currently enrolled in a college or university program	7
Regularly attend workshops	8
Preparation program included field experience	1
Preparation program included an internship	2
Preparation program included work with a mentor	2
Become a principal again	22

to principals who indicated they would not choose to become a principal again. In each of the items found to be significant, and in 44 of the 46 items analyzed, the mean response was greater for principals who indicated they would not choose to become a principal again. The inference drawn from these results is that a principal's attitude may be an indicator of barriers to the high school principalship.

The absence of significant findings when using independent t-tests to analyze principals' responses does not suggest that a high school principal's environment is free of barriers. Rather, what it may suggest is that the specific variables listed in Table 42 do not serve as indicators of the barriers.

Responses of high school principals to the two indicators of effectiveness and the 44 barriers were analyzed using the demographic factors listed in Table 43 as the basis for comparison and ANOVA tests were used to identify significant differences in means. When using the aforementioned criteria, no item was identified as being a major indicator

of barriers to effectiveness. Significant differences were identified in nine of the 46 items analyzed, approximately 20% of the response items, for two of the demographic factors: district type and administrative positions held.

Table 43

Demographic Factors: ANOVA Significant Findings

Factor	Significant Findings
School size	4
Grade configuration	5
District type	9
Level of education	2
Number of years in education	5
Teaching experience	3
Administrative experience	6
Administrative positions held	9
Years in current position	1
Administrators in building	4
Years since taking a class	1

Analysis of the data using demographic factors as the basis for comparison indicates that the demographic factors used in the survey do not serve as indicators of barriers to the high school principalship, the exception being the principal's attitude toward becoming a principal again. The absence of significant differences should not be interpreted as the absence of barriers in the high school principal's environment. As indicated by the analysis of their responses, high school principals in Pennsylvania work in environments where barriers exist, but their existence is not related to the principals'

personal, educational, or experiential background. This conclusion is supported in literature by the notion that the work environment of the high school principal is characterized by conditions that severely limit effectiveness and efficiency (English et al, 1992; Fullan, 1997; Pitner, 1988).

Table 44 lists the items identified by principals as being the greatest barriers to their ability to successfully complete their duties as building administrators. For the most, part these items challenge the high school principal's ability to succeed regardless of the person, setting, or prior experiences.

The study's findings support and are supported by the review of the literature, which indicated that a principal's effectiveness is limited by the inability to exercise control over programs and by the number and variety of tasks assigned to her or him (English et al., 1992; Gerritz et al., 1984; Kimbrough & Burkett, 1990; Richardson et al, 1996). In the current study, the two barriers with the greatest mean responses were Barrier 32—mandated programs for special student populations, and Barrier 11—too many tasks assigned to the principal. Items with the third- and fourth-highest mean responses were related to the same areas of concern: Barrier 10—inordinate amount of time spent on non-essential tasks, and Barrier 4—state-mandated programs, were third and fourth, respectively, in the list of items acting as barriers to the principalship.

Barriers to the principalship are not restricted to one or two areas within the principal's job description. Thirteen, almost 30%, of the barriers had a mean response greater than 2.5 on a scale of 1 to 5 (See survey, Appendix A). For 12 of the 13 items listed in Table 44, at least 20% of the principals reported that the barrier represented a

Table 44

Barriers With Mean Response Greater Than 2.5

Barrier	Description	Mean	SD
32 ^{2,5}	Mandated programs designed for special student populations (e.g. learning disabled, attention deficit, gifted & talented, etc.)	3.71	1.04
11 ^{2,5}	Too many tasks assigned to principal	3.59	1.07
10 ^{2,4}	Inordinate amount of time spent on non-essential tasks	3.15	1.03
31 ^{2,4}	State mandated programs	3.06	1.00
3 ^{2,3}	Teachers' lack of motivation or willingness to change	2.97	1.02
12 ^{2,4}	Number of constituencies to be considered during decision-making (e.g. students, teachers, school board, parents, etc.)	2.96	1.10
8 ^{2,4}	Conflicting responsibilities for principal (multiples roles result in duties that conflict with one another)	2.86	1.23
29 ^{1,4}	Micro managing of schools by board of education	2.75	1.42
34 ^{2,3}	Insufficient administrative staff	2.68	1.26
16 ^{1,3}	Too little parental involvement	2.59	1.14
33 ^{1,3}	Inadequate number of professional staff members	2.56	1.12
7 ¹	Constraints on program decision making resulting from collective bargaining and union contracts	2.56	1.08
39 ^{1,3}	Principal required to assume non-traditional duties (e.g. director of special education, strategic planning chair) normally assigned to district office staff	2.54	1.23

Note: ¹ = at least 40% of respondents reported that the barrier represented a moderate difficulty, large degree of difficulty, or extreme degree of difficulty; ² = at least 50% of respondents reported that the barrier represented a moderate difficulty, large degree of difficulty, or extreme degree of difficulty; ³ = at least 20% of respondents reported that the barrier represented a large degree of difficulty or extreme degree of difficulty; ⁴ = at least 30% of respondents reported that the barrier represented a large degree of difficulty or extreme degree of difficulty; and ⁵ = at least 50% of respondents reported that the barrier represented a large degree of difficulty or extreme degree of difficulty. See survey, Appendix A.

large degree of difficulty or an extreme degree of difficulty in successfully completing their duties as a high school principals. Four of the five areas identified by Leithwood and Montgomery (1984) as being associated with barriers are represented in the thirteen items. Barriers related to those persons occupying the role of the principal are not represented in the list. The absence of those items may be the result of using a survey instrument that required principals to self-report. The diverse nature of the principalship is evidenced by the range of items identified as barriers. The fact that demographic, educational, or experiential factors did not serve as indicators of barriers to effectiveness lends credence to the belief that barriers are present in the workplaces of all principals.

Barrier 32—mandated programs designed for special student populations (e.g. learning disabled, attention deficit, gifted & talented, etc.), had the greatest mean response and aligns with a major recommendation from Shivetts's study. In the recommendations portion of his study, he wrote that

[s]pecial education requirements demanding inordinate amounts of time and paper must be reduced. These regulations - both state and federal - have now become so pervasive they are distracting educators from the education of all students.

Burdensome paperwork does not fulfill the intent of providing all students with an appropriate education. (1999, p. 19)

Other findings consistent with the literature include the reported level of effectiveness of university-based preparation programs (Forsyth, 1988; Haller et al., 1997) Although principals did not condemn their programs to the same extent as did the findings of other studies, they also did not provide an overwhelming endorsement of their

preparation programs. Less than one-fourth (23.4%) of the principals indicated that their program was effective in realistically preparing them for public school administration. A majority (60.8%) described their program as being only moderately effective. The ineffectiveness of university-based programs is also supported by the high percentage of principals who described the preparation received in each of the job dimensions as inadequate. In reporting their own level of effectiveness, 46.4 % of high school principals found themselves to be effective, which is twice the reported level of effectiveness for their preparation programs. This variance can be attributed to high school principals' believing that their effectiveness is not related to their preparation.

Dimensions of the Principalship

High school principals responded to questions relating to the eight job dimensions (See Table 45) of the principalship identified by Smith and Andrews (1989). In each of the eight dimensions, principals provided input regarding the emphasis placed on the dimension given the demands and expectations of their position. Principals responded to the emphasis placed on each of the eight dimensions as follows: (1) too great an emphasis, (2) appropriate emphasis, or (3) not enough emphasis. Responses were recoded because of the disparity in the number of respondents in each of the three categories. Original responses were recoded as either appropriate emphasis or inappropriate emphasis, with responses 1 and 3 combined into a new category, inappropriate emphasis (see Appendix G).

