SELF-EFFICACY DEVELOPMENT OF ASPIRING PRINCIPALS

IN EDUCATION LEADERSHIP PREPARATION PROGRAMS

by

Tena Marie Versland

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Tena Marie Versland

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Dr. Joanne Erickson

Approved for the Department of Education

Dr. Robert Carson

Approved for the Division of Graduate Education

Dr. Carl A. Fox

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April 2009

DEDICATION

To my parents, Byron and Bessie Versland

Thank you for teaching me the value of hard work, and that accomplishment is its own reward. Thank you also for helping me understand that you never really accomplish anything meaningful without the love and support of others. I wish you could have been here, Dad, to see this.

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ABSTRACT

Much attention has been given to the importance of principal preparation programs in equipping principals with the knowledge and skills necessary to effectively lead schools. However despite this attention, many critics from inside and outside the higher education community do not believe preparation programs have gone far enough or have made the necessary changes to insure that principal candidates gain the skills and knowledge necessary for the demands of leadership in contemporary schools. Bandura (1997) found that people's self-efficacy, the judgments of their personal capabilities, rather than their actual skills and knowledge, is what drives them to achieve goals they set for themselves. Since little research exists that examines principal self-efficacy, or how preparation programs contribute to self-efficacy, preparation program faculty have limited understanding about how program elements positively influence self-efficacy development.

The purpose of this mixed methods study was to: examine principals' perceptions of the effectiveness of their preparation programs, determine the underlying factors that contributed to principal self-efficacy, understand how program elements contributed to self-efficacy, and suggest ways that preparation programs might more purposefully design experiences that promote self-efficacy development in aspiring principals. Quantitative questionnaires were sent to 538 practicing principals in Montana to rate the effectiveness of their preparation programs and their principal self-efficacy. Principals who rated their programs as effective and who also rated themselves as self-efficacious were chosen for qualitative interviews to determine how preparation program elements contributed to their self-efficacy development.

The findings suggest that: (a) four factors – leadership experiences, motivation, authentic learning experiences, and self regulation contributed to self-efficacy development of aspiring principals; (b) self-efficacy was developed through experiences that caused relationship building and learning from others, authentic experiences working with others and persistence and perseverance; (c) preparation programs can more purposefully create efficacy building experiences through: designing experiences that cause students to master the art of working with other people, developing internship and field experiences of breadth and depth, encouraging principal candidates to obtain prior leadership experiences, and to monitor students in "grow your own" programs to insure that loss of self-efficacy does not occur as a result of broken relationships.

CHAPTER 1

INTRODUCTION

<u>Background of the Study</u>

Over the last decade, the importance of principal leadership to continuous school

improvement and increased student achievement has become a well-trod plank on the

platform of educational reformers seeking an elixir for all that ails public education

(Fullan, 2003; Leithwood, Fullan & Watson, 2003; Fink & Resnick, 2001). Since the

1980's, principals have been called upon not only to manage the financial and human

resource affairs of a school, they have also had to mend the social fabric of their

communities, partnering with law enforcement and community agencies in counseling

parents, mediating family disputes and finding protection and support for students outside

the classroom walls. With the passage of the No Child Left Behind Act in 2001, another

layer of responsibility was added to the already long list of principal duties. School

leaders, in this new age of educational accountability, are expected to possess an all-

encompassing knowledge of teaching and learning toward the creation and design of

educational programs that promote academic rigor and excellence, while maintaining safe

learning environments and positive school cultures where social justice can flourish

(Grogan and Andrews, 2002; Murphy, 2002). Additionally, they have had to learn to

generate and manage data as proof of the successes of the myriad school improvement

interventions they have been expected to lead. Ultimately, principals have seen their

roles grow from

managers of financial and human affairs to the agents of change for student success and system accountability. Larry Lashaway (2000) asserts that accountability, by its nature, has created the context for a new school leadership orientation. "Accountability is not just another task added to the already formidable list of the principal's responsibilities. It requires new roles and new forms of leadership carried out under careful public scrutiny while simultaneously trying to keep day-to-day management on an even keel" (p.13).

However, complicating these processes of role transformation and increased accountability is the fact that principal leaders have been expected to lead change and increase student achievement in a climate of changing institutional norms where school improvement goals often take a backseat to union contract negotiation and teacher autonomy concerns (Elmore, 2006). Unfortunately, as school leaders' responsibilities have multiplied, the same cannot be said for the pool of talented principals needed to lead today's schools (Fullan, 1997). Fry, O'Neill and Bottoms (2006) contend that there is not so much a shortage of school administrators in the United States, only a shortage of quality school leaders. Aguerrebere, Houston and Tirozzi (2007) wrote "The demands on principals and their need for advanced training—particularly training in instructional leadership—are growing and have made the job much more challenging. Not only is it becoming increasingly difficult to attract prospective candidates to the principalship, but also, just as troubling, it is harder to keep effective and experienced administrators on the job. We need to offer these valuable school leaders an incentive to enter and then remain in the profession" (p.28).

With the emergent understanding of the importance of principal leadership growing among education reformers and the public in general, one only needs to pick up a

newspaper to discover the obvious truth that not every school can boast that it has a principal who possesses all of the attributes of the ideal instructional leader. Such recognition has generated a renewed interest as to how principals are best trained and prepared for their role in instructional leadership, and with that interest has also come criticism of principal preparation programs.

Within the last several years, a large body of research has suggested that universities and schools of education leadership have not adequately prepared candidates to meet the new challenges necessary to fulfill the expectations of the instructional leader role (Cambron-McCabe, 1999; Levine, 2005; Murphy, 2002; Tirozzi, 2001). From flaws in selection and recruitment of potential candidates to charges of inadequate clinical practice and field experience, education reformers (Levine, 2005; Hess and Kelly, 2005; Fry, O'Neill and Bottoms, 2005) have cited inadequacies encompassing nearly every element of institutional principal preparation programs.

Not only have critics outside the system launched assaults on the quality of education leadership programs, practicing administrators have also expressed dissatisfaction with principal preparation. Farkas and associates (2001) in their *Public Agenda* survey found that 69% of principals and 80% of superintendents believed that "typical leadership programs are out of touch with the realities of what it takes to run today's school districts." Additionally, 85% of those administrators surveyed believed that a recasting of preparation programs would improve school leadership (Murphy, 2002). In an Education Week article from December 12th of 2007, Aguerrebere, Houston and Tirozzi lament the lack of perceived instructional leadership focus in university preparation programs. "Principals themselves tell us they need more training in how to strengthen

relationships with teachers and mobilize a school's resources for student learning. This is not surprising. Instructional leadership has too often been diluted and given a low priority as part of principal-preparation programs" (p.28).

However, if the goal is to significantly improve school leadership, how can we be sure that the redesigning of principal preparation programs alone will produce the leaders needed to meet the daunting challenges of school improvement? According to Young and Petersen, (2002) although the necessity for preparation program revision has long been a topic of discussion within the higher education community, that meaningful redesign has yet to occur in many schools of education and university based programs. At best, programs have seemingly been slow to change. If so, perhaps more is needed to produce instructional leaders capable of meeting the demands of today's schools than simply a redesign of preparation programs.

Along with specific skills and knowledge, researchers contend that self-efficacy, the belief in one's capabilities to accomplish a given task, also contributes to leader success (Bandura, 1986; McCormick, 2001; Paglis and Green, 2002). Dr. Albert Bandura (1986) in his research with social cognitive theory and self-efficacy found that beliefs and judgments about personal capabilities, rather than their actual abilities drive people to accomplishing goals they set for themselves. Bandura made clear that more important than skills alone is the judgment of what a person can do with the skills he or she possesses. "It is when one is applying skills that high efficacy intensifies and sustains the effort needed to realize a difficult performance" (Bandura, 1997, p.394). Bandura (1997) also found that self-efficacy is vital to leadership because, "When faced with obstacles, setbacks or failures, those who doubt their capabilities slacken their efforts, give up or

settle for mediocre solutions. Those leaders who have a strong belief in their capabilities redouble their efforts to master the challenge" (p.120). Gist and Mitchell (1992) also found that self-efficacy beliefs have a significant effect on goal setting, levels of aspirations, effort, adaptability and persistence. Self-efficacy beliefs make it possible to structure a desired course of action to produce specific results (Bandura 1986).

Paglis and Green (2002) posit that leader self-efficacy enables a leader to accomplish leadership tasks of direction setting, gaining follower commitment, and overcoming obstacles. More specifically, leader self efficacy is the leader's judgment that he or she can successfully exert leadership by setting the direction for the work group, building relationships with followers in order to gain commitment to change goals, and working with followers to overcome obstacles to change. Michael McCormick (2001) defined leadership self-efficacy as an individual's perceived capability to perform the cognitive and behavioral functions necessary to regulate group process in relation to group achievement. McCormick viewed leadership self-efficacy as a focal construct that affects the goals leaders select, their motivation, the development of functional leadership strategies, and the skillful and successful execution of those strategies.

Simply redesigning principal preparation programs alone may not be the answer to producing leaders capable of meeting all the challenges of today's schools. However, Megan Tschannen-Moran and Christopher Gareis in their study, *Cultivating Principals Sense of Efficacy* (2005) suggest that pairing research based principal preparation programs with purposeful experiences targeted at developing principal self-efficacy would seem to hold promise as a two-pronged approach to school leader training.

The benefits associated with strong self-efficacy, as described by Bandura (1997) and others, along with research-based preparation programs, might more fully contribute to the success of principals by empowering them to apply skills successfully in the real world contexts of today's schools. If so, how might self-efficacy beliefs be developed in concert with effective principal preparation programs so that aspiring principals not only gain knowledge and skills, but also are able to select and execute the correct strategies to accomplish their goals?

If principal preparation programs could address functional knowledge and skills through well designed curriculum and instructional experiences, and insure that the sources of self efficacy development: mastery experiences, vicarious experiences, social persuasion, and arousal states were all equally intertwined throughout the university experience, aspiring principals might be better able to successfully assume the complex role of school leadership. Examining principal self-efficacy in the context of principal preparation programs allows for the investigation of correlations between the perceived effectiveness of research based program elements and the concurrent development of or change in self-efficacy beliefs of aspiring principals. Knowing if and how self-efficacy is developed throughout principal preparation programs strengthens university faculty's ability to revise program elements to better reflect those experiences necessary for leader success.

Statement of the Problem

Despite its promise as a catalyst for implementing and executing cognitive strategies for the tasks of school leadership, principal self-efficacy development has mostly been

unexplored (Tschannen-Moran & Gareis, 2005). In terms of principal preparation, it is

not known if or how self-efficacy is developed within university based programs.

Similarly, the elements of preparation programs which most contribute to principal

self-efficacy have not been identified.

To better understand the context of this issue, it is important to recognize that many

education leadership programs are engaged in processes of re-examination and revision

as a means of responding to the criticisms of those inside and outside the education

leadership community. To illustrate, Dr. Joanne Erickson (personal communication,

March 5, 2007) Montana State University Program Leader for Education Leadership,

states that the Montana State University education leadership faculty has been involved in

a continuous effort toward program redesign. That redesign reflects not only the

Interstate School Leaders Licensure Consortium (ISLLC) standards, but also the

recommendations from the University Council of Education Leadership (UCEA) and the

Southern Regional Education Board (SREB). SREB, through support from the Wallace

Foundation, conducted a study of 22 pacesetter universities engaged in leadership

program redesign entitled, *Schools Can't Wait: Accelerating the Redesign of University*

Preparation Programs (2006). That report found that those universities which had made

important inroads in principal preparation program redesign had met four "core

conditions" encompassing university district partnerships, research based leadership

practices, quality field experiences and program evaluations which included data

collected from program graduates (p.31).

Seeking to create those same "core conditions," Montana State University faculty

have "re-tooled" courses and experiences to further emphasize the role of instructional

and transformational leadership with a focus on teaching and learning across all disciplines of study (Joanne Erickson, personal communication July 1, 2007). That "re-tooling" has also occurred instructionally as faculty utilize problem based learning strategies and case studies to illustrate how theoretical frameworks can be applied to authentic practices. Additionally, Montana State University's new Indian Leader Education and Development (I –LEAD) program has partnered with individual school districts on or near reservations to recruit and select Native American principal candidates. The program has been designed to employ a continuous field experience so that aspiring Native American principals can gain the opportunity to practice leadership behaviors relevant to coursework and curriculum in a realistic, "contextualized" approach while they are employed teaching in their individual districts.

As reported by SREB (2006), the core condition that seems to be underdeveloped at many universities and colleges of education leadership is a program evaluation component, which measures the extent to which program graduates perceive that their principal preparation programs prepared them for their roles as instructional and transformational leaders. While course evaluations occur and act as a measure of student satisfaction, few formal data collection measures beyond individual course evaluations exist to provide a more thorough understanding of graduates' perceptions of program effectiveness.

Moreover, while self-efficacy is considered an important factor for the successful execution of skill and knowledge application in the tasks of instructional/transformational leadership (McCormick, 2001), little is known about how and when principals developed self-efficacious beliefs about the principalship. Because there is little evidence as to

whether principal preparation programs contribute to the development of, or change in, self-efficacy beliefs of aspiring principal candidates, it is also unknown how those beliefs may be influenced by specific elements of the program. Neither is there evidence which links more favorably perceived program elements to higher levels of self-efficacy development.

Determining what practicing principals perceive about the effectiveness of their principal preparation programs and identifying the program elements that most influenced how their self-efficacy beliefs were changed or developed provides the context and basis for this study.

Purpose of the Study

The purpose of this mixed methods study is to describe and explain how the elements of principal preparation programs contribute to the self-efficacy development of principals. The study will attempt to identify those specific elements in education leadership programs, which most contributed to principals' self-efficacy beliefs. The results of this study will be used to inform education leadership program faculties about what preparation program elements most contribute to principal self-efficacy with recommendations about how faculties might utilize existing experiences to further enhance the sources of self-efficacy development within preparation programs. An additional benefit could be gained as preparation program faculties utilize the results of this study to further understand the importance of personal interactions and continuous feedback (elements of social persuasion) to relationship building.

Research Questions

The following questions provide the direction for the investigation of principal preparation and self efficacy development.

1. What are the perceptions of Montana practicing principals regarding how well their principal preparation programs prepared them for the demands of principal leadership?

2. What preparation program elements do principals perceive as contributing to the development of principal self-efficacy?

3. How did specific elements within preparation programs contribute to principals' self efficacy development?

4. What unplanned experiences do principals identify that contributed to the development of self efficacy during their preparation programs?

Methodology

The design of this study featured a mixed methodology approach using quantitative data analysis of the items from the Principal Preparation Program Questionnaire and qualitative interviews. The quantitative questionnaire had two sections and used a nine-point semantic differential (e.g., 1 = "Not At All" to 9 = "A Great Deal") scale to code responses for 34 closed end questions regarding principals' perceptions about specific elements in their preparation program. That section of the questionnaire was based on findings from studies by the Stanford Education Leadership Institute (SELI, 2005) and the Southern Regional Education Board (2006); selected survey items from those studies were modified by the researcher to fit this study. The second section of the questionnaire

used the 18 item Principal Self Efficacy Scale (PSES) developed by Megan Tschannen-Moran and Christopher Gareis (2005). The PSES section used an identical nine point scale and asked principals about their beliefs in their abilities to accomplish certain aspects of principal leadership such as: managing change in their school, promoting acceptable behavior among students, motivating teachers and raising student achievement on standardized achievement tests.

The qualitative portion of this mixed methods study utilized a 10 question, open ended interview protocol that asked principals how specific elements of their preparation programs influenced the development of their self efficacy. Principals who rated their preparation programs highly and who also rated themselves highly on the Principal Self Efficacy Scale were selected as potential candidates for the follow up qualitative interviews.

The Principal Preparation Program (P3) Questionnaire was sent electronically during the third week of January 2008 to all 538 practicing principals working in Montana public and private accredited schools. The questionnaire yielded a response rate of 54% as 292 of the 538 Montana principals participated in the quantitative portion of the study. Descriptive statistics in the form of percentages were used to report demographic characteristics of the participants.   Means and standard errors were also reported for each of the items on both the preparation program section and the self-efficacy section of the questionnaire. Once descriptive statistics establish means, standard errors and mode values, a series of multivariate analysis of variance (MANOVA) were conducted to determine if preparation program effectiveness and self-efficacy were perceived differently among the groups of respondents. Results from comparison groups provided

information about program effectiveness and self efficacy across several independent variables including: years of principal experience, size of school served, level of principalship (elementary, middle or high school) and the institutions where principals were trained. An exploratory factor analysis was completed to identify which survey questions loaded into a particular factor so that the elements of preparation programs which most account for perceived program effectiveness could be readily ascertained. Four factors were retained in the analysis which delineated the importance of leadership experiences, motivation, authentic learning and practice, and persistence and perseverance.

In the qualitative phases of the study, a list of 22 potential interview subjects was drawn from principals' responses on both the preparation program section and the self efficacy section of the quantitative questionnaire. Out of the 292 respondents, 22 principals rated their preparation programs and their self-efficacy highly giving each item on the questionnaire a score of seven or higher on the nine point scale. Principals were interviewed using the Self-Efficacy Interview Protocol developed by the researcher. The interview questions were also developed to investigate the four sources of self efficacy development: mastery experiences, vicarious experiences, social persuasion and emotional reactions (Bandura, 1986) as they relate to the elements of research based principal preparation programs. The protocol asked specifically if interviewees could identify their sources of self-efficacy development (Bandura, 1986) within their preparation programs and how those program elements influenced principals' self-efficacy development. It was important to investigate the sources of self-efficacy relative to elements of principal preparation programs because by doing so, education leadership

faculty can utilize the results of this study to purposefully design those interactions and experiences which were found to promote self-efficacy among candidates in preparation programs into already existing coursework and instructional practices.

Significance of the Study

Without quality instructional leadership in every school, accountability reforms such as No Child Left Behind (NCLB), have little chance of genuinely raising student achievement. Though there have been various attempts at developing alternative administrator preparation programs such as leadership academies and individual district sponsored programs, most practicing principals will gain their skills and knowledge through university – based programs (Young & Petersen, 2002). Since Montana is rural and does not have large school districts that can afford to train and certify their own principals, university programs are the most efficient and cost effective means of principal preparation. Also, current state certification for principals requires a Master's degree from an accredited university's school of education leadership (Montana Office of Public Instruction, 2006).

Since university programs bear the greatest responsibility in terms of principal preparation, education leadership faculty must develop procedures in addition to national accreditation reviews to thoroughly evaluate their preparation programs to insure that what is being taught reflects the real needs of principals in the field. The results from this study can inform education leadership faculties and add another dimension to the decision making process during program evaluation for principal preparation programs within the Montana University system. Understanding the perceptions of graduates can provide a data rich environment where NCATE review recommendations and faculty

focus group discussions triangulate with actual practitioner experiences to create a clear focus for program development and improvement.

Although the quantitative questionnaire in this study provides an important data source for understanding principals' perceptions of the effectiveness of preparation programs and can ultimately guide program evaluation, preparation programs alone do not guarantee success in the field.   A district's labor relations, budgetary constraints, public confidence in its schools, and community support all affect the principal's ability to significantly influence school climate, professional development, and instructional practices and curriculum and ultimately affect student achievement. Since no preparation program can directly control for these environmental conditions principals must come armed with not only professional knowledge and skills, but also the belief in their abilities to accomplish their goals and the perseverance to ride out the storms that threaten those goals. Tschannen-Moran and Gareis (2005) assert that "Principals' efficacy beliefs influence the level of effort and persistence that is expended in their daily work, as well as their resilience in the face of setbacks. It is not enough to hire and retain the most capable principals; they must believe that they can successfully meet the challenges of the tasks at hand" (p. 24). They must possess self-efficacious beliefs about working with people and being able to regulate group processes so that goal achievement can occur (McCormick, 2001, p.30). Leaders must communicate their beliefs and role model their commitment to the goals in order to impact the attitudes and performances of their followers (Paglis & Green, 2000).

Because self-efficacy can account for a 28% gain in job performance (Stajkovic & Luthans, 1998), it then becomes vital that education leadership faculty understand how

their instructional practices, coursework decisions and interpersonal interactions influence the self-efficacy of aspiring principals. Bandura (2000) found that in training managers, three conditions – guided mastery, cognitive mastery, and self regulation support self-efficacy development Guided mastery provides instructive practice in acquiring a skill and then allows transfer of that skill back to the job context. Cognitive mastery uses mental models to develop thinking skills and reasoning strategies in decision making. Finally, self regulation competencies such as self monitoring, goal setting and motivational incentives provide the third condition for success. Tschannen-Moran and Gareis posit that creating those same conditions within principal preparation programs can occur in order to cultivate an understanding of not only how to raise student achievement, but also the persistence that fuels principals' efforts toward that goal. Purposeful experiences embedded within coursework, interactions and internships that combine skills, knowledge and self efficacy development must occur if education leadership programs are truly going to prepare leaders for the challenges inherent in today's school. It is in this context of understanding how principal self-efficacy is and perhaps could be more purposefully developed within preparation programs that this study finds its importance.

Limitations and Delimitations of the Study

   Preparation program effectiveness is difficult to measure; and this study is based only on the perceptions and opinions of principals. There was no data collected that triangulate student achievement and school success with principal perceptions of program effectiveness. Therefore, program effectiveness was only measured by principals' perceptions of their own successes or challenges. There was no attempt to link student

achievement scores in respondents' schools back to their specific preparation programs to correlate student achievement principal self-efficacy and preparation program effectiveness. Additionally, the study made the assumption that the preparation program "re-tooling" that has occurred at Montana State University (Erickson, 2007) has likewise been present in other education leadership programs, and that those research based programs would produce graduates more able to meet the challenges of principal leadership.

However, simply because a program is research based, there is no guarantee that it will produce only successful principals; likewise it can not be assumed that all graduates of traditional programs enjoy lesser degrees of success in the principalship. Whether or not programs are considered to be research based, their effectiveness is being determined only by the self reports of program graduates relative to their own successes. As such, principals from traditional preparation programs might perceive that they had been well prepared for the principalship because they have enjoyed success. However, their success may be more a function of their own innate abilities to work with people, create positive school climates and make decisions than from any formal coursework or preparation program experience. Conversely, some principals who completed research based programs may have experienced limited success and may blame their challenges on inadequate preparation. They might believe that they were not exposed to robust enough coursework or experiences to give them the tools to carve out success, when in fact, their preparation was quite thorough. For these principals, the lack of success they have experienced might be attributed to personal factors such as possessing limited intellectual

capability, lacking persistence, or exhibiting poor social skills, than inadequate preparation.

A second limitation is that measures for student achievement were not investigated in the schools of principals who reported that they possessed high levels of self-efficacy. Therefore, the degree to which principal self-efficacy of preparation program graduates has resulted in student achievement gains or overall school improvement is not known.

Determining that only the Principal Preparation Program Questionnaire responses would be used to select principals to be interviewed about their self-efficacy beliefs was a delimitation of the study.   Principals were selected for interviews on the basis of how they rated their preparation programs and their own self-efficacy. Only those principals who rated both their preparation program and their own self-efficacy highly were chosen for possible interviews. The assumption behind that delimitation was that effective preparation programs had a positive influence on the self-efficacy of successful principals. Whether principals who reported favorable perceptions of their preparation programs had high levels of self-efficacy due to those programs, or, whether their high levels of self-efficacy actually contributed to principals' positive perceptions of their preparation programs could not be determined.

Other delimitations of this study were based on selection criteria of participants being practicing principals in Montana. This was important for two reasons. First, although studies of preparation program effectiveness have been conducted elsewhere in the United States, no similar study has been completed in Montana or a rural state with similar demographics.   Additionally, the researcher wanted to understand what Montana principals perceived about their preparation programs because the researcher has an

interest working as a university education leadership program faculty member. This positionality led the researcher to conduct the study through the lens of examining leadership programs processes rather than specific rural contexts.   Understanding principals' perceptions of university program strengths and weaknesses would be advantageous to one pursuing employment on an education leadership faculty.

   The second reason for delimiting participation to Montana's practicing principals was done to gain an understanding of what practicing principals believe about their abilities to transform teaching and learning in their schools. To fully understand that meant examining "lived experiences" of men and women who are working in schools as principals. As such, the decision was made to only study those people who are actually practicing administrators and not everyone who earned certification.   There are several reasons why people who have earned principal certification have chosen not to pursue principal positions or have left the principalship. In a rural state such as Montana, some people may be place bound and unable to move to pursue positions in education leadership due to family needs and commitments that require them to remain in the community where they are currently teaching. Others may have never been interested in obtaining a principal position, but chose to pursue the Master's degree in education leadership to move on the salary schedule in their current district and garner a higher salary. A third reason may be that not all program completers feel that they possess the skills or desire necessary to be successful in school leadership positions. While it would be valuable to seek out those perceptions in order to understand preparation program influence on self-efficacy, doing so was determined to be beyond the scope of this study. However, it was recognized that program completers who are not practicing school

leaders may have had more negative perceptions of education leadership programs. Whether those program completers have not sought employment due to their feelings of inadequacy and being inadequately prepared for school leadership, or, whether some have in fact, applied for positions for which they have not been selected, they may perceive that their preparation and ultimately, their preparation programs, have limited their ability to gain a position in school leadership. Although those perceptions were not reported in this study, they are no less valuable in understanding principal preparation experiences as a whole and should be addressed in another study or in another component of program evaluation.

Another delimitation of this study was that soliciting information only from practicing principals in Montana narrows the generalizability of the quantitative survey results to a population outside Montana. Most practicing principals in the state of Montana have earned their principal certification from one of three state institutions, the University of Montana, Montana State University or Montana State University – Northern. A small percentage of Montana's practicing principals have gained certification outside the state prior to relocating here. While the results of this study may shed light on the effectiveness of practices in education leadership programs within the Montana University system, those results are difficult to generalize beyond these institutions. Although there have been many studies done around the country relative to principals' perceptions of their preparation program effectiveness, no formal study has occurred within the state of Montana. The data from this study provide another piece of information in addition to course evaluations that education leadership programs in

Montana can use for assessing overall program effectiveness as well as in subsequent

program improvement discussions.

<u>Definitions</u>

1. "Instructional Leadership" is the construct describing school leaders who maintain
   a relentless focus on teaching and learning, lead complex change and share
   leadership responsibilities" (Waters, Marzano and McNulty, 2003).

2. "Principal Preparation Program" refers to a university based degree or certificate
   program that includes coursework and experiences designed to ready candidates
   for a position as a school principal.

3. "Self-Efficacy" is a social cognition that describes an individual's belief in their
   capabilities to organize and execute the courses of action required to produce
   given attainments (Bandura, 1997, p.3). Sources of self-efficacy are mastery
   experiences, vicarious experiences, social persuasion, and arousal states.

4. "Mastery Experience" is the primary source of self-efficacy. Mastery experiences
   are the most influential source of self-efficacy information because they provide
   the most authentic evidence of whether one can muster what it takes to succeed.
   Successes build a robust belief in one's personal self-efficacy. Failures
   undermine it (Bandura, 1997, p.80).

5. "Vicarious Experience" is a second source of self-efficacy where the modeling of
   others has an affect on one's self-efficacy. Beliefs about one's capabilities are
   influenced by social comparative inference where the attainments of others' who
   are similar to oneself are judged to be diagnostic of ones' own capabilities
   (Bandura, 1997, p.87).

6. "Social Persuasion" is a third source of self-efficacy that comes from positive

   evaluative feedback and encouragement from significant others. Verbal

   persuasion alone may be limited in its power to create enduring increases in

   perceived efficacy, but it can bolster self-change if the positive appraisal is within

   realistic bounds. People who are persuaded verbally that they possess the

   capabilities to master given tasks are likely to mobilize greater effort and sustain

   it than of they harbor self doubts and dwell on personal deficiencies when

   difficulties arise (Bandura, 1997, p.101).

   "Arousal States" represents the fourth source of self-efficacy. In judging their

   capabilities, people rely on somatic information conveyed by physiological and

   emotional states. People read these states in stressful or taxing situations as signs

   of vulnerability to dysfunction. Because high arousal can debilitate performance,

   people are more inclined to expect success when they are not best by aversive

   arousal than if they are tense or viscerally agitated (Bandura, 1997, p. 106).

<center>Chapter Summary</center>

Chapter one has introduced and outlined the rationale for this study and its

significance in adding to the knowledge base regarding principal preparation programs

and the development of principal self-efficacy. Chapter one provided a statement of the

problem, the purpose of the study, the research questions answered, limitations and

delimitations. The significance of the study and definition of terms were also included.

Understanding principals' perceptions of the effectiveness of preparation programs in

terms of their self-efficacy beliefs is useful in program evaluation. This study also

provides data for education leadership faculties to support informed decision making

regarding elements of preparation programs. Chapter two will review the literature

base regarding principal preparation programs and self-efficacy development to define

the theoretical framework for this study.

CHAPTER 2

LITERATURE REVIEW

Understanding the perceptions of principals regarding the effectiveness of principal

preparation programs is important to education leadership faculty and policy makers.

Equally important is the understanding of how those leadership program elements

contribute to principal self efficacy development. That information can provide the basis

for replicating or revising program elements to further strengthen the principal

preparation program experiences for principal candidates. The purpose of this mixed

methods study is to examine how the elements of principal preparation programs

contribute to the self efficacy development of principals. The results of this study will be

used to inform education leadership program faculties about what preparation program

elements most contribute to principal self efficacy with recommendations about how

faculties might utilize existing experiences to further enhance the sources of self efficacy

development (mastery and vicarious experiences) within preparation programs.

  Chapter two presents a review of literature regarding the importance of principal

leadership on student achievement and overall school improvement. A historical glance

at the move from "principal as manager' to "principal as instructional leader" underscores

the need for change and revision of principal preparation programs. Research findings

from notable education reformers critique preparation programs and identify program

elements necessary to develop instructional leader principals.

This chapter also reviews the historical development of the theory of self efficacy and its sources. Studies are cited that discuss the importance of leader behavior on teacher efficacy and performance and the impact principal self efficacy has on the collective efficacy of a school and ultimately its success. A culminating argument will be made that suggests that the purposeful inclusion of experiences and interactions designed to promote self efficacy development into a research based principal preparation program could strengthen the overall preparation experience for aspiring principals.

Importance of Instructional Leadership

Over the last two decades, the importance of principal leadership to school improvement has become a foregone conclusion. Study after study has placed the spotlight directly on principals for maintaining school safety, changing school culture and climate and ultimately improving student achievement and learning. Hess and Kelly (2005), describe the demanding expectations and responsibilities of school leaders this way:

> School leaders are the front-line managers, the small business executives, the battlefield commanders charged with leading their team to new levels of effectiveness. In this new era of accountability where school leaders are expected to demonstrate bottom line results, and use data to drive decisions, the skills and knowledge of principals matter more than ever…school improvement rests to an unprecedented degree on the quality of school leadership (p. 2).

In Waters, Marazano and McNulty's *Balanced Leadership* (2003), a meta-analysis of over 5000 studies of factors affecting student achievement was conducted. From that meta analysis, 21 principal responsibilities along with 66 behaviors were identified that

have reinforced our understanding of the complex and necessary role of the principal.

That study found that principal leadership matters and that the application of leadership

responsibilities is significantly correlated with higher student achievement. Waters, et al,

also argue that leadership is more than just possessing knowledge about schools and

education. They state:

> Effective leaders understand how to balance pushing for change, while at the same time protecting aspects of culture, values and norms worth preserving. They know which policies, practices, resources and incentives to align and how to align them with organizational priorities. They know how to gauge the magnitude of change they are calling for and how to tailor their leadership strategies accordingly. Finally, they understand and value the people in the organization. They know when, why and how to create learning environments that support people, connect them with one another and provide the knowledge, skills and resources they need to succeed (p. 2).