The number of response categories for the university-based preparation received in seven of the eight job dimensions was also reduced from three to two, because of the

Table 45

Dimensions of the Principalship

Dimension 1:	<u>Educational Program Improvement</u> : the principal's role in academic matters, inservice programs, program evaluation, and curriculum appraisal.
Dimension 2:	<u>Personnel Selection and Evaluation</u> : the principal's role in the selection, improvement, and evaluation of certified and classified staff.
Dimension 3:	<u>Community Relations</u> : the principal's role in community activities, communication with parents, and the interpretation of the school to the community.
Dimension 4:	<u>School Management</u> : the principal's role in the use and maintenance of facilities, record keeping, relations with custodial staff, school supplies, and school budget.
Dimension 5:	<u>School Services</u> : the principal's role in working with counselors, psychologists, student government, and counseling of students.
Dimension 6:	<u>Supervision of Students</u> : the principal's role in supervising halls, lunchrooms, bus loading, student discipline, student activities, and athletic events.
Dimension 7:	<u>District, State, and Federal Coordination</u> : the principal's role in completing, district, state, and federal reports, attending meetings, and facilitating communication among these groups.
Dimension 8:	<u>Professional Preparation</u> : the principal's role in professional organizations, reading professional journals, and attending workshops, classes, and other professional growth activities.

Note: Throughout the study the dimensions of the principalship (Smith & Andrews, 1989) are referred to as Dimensions 1 through 8. The above table provides a correlation between the numbering and description of the dimensions.

disparity in the number of respondents in each of the three categories. Principals did not provide a response for Dimension 8, the principal's role in professional organizations, reading professional journals, and attending workshops, classes, and other professional growth activities. Preparation received was initially coded as adequate, inadequate, or

none received in each of the dimensions. Responses identified as inadequate or none received were recoded and combined into a single category, inadequate preparation (see Appendix H).

Principals' perceptions of the emphasis placed on the eight job dimensions of the principalship appear to serve as indicators of barriers to effectiveness (see Appendix I). In seven of the eight dimensions, at least 30% of the 46 items analyzed had significant differences between the means. For each item having a significant difference between the means, the mean response for principals who indicated the emphasis placed on the dimension was inappropriate was greater than the mean for those who indicated otherwise.

The percentage of principals indicating the emphasis placed on the dimension was inappropriate ranged from 11.4% to 36.1%, and the number of significant findings ranged from 1 to 39. Dimension 5, school services, had both the smallest percentage of principals indicating the emphasis was inappropriate and the least number of significant findings. Over one-fifth of the principals indicated that the emphasis was inappropriate in five of the dimensions (see Table 46).

The percentage of principals indicating that the emphasis is inappropriate for a specific set of duties is consistent with the literature, which suggests, principals have little, if any, control over their work environment (English et al., 1992; Gerritz et al., 1984; Kimbrough & Burkett, 1990; Richardson et al, 1996). The dimensions having the greatest percentage of principals believing the emphasis was inappropriate were Dimension 6 (35.8%), supervision of students, and Dimension 7 (36.1%), district, state,

and federal coordination. These dimensions have the potential to consume an inordinate amount of the principal's time and, because of their nature, a principal would exercise little control over the tasks associated with the dimension.

Findings in this section are similar to the findings when high school principals identified items as significant barriers to effectiveness (Table 44, p. 213). Dimension 7, which had the greatest percentage of principals who believed the emphasis was inappropriate, aligns with the item identified as the greatest barrier to effectiveness, Barrier 32—mandated programs for special student populations. And Dimension 6, which had the second greatest percentage of principals indicating the emphasis was inappropriate, corresponds to the item identified as the second greatest barrier to effectiveness, Barrier 11—too many tasks assigned to the principal. Dimensions 6 and 7 also had the highest percentage of principals reporting that the university-based preparation received was inadequate, 47.5% and 66.4% respectively.

In each of the seven questions used to assess the adequacy of university-based preparation programs, at least one-third of the principals indicated that their university-based preparation program did not adequately prepare them for the high school principalship. Percentages ranged from 36.7% to 66.4%. The reported level of inadequacy for university-based preparation programs was not necessarily congruous with the appropriateness of the emphasis placed on the dimension. For example for Dimension 5, 11.4% of the principals believed the emphasis was inappropriate, while 39.8% of the principals said the university-based preparation was inadequate. Table 46 provides a summary of principals' responses to the survey questions for the eight dimensions. For

Table 46

Dimensions of the Principalship: Emphasis and Preparation - Significant Findings

Dimension	Percent indicating emphasis/preparation was:				Findings
Dimension 1: Educational Program Improvement					
Emphasis	Appropriate:	78.5	Inappropriate:	21.5	28
Preparation	Adequate:	63.3	Inadequate:	36.7	25
Dimension 2: Personnel Selection and Evaluation					
Emphasis	Appropriate:	81.9	Inappropriate:	18.1	14
Preparation	Adequate:	55.5	Inadequate:	44.5	7
Dimension 3: Community Relations					
Emphasis	Appropriate:	81.6	Inappropriate:	18.4	14
Preparation	Adequate:	61.5	Inadequate:	38.5	22
Dimension 4: School Management					
Emphasis	Appropriate:	76.1	Inappropriate:	23.9	30
Preparation	Adequate:	57.0	Inadequate:	43.0	10
Dimension 5: School Services					
Emphasis	Appropriate:	88.6	Inappropriate:	11.4	1
Preparation	Adequate:	60.2	Inadequate:	39.8	2
Dimension 6: Supervision of Students					
Emphasis	Appropriate:	64.2	Inappropriate:	35.8	39
Preparation	Adequate:	52.5	Inadequate:	47.5	5
Dimension 7: District, State, and Federal Coordination					
Emphasis	Appropriate:	63.9	Inappropriate:	36.1	20
Preparation	Adequate:	33.6	Inadequate:	66.4	12
Dimension 8: Professional Preparation					
Emphasis	Appropriate:	73.2	Inappropriate:	26.8	24

each item having a significant difference between the means, the mean response for principals who indicated their university-based preparation was inadequate was greater than the mean for those who indicated otherwise.

When using the adequacy of the university-based preparation received as the basis for analysis, the number of significant findings ranged from 2 to 25 for the seven dimensions analyzed (see Appendix J). A total of 107 significant findings resulted when using preparation as the basis for analysis compared with 170 when using emphasis. For five of the eight dimensions, at least one of the factors (emphasis or preparation) produced significant findings greater than or equal to half of the items analyzed. The number of significant findings provides sufficient evidence that principals' perceptions, of either the emphasis placed on a dimension or the university-based preparation received, serve as indicators to barriers in the principals' environment.

Also, in over 96% of the total items analyzed, principals who responded that the emphasis placed on the dimension was inappropriate or the preparation received was inadequate had a mean response greater than that of principals who responded differently. The significance of this finding may be that the increased level of difficulty faced by principals creates conditions that contribute to the formation of barriers. These findings are similar to those associated with the analysis of data when demographic factors were used as the basis for comparison, which suggested that a principal's attitude or perception of his or her position serves best to identify barriers in the workplace. The findings, that resulted from the analysis of data in this section, indicate that a principal's attitude or perception toward the emphasis placed on a specific dimension or toward the

university-based preparation received in that same dimension serves as an indicator of barriers in the principal's environment.

Principals' responses provide support to the eight dimensions identified by Smith and Andrews (1989) as adequately reflecting the duties associated with the high school principalship. In each of the dimensions, a majority of principals indicated that the emphasis placed on the dimension was appropriate. The number is increased, when principals who indicated that the emphasis placed on the dimension was not great enough are included with those who believed the emphasis was appropriate. For example, almost one-fourth (23.4%) of the principals indicated that not enough emphasis is placed on Dimension 8—the principal's role in professional organizations, reading professional journals, and attending workshops, classes, and other professional growth activities.

Duties and Time: Expectations and Perceptions of the Principalship

Results of independent t-tests indicate that principals' pre-service expectations and perceptions of the high school principalship compared with their current duties, and the availability of time to complete their duties serve as indicators of barriers in the principals' environment. Data were analyzed using two separate configurations of principals' responses. Principals were first grouped according to the match between their pre-service expectations and perceptions of the principalship and their current duties. Principals whose expectations and duties aligned were grouped together and their responses were compared with those of principals in the other group. Of the 298 principals responding to this question, 219 (73.5%) said their current duties matched their expectations. The other grouping used for data analysis was based on principals'

responses to questions concerning the availability of time to complete their duties.