In another study commissioned by the Wallace Foundation and conducted by the

Stanford Educational Leadership Institute, Davis, Darling – Hammond, LaPointe &

Meyerson (2005), posit that in reviewing the existing research and literature about the

importance of principal leadership, two attributes of effective school principals have

gained widespread acceptance. Successful school leaders influence student achievement

through the support and development of effective teachers, and through the

implementation of effective organizational practices.

The concept of principals having a powerful influence on the overall achievement of

students has resulted in profound changes in the principal's role. Once thought of only in

terms of a mid-level manager, today's instructional leader principal is expected to possess

an all encompassing knowledge of teaching and learning toward the design of educational

programs that promote academic rigor and excellence (Grogan & Andrews, 2002). This

new principal is also expected to create and maintain safe learning environments and positive school cultures for students and teachers. Ultimately, this instructional leader has been asked to revive a failing institution so that the tenets of No Child Left Behind might contribute to an ideal scheme in which social justice and educational excellence breathes new life into our social, political and economic systems.

To accomplish these awesome tasks of instructional leadership, principals must have the knowledge, skills and training to begin their work. Although alternate principal preparation systems exist, such as state based alternative programs, for-profit online companies and foundation funded partnerships (Barbour, 2005), most principals will obtain their principal training and certification from universities and schools of education (Young & Petersen, 2002). Since universities bear the greatest responsibility for preparing the new breed of principal leaders, programs in education leadership must also change to reflect the training and knowledge essential for leader success.

Are universities and schools of education providing principals with the skills and knowledge needed for success in today's schools? Some theorists would say that even though the necessity for preparation program revision has long been a topic of discussion within the higher education community, many schools of education and university based programs have been slow to change (Young & Petersen, 2002). To more fully understand the issues surrounding preparation program revision, an understanding of the historical context of school leader preparation is required.

Historical Perspective on Principal Preparation

In the 19th century, children were mostly educated in one room schools with a single teacher responsible for delivering a basic curriculum. As the population increased, schools became larger, employing more teachers in larger multi-room schools. With a growing population and more services added, the necessity for role differentiation gave way to the concept of "head teachers" or "principal teachers." In addition to mentoring and assisting other teachers within the school, the principal teachers also became responsible for clerical tasks and organizational duties (Goldman, 1966).

In the early 1900's and as enrollment in high schools burgeoned, so did the need for administrators who could maintain order and manage the financial and business needs of a school. In 1900, no degree programs for administrator preparation existed, only coursework and single subject offerings (Powell as cited in Levine, 2005). However, more than 125 colleges and university degree granting programs emerged after World War II (Murphy, 1998).

After the 1920's and as each decade brought new social, economic and political contexts, the preparation programs for school leaders changed as well. Joseph Murphy, (1998), describes the evolution of preparation programs as "eras of ferment" in which past ideas were challenged and replaced with new paradigms that paralleled societal changes. Murphy identifies three distinct "eras" in the last 100 years. The prescriptive era (1900-1946) saw the rise of formal preparation programs which emphasized technical and business skills. Pedagogical expertise was valued during this era as program instructors mainly came from the practitioner ranks.

The post-war period from 1947-1985 was characterized by a move to embrace theoretical

ideas from the social sciences. Professors teaching within the preparation programs

during this period were theorists with little practical experience leading schools. Murphy

(1999) categorizes the current period as the "dialectic" era where preparation programs

are the subject of intense scrutiny from both inside and outside the education community.

In addition to scrutiny, this period is defined by "notable efforts to define rigorous

standards for the profession" (p. 367). The current period has been marked by a

realization that education leadership professors ideally should possess practitioner skills

and experience as well as research capabilities (Jackson, 2001).

Grogan & Andrews (2002) agree and further relate that the principalship of the 1920's

was characterized by a values based concern with pedagogy and that the role of the

principal was to maintain the connection between family values and the school. The

1930's saw a move toward the scientific and technical management of schools. Post

World War II patriotism of the 1940's and 1950's influenced the principalship through

stressing the importance of education for a strong and democratic society (Lucas, 2001).

The Soviet launch of Sputnik in 1957 catapulted United States schools into a

revolution focused on academic excellence, especially in regards to math and sciences.

Empirically based strategies for management and instruction became the prevailing

theme for principal preparation programs. The social issues of the 1970's such as drug

abuse, racial tensions and teen sexuality drew principal focus away from academic

leadership and thrust principals into roles paralleling social work. For the first time, the

outcry for accountability rose while the public confidence in American schools declined

(Grogan & Andrews, 2002). That theme of accountability became even stronger in the

late 1970's and early 1980's as economic competition with Japanese companies led to the report, *A Nation at Risk* (1983). That publication renewed the call for schools to refocus on academics and technical skills that would bolster the workplace. While some small forays into social awareness issues have occurred, the focus on academics and accountability has continued to the present with No Child Left Behind (2001) taking center stage in the national education debate.

Unlike the pure sciences and true to its social science roots, principal preparation programs have been influenced by societal shifts and public pressures. Though the focus in public schools has been on academic preparation for about the last two decades, many schools of education leadership have continued to prepare candidates to lead schools as managers rather than instructional leaders, focused on teaching and learning. Young and Petersen (2002) assert that despite the call for revision, few programs have produced substantive changes and that the question of education leadership program effectiveness continues to generate considerable criticism and discussion. It is in this context of criticism that the literature review on preparation programs will continue.

<u>Criticisms of Preparation Programs</u>

<u>Certification Doesn't Insure Quality</u>

In the 1990's, considerable attention was paid to an impending turnover and shortage of school leaders (Whittaker, 2001). In 1998, a study by the Educational Research Service and commissioned by the national elementary and secondary principals' associations (NAESP, NASSP) found that 50% of school districts in the study reported a shortage of qualified applicants to fill principal positions. Additionally, state directed

studies such as the Montana School Boards Association (MSBA) study in 1999, also

revealed that filling administrator positions, especially in the light of increasing

retirements, had become very difficult.

While many districts may report that the applicant pools for principal positions have

dwindled significantly, recent studies have revealed that the problem isn't necessarily

related to a shortage of certified principals, but instead a lack of qualified ones (Bottoms

& O'Neill, 2001).   In the Southern Regional Education Board (SREB) states, all 16

states have an ample supply of people who hold principal certificates. From 1998-2001,

Texas had certified more than 7,000 school administrators – enough to replace every

principal in the state. Georgia had 3,200 people who were certified as administrators, but

were not employed in administrative positions. Other SREB states were oversupplied

with principal candidates.   In the SREB study, Bottoms & O'Neill reported that in a

large urban district, not one of the 35 candidates reviewed for a principal position met the

published criteria and needs. They summed up the concerns thusly, "certification, as it

exists today, is not proof of quality" (p.2).

Convenience over Quality

Much of the blame for this perceived lack of substantively prepared principal

candidates comes as a result of having too many preparation programs. Despite the

National Commission on Excellence in Educational Administration (1987)

recommendation to close three fifths of the graduate programs in school leadership, the

number of principal preparation programs has actually increased to over 600 (Levine,

2005). The resulting competition for students has changed the focus of many of these

programs to promote convenience over quality. Young and Petersen, (2002) assert that

the argument that having many preparation program options, including private and non-profit programs as recommended in *Better Leaders for America's Schools: A Manifesto* (2003), would strengthen education leadership and work much the way economic competition does has not held true. Moreover, Murphy & Forsyth (1999) found that many principal candidates were not willing to devote adequate time and effort to gain certification through quality programs and that as a result, programs that touted the cheapest and easiest routes to licensure had become more popular all across the country. While these programs of dubious quality bear responsibility for inadequately prepared leaders, principal candidates themselves, choosing convenience and cost over quality, also figure into the equation.

"Cash Cow" Competition

A related issue plaguing principal preparation programs was brought to light by Arthur Levine in his *Educating School Leaders* study (2005). According to Levine (2005), there are three main reasons students enroll in education leadership programs. The first is to obtain certification to become a principal and find a leadership position in a school. The second reason students enroll in education leadership programs is to become an education researcher or university professor. Finally, for teachers who have little intention of becoming an administrator, earning an advanced degree in administration still enables them to earn a significant raise in salary. Herein lays the problem.

With school districts requiring teachers to earn advanced degrees to move on the salary schedule and enhance their salaries, schools of education leadership have become the logical choice for dispensing graduate level credits for teachers. At universities where education leadership programs are already in existence, universities administrators are

not compelled to offer other masters level programs in other education disciplines and can rely on the education leadership "cash cow" to produce even more revenue. Since program costs for education leadership are tied only to instructor salaries and require few special materials, universities administrators can further "balance the budget" by diverting the revenue that is generated from education leadership credits to other departments and programs that require the use of laboratories and equipment which are more expensive to operate. As the competition for these "cash cow" dollars increases from one university to another, education leadership programs have lowered admission standards, watered down programs and coursework and offered expedited degrees. In addition to setting low standards, the schools of education leadership often have to resort to hiring lower – cost, part time and adjunct faculty to teach classes and handle the student advising load that has become too large for the full time professors to adequately manage. Levine refers to this competition as a "race to the bottom" (p. 24) in order to produce more degrees in the fastest, easiest and cheapest manner possible. Levine says, "The combination of school district incentives and university funding practices serves as a barrier to improvement. In fact, it spurs the race to the bottom (p. 25)."

Though the above scenario can not be described as a formal partnership, Levine also criticizes university satellite programs in education leadership which are created in collaboration with a nearby school system. These off campus education leadership programs present several factors that can potentially affect program quality. In many satellite programs in school districts, adjunct instructors become the professor of record. In these situations, there is often little university professor oversight as to what gets taught, the kinds of instructional practices that are used, and the overall academic rigor of

the experience. Other requirements, such as the internship, are typically shortened or

may be satisfied through one's own teaching position without working with a principal

mentor. Since there are so many district teachers enrolled in the satellite program, there

is a problem finding enough district level administrators to provide adequate mentoring to

all the candidates. The likely solution to the problem then is to lessen or modify the

internship requirements. This lack of clinical field experience or authentic learning will

be elaborated upon later in this literature review.

> Though Levine delivers a stinging criticism of university based programs for a variety of reasons including a general lack of rigor, irrelevant curriculum for current practice, low admission and graduation standards, and weak faculty, his criticisms have not illuminated anything unique from the original issues brought forth in the National Commission on Excellence in Education Administration in 1987. That report suggested that only 200 of the country's 505 graduate programs were capable of meeting the demands for excellence and that the remaining 300 programs should be eliminated altogether. In further reviewing a brief history of the criticisms of university education leadership programs, the case will be made for why the call for reform was so prevalent.

Historical Review of Preparation Program Criticisms

   The National Commission on Excellence in Education Administration report in 1987

(UCEA,1987), cited several issues of concern regarding preparation programs including:

lack of definition of good education leadership, absence of collaboration between

universities and school districts, low number of minorities and women in the field,

programs devoid of modern content and clinical experiences, and poor quality of

principal candidates. Although a number of recommendations were made, the disconnect

between what was needed and what could be politically engineered by education

leadership faculty without the broad based coalitions of university administration, school

districts and state licensure agencies, was too great to overcome (Hale and Moorman,

2003). That inability of schools of education leadership to make meaningful program revisions spawned even more attention mostly from inside the ranks of leadership programs.

The National Policy Board for Education Administration, (NPBEA, 1988) was borne out of an alliance of ten educational associations working to improve the quality of education leadership programs. The intent of the NPBEA was to promote changes that would strengthen admission requirements, provide greater depth in academic coursework and to restructure field experiences so that preservice principals could engage with proven educational leaders in meaningful internship work (Starratt 2003, p.7). The NPBEA recommended a core of knowledge and skills that addressed: influences of culture and society, teaching and learning processes, organizational theory, policy analysis, leadership and management functions, and moral and ethical demands on leadership within schools. It also saw as its purpose to increase the recruitment of women and minorities for educational leadership positions and to bring about national certification for education leaders (NPBEA Bylaws, 1988). Though the NPBEA addressed the criticisms from the National Commission for Excellence in Education Administration by commissioning a number of initiatives as to how university programs should recruit and train school leaders, the wholesale changes in education leadership programs were slow to develop (Murphy, 2003).

One initiative however did gain importance. In 1994, the Council of Chief State School Officers (CCSSO), through the Interstate School Leaders Licensure Consortium (ISLLC), began to develop standards to guide leader preparation and behavior. The ISLLC standards were created by 24 representatives of state agencies and professional

associations whose goal was to shift the focus of school administration from management

to leadership (Murphy, 2003). Joseph Murphy, the primary author of the standards stated

that:

> The ISLLC team also studied our history to discern how we arrived at where we were as a profession at the dawn of the 21st century; analyzed and critiqued that resting place in history; and crafted a vision of leadership for schools that privileged the centrality of student learning, the collaborative nature of school leadership, the concepts of access, opportunity, and empowerment for all members of the school community, the role of the school administrator as an educational leader (CCSSO, 1996, p. 7).

The ISLLC team, in studying the history of education administration programs,

agreed that the profession and its preparation had been built upon the pillars of

management and behavioral science. Courses in school business, school personnel

management, facilities and school policies made up 40%-50% of the education

leadership curriculum in typical education leadership programs. The remaining

coursework came from areas of psychology (research methods and statistics),

political science (community relations, politics of schools), economics (school

finance), and anthropology (qualitative methods). While the ISLLC team did not

completely dismiss these influences, they did in Murphy's words, "reject their

privileged space at the center of the profession" (2003, p. 2). Instead, the team

designed the standards to represent the ideal of instructional leadership.

Murphy stated,

> We crafted a set of Standards for School Leaders that makes children and their learning the foundation of school administration and builds the balance of the scaffolding for the profession on top of this platform – a platform that is nicely captured by the concept of "learner centered leadership (2003, p. 3).

The standards were approved in final form in 1996 and read:

Standard 1: A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation and stewardship of a vision of learning that is shared and supported by the school community.

Standard 2: a school administrator is an educational leader who promotes the success of all students by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Standard 3: A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations and resources for a safe, efficient and effective learning environment.

Standard 4: A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.

Standard 5: A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness and in an ethical manner.

Standard 6: A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal and cultural context.

As the ISLLC standards were being widely embraced by educational leadership programs throughout the country, they were also subject to criticism. One such criticism was that the standards lacked breadth and depth about knowledge and applied practice, and that they were drawn from scant empirical research correlating preparation programs with student success (English, 2002). English also posited that the ISLLC Standards did not address adequately address social justice and democratic ideals.

John Norton has argued that standards alone are not enough to reshape leadership programs and that too often a standards based redesign results in a paper and pencil

exercise that requires education leadership administrators to match existing course titles

and content with the newly adopted standards without wholesale changes. Norton

contends that standards must lead to a fundamental rethinking of content delivery and

assessment if they are to be judged as effective (Norton, 2002).

<center>Criticisms of Current Preparation Programs</center>

Lack of Organization of Knowledge Base

   Other criticisms, though not specifically of the ISLLC Standards, focused on the lack

of knowledge base of education administration program. Charles Achilles, a professor of

education leadership at Eastern Michigan University and Seton Hall University (1999),

says that education administration programs have been plagued by uncertainty or lack of

organization of the field's knowledge base, weak research, and poor application of the

best research available. Achilles cites a quote from Culbertson (1990) about the lack of

true educational research in texts used in education administration programs.

> First, borrowed concepts tend to enter textbooks before they are
> adequately tested in school systems. The result is that such concepts may
> be used *indefinitely* in training programs even though their actual relations
> to school management and leadership practices remain unknown (pp. 102-
> 103, emphasis added).