Responses of principals who believed sufficient time is available to complete their duties were compared with responses of principals believing that sufficient time is not available. A disproportionate number, 244 principals (81.9%), said that sufficient time did not exist to complete their duties.

Analysis of the data based on the match between current duties and perceptions and expectations of the high school principalship resulted in 37 significant findings (80.4% of the items analyzed), of which 35 were significant at the .01 level (see Table 26, p. 161). When using the availability of time as the basis for analysis 29 significant findings resulted, of which 21 were significant at the .01 level (see Table 27, p. 170). The number and strength of the significant findings warrant consideration of the two items as indicators of barriers to effectiveness. In each of the items analyzed in the two categories, the mean response for principals who indicated their expectations and perceptions did not match their current duties and the mean response for principals who indicated sufficient time was not available was greater than the mean response for principals in the other group.

Findings in this section support the findings discussed in the two previous sections, Demographic Factors and Dimensions of the Principalship. In those sections, indicators of barriers were not related to a specific trait or characteristic associated with the principal. Rather, significant differences were based on principals' perceptions or attitudes toward a specific item in the principals' work environment or experiential history. In this instance, principals who believed their current duties are incongruous with

their pre-service expectations or perceptions of the principalship and those who believed sufficient time does not exist to complete their duties faced more barriers than did principals who believed otherwise.

Findings in this section may act to extend the knowledge base associated with the high school principalship. Although literature does not directly link barriers in the principals environment with the items discussed here, it does make reference to principals who believe their duties are inappropriate and to those who feel that, given the overwhelming nature of the position, sufficient time does not exist to complete their duties. The findings of the current study suggest that the previously mentioned conditions could function to impede effectiveness. They may also be the barriers that Leithwood and Montgomery (1984) described as ones principals are unable to identify.

Correlations

Seven demographic factors and two indicators of effectiveness were correlated to examine the relationships existing between them. Table 40 (p. 200) provides a complete listing of the findings. Correlation of the demographic factors and the indicators of effectiveness produced only one significant relationship, and as such, no inferences can be drawn. A correlation, significant at the .01 level, exists between the two indicators of effectiveness. The relationship between the two items is such that as the perceived level of effectiveness of a principal's university-based preparation program decreases, so does the principal's own perceived level of effectiveness. This relationship may provide additional indirect evidence to support the inadequacy of university-based preparation programs.

Significant findings between demographic factors do not directly relate to the study's intent and purpose. Correlations between demographic factors may best be used to develop a profile of Pennsylvania high school principals.

Research Question Summary

The study was built around six major research questions. Findings for each of the questions are as follows:

Research Question A: Are there specific environmental or experiential factors that serve as indicators of a principal's perceived ability to successfully discharge his or her duties or that correlate with a principal's level of satisfaction with his or her university-based preparation program?

Findings indicate that the specific environmental or experiential factors used in the survey do not serve as indicators of barriers to a principal's effectiveness or efficiency. Barriers exist regardless of setting, educational, or experiential background. The lone exception was the two groups of principals that resulted from principals' responses to the question concerning becoming a principal again. Twenty-two significant findings resulted when principals were grouped according to their response to the question. In each instance, the mean response for principals who indicated they would not become a principal again was greater than those who indicated otherwise.

Correlations between demographic factors and the principals' reported level of satisfaction with their university-based preparation program did not result in significant findings. Correlations may best be used to develop a profile of Pennsylvania high school principals.

Research Question B: Does the pre-service, university-based preparation received by high school principals in essential knowledge and skill areas align with the requirements of the principalship?

Based on the responses provided by principals' to the questions concerning the adequacy of their university-based preparation program, principals appear to believe that preparation is not necessarily congruent with their duties. In each of the seven dimension for which principals provided responses, at least one-third of the principals indicated that their university-based preparation program did not adequately prepare them for the high school principalship. The reported level of inadequacy ranged from 36.7% to 66.4%.

Research Question C: Do pre-service expectations and perceptions of the high school principalship match the reality of the position?

Study results indicate that principals believe their pre-service expectations match their current duties. A majority of principals (73.5%) indicated that their current duties matched their expectations of the principalship. Principals' responses to the questions concerning the appropriateness of the emphasis placed on the eight dimensions of the principalship identified by Smith and Andrews (1989) provide additional indirect support to the findings for Research Question C. In each of the dimensions, a majority of principals indicated that the emphasis placed on the dimension was appropriate. The number is increased, when principals who indicated that the emphasis placed on the dimension was not great enough are included with those who believed the emphasis was appropriate. The percentage of principals indicating the emphasis on the dimension was appropriate ranged from 61.9% to 88.6%.

Research Question D: Is there a difference in the reported degree of success by administrators who regularly attend workshops or who regularly update skills through university-based programs and by those who do not?

Regular attendance at workshops and updating skills through university based programs do not appear to significantly reduce the number of barriers in the principal's environment. The number of significant findings that resulted from the analysis of the data were 8 and 7 respectively.

Research Question E: Do principals, whose university-based preparation program included either a field experience, internship, or mentor program, report a greater degree of success than those whose programs do not?

Principals whose university-based preparation program included either a field experience, internship, or mentor program did not face significantly fewer barriers than did those principals who programs did not include similar components. Participation in the aforementioned programs did not result in the successful elimination of barriers. The number of significant findings for each of the factors were as follows: preparation program included a field experience, 1 significant finding; preparation program included an internship, 2 significant findings; and preparation program included work with a mentor, 2 significant findings.

Research Question F: Does a principal's perception of the emphasis placed on the eight job dimensions or the adequacy of the university-based preparation received serve as an indicator of success?

A principal's perception of the emphasis placed on the eight job dimensions or the

adequacy of the university-based preparation received in the dimension appears to serve as an indicator of barriers to effectiveness. In each instance, principals who believed that either the emphasis was inappropriate or that the preparation received was inadequate faced significantly more barriers than principals who believed otherwise.

Recommendations

Based on the findings of the study, five recommendations for future study or program consideration are presented in the text that follows. The study was designed to (1) identify obstacles in the principal's environment that inhibit the successful discharge of duties; (2) identify demographic, experiential, or educational factors that may serve as indicators to barriers; (3) identify correlations between demographic factors and indicators of effectiveness; (4) identify tasks considered essential to the day-to-day operation of schools; and (5) determine the principal's level of satisfaction with her or his university-based preparation programs. Findings based on the study's design are used in support of the recommendations.

Recommendation 1

Several of the study's findings indicate that some high school principals may have entered into their current positions with unrealistic expectations or insufficient information regarding the nature of the principalship. This is supported by the findings in three areas: Demographic Factors, Dimensions of the Principalship, and Duties and Time. University-based preparation programs should consider developing structures and procedures to counsel prospective principals prior to their entry into the program. Initiating a pre-service program similar to those found in teacher education programs also

deserves serious consideration. A gradual introduction to the role and responsibilities associated with the high school principalship, such as the one provided to teaching candidates, may serve to better prepare candidates and allow prospective high school principals to make a more informed career decisions.

With the impending shortage of high school principals and assistants, accrediting agencies, in conjunction with university-based programs, should consider implementing procedures to support newly placed administrators. Standards for preparation programs should be reviewed with practicing high school administrators being an integral part of the process, as well as, their being involved in the evaluation and redesign of programs. Finally, once an individual is incumbent in a position, a continuing education program should be instituted. The program should be a requirement for making an administrative certificate permanent and as a prerequisite for additional administrative certification. Principals should be required to maintain a close association with their university-based program for a period of two or three years after being elected to their first administrative position. Implementation of these or similar procedures may serve to decrease the number of barriers in the high school principal's environment and increase effectiveness.