Achilles suggests the need for education administration programs and texts to include

scientifically based research studies about education innovations, such as class size, so

that administrators could base their decisions about how to organize and support learning

on proven practices. Too often education leadership has relied on surveys as its research

base and that those surveys are created and administered by graduate students with little

formal or comprehensive training in research. Achilles (1998) argued that most of what

passes for research among professors in education administration is actually the dissemination of other people's research to insure additional publications, a frequent requirement of tenure status.

John Daresh (2002) relates that academic knowledge and practical knowledge have benefits as well as limitations and that both must be included in preparation programs. Academic or theoretical knowledge equips candidates with the conceptual foundations in a complex field and can provide a common language to discuss the problems of practice. Field based knowledge has practical value, but is limited by the fact that it is oriented around existing knowledge and practices rather than future thinking for needed reforms. Daresh (2002) advocates for a blended integration of personal and professional knowledge that provides a moral compass for orienting leaders in difficult situations.

Finally, Achilles (2005) recommends that education administration programs focus their reform strategies in three primary areas. The first, is that programs develop better criteria to recruit and select future school leaders; second, that they align purpose, content, structure, and delivery to the outcomes of their candidates "knowing what to do, knowing how to do it and understanding why it should or shouldn't be done" (p. 105). Lastly, that program evaluations adopt a systematic scheme for follow-up, performance and assessment and on-going recommendations for program revision.

Recruitment and Selection Procedures Lack Rigor

Others in the field of education leadership concur with Achilles' first recommendation and cite program recruitment and admission standards as problematic for selecting quality candidates for school leadership. As Levine, (2005) pointed out, many students who enroll in university education leadership programs have no intention of becoming

school leaders and instead are teachers looking for financial advancement on their districts' salary matrix. University administrators allow this practice because enrollment in education leadership programs produces revenue that can be used to balance higher priority, more expensive programs on campus. Because student numbers are important to keep the "cash cow" dollars flowing, admission standards have been relaxed to allow for enrollment growth (Levine, 2005). Many writers have suggested that the recruitment policies in education leadership programs lack rigor (Brown –Ferrigno & Shoho, 2003; Coleman & Achilles, 1987; Creighton & Jones, 2001; Young, Petersen & Short, 2002).

   Creighton and Jones (2001) examined the admission requirements of 450 principal preparation programs and found that little rigor existed in selecting principal candidates. The researchers reviewed each university's web site to access the graduate admissions criteria for education administration programs. They sampled 45 of the 450 institutions and found that the prevailing admissions practice continues to be a) GRE scores, b) GPA and c) letters of recommendation. Creighton and Jones also found that only 3% (15) of the 450 institutions required an undergraduate degree in education for program admission. Additionally, only 40% of the programs required teaching experience or a teaching credential and that over 60% of universities allowed students to complete an administrative degree program without first satisfying the minimum teaching requirement for state licensure and certification. These practices would seem antithetical in the light of a study by Kraus and Cordeiro (1995) that found that newly hired administrators identified prior teaching experiences and previous leadership responsibilities as extremely helpful in their new career. John Norton and Gene Bottoms of the Southern Regional Education Board (SREB, 2002), concur that most preparation programs are

guilty of half-hearted screening, and little or no outreach to talented individuals. The

selection process is "based on the Graduate Records Exam, undergraduate GPA and a

check that doesn't bounce" (Bottoms, 2002, p. 5).

Creighton and Jones (2001) posited that the lack of rigorous selection procedures has

several potentially negative effects:

1. Weak selection processes lower the quality of instruction offered, since courses and instruction are often geared to the background and intelligence of the students;
2. Easy entry diminishes the status of education administration programs in the eyes of the public;
3. The candidates themselves realize that anyone can get the credential if he or she keeps paying for credits and,
4. Low standards of admissions permit and encourage enrollment of candidates interested only in a master's degree in education with little intent of vigorously pursuing an administrative position (Creighton and Jones, 2001, p 11.).

Other researchers, such as Milstein and Krueger (1997), suggest that programs should

become more intentional about selecting candidates with the greatest potential for success

(p.103). Milstein and Krueger also cite the need to become more purposeful in seeking

out minority candidates and mentoring promising candidates while they are still teachers.

In reviewing five successful education administration programs funded by the Danforth

Foundation, Milstein (1993) found that the partnerships between university faculty and

school districts made it possible to recruit and select those teachers with the most

leadership potential, rather than relying on graduate entrance exam scores to assess

academic potential alone. The purposeful recruitment and screening of candidates by

district personnel and university faculty helped ensure that the intent of the education

leadership programs was to "produce leaders, not scholars" (Milstein, 1993, p. 188).

Hale and Moorman (2003) also report that most admission standards to accredited programs are low and that few leadership programs actually target women, minorities or those who would serve in high needs rural or urban environments. They also cite that the lack of formal partnerships between districts and universities impedes the search and identification of quality candidates and that by not developing such partnerships, program design and quality are ultimately affected (p. 6).

Creighton and Jones (2002) argue that having interviews as a part of the screening process will elicit a more in depth view of the candidates' personal reactions to commonly encountered problems and issues. They stated:

> Acceptance into school administration preparation programs should indicate more than perseverance and one's willingness to complete the course. It should indicate that some of our best, most well prepared and most creative people have entered the field. The time has come to take a more rigorous approach to the selection and training of school administrators (p. 18).

Creighton and Jones (2002) even likened the interviews to auditions in which "leadership is a performing art" whereby the interview committee gets a first hand look at the candidates' ability to be attentive, spontaneous and creative as they address real life scenarios that present difficult decision making and situations in need of resolution. The candidates in auditions are immersed in the real life environment of education administration where they are required to demonstrate or perform a behavior. The audition enables the selection committee to observe whether candidates "display the 'qualities' necessary or the 'potential' for performing effectively with children, parents and teachers" (p. 24).

Disconnect Between Theory and Practice

Another area that garnered criticism centered on the lack of congruence between what

is theorized and taught and what actually occurs in a school. In setting the stage for the

development of the ISLLC standards, Joseph Murphy (2002), cited that education

leadership programs emphasized a managerial orientation organized around theories of

administration and social science frameworks. Deductive instruction around topics that

included supervision and evaluation, finance, organizational management, history and

philosophy of education and school facilities was common across all programs (Murphy,

2002; NPBEA, 1989).

As attention was drawn to educational accountability, the need arose for coursework

and experiences that: assisted leaders in the analysis and use of data for instructional

decision making, promoted the understanding of teaching and learning and assisted in the

design of professional development activities (Best Practices Panel Report, 2002).

Principals had to adapt to the new role of facilitator, mentor and coach of teachers who

expected to share in leadership and decision making (Grogan & Andrews, 2002; Murphy,

2002). Traditional leader preparation emphasized the old notions of management and did

little to equip graduates for these new challenges. In traditional preparation programs,

faculty instructors directed learning that was static and disconnected to real life

experiences. Levine's study (2005), found that 47% of principals perceived their

preparation programs' curricular examples and classroom practices as outdated (p. 30).

Curriculum changes were needed to reflect the integration of learning experiences around

real life topics related to such issues as poverty and racial diversity. Levine (2005),

reported that "more than 40% of principals rated their programs as fair to poor in

preparing them to work with diverse school environments and with students from

differing socio-economic groups" (p. 28). Some researchers (Elmore, 2000; Murphy and

Vriesenga, 2004), believe that important topics related to effective teaching and learning,

the design of instruction and professional development and the organizational design

needed to reform schools are absent from many preparation programs. Other scholars

acknowledge that innovative coursework would be required to address the emerging

leaders' role in understanding and responding to the larger political, social, economic and

cultural contexts with integrity and an eye toward fostering learning communities, rather

than a collection of managerially based courses all taught in isolation (Bottoms &

O'Neill, 2001; Jackson & Kelley, 2002).

   As curricular emphasis moves to better position school administrators for leading

change initiatives toward school improvement, developing teachers and promoting

collaboration with the larger community, scholars posit that the delivery systems must

also change to reflect this new emphasis on instructional leadership. Use of adult

learning principles such as reflection, collaboration, and active problem solving in

university programs supported by the Danforth Foundation were found to make a

difference in leader success. Leithwood and colleagues (1995), concluded that the

evidence was unequivocal that delivery systems employing adult learning theories were

important to transforming instruction in administrator preparation programs. In the

Levine (2005), study, preparation students reported favoring active learning pedagogies

that integrated the clinical and academic strands of their education. Survey respondents

report that simulations and case studies were especially popular as learning strategies.

Coles (1985) suggests that problem based learning (PBL) represents what adults need to learn best. Adult learning theory relates that adults are most successful when they direct their own learning, focus on problems that are relevant to their work and they can immediately reflect on the outcome of their decisions. Hallinger and Bridges (1997), view problem based learning (PBL) as an opportunity for instruction that connects both academic and practical knowledge within education leadership programs. Critiquing traditional instruction, Hallinger and Bridges (1997) suggest that the goal of traditional instruction is the transmission of knowledge. Traditional instruction is grounded in the assumption that the context of that transmission makes little difference in the recall of knowledge. A second assumption is that knowledge is most effectively learned when it is organized around certain disciplines and taught through lecture and discussion. In advocating for a problem based learning approach, Hallinger and Bridges (1997) relate that learning involves *knowing and doing* and that knowledge and the ability to use that knowledge are of equal importance. Rather than recall knowledge that is disconnected from genuine practice, Hallinger and Bridges (1997) assert that PBL promotes the encoding of knowledge in a context similar to one in which it will be subsequently used. PBL allows students to understand and "rehearse" specific behaviors and actions in the reality of the workplace as content learned naturally follows the problem.

Clinical Practice, Internships and Field Experiences

There is a large of body of research (Fry Bottoms, & O'Neill, 2005; Orr & Barber, 2005; Orr, 2006 ;) that supports the importance of clinical experiences for aspiring principals. Researchers agree that allowing prospective leaders to learn the many complex facets of the job under close supervision of skilled veteran principals helps them

learn the skills needed to carry out the demands of the position. Murphy (1992) found that over 90% of preparation programs employed some kind of internship or clinical training. Regardless of the wide support that internships or field experiences have among education leadership programs, there is extreme variation with regards to their scope and design (Orr & Barber, 2005). Fry, Bottoms and O'Neill (2005), relate that in a study of 61 programs, many did not provide aspiring principals with experiences that were "hands- on" in nature or that were akin to a leader apprenticeship. Few ensured opportunities to practice decision making or develop strategies related to improving student learning. In these programs, interns spent much of their clinical experiences as passive learners or through conducting small projects. Levine (2005) also asserts that many aspiring principals are fulfilling internship requirements while still in their teacher assignments by simply completing paperwork tasks and writing reports.

Another criticism of field experiences is that because few formal partnerships exist between districts and universities, education leadership faculties have no way to identify proven instructional leaders at local schools. Not identifying principals with instructional expertise who could act as mentors to interns is counterproductive to their learning especially if interns were paired with principals who knew little about school leadership (Levine, 2005: p.40). If those relationships between districts and schools of education were intact, there would also be a greater chance that academic coursework could become more integrated into field experiences. Lumsden (1992) says that integration is necessary so that coursework is organized as a set of learning experiences that build upon and support field based experiences. However, on-going communication between districts and university faculty is needed for that to occur.

The variability of clinical practice requirements is further highlighted by Levine (2005). In 23 of 25 schools of education that were visited, internships could be completed in the student's home school with their current administrator as supervisor/ mentor. Whether the principal was a successful leader seemed to matter little. Even if those principals were competent instructional leaders, interns lost out on valuable new perspectives about school improvement and leadership in general because they were not exposed to anything outside their own schools. Levine and colleagues (2005) also found that length of internships ranged from 45 to 300 hours, from 90 days to a full academic year and that required credits ranged from 2 to 15 credits. However varied the requirements might be, the results remain the same, in that, the activities and duties that were assigned by principal mentors or university supervisors generally static (p.40).

Weak Faculty

The final critique of preparation programs focuses on education leadership faculty and their instructional practices. Frederick Dembowski (1999) argues that much of education leadership programs are "professor centered" rather than "student centered." He further suggests that faculty should clarify whether the purpose of education leadership programs is to convey a body of knowledge and skills or to also enable students to become self learners. He advocates the use of a rigor/relevance framework developed by William Daggett (1997), for professors to examine their instructional methodologies to insure that both rigorous content as well as authentic learning activities relevant to the demands of the job become embedded within the programs (Dembowski, 1999).

Levine characterized the faculties in his study as "distressingly weak" and that the reasons for that weakness were paradoxical (2005, p.35). Too many full time professors

possess little, if any, administrative experience in schools. Conversely, many other

programs rely on part-time adjunct instructors to teach as much as 60 % of the required

courses in the principal preparation programs (Levine, 2005, P 38). While adjunct

professors may have practitioner experience in the day to day operations of schools,

many lack current knowledge and scholarly expertise in research and theory. They are

also weak in integrating leadership and learning theories into practice. Their

perspectives, though important, can be narrow and confined to only one school

experience.

At universities where off campus programs are popular, use of adjunct professors

increases significantly. As school districts partner with universities to house these off

campus programs, adjunct professors are frequently drawn from the ranks of the local

administrators. Levine (2005), states, "the dominant mode of instruction…was telling

war stories about their adventures as school administrators" (p. 36). Such experiences

hardly prepare principal candidates for leadership. Additionally, Levine found in a recent

study of the American Association of School Administrators, that adjuncts were polled

regarding the subjects they taught and their expertise. Only 53% said that they only

taught courses that they knew a lot about. In other words, nearly half of the

superintendents in the study admitted teaching classes in which they admittedly have

little experience.

As distressing as this might be, full time faculty can be described in near mirror image

terms. Though they are well grounded in theory and research, their fault lies in their lack

of practical experience and their disconnect from schools in general. Only 6% of faculty

in the Levine (2005), study reported prior principal experience (p. 38). Their lack of

school experience hinders them in providing learning opportunities that marry theory to the authentic contexts of school leadership. Further, when faculty are not practitioners, they sometimes lack a critical perspective necessary to appropriately mentor aspiring principals (Kaagen as cited in Darling Hammond, et al, 2007). This mentor support is also lost as full time faculty report being too busy teaching classes, managing the leadership program and conducting research to spend adequate time advising and assisting aspiring principals. At research universities, professors are expected to conduct research, publish and obtain external funding for their programs. Though service to the field is also a requirement, it is often subordinated to fulfilling a research agenda. These expectations are in direct conflict with another reality of the professoriate, which is to mentor and support aspiring principals (Young & Petersen, 2002).

A lesser mentioned issue with regard to faculty is that in many education leadership programs, the program itself has been ill-defined in terms of curriculum and program expectations. These programs are heavily dependent on faculty members alone to design and maintain or revise program components. As such, and without a coherent and well specified set of program standards and curricular expectations, individual faculty members become the defacto curriculum. Their individual interests determine resources used, topics covered and methodologies employed. In this sense, faculty turnover amounts to program overhaul.

<u>Recommendations for Preparation Programs</u>

The foci of preparation program criticisms as discussed in this literature review provide the basis for revising and re-tooling education leadership programs. Much like

the criticisms themselves, the recommendations for change have come from a variety of

sources mostly inside the education community (Brown-Ferrigno & Shoho , 2002;

Creighton & Jones, 2002; Hess & Kelly, 2005; Jackson & Kelley, 2002; Young &

Petersen, 2002). The National Commission for the Advancement of Educational

Leadership Preparation (NCAELP,) was established in 2001 by the University Council

Educational Administration with the purpose of examining and improving the quality of

educational leadership in the United States. That commission was asked to build upon

the foundational work that was done by other organizations including the Interstate

School Leadership Licensure Consortium (ISLLC), the National Policy Board in

Educational Administration (NPBEA), and the National Council for the Accreditation of

Colleges of Teacher Education (NCATE) with regard to program standards and

accreditation. Additionally, the commission reviewed other issues that had relevance to

educational leadership and needed attention such as: examining recruitment programs and

strategies, increasing the number of women and minority education leaders, facilitating

collaboration between universities and school districts and making programs congruent to

the demands of the principal position (2002, p. 9).