Shivetts (1999), as part of his study for the Pennsylvania Educational Leadership Foundation and the Pennsylvania Associations of Elementary and Secondary School Principals (PAESSP), made the following recommendations to alleviate the shortage of public school administrators:

1. The legislature in conjunction with the Pennsylvania department of Education must recognize the severity of the shortage and find ways to encourage properly

certified applicants. Proposed state-sponsored leadership institutes should be financially supported by the Commonwealth in order to lessen the expenses of individual districts and to serve as an inspiration for aspiring principals.

2. Professional organizations like the Pennsylvania Associations of Elementary and Secondary School Principals must increase their professional development opportunities around the state to encourage nominated and interested professionals to consider the principalship. Further, these professional development opportunities must evolve into a total support system and a source of vital information for the practicing administrator.
3. Individual school districts, consortia and Intermediate Units must develop methods to identify and encourage teachers in their own ranks who demonstrate an ability to lead to seek administrative credentials and positions of instructional leadership.
4. Practicing administrators must encourage their teachers who demonstrate leadership skills to become administrators and relate to them the positive aspects of the job. They must fight the natural need for sympathy when they are confronted by a teacher who says, "I wouldn't want your job for anything." How we respond to this statement sets a tone for how the administrative leadership position is viewed within the entire school community. Principals must promote the principalship.
5. As we examine ways of promoting and marketing the principalship, we need to reflect on what drew us into administration in the first place - the factors that

make the principalship what it is for us today and what actions we need to take to strengthen the principalship in the future. (20)

Recommendation 2

The current study did not identify significant relationships between demographic, educational, or experiential factors and the two indicators of effectiveness and the 44 barriers. Barriers used in the study were based on those identified by Leithwood and Montgomery in their 1984 study. Additional items that may not have been considered barriers in 1984 were also used. Consideration should be given to the following studies to add to the knowledge base and to identify other items that may serve as indicators of barriers in the principal's environment:

1. A study of high school principals using the same set of barriers but a different set of demographic, educational, and experiential factors as the basis of comparison should be considered. In failing to identify specific indicators, the current study may have served to eliminate the factors used from consideration, but other factors not included in the study may serve as indicators of barriers.
2. Survey principals to identify items believed to be barriers to effectiveness or efficiency. Included in the survey would be the manner in which internal and external forces interact to shape the principalship. Interviews with principals should be an integral part of the process, in order to identify barriers that may not be discovered via a survey. Survey results could then be used to conduct a study with the newly identified barriers, in conjunction with features of the current study. The inclusion of interviews in the study deserves serious

consideration. The study's purpose would be to confirm or refute findings that indicate demographic, educational, or experiential factors do not serve as indicators of barriers in the high school principal's environment.

Recommendation 3

Analysis of the data revealed that principals who believe the emphasis placed on a specific dimension of the high school principalship is inappropriate or who indicate that their expectations or perceptions of the principalship do not match their current duties, face significantly more barriers than do principals not believing as they do. Further study is needed to identify factors that may contribute to the development of these beliefs. The absence of principals from the decision-making process at the district level, however, may be a contributing factor. A study designed to examine the high school principal's level of involvement in the decision-making and the effect that the level of involvement has on a principal's attitude should be considered. Findings from the study may support the assumption that greater involvement in the decision-making process results in a reduced number of barriers in the workplace. Superintendents and school boards should be made aware of the findings of the current study and examine their practices in respect to its findings. Individuals responsible for policy and program development at the state level should also examine their practices in a similar manner.

Recommendation 4

Results of the current study should be shared with school boards and agencies responsible for mandated high school programs. Particular attention should be given to the study's findings associated with the inability of high school principals to complete

their duties and effectively and efficiently lead their teachers because of

1. insufficient time,
2. the inordinate number of duties assigned to the high principal, and
3. the difficulty created by state and federally mandated programs.

Initiatives that may help eliminate barriers created as a result of the nature of the high school principalship should be examined. Priority should be given to efforts designed to provide adequate resources to fund and staff the high school. Success of this recommendation is contingent on the support and cooperation of a variety of state and local agencies. Principals need to become more closely involved with the agencies charged with the responsibility of shaping and directing the high school and its programs. The need to include principals in the process is supported by Shivetts (1999) who wrote that

[p]rincipals do not reject, nor are they afraid of, meaningful reform. However, reforms presented from “on high” or from outside the world of education are meaningless if they cannot be implemented. Meaningful reform must be grounded in research arising out of schools. Practitioners must study the reliability and validity of reform measures and be allowed to develop methods to put good research into practice. (p. 19)

Recommendation 5

The findings of the current study suggest that a principal’s attitude toward specific environmental or experiential factors contribute to the formation of barriers in her or his environment. Sergiovanni (1995) noted that “circumstances prevent principals from

becoming the leaders they want to be” (p. 83). The principal’s attitude may be one such circumstances to which Sergiovanni is referring when he writes. He goes on to note, however, that “many principals are able to rise above these and other difficulties. Key to realizing the potential for leadership in the principalship is to recognize that schools provide opportunities for expressing a *unique* [sic] form of leadership” (p.84).

A study designed to explore the relationship between barriers and attitude deserves serious consideration. Focusing on the principal’s attitude as a major factor that contributes to the formation of barriers or as a barrier itself would be central to the study. The study may produce results that significantly impact program design and development at the university, state, or local level.

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APPENDIX A
Survey

How effective was your university-based preparation program in realistically preparing you for public school administration?

_____ Effective _____ Moderately Effective _____ Neither _____ Moderately Ineffective _____ Ineffective

Based on your perceptions and beliefs of the duties and responsibilities that principals should engage in to effectively administer their school, how do you perceive your level of effectiveness?

_____ Effective _____ Moderately Effective _____ Neither _____ Moderately Ineffective _____ Ineffective

PART II:

Using the scale given below, assess the extent to which each of the following factors¹ inhibits your ability to complete your duties as a building administrator.

Scale: (1) **ND** = No Difficulty, (2) **SD** = Slight Difficulty, (3) **MD** = Moderate Difficulty, (4) **LD** = Large degree of Difficulty, (5) **ED** = Extreme degree of Difficulty

		<i>Please circle your responses:</i>				
		1	2	3	4	5
1.	Teachers' lack of knowledge and skill about new practices	ND	SD	MD	LD	ED
2.	Varied professional training among teachers	ND	SD	MD	LD	ED
3.	Teachers' lack of motivation or willingness to change	ND	SD	MD	LD	ED
4.	Unwillingness by teachers to participate in in-service training	ND	SD	MD	LD	ED
5.	Teachers' resistance to collaborate in planning	ND	SD	MD	LD	ED
6.	Teacher autonomy	ND	SD	MD	LD	ED
7.	Constraints on program decision making resulting from collective bargaining and union contracts	ND	SD	MD	LD	ED
8.	Conflicting responsibilities for principal (multiples roles result in duties that conflict with one another)	ND	SD	MD	LD	ED
9.	Inadequate preparation for role and responsibilities of principal	ND	SD	MD	LD	ED
10.	Inordinate amount of time spent on non-essential tasks	ND	SD	MD	LD	ED
11.	Too many tasks assigned to principal	ND	SD	MD	LD	ED
12.	Number of constituencies to be considered during decision-making (e.g. students, teachers, school board, parents, etc.)	ND	SD	MD	LD	ED
13.	Unwillingness by principal to take risks associated with classroom change	ND	SD	MD	LD	ED
14.	Hostile political environment	ND	SD	MD	LD	ED
15.	Too much parental involvement	ND	SD	MD	LD	ED
16.	Too little parental involvement	ND	SD	MD	LD	ED
17.	Inadequate resources	ND	SD	MD	LD	ED
18.	Excessively rigid policies and procedures	ND	SD	MD	LD	ED
19.	Excessively time-consuming policies and procedures	ND	SD	MD	LD	ED