   In its review of exceptional and innovative principal preparation programs, the

NCAELP identified seven characteristics that contributed to program effectiveness.

Those were: 1) planned recruitment and selection of students, 2) planned recruitment and

retention of core faculty with contemporary experiences, 3) professional development of

faculty, 4) involvement of practitioners in program planning, teaching and internships, 5)

reasonable teaching and advising loads, 6) advisory boards of practitioners, 7)

collaboration with state agencies, 8) alignment to best practices of adult learning theories,

cohorts, authentic internship experiences and mentoring, 9) coherent program design and delivery and 10) on-going program evaluation and enhancement (2002, p.15). Despite the identification of these characteristics, commission members posited that replication of exemplary programs would be difficult because so many of the program characteristics depend on the quality of faculty and their willingness to embrace change (p.15).

Following the NCAELP recommendations, the Institute for Educational Leadership (IEL, 2003) identified some "options for action" in its report "Preparing School Principals: A National Perspective on Policy and Program Innovations" (2003). Hale and Moorman relate that level policy changes in some states have contributed to increasing the quality of preparation programs. Shoring up licensure requirements, and promoting stringent evaluations of education leadership programs based on rigorous research based criteria are two reforms initiated by state legislatures that are working to strengthen principal preparation. Other innovations cited in the report as producing excellent results include collaborations with school districts to select and mentor exemplary candidates, cohort structures for nurture and support, competency based courses in leadership, finance, school law, curriculum and learning theory and diversity and social justice. Still, Hale and Moorman (2003) acknowledge that policy changes alone have not guaranteed program improvements and that since the unit of change is still individual institutions, and individuals within those institutions, program faculty and administration must recognize and embrace the need for programmatic changes.

Since the inaugural meeting of the NCAELP in 2002, two other organizations stand out with regard to calling attention to the need for principal preparation program revision and creating recommendations to bolster education leadership programs. The Southern

Education Regional Board, (SREB) and the Stanford Education Leadership Institute,

(SELI) have conducted numerous studies associated with school leader development and

preparation program effectiveness. Through funding from the Wallace Foundation, a

philanthropic organization whose mission is to strengthen school leadership to enhance

student achievement, SREB and SELI have independently examined school leadership

preparation and have identified core conditions for program redesign as well as

recommendations for strengthening existing program elements.

Southern Regional Education Board Study

The SREB report, *Schools Can't Wait: Accelerating the Redesign of Principal*

Preparation Programs" (2006), illuminates the progress made by 11 pacesetter

universities chosen to participate in the SREB University Leadership Development

Network and 11 other universities reputed to have success in redesign efforts. A set of

four core conditions for increasing the effectiveness of principal preparation programs

and ultimately improving school leadership, was identified at the outset as being

necessary for successful program redesign. Those conditions represent a synthesis of five

years of study of the literature, focus groups with exemplary principals, interviews with

expert panels and evaluations of redesign efforts. The four conditions are: 1) establishing

formal school district university partnerships, 2) utilizing standards, research based

practices that transform course content and learning experiences, 3) developing

continuous field experiences that allow candidates to demonstrate leadership

competencies, 4) designing and implementing program evaluation strategies that address

graduates' competencies and the program's impact on schools.

An example of successful implementation of the first condition would have university and school district partnerships collaboratively implementing a discriminating recruitment and selection process. In another SREB report, *Preparing School Leaders: It's Time to Face the Facts*, Gene Bottoms (2002) touts the new collaborative approach to recruitment and selection this way:

> Individuals who participate in network programs will be persons who have been "tapped" as future leaders in their districts. These will be educators who have demonstrated deep knowledge of curriculum and instruction and have a track record of improving student achievement. They will have proven their capacity for leadership by their performance in other positions. These model programs will not waste time and resources on individuals who "self –select" for administrative training, even though they have little potential to be successful school leaders (p.13).

Another benefit of collaborative partnerships will be realized as school districts create flexible work times which enable mentoring for candidates and co-teaching of university courses by district experts. Substantive internship experiences which employ authentic learning experiences tied to coursework and which also allow for extensive mentoring relationships can also be beneficial by-products of collaborative relationships between schools and universities.

The second condition for effective program redesign occurs as key faculty, university administration and principal practitioners work together in identifying current and essential content in required courses. Mapping content across all courses to ensure that research based instructional practices are used to build knowledge and solve real world problems is another cornerstone of implementing standards based curricula. The curricular focus would be placed on the principal's role in improving curriculum, instruction and ultimately student achievement.

Condition three creates on-going internship experiences which are integrated with coursework and are designed to provide application, practice and reflection on concepts skills and procedures necessary for leading school improvement. Candidates receive frequent and specific feedback and coaching from university supervisors as well as principal mentors about their experiences. Mentors and supervisors actively plan opportunities for candidates to master essential competencies.

The fourth condition necessary to effective program design employs rigorous evaluation not only of candidates' competencies, but also in regard to overall program quality and effectiveness. University and school district personnel jointly monitor program success, using data that illuminates performance with regards to: instructional processes and delivery, retention and graduation rates and how well the program is meeting the needs of the districts. Rigorous assessments are used to understand how candidates are mastering essential competencies. Feedback on the assessments is given to candidates so that they might shore up weak areas and meet performance criteria. Evaluation also assesses the "on the job performance" for new hires and tracks their progress beyond graduation to determine program effectiveness in preparing school leaders.

SREB found several "promising practices" in establishing these core conditions as it reviewed the progress made by the 22 pacesetter universities. First, universities that made substantial progress in redesign started by creating partnerships with school districts. Fry et al (2006) state:

> The obligation to deliver on a formal partnership agreement signed by the university president served as a strong incentive for the university to put real effort and additional resources into program design and delivery – and to maintain a close productive working relationship with those being served by the program (p.49).

When districts participated in the selection of candidates for principal positions, they were more likely to commit significant resources to support their pool of candidates. Typically, this was accomplished through paying tuition, reimbursing expenses for materials and books, and providing release time for class and study. Often the district also provided expertise in teaching special topics such as school budget planning and facilities maintenance procedures.

Another promising practice of universities showing progress in their redesign efforts was that they created curriculum design teams made up education leadership faculty, selected faculty from other departments and practitioners from school districts. The rationale for this design team diversity was to address the education leadership departments' resistance to change. The teams were encouraged to establish a vision and essential competencies needed in the principal ship. Together they studied research, reviewed state and national standards and analyzed school reform models with the goal of translating that knowledge into priority content and effective instructional practices. The design teams were able to more effectively utilize practitioners in class presentations and teaching roles to authenticate specific content (SREB, p. 54).

In universities where internship experiences (condition three) were substantially improved, the redesign again benefited from a formal school and university partnership. Effective redesigns established clear curricular goals and a prescribed set of activities which were linked not only to course content but also addressed school improvement

needs. Although Fry and colleagues (2006) cite some promising practices in internship

experiences, they concede that even universities rated as making substantial progress in

redesigning field experiences did not measure up on all indicators. No universities had

established formal training programs for mentors, nor had any university created

evaluations of candidates based on performance criteria and validated measurements (p.

61). Portfolios documenting candidates' experiences still carried the most weight in

determining internship success or failure.

Rigorous assessment of candidate competencies as well as program evaluation, the

fourth condition for successful preparation program redesign, received the least amount

of attention. Fry (2006) states;

> It is not possible to paint a picture of redesign in action, because so little
> progress was found in the 22 universities studied. The process of
> continually gathering information to help faculties make decisions such as
> how to improve the program's design appears to be given low priority in
> the redesign process" (p. 64).

The essential findings from the SREB studies indicate that through four core conditions,

universities can make significant strides toward program redesign. The purpose of that

redesign is to produce better principal candidates ready to lead schools in the process of

continual improvement. However, even in pacesetter university programs where there is

knowledge about the four essential core conditions, true and complete redesign is not

easily forthcoming.

Stanford Educational Leadership Institute Study

Another important study that has identified preparation program elements necessary to

producing successful educational leaders is the Stanford Educational Leadership

Institutes' *School Leadership Study: Developing Successful Principals* that was begun in

2003 and commissioned by the Wallace Foundation. The *School Leadership Study*
examined eight exemplary pre -service and professional development programs in five
states and a comparison sample of principals from other preparation programs. The study
sought to answer three questions regarding the exemplary programs: Why are the
programs exemplary? What models of leadership and instruction do the programs
explicitly and implicitly enact? How are they designed and implemented?

 After three years of case study analyses and data collection, the final report, *Preparing
School Leaders for a Changing World: Lessons from Exemplary Leadership
Development Programs* (2007), provides details about the elements of programs that are
most successful in developing school leaders. The case studies revealed seven common
elements that exemplary programs included.

- Exemplary programs possess a comprehensive and coherent curriculum aligned to state and professional standards. The ISLLC standards which emphasize instructional leadership are particularly important.

- The overall program goals emphasize leadership in terms of instruction and continuous school improvement.

- Instructional methodologies in exemplary programs utilize active, student centered pedagogy that facilitates the integration of theory into practice. Instructional strategies include: problem-based learning, action research, field-based projects, journal writing and self reflection. Portfolios which demonstrate substantive feedback from faculty and peers and highlight ongoing assessment are also important features of the instructional process.

- Exemplary programs boast knowledgeable faculty with relevant practitioner experience in school administration.

- Social and professional support is another essential component to program success. The use of cohort groupings and formal mentoring and advising from expert principals stands out.

- Recruitment and selection practices are purposeful and proactively target expert teachers with leadership potential for the principalship.

- Administrative internships are well designed and supervised. There are opportunities for candidates to engage in leadership responsibilities for substantial periods of time under the guidance of expert veterans.

The implications of these findings bear greater examination especially in the light of program evaluation and redesign. One of the program criticisms discussed by John Norton (2002) is that often program redesign has become a "pencil and paper game" in which education leadership faculty match existing course titles and practices with the newly adopted standards without making thoughtful revisions or wholesale changes. In the exemplary programs detailed in the Stanford Educational Leadership Institute (SELI) study, four key activities helped to bring about authentic program changes which improved candidates' experiences. First, purposeful recruitment and selection of program participants was vital. Since the individuals in the program determine the level of instruction, purposeful recruitment led to higher levels of engagement and expectation. In addition, those programs which recruited excellent teachers with strong instructional skills, found that their graduates had greater understanding of and commitments to instructional leadership. The second key was in creating a standards based approach which strengthened the focus on instructional leadership and overall school improvement. Robust implementation and integration of coursework and clinical experiences was necessary to realize change. A third key was in developing partnerships between schools and universities to create possible collaborations that would strengthen both districts and schools of education leadership. Lastly, the most important key to the success of program design was the integration of all the program elements and how they reinforced a robust model of leadership. Linda Darling-Hammond, lead author of the report states,

> The presence or absence of a single celebrated feature in a program design may be less important than how well the existing features are implemented, how well they reinforce and convey a consistent model of leadership and whether the design provides important learning for participants (2007, p. 150).

The SREB and the SELI studies, have illuminated common program features that exemplary programs possess, or are necessary to the successful redesign of existing programs. Such features support principal candidates though the integration of people and experiences that build upon and reinforce leadership. The four common program features are:

1) School district and university partnerships that serve to support principal candidates by: jointly and purposefully recruiting highly skilled teachers for school leadership positions; encouraging practitioners to share their expertise as adjunct instructors who teach preparation courses; and using practicing principals as mentors for aspiring school leaders in well designed and well supervised internship experiences

2) Standards based design of a coherent curriculum that emphasizes the importance of instructional leadership and research based practices in every aspect of the program from coursework to clinical experiences.

3) Instructional methodologies that use the tenets of adult learning theory to more fully engage adult learners. Those methodologies include problem based learning, cohort organization, action research activities, faculty feedback and candidate reflection.

4) Faculty who possess relevant practitioner experience and who are committed to ongoing program evaluation for continuous improvement are vital to redesign efforts.

Although there is a growing conceptual consensus about the program elements essential in leadership training programs to adequately prepare principals for the demanding roles of contemporary leadership, there is little empirical evidence for how these practices impact principals' abilities to be effective on the job (Davis, Darling-Hammond, La Pointe & Meyerson, 2005). Orr (2006) suggests that most preparation programs are assessed on participants' self-reports of what they have learned. However, Orr also argues that not only what graduates learn is important, but also what they come to believe about being a principal and how much they identify with the principal role. Orr continues to assert that principals' shifts in professional practices are developed first from changes in cognitive belief systems.

The Winter, Rinehart and Munoz (2002) study also supports the importance that cognitive belief systems play in principals' success. Winter et al discovered that the self-perceptions of principal candidates regarding their ability to do the job were the strongest predictor of their willingness to apply for a principal position. That research would indicate the need for training that not only develops skills, but also builds candidates' sense of self efficacy. Darling-Hammond (2007) also makes reference to the importance of self efficacy as she summarizes the importance of the SELI study,

> The findings show that high-performing principals are not just born, but can be made - and that those who can be prepared in innovative, high-quality programs are more likely to become instructional leaders who are committed to the job and efficacious in their work (2007, p. 146).

Additionally, the Stanford report discussed the importance of recruiting and selecting teachers with exceptional instructional skills and previous leadership experiences (2007, p.145). Building on candidates' specific mastery experiences such as instructional expertise or prior leadership, helps aspiring principals develop their self efficacy beliefs

about instructional leadership. Recruiting efficacious people and providing them with

robust training and support that enhance their beliefs about their abilities to become

successful principals would appear a logical step in further improving principal

preparation programs.

<div align="center">Self-Efficacy and School Leadership</div>

Self efficacy is defined as the belief in one's ability to set a course of action to

accomplish a specific task or produce a desired outcome (Bandura, 1997). Self efficacy

is vital to principals' success, because it determines the degree of effort exerted on a

particular task as well as the kinds of aspirations and goals that principals will set for

themselves (Bandura, 1986; Gist & Mitchell, 1992). Bandura (2000) promotes the

importance of self-efficacy in leadership situations by stating, "when faced with obstacles

or setbacks…those with a strong belief in their capabilities will redouble their efforts to

master the challenge" (p.120). Even though principal self-efficacy seems to be a

promising construct for understanding principal motivation and behavior, it has been

relatively unstudied (Tschannen-Moran, 2005, p.3). In establishing a framework for the

purposeful inclusion of interactions and experiences that develop principal self-efficacy

within preparation programs, it is important to first understand the history and

development of the theory of self-efficacy.

Historical View of Self-Efficacy

Early in the 20th century, psychologists were interested in "self" and how that

perception of "self" determined a person's behavior. William James was among the first

psychologists to forward the theory of "self-esteem" by describing it as the way in which

people view their accomplishments in comparison to others in society. Behavioral

psychology was the dominant school of thought in the era from 1920-1940. People

replaced their interest in self with an interest in the cause and effect theories of stimulus

and response made famous by B.F. Skinner and Pavlov. In 1943, Abraham Maslow

developed a theory of motivation that explained a hierarchy of needs in relation to "self."

That theory analogized human needs as a ladder where each rung represented a higher

level of personal development that transcended basic physical needs for survival. The

highest level in Maslow's hierarchy was "self-actualization" or personal growth and

fulfillment.

 Maslow's theories ushered in the humanistic movement in psychology which once

again embraced the study of "self constructs" and "self beliefs." During the 1960's and

1970's schools began to adopt practices that focused on students' self-concepts and self-

esteem. Later those theories lost favor with researchers who could find little support for a

positive correlation to student achievement (Pajares, 2002, p.4). By the 1970's and

1980's cognitive theories had overshadowed the study of self. Psychologists focused on

mental tasking, problem solving, information processing and schema building paralleling

the societal interest in technology.   It was during this time that Albert Bandura began to

posit his social learning theory.

<u>Social Cognition Theories</u>

 Bandura's social learning theory promoted the notion that people can learn by

observing the behavior of other people and the outcomes of those behaviors. In social

learning theory, modeling was viewed as an important component of learning, both actual

learning and vicarious learning through watching others and understanding the outcomes of others' actions (Bandura, 1977). Social learning theory was considered an important bridge between the behavioral school and the cognitive school of psychology. Another important aspect of social learning theory was reciprocal determinism, which proposed that the person, their behavior and the environment could all have an influence on each other. Social learning theory provided the foundation for Bandura's later work on social cognition which sought to explain how thoughts, feelings and behaviors of people are influenced by the real or imagined presence of others (Bandura, 1986).

In Bandura's *Social Foundations of Thought and Action* (1986), people are described as active agents who exercise control over their thoughts and behavior. Because people have the ability to symbolize events and create meaning, they then can represent their environment cognitively, and in essence, anticipate future events. The ability to have foresight or anticipate events, allow people to adapt present actions to their perceived future. Two tenets of social cognition theory influenced Bandura's theory of self-efficacy; those tenets are self-regulation and self-reflection. Bandura (1986) posited that people control, or regulate their behavior by creating standards for evaluating their actions. While environment does affect self-regulation, people mostly chart their own courses for decisions and behaviors. As people regulate their own behaviors, they also reflect on their thoughts and actions. Through self-reflection, people analyze past events and determine future actions.

Self-Efficacy Theory

In 1977, Dr. Bandura penned *Self-Efficacy: Toward a Unifying Theory of Behavioral Change* and sought to present self-efficacy as the missing piece for understanding how people's beliefs about their capabilities influence their actions. Dr. Bandura further defined-self efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391). Bandura (1986, 1997) found that these beliefs and judgments about personal capabilities, rather than their actual abilities drive people to accomplishing goals they set for themselves. The stronger their self-efficacy, the more vigorous and persistent are people's efforts (p. 394). Bandura made clear that more important than skills alone is the judgment of what a person can do with the skills he or she possesses. "It is when one is applying skills that high efficacy intensifies and sustains the effort needed to realize a difficult performance" (p.394).

Perceptions of self-efficacy can be either positive and empower people to action, or can be negative, and cause people doubt, resulting in inaction. Those individuals with high levels of self-efficacy about a given task will undoubtedly perform better than those without such beliefs. Those people who are lacking in self-efficacy regarding specific tasks often will not even attempt those tasks. Pajares (2002) illustrates this phenomenon through the example of language arts students whose grades are based primarily on writing assignments. Those who excel in composition will feel confident in their ability to earn good grades while those students who struggle in the writing process will feel demoralized in their pursuit of higher grades.

Self-Efficacy Sources

   Bandura (1986) refers to four sources of self efficacy. The most influential source is

that of mastery experiences. Completing a task well builds successful experience, which

in turn is necessary to create further successes. "Repeated successes raise self-efficacy

appraisal; repeated failures lower them" (Bandura, 1986, p. 399). Failures that are

overcome by robust efforts also raise self-efficacy and cause the person to believe that

greater effort can overcome almost any obstacle. The second source takes into

consideration the modeling aspect of social cognition. As people observe and learn from

others, they vicariously experience events. If the other person completing the task

(event) is judged to be of similar competence, the vicarious learner makes a mental note

about his/her own competence based on the success or failure of the first person. Bandura

explained the power of vicarious experiences thusly:

> Although vicarious experiences are generally weaker than direct ones,
> vicarious forms can produce significant, enduring changes through their
> effects on performance. People convinced vicariously of their inefficacy
> are inclined to behave in ineffectual ways that, in fact, generate
> confirmatory behavioral evidence of inability. Conversely, modeling
> influences that enhance perceived self-efficacy can weaken the impact of
> direct experiences of failure by sustaining performances in the face of
> repeated failure. A given mode of influence can thus set in motion
> processes that augment its effects or diminish the effects of otherwise
> powerful influences" (1986, p. 400).

   The third source for self-efficacy development is social persuasion in the form of

feedback from another person about a specific capability. When genuine feedback from

others who possess skills or expertise in the particular area in question is positive,

performance can be enhanced. However, if social persuasions are negative, performances

that were once adequate can suffer (p. 400). The final self-efficacy source occurs as

people monitor their somatic and emotional states with regard to a specific task. If the

thought of completing the task makes one ill at ease or nervous, self-efficacy suffers.

Bandura suggests, "People read their somatic arousal in stressful or taxing situations as

ominous signs of vulnerability to dysfunction" (p. 401). Conversely, when people

welcome the challenge of a particular task, their self-efficacy heightens as does their

corresponding performance of that task.

<u>Importance of Self-Efficacy to Leadership</u>

Efficacious beliefs have been shown to influence how much effort people will devote

to a task, and how long they will persist in the face of challenging circumstances

(Bandura, 1997). Efficacy beliefs also affect the cognitive mechanisms that drive

behavior. Self-efficacy can impact performance by influencing the goals people set for

themselves. Bandura (1986) found that individuals with high self-efficacy set higher

performance goals, and then develop and more skillfully enact effective task strategies

than those low in self-efficacy. McCormick (2001) agrees that self-efficacy beliefs affect

the development of functional strategies and the skillful execution of those strategies.

This reinforces the idea that not only must leaders know what goals they need to

accomplish, but also how to utilize people and processes to actually accomplish goals.

McCormick goes on to say that "successful leadership uses social influence processes to

organize, direct and motivate the actions of others. It requires persistent task-directed

effort, effective task strategies and the artful application of various conceptual, technical,

and interpersonal skills" (p. 28).

Leader self-efficacy is also important in affecting the attitudes and performance of

followers as shown in studies by Chemers, Watson and May (2000). Those researchers

found that leaders' beliefs increased their followers' commitments to organizational

tasks. Luthans and Peterson (2002) also found that leader self-efficacy had a positive

effect on employee's engagement with their work as well as created an environment that

could more effectively overcome obstacles to change.

Efficacy and School Leadership

Efficacious school leaders possess qualities that allow them to be more persistent in

pursuing goals. However, efficacious leaders are also pragmatic in the sense that they

adapt their strategies to the present context so that they do not waste time trying

unsuccessful strategies (Osterman & Sullivan, 1996). When confronting problems,

efficacious principals interpret failure as a lack of effort, or application of an incorrect

strategy rather than a lack of skill. Principals with high levels of self-efficacy believe that

by doubling their efforts or changing their strategy, they will realize success and

accomplish goals.

Leaders possessing low levels of self-efficacy tend to set lower goals for their

organizations, if indeed they set goals. Rather than adapt pragmatically to difficult

conditions, inefficacious principals tend to rigidly maintain the same course of action

even if evidence suggests a change. Inefficacious principals regard failure as the result of

something beyond their control. They frequently blame other people or external

conditions for failure or low performance. In a school setting, low efficacy principals are

slow to implement new programs or try new strategies because they have adopted the

idea that since they cannot change certain conditions such as poverty or labor relations,

there is little use in trying something new. Osterman and Sullivan (1996) found that

these principals do not possess the capacity to adapt to changing contexts or garner

support from others. Principals with low self-efficacy perceive their immediate

environment as uncontrollable, which similarly has a negative or incapacitating effect on

goal setting and problem solving. They also regard power very differently from

efficacious principals. Inefficacious principals use external power sources such as

management rights to coerce others into desired actions, while those principals with

greater self-efficacy use internally based power to lead, build relationships and set

examples for others to follow (Lyons & Murphy, 1994).

Teacher Efficacy, Collective Efficacy and the Principal

   The role of teacher self-efficacy in student achievement has been well documented

(Ashton & Webb, 1986; Guskey & Passaro, 1994; Ross, 1994; Tschannen- Moran,

Woolfolk –Hoy & Hoy, 1998). Teacher efficacy influences how teachers plan, make

instructional decisions and interact with students. Teacher efficacy was also found to

affect teachers' behaviors, effort, innovation planning and organization, persistence,

willingness to work with difficult students and commitment to the job (Tschannen-

Moran, Woolfolk- Hoy & Hoy, 1998). Highly efficacious teachers were also active

outside the classroom, making contact with parents and building positive relationships.

An additional finding of Tschannen-Moran et al was that teacher efficacy was influenced

by colleague and principal support.

   Individual teacher efficacy becomes even more important when integrated with others

in collective efficacy. Collective efficacy is more than the just sum of individual teacher

efficacies. Bandura contends that collective efficacy is an emergent group level attribute

– a product of the dynamic interactions of group members. Collective efficacy is the

group's shared belief in its capability to organize and execute courses of action required

to successfully educate students (Bandura, 1997, p. 477; Goddard & Goddard, 2001, p. 8). As with self-efficacy, collective efficacy is associated with specific tasks, levels of efforts, persistence, goal setting and achievement of groups. Collective teacher efficacy has an even stronger impact on student achievement than does a student's socio-economic status due to the interactive, coordinative and synergistic dynamics of their interactions (Bandura, 1997, 2000).

In a recent study of principal self-efficacy, Tschannen-Mopran and Gareis (2005) cited the findings from other researchers (Hipp & Bredseson, 1995; Hoy & Woolfolk, 1993; Moore & Esselman, 1992) about the importance of principal behavior to teacher efficacy beliefs. The behaviors of principals that raised teacher self-efficacy were identified as: modeling appropriate behavior, proving rewards contingent upon performance, fostering a healthy school climate through establishing order, creating a strong emphasis on academic achievement, and allowing teachers flexibility and autonomy over classroom affairs. The purpose of the Tschannen-Moran and Gareis (2005) study was to understand what supportive elements were associated with stronger principal self-efficacy beliefs in schools. The researchers found that what seemed to matter most in the development of principal self-efficacy was the quality and usefulness of preparation experiences and the interpersonal support they received from others, including colleagues, others inside the school community and parents (pp. 19-21).

<u>Principal Preparation Program Elements as Efficacy Sources</u>

Earlier in this literature review, several elements of education leadership programs were identified as necessary to improving the preparation of school principals (SREB,

2006; SELI, 2007). In the Tschannen- Moran and Gareis study, *Cultivating Principals'*
Sense of Efficacy: Supports That Matter, Tschannen-Moran stresses the importance of

infusing preparation programs with precepts that also develop self-efficacy. She states,

> Social cognitive theory provides practical guidance for the preparation and
> professional development of school principals in order to equip them with
> the capabilities and a resilient sense of self efficacy that will enable them
> to enhance both their well being and their accomplishments (p. 24).

The same preparation program elements identified by the SREB (2006) and SELI (2007)

studies can be discussed in the context of Bandura's (1986) sources of self efficacy in

examining the results and implications from the 2005 Tschannen-Moran study. Bandura

(2000) proposed three specific approaches for developing self efficacy in manager

leaders. Tschannen-Moran and Gareis assert that it is possible and desirable to utilize

those three approaches: guided mastery experiences, cognitive mastery modeling and self

regulatory competencies in principal preparation programs.

   Guided mastery could be accomplished through faculty instructional practices where

adult learning practices such as problem based learning and analysis of case studies assist

aspiring principals in developing a mastery of specific skills and competencies needed to

function as an instructional leader. Coherent coursework and curriculum could create

other mastery experiences in areas such as data collection and analysis and instructional

supervision and feedback. Cognitive mastery modeling would expose aspiring principals

to successful practitioners to learn thinking skills and reasoning strategies. This modeling

represents both vicarious and socially persuasive learning that would occur throughout

classroom and intern experiences as expert principals and faculty mentor and teach

students how thought processes guide decision making and provide them with practice

and feedback in those processes. In the final strategy for developing self-efficacy, self

regulatory competencies such as reflection and goal setting could be integrated across all elements of preparation programs so that aspiring principals can effectively monitor their affective states, Bandura's fourth source of self-efficacy development.

These strategies promoted by Tschannen-Moran and Gareis (2005) are also hailed in the 1992 study by Gist and Mitchell. They advocate that training programs should include mastery experiences, role plays and positive persuasive feedback to strengthen principals' task specific efficacy perceptions. Lyons and Murphy (1994) also advocate that principals be provided the opportunity to observe effective school leaders and receive coaching by colleagues and supervisors as they develop new skills.

Tschannen-Moran and Gareis admit that though their recommendations make sense in light of the research about innovative and effective principal preparation program elements, the lack of empirical studies linking program elements to self-efficacy development makes their recommendations tenuous (p. 26). This tenuous link between efficacy sources and preparation program elements invites more research for understanding the importance and weight those self-efficacy sources; mastery experiences, vicarious experiences, social persuasion and physiological arousal might have in be more effectively training and equipping principals for successful school leadership. It is in this context of self-efficacy development within preparation programs that this study will attempt to add to the knowledge base.

Chapter Summary

Chapter two presented a review of the literature regarding the importance of principal leadership on student achievement and overall school improvement. A historical glance

at the move from "principal as manager' to "principal as instructional leader" underscored the need for change and revision of principal preparation programs. Research findings from notable education reformers critique preparation programs and identified program elements necessary to develop instructional leader principals.

This chapter also reviewed the historical development of the theory of self-efficacy and its sources. Studies discussed the importance of leader behaviors on teacher efficacy and performance and the impact principal self-efficacy has on the collective efficacy of a school and ultimately its success. A culminating argument was made that suggests that the purposeful inclusion of experiences and interactions designed to promote self-efficacy development into a research based principal preparation program could strengthen the overall preparation experience for aspiring principals.

Chapter three will provide an explanation of the research design and data collection and analysis methods used in this study.

CHAPTER 3

METHODOLOGY

Background and Purpose

The purpose of this mixed methods study is to examine how the elements of principal preparation programs contribute to the self-efficacy development of principals. The study will attempt to identify those specific elements in education leadership programs which most contributed to principals' self-efficacy beliefs. The results of this study will be used to inform education leadership program faculties about what preparation program elements most contribute to principal self-efficacy with recommendations about how faculties might utilize existing experiences to further enhance the sources of self-efficacy development (mastery and vicarious experiences) within preparation programs. An additional benefit could be gained as preparation program faculties utilize the results of this study to further understand the importance of personal interactions and continuous feedback that provide social persuasion to build aspiring principals' self-efficacy.

This chapter describes the purpose, participants, design and instruments used to gather the data as well as the statistical methods and verification techniques used for this study. The following questions provide the direction for the investigation of principal preparation and self-efficacy development in this study.

1. What are the perceptions of practicing principals regarding how well their principal preparation programs prepared them for the demands of principal leadership?

2. What preparation programs elements do principals perceive as contributing to the development of principal self-efficacy?

3. How did specific elements within preparation programs contribute to principals' self-efficacy development?

4. What unplanned experiences do principals identify that contributed to the development of self-efficacy during their preparation programs?

<u>Rationale for Mixed Methods Approach</u>

Denzin (1989), promotes the use of mixed methods research because "by combining multiple observers, theories, methods and data sources, researchers can hope to overcome the intrinsic bias that comes from single-methods, single-observer and single- theory studies" (p. 309). The use of mixed methods studies allows for triangulation to occur that substantiates or corroborates initial data analysis of a phenomenon. Gay, Miles and Airasian (2006), concur with other researchers about the usefulness of mixed methods in stating, "the purpose of mixed methods research is to build on the synergy and strength that exists between quantitative and qualitative research methods in order to understand a phenomenon more fully than is possible using either quantitative or qualitative methods alone" (p 490).   Patton suggests that researchers use mixed methods because "they need to know and use a variety of methods to be responsive to the nuances of particular empirical questions and the idiosyncrasies of specific stakeholder needs" (2002, p. 585). Patton goes on to say that using mixed methods to study a social phenomenon has come to be accepted as a beneficial practice. Researchers have also come to recognize that in any one type of study, biases are

inherent, and that by using mixed methods, researchers can conduct stronger research by reducing those biases.

In seeking understanding of how principals perceive their experiences in education leadership programs and their self efficacy development, it is important to look with depth at the sources of principal self-efficacy development. Using quantitative surveys within the context of this study, allows for the examination of program elements and their potential relationships to Bandura's (1997) sources of self efficacy development. In understanding the relationships between efficacy sources and preparation program elements, it was useful to identify the program elements that contributed most to principals' reported gains in self-efficacy so that they might be purposefully replicated by program faculty for other principal candidates' benefit. It was vital to interview highly efficacious principals to gain an understanding of their "lived experiences" relative to how preparation program elements contributed to their self-efficacy development.