		1	2	3	4	5
20.	Pressure created by special interest groups	ND	SD	MD	LD	ED
21.	Bureaucratic inhibitors to change (structures and procedures)	ND	SD	MD	LD	ED
22.	Insufficient information provided to principal concerning new programs or initiatives	ND	SD	MD	LD	ED
23.	Low expectations set by teachers	ND	SD	MD	LD	ED
24.	Low expectations set by parents	ND	SD	MD	LD	ED
25.	Resistance to change by central administration	ND	SD	MD	LD	ED
26.	Unrealistic view of principal's role within school system by:					
	(A) Community	ND	SD	MD	LD	ED
	(B) School Board	ND	SD	MD	LD	ED
	(C) Central Administration	ND	SD	MD	LD	ED
	(D) Teachers	ND	SD	MD	LD	ED
27.	Inappropriate standards/expectations established for principal by:					
	(A) School Board	ND	SD	MD	LD	ED
	(B) Central Administration	ND	SD	MD	LD	ED
28.	Unclear expectations established for principal by:					
	(A) School Board	ND	SD	MD	LD	ED
	(B) Central Administration	ND	SD	MD	LD	ED
29.	Micro managing of schools by board of education	ND	SD	MD	LD	ED
30.	Discrepancy between principal's conception as to the function of the school system and the principal's role in it	ND	SD	MD	LD	ED
31.	State mandated programs	ND	SD	MD	LD	ED
32.	Mandated programs designed for special student populations (e.g. learning disabled, attention deficit, gifted & talented, etc.)	ND	SD	MD	LD	ED
33.	Inadequate number of professional staff members	ND	SD	MD	LD	ED
34.	Insufficient administrative staff	ND	SD	MD	LD	ED
35.	District initiated programs with insufficient building administrator input	ND	SD	MD	LD	ED
36.	District initiated programs with insufficient training	ND	SD	MD	LD	ED
37.	District initiated programs with insufficient funding	ND	SD	MD	LD	ED
38.	The integration of technology into the traditional education program	ND	SD	MD	LD	ED
39.	Principal required to assume non-traditional duties (e.g. director of special education, strategic planning chair) normally assigned to district office staff	ND	SD	MD	LD	ED

PART III:

Below you will find a table outlining eight **job dimensions** of the principalship as identified by Smith and Andrews². Next to each of the dimensions are two categories with three response columns for each category. The first category labeled “**emphasis**” is for your response as to the emphasis placed upon the dimension given the demands and expectations of your current position. The other category, “**preparation received**” is for your response as to the university-based preparation received for the given job dimension. Using the legend given below, place an “**X**” in the column that best matches your response in each category.

Emphasis:

- TGE:** Too great an emphasis
- AE:** Appropriate emphasis
- NEE:** Not enough emphasis

Preparation Received:

- A:** Adequate preparation
- I:** Inadequate preparation
- NR:** None received
- NA:** Not Applicable (final dimension)

JOB DIMENSION	Emphasis			Preparation Received		
	TGE	AE	NEE	A	I	NR
Educational Program Improvement (the principal's role in academic matters, inservice programs, program evaluation, and curriculum appraisal)	TGE	AE	NEE	A	I	NR
Personnel Selection and Evaluation (the principal's role in the selection, improvement, and evaluation of certified and classified staff)	TGE	AE	NEE	A	I	NR
Community Relations (the principal's role in community activities, communication with parents, and the interpretation of the school to the community)	TGE	AE	NEE	A	I	NR
School Management (the principal's role in the use and maintenance of facilities, record keeping, relations with custodial staff, school supplies, and school budget)	TGE	AE	NEE	A	I	NR
School Services (the principal's role in working with counselors, psychologists, student government, and counseling of students)	TGE	AE	NEE	A	I	NR
Supervision of Students (the principal's role in supervising halls, lunchrooms, bus loading, student discipline, student activities, and athletic events)	TGE	AE	NEE	A	I	NR
District, State, and Federal Coordination (the principal's role in completing, district, state, and federal reports, attending meetings, and facilitating communication among these groups)	TGE	AE	NEE	A	I	NR
Professional Preparation (the principal's role in professional organizations, reading professional journals, and attending workshops, classes, and other professional growth activities)	TGE	AE	NEE	NA	NA	NA

Please select one of the following four choices:

- _____ 1. My current administrative duties **match** my expectations and perceptions of the principalship and **sufficient time** exists to complete them.
- _____ 2. My current administrative duties **match** my expectations and perceptions of the principalship and **insufficient time** exists to complete them.
- _____ 3. My current administrative duties **do not match** my expectations and perceptions of the principalship and **sufficient time** exists to complete them.
- _____ 4. My current administrative duties **do not match** my expectations and perceptions of the principalship and **insufficient time** exists to complete them.

¹Leithwood, K.A., Montgomery, D.J. (1984). Obstacles preventing principals from becoming more effective. *Education and Urban Society*, 17, 73-88.

²Smith, W.F. & Andrews, R. L. (1989). *Instructional Leadership: How Principals Make A Difference*. Alexandria, VA: Association for Supervision and Curriculum Development.

APPENDIX B
Expanded Job Dimensions

Expanded Job Dimensions

1. Provides inservice training for teachers to increase their effectiveness. (1)
2. Supervises job performance of custodial, secretarial, or other support staff. (4)
3. Plans, develops, and implements a process for student, teacher, and parent involvement in determining curriculum goals and objectives. (1)
4. Organizes community members to lobby for support for programs in which he/she/community have a special interest. (3)
5. Meets with various parties involved (teachers, parents, students, and professional people) in accordance with legal requirements. (7)
6. Communications with the public concerning the nature and rationale of various school programs. (3)
7. Organizes a system for dealing with discipline problems. (5)
8. Exercises leadership role in developing mechanisms for integration of various cultural groups in the school. (5)
9. Assigns teachers/professional staff to classes. (1)
10. Establishes communication lines with other principals in the district. (7)
11. Works with booster clubs to raise money for various school needs or activities. (3)
12. Encourages and helps the faculty to develop innovative teaching methods. (1)
13. Monitors disciplinary actions involving students to ensure due process is followed. (6)
14. Reports to the district on nature and cleanliness of the building and its maintenance. (4)

15. Sets standards; communicates and monitors standards for orderly maintenance of school facilities. (4)
16. Develops standards, objectives, and procedures to maintain counseling services. (5)
17. Selects and supervises safety patrols. (6)
18. Monitors or oversees free-lunch program to ensure that appropriate students receive lunches. (4)
19. Coordinates with local police to ensure smooth functioning of school, both during school hours and after school at extracurricular activities. (6)
20. Seeks to know the parents and to interpret the school's programs to them. (3)
21. Organizes activities and provides space for school psychologists, speech pathologists, and similar professionals. (5)
22. Follows established district procedures for selection of new maintenance staff members. (4)
23. Arranges transportation of students to extracurricular events. (4)
24. Helps the community raise money for the United Fund and other charitable or service organizations. (3)
25. Provides training for staff members to enable them to deal with parents and community. (3)
26. Responds to requests for input or ideas on various community programs and activities not directly involving the school. (3)
27. Determines, communicates, and maintains standards for participation in student

- activities. (6)
28. Determines student interest in new courses and encourages their development. (1)
 29. Elicits student participation in student government. (5)
 30. Participates in various community agencies and concerns—not solely academic (Kiwanis, churches, Chamber of Commerce, Lion’s Club, senior citizens groups, etc.). (3)
 31. Monitors the racial/sexual composition of student groups and the compliance of the school with the provisions of Title IX. (7)
 32. Coordinates programs with various agencies—employing students in co-ops. (5)
 33. Ensures that approved budget monies are received. (4)
 34. Recruits applicants for staff positions. (2)
 35. Responds to requests for information, paperwork, annual reports, etc., from district. (4)
 36. Strives to know and understand students and considers requests. (5)
 37. Approves, oversees, and works with student fundraising efforts/exercises. (6)
 38. Communicates with nurses, health officials, parents, etc., so that students’ special health problems (e.g., allergies, epilepsy) can be recognized. (5)
 39. Reviews the number and nature of student activities or establishes a system to review and eliminate or add activities. (6)
 40. Organizes programs to evaluate students’ competencies. (1)
 41. Selects and assigns staff to direct extracurricular activities. (6)
 42. Monitors the expenditure of funds raised by booster clubs, other community