The quantitative portion of the study featured a 52 item questionnaire which had two sections and used a nine point semantic differential scale to code responses. The first 34 items of the questionnaire yielded data regarding principals' perceptions of the effectiveness of program elements such as recruitment, faculty knowledge, instructional practices, coursework, learning experiences, and field experiences or internships, all elements that researchers identify a contemporary education leadership program should possess regarding principals' perceptions about specific elements in their preparation program (Darling-Hammond, et al, 2007; Fry, O'Neill & Bottoms, 2006). That section of the questionnaire contained 34 items that were based on findings from studies by the Stanford Education Leadership Institute (SELI, 2005) and the Southern Regional

Education Board (SREB, 2006); those findings were modified by the researcher to function as questionnaire items for this study. The second section of the questionnaire used the 18 item Principal Self Efficacy Scale (PSES) developed by Megan Tschannen-Moran and Christopher Gareis (2005). The PSES section used an identical nine point semantic differential scale and asked principals about their beliefs in their abilities to accomplish certain aspects of principal leadership such as: managing change in their school, promoting acceptable behavior among students, motivating teachers and raising student achievement on standardized achievement tests.

Responses to all 52 questionnaire items were used as the basis for developing a list of potential qualitative interviewees. Principals who rated every item from their preparation programs highly (seven or higher on the nine point scale) and who also rated themselves highly (seven or higher on the nine point scale) on every item from the Tschannen-Moran and Gareis Principal Self Efficacy Scale (PSES) were selected as potential candidates for the follow up qualitative interviews. Creswell (2003) asserts, "Qualitative research provides the researcher with a deeper, richer understanding of the topic or participants being studied than does quantitative research alone." Using the quantitative responses to inform the qualitative protocol would strengthen and provide additional validity to the mixed methods study (Greene, Caracelli & Graham, 1989; p. 258).

In the qualitative phase of the study, interviews were conducted with survey respondents who represented principals identifying themselves as highly self-efficacious and who also rated their principal preparation programs highly. The researcher utilized interviews with highly self-efficacious survey respondents who reported positive views of

preparation programs in order to identify those positive program elements that influenced

self-efficacy development in hopes of being able to more purposefully replicate those

experiences for others. Utilizing positive cases not only provided thick and rich

descriptions of program elements that are perceived to be effective preparation

experiences, but also assisted the researcher to better understand the conditions and

factors that promote leadership efficacy. According to Gay, Mills & Airasian (2006),

"quantitative researchers are concerned with objective reality that is 'out there' to be

discovered. Qualitative researchers focus on interpreting their participants'

perspectives," (p 489). Interviewing principals about their preparation experiences and

self-efficacy development provided information regarding the importance of specific

preparation program elements, student experiences and faculty interactions.

Since the quantitative phase of the study was completed first and provide a list of

potential qualitative interview subjects and further informed the interview protocol, the

quantitative phase will be discussed first. The qualitative phase will be described

separately in a subsequent section.

<div align="center">Quantitative Phase</div>

Participants

The population for the quantitative phase of the study consisted of 538 practicing

principals in Montana public schools and accredited private schools. A list of potential

participants was obtained from the School Administrators of Montana (SAM, 2007)

directory which included all the names of superintendents, principals, curriculum

coordinators and special education directors or administrators for all public schools and

some accredited private schools in Montana. Elementary, middle school and high school

principals who currently serve public schools in Montana were identified from the SAM

directory and were sent questionnaires electronically during the third week in January

2008. Also included in this emailing were those administrators whose positions in small

rural schools include both superintendent and principal duties.

   Each principal was given a four digit code as an identifier. The code was first used to

identify those principals who had not yet responded to the survey so that follow-up

contacts could be made to encourage their participation in order to obtain an adequate

sample size.   A second purpose of coding was to identify principals for further

qualitative interviews based on their responses to the 52 items of the Principal

Preparation Program Questionnaire.   Principals were guaranteed anonymity in their

survey responses and their identities were also kept confidential.

   A total of 168 questionnaires were returned for a 31 % response rate after the first

distribution. Follow-up emails were sent out during the fourth week of January to non-

respondents asking again for their participation. Another 12 % of questionnaires were

returned after the follow-up email. The researcher made a second follow-up contact to

non-responders by phone during the first week of February. Those follow-ups helped to

garner a 54 % response rate for the survey.

   Demographic analysis of the sample indicated that 64 % of the respondents were

male, with the remaining 36% female. Twenty five percent of the sample was between

the ages of 30 and 40 years old. Principals 41 years of age to 50 years of age accounted

for 31 % of the sample. Thirty eight percent of respondents were between the ages of 51-

60 with the remaining 6% of principals being 61 or older. Elementary principals and

elementary assistants made up 43 % of the respondents. Middle school principals were represented by 12 % of the respondents, with high school principals and high school assistant principals accounting for 29 % of the sample. Those principals who performed both principal and superintendent duties at small rural schools totaled 14 % of the sample.

With regards to number of years of principal experience, principals with five years or less experience accounted for 36% of the respondents, while 28 % of respondents had 6-10 years of principal experience. Principals with 11 years of experience or more made up the remaining 36 % of the respondents. The percentage of principals who completed principal preparation programs since 2001 was 41%, while those who completed programs from 1994 -2000 account for 29 %. Principals who completed programs between the years of 1986 - 1993 made up 18 % of the sample. Another 12 % of the respondents reported earning their principal certification prior to 1986.

More than 80 % of principals earned their certification from schools in the Montana University system, specifically; Montana State University and the University of Montana were each represented by 37 % of the respondents. Montana State University – Northern graduates accounted for 10 % of the sample while 18% of the respondents reported earning principal certification from programs outside the state of Montana.

Design and Procedure

Permission was obtained through the Montana State University Institutional Review Board to conduct this human subjects' research (See appendix B). The Principal Preparation Program Questionnaire was chosen to gather data from a large population.

Though not all principals in Montana had earned their masters degrees and principal

certification from schools in the Montana University system, the results of this study are

no less valuable to the state's education leadership faculties. The results of this study

could not only provide some program evaluation data to Montana University system

schools of education leadership, but might also provide information about what program

elements are perceived to be most effective in developing self-efficacy in aspiring

principals. Gay et al (2006) suggest that such evidence based data is helpful to

institutions looking to make programmatic changes or revisions. The results of this study

triangulated with course evaluations and accreditation self studies should illuminate

program strengths and areas of opportunity for education leadership schools in Montana.

The Principal Preparation Program Questionnaire was sent out the third week of

January 2008 through SurveyMonkey, an online survey service to the email addresses of

538 practicing principals in Montana. SurveyMonkey, was chosen as the vehicle to

collect information about principals' perceptions of their preparation programs for several

reasons. The advantages of using this online survey system over a conventional mail

survey were primarily associated with cost, clerical accuracy and immediacy of results.

A conventional survey distributed by mail would have been nearly five times more

expensive to conduct than an online subscription to the SurveyMonkey. Also the online

service (SurveyMonkey) provided immediate results to the questionnaire and tabulated

both individual item percentages as well as respondent demographics. Since data did not

have to be hand entered for analysis, clerical errors were greatly reduced. The

SurveyMonkey subscription service was recommended by Montana State University

faculty members who have used the program previously and have been impressed with

the ease of use and the immediate availability of results and reports. Another reason

SurveyMonkey was chosen was that the Principal Preparation Program Questionnaire

data were easily downloaded into an EXCEL spreadsheet and for exporting to the

Statistical Package for the Social Sciences (SPSS) program for conducting statistical

analyses on the survey data. That feature alone reduced clerical error and time associated

with data entry of thousands of data points.

   The first emailing of the questionnaire resulted in a 31% response rate. During the

fourth week of January 2008, a follow-up email was sent to those principals who had not

yet responded to the questionnaire. An additional 12% of principals participated in the

survey as a result of that follow-up. The researcher contacted the remaining non-

respondents by phone or left phone messages asking for their cooperation in completing

the survey. By the end of the first week February, a total of 292 principals had

participated in the survey resulting on a total response rate of 54%.   The researcher made

follow-up contacts after the first email with the purpose of gaining at least 250 responses

so that a factor analysis could be conducted on the questionnaire data with a subject to

item ratio of no less than 5:1 as suggested by researchers Bryant and Yarnold (1995).

With 292 responses, the subject to item ratio increased to 8.8:1 thereby strengthening the

overall study results.

   Confidentiality of identities and anonymity of responses were discussed on the cover

page of the survey. Principals were advised that their completion of the questionnaire

indicated permission to use their perceptions in the overall study. A final question on the

questionnaire asked if principals would grant permission to be contacted by the

researcher for possible qualitative interviews. A total of 66% of principals gave

permission to be contacted for possible qualitative interviews.

<center>Instrument</center>

   The Principal Preparation Program Questionnaire was designed to gather data from

education leadership program graduates who were currently employed as principals in

Montana schools. The questionnaire consisted of two sections; the first, a 34 item section

which addressed recruitment and admission to the program, faculty and instructional

experiences, relevancy of coursework to practice and the quality of field experiences or

internships. The first section of the questionnaire was modified by the researcher who

based it on findings from Stanford University's School Leadership Study (Stanford

Education Leadership Institute, 2005). Other questions came from an independent

review of additional literature advocating stronger selection and recruitment criteria

(Creighton & Jones, 2002), recent and relevant public school experience for university

faculty (Hess & Kelly, 2004) research based instructional constructs (Murphy, 2002;

Hallinger & Bridges, 1997) and meaningful mentoring and field experiences (Elmore,

2000; SREB, 2006).   The second section of the questionnaire used Tschannen-Moran's

and Gareis' (2005), Principal Self-Efficacy Scale (PSES), an 18 item questionnaire that

asked about principals' perceptions of their self-efficacy in specific areas of school

leadership. Permission was obtained from Dr. Megan Tschannen-Moran for use of the

PSES in this study. Published reliability for the PSES using Chronbach's alpha was .91.

   The Principal Preparation Program Questionnaire (see Appendix A) had a total of 52

questions which were measured on a nine point semantic differential scale. The nine

point semantic differential scale was used to indicate whether principals agreed: 1 = Not

at All, 3 = Very Little, 5 = To Some Degree, 7 = Quite a Bit, or 9 = A Great Deal with

items representing elements from principal preparation programs as well as principals'

perceptions of their self-efficacy. The 34 items from the first section asked participants

about their perceptions of their principal preparation program in the areas of recruitment

and selection, faculty instructional practices, development of learning community and

school climate, coursework that emphasized theory into practice and data driven decision

making, and internships that provided real world experiences in student management,

staff supervision and community building.   The second section of the questionnaire, the

PSES, asked about principals' perceptions of their ability in the areas of: facilitating

learning in their schools, managing change, raising student achievement, motivating

teachers and handling the demands of the job.

> Content and face validity of the questionnaire were determined by having
> two Montana State University Education Leadership faculty review the
> questionnaire for accuracy, content and how well it represented the
> research base in reviewing principal preparation program effectiveness. In
> addition to literature review, discussions between the researcher and
> faculty brought forth the necessity of piloting the questionnaire with
> Montana principals who would not be part of the actual study. It was
> decided to pilot the questionnaire with administrators who were in
> proximity to the researcher as a convenience sample.

Quantitative Pilot Study In October of 2006, 10 former or currently practicing

principals, graduates of Montana University System schools of education leadership

before 2000, were asked to pilot the survey instrument for internal consistency,

congruency and syntax. The pilot study questionnaire consisted of 34 items that were

measured on a four point semantic differential scale where 1 = Strongly Disagree, 2 =

Disagree, 3 = Agree and 4 = Strongly Agree. Questions asked about principals'

perceptions in four primary areas of recruitment and selection, faculty and instructional

practices, relevance of coursework and internships or authentic field experiences. The

questionnaire also contained four open ended questions about how each area or program

element supported their overall self-efficacy development.

The questionnaires were hand delivered to the pilot study participants or mailed to

their schools. In the pilot study, there were six males and four females with principal

experience ranging from 2-18 years. Only 6 of the pilot study participants were current

principals, others were special education directors, curriculum directors or

superintendents who had been principals previously. The pilot study sample consisted of

four current or former elementary principals, two middle school principals, two current or

former high school principals and one K-12 principal. All 10 questionnaires were

returned within a week. Follow-up phone calls or face to face visits were made to each

pilot participant asking for their input about the ease of use of the questionnaire as well as

its face validity. From the follow-up contacts and discussion, the researcher learned that

the items were perceived to be understandable and appropriate to the study.   Pilot study

participants reported that the questionnaire addressed important areas of principal

preparation and that the open ended items gave them a chance to further explain their

thoughts.

The pilot questionnaire responses were coded and entered into the Statistical

Package for the Social Sciences version 13.0 (SPSS, 2004) program. Data were analyzed

to present descriptive statistics and compare means for each question. That analysis was

completed to obtain an overall view of principal perceptions about preparation program

effectiveness and to see if any particular items in the questionnaire had higher or lower

overall mean scores than other item. Frequency analysis was also run to determine the

percentage of participants choosing specific responses.   A series of one way analysis of

variance (ANOVA) were also conducted to determine if gender, years of experience,

level of school served (elementary, middle or high school) or school size had an effect

on principals' perceptions of the effectiveness of their preparation programs. In

December of 2006, the results of the pilot study were presented to a research focus group

at Montana State University for further analysis and feedback. As a result of the pilot

study participants' comments, and further discussion among the researcher and Montana

State University faculty after the initial statistical analysis and feedback, the instrument

underwent some editorial changes in word choice and syntax for seven of the items. Five

questions which seemed to be redundant or addressed in other sections were deleted from

the questionnaire and two other items added to more adequately represent the literature

base about theory into practice experiences.

Once the quantitative pilot study was completed and as a result of further inquiry into

the theory of self-efficacy development and its place in education leadership, a second

qualitative pilot study that focused on self-efficacy development was conducted. The

primary purpose of the qualitative pilot study was to allow participants an opportunity to

expand on survey responses and give more detail about how their principal preparation

experiences influenced their self-efficacy development. The researcher reasoned that the

depth and quality of responses from an interview protocol would provide a greater

measure of richness and insightfulness about the lived experiences of principals.

Six of the 10 original participants from the quantitative pilot study were asked and

agreed to participate in the pilot study interviews. Those participants were chosen based

on their responses to the four opened questions from the questionnaire. Thoughtful and in depth responses to questions were identified by asking respondents to describe particularly effective elements within preparation programs and to elaborate as to what made them effective. Using positive case examples allowed the researcher to identify "what worked" so that those program elements and experiences might be more purposely replicated during program evaluation or revision.

The researcher developed a 10 question interview protocol that asked principals about how coursework, instructional practices and internships provided mastery experiences that created beliefs in their abilities to perform the tasks of the principalship. Other questions sought to elicit examples of how faculty interactions or relationships with others in the program helped to build principal self-efficacy through positive feedback or social persuasion. Two separate questions queried principals about how they may have benefitted from vicarious experiences, and finally, how arousal states contributed to the development of their self-efficacy. Interviews were conducted in person in the work offices of the participants during April of 2007. Most interviews lasted approximately 40 minutes and were completed at the end of the school day. All interviews were tape-recorded and transcribed by the researcher. To insure trustworthiness of the data, transcripts of the interviews were sent to the participants to check for accuracy and verify responses. Once member checks were completed, inductive analysis of transcript data was conducted to break data into small units of meaning, categorize the units into patterns and ultimately discover the themes about self-efficacy development within elements of preparation programs. A second member check was conducted to assess the reasonableness of data interpretation.

Like the quantitative study, the results of the qualitative interviews were presented to a focus group of Montana State University faculty and students for review and study. The interview protocol was then revised to include probing questions that asked respondents to provide specific examples of how program elements fostered their self-efficacy. These changes generated greater thick, rich descriptions of participant experiences in the actual qualitative interviews for this study.