- groups, or student activities. (4)
43. Sets up strategies to implement activities, priorities, and programs set at the district level. (1)
 44. Patrols parking lots. (6)
 45. Maintains accessibility to students, parents, teachers, and other groups interested in school activities. (4)
 46. Provides teachers with uniform procedures for keeping and reporting attendance. (4)
 47. Helps staff members set professional goals. (1)
 48. Solicits and coordinates parent volunteers and cooperation in school committees, tutor pool, health services, etc., and other school activities. (5)
 49. Meets with and informs parents and health officials regarding various school problems, including nutrition and immunizations. (4)
 50. Implements and refines what is developed by central office in the area of curriculum. (1)
 51. Establishes orientation for new teachers/staff. (2)
 52. Seeks resource alternatives within and outside district if original proposals are not accepted. (7)
 53. Provides feedback to teachers concerning their performance. (2)
 54. Deals with conflicts that arise among teacher/student/parent/support-staff relationships. (5)
 55. Monitors the staff to determine the extent to which curriculum goals and

- objectives are being met. (1)
56. Writes grant proposals to seek money from district, county, and federal sources.
(7)
57. Schedules work hours of support staff. (4)
58. Sets up procedures to deal with ill or injured students. (5)
59. Encourages and secures parent involvement in student activities as participants and chaperones. (6)
60. Elicits community sponsorship or school programs. (3)
61. Maintains current knowledge of union-management contracts in order to develop personal policies consistent with their provisions. (8)
62. Supervises the lunchroom. (6)
63. Coordinates with district to procure equipment to render services for transportation needs. (4)
64. Meets with union officials as specified by union contract. (4)
65. Arranges to have parents called or otherwise notified when child is tardy or absent from school. (4)
66. Evaluates the job performance of custodial, secretarial, and other support staff members. (4)
67. Confers with other principals and/or district personnel to coordinate educational programs across schools. (1)
68. Surveys various segments of the school to assess how individuals are perceived.
(8)

69. Attempts to instill pride in school facilities and equipment to control vandalism.
(4)
70. Establishes procedure to use teacher aides and to evaluate them. (2)
71. Attends district budgetary meetings and provides needed input. (7)
72. Keeps informed about new techniques (i.e., in computer technology, human relations) and how they might affect various staff elements, and encourages appropriate educational effort. (8)
73. Structures a cafeteria schedule and traffic flow chart. (4)
74. Responds to requests for information or help from various community groups, agencies, etc. (3)
75. Requests and follows up requests for maintenance, repair, and equipment (people and material need). (4)
76. Accounts for and monitors expenditure of school funds in accordance with existing laws and regulations. (4)
77. Oversees and contributes to newsletter for parents and public to keep them informed of school policies and activities. (3)
78. Provides feedback to custodial, secretarial, and other support staff about job performance. (2)
79. Defines and implements the objectives and standards for an effective library/media center. (1)
80. Conducts orientation session for parents; develops special programs for parents new to the school. (3)

81. Organizes community advisory groups consisting of parents, teachers, and administrators, and meets with them. (3)
82. Communicates priorities regarding resources and material to staff, community, and students. (3)
83. Coordinates with fire department and traffic personnel for smooth operation of school and provisions for emergencies. (4)
84. Solicits substitute teachers and supervises their classes. (2)
85. Works to convince the community to pass bond issues. (3)
86. Provides information to financial auditors on expenditure of school funds. (4)
87. Encourages the staff to search for and implement new programs. (1)
88. Encourages teachers to get certified in areas for which expertise is lacking. (2)
89. Develops and coordinates students activities (athletics, debates, etc.) with other schools in and out of the district. (6)
90. Finds and develops programs to reduce absenteeism, tardiness, and/or behavioral problems. (5)
91. Counsels teachers, students, and the staff on personal problems and refers them to appropriate groups. (6)
92. Meets with leaders of student organizations. (6)
93. Seeks the input of local employers to make vocational programs sensitive to employers' needs. (1)
94. Explains disciplinary code to students, parents, and the staff in accordance with student bill of rights. (5)

95. Provides for supervision at student activities. (6)
96. Provides resources and/or training to help the staff recognize and deal with student behavior problems. (6)
97. Writes faculty handbook to describe school policies, procedures, and attendance. (4)
98. Monitors and encourages individual student progress. (1)
99. Monitors keeping of records about students (i.e., medical needs, registration, tardiness, absenteeism, etc.). (4)
100. Elicits staff participation in extracurricular activities. (5)
101. Coordinates and oversees use of school facilities by community groups (i.e., church, recreation, or other purposes). (3)
102. Involves the current staff in the selection of new staff members. (2)
103. Ensures appropriate use of community agencies and refers students with special needs. (3)
104. Organizes bilingual curriculum for English-as-a-second-language students. (1)
105. Requests and pursues district or central resources for maintenance and repair of school plant. (4)
106. Explains reasons for district-level and federal rules and regulations to staff, students, and community. (4)
107. Supervises or provides for supervision of bus trips to special events or extracurricular activities. (6)
108. Reviews use of instructional materials (books, audiovisual equipment, etc.) in the

- school. (1)
109. Produces student handbook to explain students' rights and responsibilities. (5)
 110. Develops relationships with local media to ensure exposure of school activities and needs. (3)
 111. Evaluates curriculum in terms of objectives set by school or district. (1)
 112. Develops communication channels for minorities to voice concerns. (3)
 113. Trains and monitors students to keep them in line with the prescribed traffic and cafeteria flow charts. (5)
 114. Communicates the various roles of resource personnel (nurses, psychologists, curriculum experts, etc.) to the staff and the teachers. (1)
 115. Involves the professional and custodial staff members in school maintenance problems that affect them. (4)
 116. Interviews personnel to select people and/or provide input into the selection decision. (2)
 117. Participates in professional growth activities: attends professional meetings, reads professional journals, takes classes, or attends seminars on relevant topics. (8)
 118. Encourages involvement of the staff in professional organizations and supports involvement in workshops and classes. (1)
 119. Serves on district-level curriculum and policy committees. (7)
 120. Develops procedures for efficient office routine. (4)
 121. Provides for meetings or training sessions in which people can share ideas they picked up from professional associations. (1)

122. Observes teachers' classroom performance for the purpose of evaluation and/or feedback to teacher. (2)
123. Develops a comprehensive plan for the orderly improvement of school plant, facilities, and equipment. (4)
124. Provides a structure for dialogue and cooperation between faculty and community groups. (3)
125. Prepares community for educational innovation. (3)
126. Involves staff and/or community in process to refine annual budget. (4)
127. Confers with parents when they visit the school. (3)
128. Attends various student extracurricular events. (6)
129. Constructs a class schedule. (4)
130. Oversees the activities of the guidance counselor. (2)
131. Sets priorities for provisions or materials and resources according to financial limitations. (4)
132. Evaluates new students to facilitate their integration into the school. (5)
133. Ensures that fire and tornado drills are carried out and reports their conduct to appropriate authorities. (4)
134. Supervises ordering, receipt, and distribution of supplies. (4)
135. Attends parent-teacher organization meetings and otherwise supports similar groups. (3)
136. Establishes orientation activities for incoming students. (5)
137. Confers with district to determine how best to fulfill legal requirements of various

- programs. (7)
138. Exercises responsibility for teacher and parent meetings when a parent requests such a meeting. (3)
 139. Monitors the enforcement of various health regulations involving immunizations, health standards in cafeteria, etc. (4)
 140. Supervises the transportation of students. (6)
 141. Meets with faculty representatives to discuss faculty problems. (1)
 142. Writes and/or presents reports of school activities to community groups. (3)
 143. Teaches class to serve as a model. (1)
 144. Reviews and monitors educational programs to ensure that they meet various students' needs. (1)
 145. Confers with coaches and other activity leaders to ensure space, time, and resource requirements for various activities. (6)
 146. Coordinates testing programs required by the state or otherwise requested of the school. (7)
 147. Establishes procedures and techniques for adequate plant security. (3)
 148. Assesses physical plant and equipment needs in terms of school goals and objectives. (4)
 149. Trains student leaders to be more effective students leaders. (6)
 150. Meets with other colleagues to discuss problems, their solutions. And new developments in education. (1)
 151. Plans student assemblies and cultural productions. (6)

152. Coordinates with local vocational education groups for cooperative programs. (1)
153. Meets with students to explain academic requirements and availability of various programs. (5)
154. Informs parents of any disciplinary action involving students. (3)
155. Defends budget needs to Board of Education or district personnel. (7)
156. Implements program to provide additional instruction to students who do not pass minimal competency tests. (5)
157. Resolves conflicts in class schedules; works with data processing and teachers to effect solutions. (5)
158. Authorizes and supervises field trips. (6)
159. Attends banquets or special events to honor outstanding students and/or athletes. (6)
160. Works with community to develop student activities. (3)

Smith and Andrews, 1989. Number in parentheses is job dimension referenced by specific item. A copy of the eight job dimensions can be found in Appendix A or on page 216, Table 45.

APPENDIX C
Content Validity of Survey

Dear Respondent:

The attached four (4) page survey is designed to gather data from high school principals. A cover letter detailing the purpose of the study will accompany the survey when it is distributed. In brief, the study seeks to identify barriers in the principal's environment that inhibit or prevent the successful discharge of duties. The study also seeks to collect data on effectiveness, formal preparation for an administrative position, and time available to complete essential tasks. Your help in pretesting this instrument is greatly appreciated and will help insure its reliability and validity.

Thank You,

Mike Thomas

INSTRUCTIONS

Please use the following procedures when critiquing the survey:

1. Circle any word that is used inappropriately or whose use makes the question ambiguous. Please offer an alternate suggestion by writing it as close to the circled word as possible.
2. Place an "X" next to any question that should be considered for elimination. Please provide a brief explanation on the attached sheet as to why the item should be eliminated (e.g. too personal or not appropriate for the nature of the study). Number questions to be eliminated as follows: "X1", "X2", "X3", ...
3. Place a "?" next to any question, set of directions, or statement whose meaning is unclear and as a result creates confusion as to the meaning or nature of the question or how the item is to be completed. Please use the attached sheet to offer any suggestions you may have as to how to revise the item and thereby correct the deficiency. Number as follows: "?1", "?2", "?3", ...
4. Please offer any additional suggestions you may have for improving the instrument's overall quality or effectiveness. This would include the addition of any items that may serve as barriers or any other question that should be considered for inclusion.

Place an "X" next to the appropriate response.

1. Survey instrument ease of use:
 Very easy to use Easy to use Very difficult to use
2. If you received the survey in the mail is the likelihood greater that you would complete it than not?
 Yes, would complete No, would not complete

If no, why not? _____

ITEMS CONSIDERED FOR ELIMINATION	
X1	
X2	
X3	
X4	
X5	

ITEMS CONSIDERED FOR REVISION	
?1	
?2	
?3	
?4	
?4	

ADDITIONAL SUGGESTIONS

APPENDIX D
Human Subjects Research Committee Approval

January 25, 1999

Dr. David Ruggles, Professor
Mr. Michael Thomas
Department of Educational Administration,
Research, and Foundations
UNIVERSITY

Dear Dr. Ruggles and Mr. Thomas:

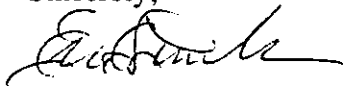
The Human Subjects Committee of Youngstown State University has reviewed your Protocol #39-99, "The Secondary Principalship: Administrators' Perceptions of Pre- and Post-Service Barriers to Effectiveness," and has determined it to be exempt under DHHS Category 2, subject to the following conditions:

- (1) The PI should provide instructions to potential subjects stating the nature of the study sufficient to allow them to make an informed consent to participate;
- (2) If the surveys are to be distributed through any means other than direct mail, the PI should notify the YSU HSRC of the mechanism to be used (also subject to further review and approval);
- (3) Dr. Ruggles should co-sign the HSRC forms and all related correspondence as PI.

Please respond to the above conditions to Cheryl Coy, Secretary, Office of Grants and Sponsored Programs, 3010 Jones Hall for approval by the committee before initiating your project.

Any changes in your research activity should be promptly reported to the Human Subjects Research Committee and may not be initiated without HSRC approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the Human Subjects Research Committee. Best wishes in the conduct of your study.

Sincerely,



Eric Lewandowski
Administrative Co-chair
Human Subjects Research Committee

APPENDIX E
Survey Letters

Youngstown State University / One University Plaza / Youngstown, Ohio 44555-0001

February 12, 1999

Dear High School Principal:

As a high school principal, the position you occupy is not only essential in the organizational framework of the school district, but is also one of the most demanding within the public school system. Principals, however, encounter numerous factors in their environment that function as barriers and inhibit their ability to successfully administer their school.

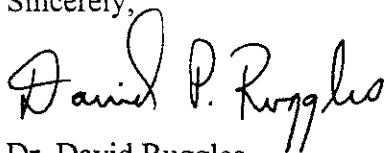
A doctoral study, entitled "The Secondary Principals' Perceptions of Pre- and Post-service Barriers to Effectiveness," is being conducted in an attempt to identify specific factors that serve as barriers. The study is under the direction of Dr. David Ruggles, Professor in the Department of Educational Administration, Research, and Foundations at Youngstown State University. The doctoral candidate, Michael Thomas, is superintendent of the Monaca School District, Monaca, PA.

The purpose of the study is to establish links between demographic and other variables that may serve as indicators of the aforementioned barriers. Results of the study are intended to aid providers of pre- or post-service preparation for principals in their attempts to develop programs designed to improve the overall efficiency and effectiveness of principals.

Having served as a high school administrator for ten years, I appreciate how difficult it is to find time to complete tasks outside your regular duties. The enclosed survey is designed to be completed in about 15 minutes. Your participation is vital to the success of this undertaking. To insure confidentiality, no personally identifying marks are included on the survey. The return envelope includes a tracking number which will be destroyed once the survey is returned. It would be greatly appreciated if you could find time within the next week to complete the survey and return it in the self-addressed envelope.

Thank you for taking the time to participate in this important endeavor.

Sincerely,



Dr. David Ruggles
Professor of Educational Leadership

Sincerely,



Michael Thomas
Doctoral Candidate



Youngstown State University / One University Plaza / Youngstown, Ohio 44555-0001

March 17, 1999

Dear Principal:

You recently received a survey dealing with barriers in the principal's environment. Enclosed you will find an additional survey and a copy of the original letter that accompanied it. Since your input is vital to this endeavor, I am requesting that you please find time within your busy schedule to complete the survey and return it in the envelope provided within the next week. The original letter outlines the specific purpose of the study and the how the data will be used.

Thank you for your serious consideration of this matter.

Sincerely,

A handwritten signature in cursive script that reads "David Ruggles".

Dr. David Ruggles
Professor of Educational Leadership

Sincerely,

A handwritten signature in cursive script that reads "Michael Thomas".

Michael Thomas
Doctoral Candidate

APPENDIX F
Significant T-Test Results: Demographic Factors

SIGNIFICANT T-TESTS RESULTS							
Item	Demographic Factor						
	Gender	Currently Enrolled	Attend Workshops	Field Exper.	Internship	Mentor	Do Again
univefct			S*		S**	S**	S**
lvleffct							S**
1							
2			S*				
3							S*
4							S*
5							
6							
7							S*
8			S*				S*
9			S**				S*
10							S**
11			S*				S**
12							S**
13							
14							S*
15				S*			
16							
17			S*				
18							
19							S*
20							
21							S*

SIGNIFICANT T-TESTS RESULTS							
Item	Demographic Factor						
	Gender	Currently Enrolled	Attend Workshops	Field Exper.	Internship	Mentor	Do Again
22			S*				
23							
24							
25		S**					
26A		S*					
26B					S*		S**
26C							S*
26D		S*					S**
27A							S**
27B							S*
28A		S**					S**
28B		S*					S*
29							S**
30		S**					S**
31						S*	
32	S*						S*
33							
34		S**					
35							S*
36							
37							S**
38			S*				
39							

Note. Item refers to two indicators of effectiveness and 44 barriers. See survey Appendix xxx. S* indicates $p \leq .05$, S** indicates $p \leq .01$

APPENDIX G
Recoded Emphasis

Recoded Emphasis

Factor	Original Values			Recoded Values		
	Code	Emphasis	N	Code	Emphasis	N
Dimension One	1	Too Great	16	2	Inappropriate	64*
	2	Appropriate	234	1	Appropriate	234
	3	Not Enough	48	2	Inappropriate	64*
Dimension Two	1	Too Great	7	2	Inappropriate	54*
	2	Appropriate	245	1	Appropriate	245
	3	Not Enough	47	2	Inappropriate	54*
Dimension Three	1	Too Great	22	2	Inappropriate	55*
	2	Appropriate	244	1	Appropriate	244
	3	Not Enough	33	2	Inappropriate	55*
Dimension Four	1	Too Great	47	2	Inappropriate	71*
	2	Appropriate	227	1	Appropriate	227
	3	Not Enough	24	2	Inappropriate	71*
Dimension Five	1	Too Great	14	2	Inappropriate	34*
	2	Appropriate	265	1	Appropriate	265
	3	Not Enough	20	2	Inappropriate	34*
Dimension Six	1	Too Great	94	2	Inappropriate	107*
	2	Appropriate	192	1	Appropriate	192
	3	Not Enough	13	2	Inappropriate	107*
Dimension Seven	1	Too Great	76	2	Inappropriate	108*
	2	Appropriate	191	1	Appropriate	191
	3	Not Enough	32	2	Inappropriate	108*

(continued)

Recoded Emphasis

Factor	Original Values			Recoded Values		
	Code	Emphasis	N	Code	Emphasis	N
Dimension Eight	1	Too Great	10	2	Inappropriate	80*
	2	Appropriate	219	1	Appropriate	219
	3	Not Enough	70	2	Inappropriate	80*

* Indicates combined value.

APPENDIX H
Recoded Preparation

Recoded Preparation

Factor	Original Values			Recoded Values		
	Code	Preparation	N	Code	Preparation	N
Dimension One	1	Adequate	188	1	Adequate	188
	2	Inadequate	92	2	Inadequate	109*
	3	None received	17	2	Inadequate	109*
Dimension Two	1	Adequate	166	1	Adequate	166
	2	Inadequate	103	2	Inadequate	133*
	3	None received	30	2	Inadequate	133*
Dimension Three	1	Adequate	184	1	Adequate	184
	2	Inadequate	89	2	Inadequate	115*
	3	None received	26	2	Inadequate	115*
Dimension Four	1	Adequate	161	1	Adequate	161
	2	Inadequate	101	2	Inadequate	127*
	3	None received	26	2	Inadequate	127*
Dimension Five	1	Adequate	180	1	Adequate	180
	2	Inadequate	91	2	Inadequate	119*
	3	None received	28	2	Inadequate	119*
Dimension Six	1	Adequate	157	1	Adequate	157
	2	Inadequate	82	2	Inadequate	142*
	3	None received	60	2	Inadequate	142*
Dimension Seven	1	Adequate	100	1	Adequate	100
	2	Inadequate	124	2	Inadequate	198*
	3	None received	74	2	Inadequate	198*

* Indicates combined value.

APPENDIX I
Significant T-Test Results: Emphasis

Emphasis: Significant Independent T-Test Results								
Item	Dimension							
	1	2	3	4	5	6	7	8
univefct	S*							
lvleffct	S**		S*	S*	S*	S*	S*	S*
1						S*		
2				S*		S*		S*
3			S**			S*		
4			S*	S*				
5								
6								
7	S*	S*		S**		S*		
8	S*			S**		S**	S**	S**
9	S**			S**		S*		
10	S**		S**	S**		S**	S**	S**
11			S*	S**		S**	S**	S*
12	S**			S**		S**	S**	S*
13						S**		
14	S*					S*		
15								
16		S*				S**		S*
17	S*	S**				S**		S**
18	S*			S*		S**		
19	S*			S**		S**	S**	
20	S**			S**		S**	S**	
21	S**	S*	S*	S*		S**	S**	S*
22		S*				S**		S**

Emphasis: Significant Independent T-Test Results								
Item	Dimension							
	1	2	3	4	5	6	7	8
23						S**		
24				S*		S*		
25	S*	S*		S*		S*		S*
26A	S*			S*		S**		
26B	S**		S*	S**		S**	S*	S**
26C	S*	S**	S*	S**		S**		S**
26D				S*		S*		
27A	S**			S**		S**	S*	S*
27B	S**	S**	S*	S**		S**	S*	S*
28A	S**		S*	S**		S**	S**	S*
28B	S**	S*	S**	S**		S**	S**	S*
29	S**		S*	S**		S**	S**	S**
30	S**			S**		S**	S**	
31		S*				S**	S**	
32		S*				S**	S**	S**
33	S*	S*		S*		S**		
34	S**	S*		S**		S**	S**	S*
35	S**	S**		S*		S**	S**	S*
36	S**			S**		S**	S**	S**
37	S**					S**		S**
38			S*					
39			S**	S**		S**		S**

Note. Item refers to two indicators of effectiveness and 44 barriers. See survey Appendix xxx. S* indicates $p \leq .05$, S** indicates $p \leq .01$

APPENDIX J
Significant T-Test Results: Preparation

Preparation: Significant Independent T-Test Results							
Item	Dimension						
	1	2	3	4	5	6	7
Univ effect	S**	S**	S**	S**	S**	S**	S**
Level of effct	S**	S*					S*
1							S*
2							
3							
4							
5							
6				S*			
7			S**			S*	S*
8	S**	S**		S*			
9	S**		S**	S**	S**		S**
10	S**						S**
11	S**		S**	S*			S**
12			S**				S*
13				S*			
14							
15			S*			S*	
16							
17	S*						
18			S*				
19	S*						
20							S*
21			S*				
22	S*		S**				S*

Preparation: Significant Independent T-Test Results							
Item	Dimension						
	1	2	3	4	5	6	7
23							
24	S**			S**			
25							
26A			S*			S*	S*
26B	S**		S**	S*			S*
26C	S*						
26D				S*			S*
27A	S*		S**				
27B	S*		S*				
28A	S**		S*				
28B	S*		S*				
29	S**	S*	S*				S*
30	S**	S*					
31	S**	S*	S**				S**
32	S*		S**				S**
33							
34	S*						
35	S*		S*				
36	S**		S**				S*
37	S*		S**				
38							
39	S**	S*	S*	S**		S*	S**

Note. Item refers to two indicators of effectiveness and 44 barriers. See survey Appendix xxx. S* indicates $p \leq .05$, S** indicates $p \leq .01$

APPENDIX K
Significant ANOVA Results: Demographic Factors

SIGNIFICANT ANOVA RESULTS												
Item	Demographic Factor											
	Schl Size	Grade Confg	Dist Type	Ed Level	Yrs in Ed	Tch Exper	Adm Exper	Adm Pos Held	Yrs in Pos	Adm in Bldg	Yrs Since	Wkshp Year
22												
23				S**								
24			S**	S**								
25		S*										
26A								S*				
26B												
26C	S**	S**	S*									
26D					S*	S*						
27A												
27B												
28A												
28B					S*							
29	S*				S**							
30										S*		
31			S**		S*		S*					
32			S*					S*				
33								S*				
34		S**					S*	S*		S**	S*	
35	S*		S*									
36			S*									
37												
38								S*				
39	S*						S*	S*		S**		

Note. Item refers to two indicators of effectiveness and 44 barriers. See survey Appendix xxx.
 S* indicates $p \leq .05$, S** indicates $p \leq .01$