Results of both pilot studies played an important role in the overall design and revision of the current study. Following the conclusion of the qualitative pilot study, the researcher and Montana State University faculty advisors determined that a stronger link needed to be developed that would tie together self-efficacy development and elements of principal preparation programs. Drawing inspiration from the Tschannen-Moran and Gareis (2005) study, "Cultivating Principal Self-Efficacy," the researcher decided to combine the Principal Self-Efficacy Scale (PSES) with the Principal Preparation Program Questionnaire. Although the function of the Principal Preparation Program Questionnaire was to examine principals' perceptions about overall preparation program effectiveness, it also was a factor in choosing principals to interview for information about self-efficacy development. By pairing the PSES, which surveyed principals about their self-efficacy with the Principal Preparation Program Questionnaire, which asked principals about their perceptions of the effectiveness of their preparation programs, the connection between efficacious principals and highly rated preparation programs could be examined in greater depth. In further contributing to the research base, the researcher wanted to identify particularly effective program elements and understand how those elements positively contributed to the development of principal self-efficacy.

In order to thoroughly answer the study's research questions about the effective elements of preparation programs, factor analysis was chosen as the statistical method to reduce data and extract the underlying factors presented by items written to assess the effectiveness of preparation programs. The extracted factors would also become important to the qualitative phase of the study as those factors or topics provided the basis for a deeper layer of inquiry regarding the sources of self-efficacy development with program experiences. Understanding those factors allowed the researcher to more thoroughly probe the context of mastery experiences and human interactions and gain a sense of how those efficacy building experiences could be more purposefully replicated or implemented within education leadership programs.

The same nine point scale contained in the PSES was adopted for use with the revised questionnaire. Questions regarding demographic information including: gender, age, number of years of principal experience, size of school served (less than 200 students, 200-400 students and more than 400 students), level of principalship (elementary, middle, and high school), institution where certification was earned, and year that certification was earned were added to the questionnaire. Delineating these demographic tendencies would later allow the researcher to choose qualitative interview candidates who represented the diversity of practicing principals in Montana.

Data Collection and Analysis

Gay & Airasian (2000), promote the use of descriptive data analysis for answering questions about how participants view certain conditions or issues within a given reality. Surveys and questionnaires are the primary source for data collection of this nature. After the Principal Preparation Program Questionnaires were returned to the researcher,

analysis of semantic differential scale responses was conducted using the Statistical

Package for the Social Sciences (SPSS). Descriptive statistics was used to determine

means, standard deviations and standard error for each of the 52 items on the

questionnaire. Descriptive statistics in the form of percentages were used to report

demographic characteristics of the participants.

Once descriptive statistics established means and standard deviations, a series of

multivariate analysis of variance (MANOVA) were conducted to determine if program

effectiveness was perceived differently among the groups of respondents. Results for

follow-up univariate ANOVAs were conducted to determine group differences on the

individual Principal Preparation Program Questionnaire items. Results from comparison

groups provided information about program effectiveness and efficacy across several

independent variables including: gender, age, years of principal experience, size of school

served, level of principalship (elementary, middle or high school), institution where

principals were trained and year principal certification was earned. The latter two

statistical analyses yielded important information about principals' perceptions of

program quality for the schools of education leadership in Montana. That data has been

used by faculty to provide the basis for program evaluation discussions at one of the

institutions.

Exploratory factor analysis was completed on the items in the first section of the

quantitative questionnaire to identify which items loaded into a particular factor so that

preparation programs elements perceived as most effective could be readily ascertained.

Exploratory factor analysis was chosen because it is useful in determining the

relationships among many dependent variables and reducing the number of those

variables down to a few interpretable factors (Field, 2005). Principal components analysis was used to extract factors and oblique rotation was used to increase the interpretability of the factor structure. Gliner and Morgan (2004), suggest using oblique rotation allows factors to correlate with one another. Doing so provided a more accurate and realistic representation of how the factors representing self-efficacy are related to one another. The extracted factors were important to the qualitative phase of the study as those factors provided the basis for a deeper layer of inquiry regarding the sources of self-efficacy development with program experiences.

<div align="center">Qualitative Phase</div>

Participants

Upon completion and return of the Principal Preparation Program questionnaires, a qualitative approach was employed to gain thicker and richer information about how principal preparation program elements contributed to the self-efficacy beliefs of principals. Because the researcher has an interest in working in a university education leadership program, that positionality led the researcher to conduct the study through the lens of examining self-efficacy and the processes in leadership education programs rather than their contexts. The Self-Efficacy Interview Protocol is included in Appendix C. In late February of 2008, the quantitative data was analyzed to determine which principals rated their preparation programs highly and also reported themselves as possessing high levels of self-efficacy for the principalship. Twenty- two of 292 principals gave every element of their preparation programs ratings of seven or greater on the nine point scale; they also rated their self-efficacy as a seven or greater for each item on the 18 item

Principal Self-Efficacy Scale (PSES). Although several principals rated either their

preparation program elements highly (at least 7 of 9 on the 9 point scale) or their self–

efficacy highly, only 22 principals rated both preparation program and self efficacy

highly and granted permission to be contacted for possible interviews. Of the 22

potential interview candidates, 10 were chosen who represented the diverse

demographics of principals in Montana and who were in proximity to the researcher.

Since Montana is a large rural state, proximity for this study was defined as within 200

miles. Once the interviews began, saturation was reached after six interviews. Patton

(2001) identifies saturation as the point where informational redundancy occurs during

qualitative interviews. Because data is analyzed as it is collected, subsequent decisions

about further data collection are made when no new information is revealed. The

demographics of the six interviewees included a principal with less than five years of

experience, 2 principals with six to ten years of experience and three principals with more

than 11 years of experience. Three of the principals were high school principals. One had

served in a school of less than 250 students for 14 years. The second high school

principal interviewed had less than five years of experience and worked in a school of

500 students. The third high school principal had over 20 years of principal experience

and had been in his current school of more than 600 students for seven years. The

elementary principal had served in a K-5 school with an enrollment of 300 for the last

nine years. The middle school principal who was interviewed had been principal in a

school of 400 for five years. The final participant served as principal /superintendent of a

small rural school with less than 150 students for the past two years. Additionally, five of

these six principals interviewed earned their certification from schools in the Montana

University system.   The researcher felt that these principals made up a diverse, yet representative sample of principals in Montana based on their years of experience, the size and level of schools that they served and when and where they earned their principal certification. They provided a measure of depth and insight about their program experiences and self efficacy development and were able to make thoughtful recommendations for program experiences to enhance self-efficacy development.

Interviews were conducted in May and June of 2008. Three occurred in the offices of the principals, two were completed over the phone and one was completed at a local restaurant. Most interviews took approximately an hour; all were tape-recorded for later transcription by a professional transcriptionist. It was decided to hold interviews after the quantitative data from the Principal Preparation Program Questionnaire was analyzed so that the results of that analysis could further inform the qualitative process. Identifying and understanding the factors that were extracted from the factor analysis gave the researcher opportunities to probe those factors in greater depth with the participants in order to triangulate the quantitative results with the qualitative data. The thick and rich descriptions of program experiences and human interactions that influenced principals' self efficacy development were borne out of the identification of factors from the factor analysis and from statistically significant findings from the some of the multivariate analyses of variance, MANOVA, that were conducted.

Once the transcriptions were complete, they were sent to the interviewees to review for accuracy and further clarification.   After these initial member checks, the researcher began the process of inductive analysis of the interview data. Data from transcripts was broken into small units of meaning relative to preparation program elements and self-

efficacy development that were independent of other units. These units were then organized into larger patterns and categories. Once categories were established, the researcher also looked for links and similarities between categories that would establish relationships between program elements and self-efficacy development. The categories were then coded thematically. The researcher performed a second member check with interview participants to gain further clarification of specific episodes and to discuss the reasonableness of suggested themes. Participants reviewed the categories and the specific episodes that represented them and gave the researcher feedback about the themes. Following feedback gained from the second member check, the researcher reviewed the data again for case discrepancies and summarized the data and positing theories about program elements and self-efficacy development. The researcher thanked the participants for their assistance in this study by providing them with gift certificates from local restaurants.

<u>Design and Procedure</u>

The second phase of the study, the qualitative research, involved inquiry, which occurred in a naturalistic setting and involved creating understanding out of information obtained from others (Creswell, 1998). Miles & Huberman (1994), assert that small sample size in qualitative research is appropriate because purposeful sampling provides more in depth information than quantitative sampling which attempts to gather data from large numbers of participants. The sample size in this study, while small, was adequate to provide thick, rich descriptions of participant self efficacy development during their preparation programs.

This study was designed to identify common themes and topics regarding how principals perceived their principal preparation experiences and how program elements and human interactions contributed to their self efficacy development. Through illuminating and understanding principals' preparation experiences, the researcher sought to assist education leadership program faculty and administration in identifying those program elements and participant experiences that most contributed to principal self efficacy. Once these experiences are understood, faculty and administration can more purposefully design experiences that are identified as developing self efficacy and weave them throughout the fabric of preparation programs through instructional practices, coursework, field experiences and student and faculty interactions.

The research design employed the use of standard, open-ended interviews of six current principals who work in Montana schools. Principals who represent the diverse demographics of Montana principals were purposely selected. Patton (1990) posits that an interview guide or protocol is necessary to determine exact wording or sequencing of questions and allows a common set of topics to be investigated. An interview protocol was developed and revised after qualitative pilot study interviews in the spring of 2007. Gliner and Morgan (2004) recommend that a pilot study be used to determine appropriateness of research questions and interview protocol before actual interviews take place. In addition to the revision of the protocol after the qualitative pilot study, the researcher utilized findings from the Principal Preparation Program Questionnaire to further probe self-efficacy and principal preparation.

In that pilot study, four current or former principals who are now special education directors or curriculum directors were interviewed using a 10 item protocol about the

kinds of experiences in their preparation programs that affected their self-efficacy development. These interview participants had previously participated in this study's quantitative pilot questionnaire and were familiar with the goals of this pilot study.

 The initial protocol that was used in the pilot study was developed around Bandura's (1986) sources of self efficacy development (mastery experiences, vicarious experiences, social persuasion and arousal) and how principal preparation program elements could be understood in terms of those sources. The researcher interviewed the participants in their school offices, transcribed the pilot study interviews and coded the data based on common themes that emerged. The information from those four interviews was analyzed and presented to a focus group of faculty and doctoral students at Montana State University for feedback and further recommendations. Following discussion with Montana State University education leadership professors about the pilot study results, the protocol questions were revised to elicit a greater range of responses and probe with more depth into program elements as self efficacy sources. Additionally, and as a result of the quantitative phase of this study, the researcher sought to probe the factors extracted from the factor analysis and statistically significant findings from the MANOVAs to elicit a deeper understanding of principals' experiences.

    Prior to the qualitative interviews principals were contacted by phone about the purpose of the study and to get verbal permission to be interviewed. Principals were then asked to sign an informed consent form before being interviewed. Once the informed consent document (Appendix B) was returned, interview times and locations were established so that the interviews could take place in familiar surroundings to support naturalistic inquiry. The researcher assured the participants of confidentiality and

informed them of their right to withdraw from the study at any time. Interviews occurred during May and June of 2008; three occurred in the principals' offices, two were completed over the phone and one was held at a local restaurant at the request of the participant. Most interviews lasted approximately an hour. Each participant was asked about his or her principal preparation program experience and his or her self-efficacy development during their preparation program. Interviews were tape recorded for transcription by a professional transcriptionist. All interview tapes were kept confidential and will be erased following the study's completion.

Following completion of the interview transcriptions, the researcher contacted participants to notify them that email attachments of their transcriptions were sent for their review. Interviewees were asked to review the transcriptions of their interviews for accuracy, correct interpretation and to clarify responses when necessary. Lincoln & Guba (1985) describe this kind of member checking as essential to establishing credibility. The follow-up contacts also provided another measure of validity of the data by determining whether the participants believed that the researcher's perceptions were accurate. The identities of the interviewees are protected by giving them pseudonyms during the data analysis and reporting phase of the study.

Interview Protocol

The final item on the Principal Preparation Program Questionnaire from the first phase of this study asked for participants' permission to be contacted for a possible qualitative interview. Following the analysis of the quantitative data, 22 principals were chosen who fit the criteria of rating their preparation programs highly, viewing themselves as having high self-efficacy and who also agreed to be contacted for a possible interview. Once

that list of potential interviewees was developed, 10 principals in proximity to the researcher were sent a letter detailing the purpose of the research study and citing its importance and benefit to the field of principal preparation (Gay et al, 2006). In addition to requesting their participation in the interviews, principals were informed that their participation was voluntary, they could withdraw at any time, and that they would be protected with pseudonyms during the analysis and reporting phase of the study.

The purpose of the qualitative research was to gather information that could not be gleaned from the responses of the Principal Preparation Program Questionnaire. The researcher revised a pilot study interview protocol to better connect elements of successful principal preparation programs with Bandura's (1997) four sources of self-efficacy development. The researcher conducted a pilot study with the interview protocol in 2006 with four principals. Upon completion of the qualitative pilot study, subsequent data analysis was presented to a faculty and doctoral student focus group which gave the researcher feedback on the instrument and suggestions for revision. Follow-up questions were added to clarify the intent of research questions, highlight specific examples or experiences and further probe into how program elements influenced the development of their self-efficacy. The follow-up questions were also written to elicit specific examples and recommendations about how programs and faculty might provide opportunities to further promote principal self-efficacy. These structured follow-up questions assisted in obtaining thicker, richer data to more fully explain and understand participants' lived experiences during principal preparation programs.

The Montana State University Education Leadership Program Leader and an Assistant Professor in the Education Leadership department reviewed the revised

protocol for accuracy and relevance of purpose and face and content validity. Since instrument reliability also depends upon the reliability and positionality of the researcher when qualitative researcher is conducted, the researcher was especially careful to be aware of her potential bias as an adjunct instructor in the Montana State University Education Leadership Program.

Each of the protocol questions was coded to reflect its representation of one or more self-efficacy sources embedded in or specifically addressed within principal preparation program elements. Questions that asked about specific coursework or experiences which require students to master a certain skill or knowledge set were coded as mastery experiences (ME), while other questions that inquired about social interactions with classmates, faculty and other practitioners have been coded as vicarious experiences (VE) or social persuasion (SP). Arousal (A) questions dealt mainly with principals' recollections of whether they have encountered any particularly stressful or encouraging elements within the principal preparation program. A total of eight questions addressed mastery experiences while six questions delved into the role that vicarious experiences played in efficacy development. Social persuasion was also tested through eight questions and there were five items that addressed the arousal state source of self-efficacy. Several questions are coded with more than one self efficacy source. For instance, question number five asks: "How did faculty in your program have an impact on your self-efficacy development?" This question addresses vicarious experiences, social persuasion and potentially mastery experiences because it seeks to understand not only levels of personal interactions and how those interactions influence aspiring principals' belief systems, but also the kinds of experiences that faculty design that

require students to master various skills. The fact that a single protocol question can

identify more than one self-efficacy source indicates the importance of the interplay

between and among specific efficacy sources within preparation programs. A table of

specifications (Table 1), detailing efficacy sources within preparation program elements

and interactions follows.

Table 1. Table of Specifications: Program Elements and Interactions as Self Efficacy
         Sources

Interview Themes	Efficacy Sources	Research Question
1. Perception of Success	Arousal (A)	3, 4
2. Coursework	Mastery Experiences (ME)	2, 3
3. Instructional Experiences	Mastery Experiences (ME) Social Persuasion (SP)	2, 3, 4
4. Faculty Interactions	Social Persuasion (SP) Vicarious Experiences (VE) Mastery Experience (ME)	2, 3, 4
5. Interactions with Others	Vicarious Experiences (VE) Social Persuasion (SP)	2, 4
6. Internship/ Field Experience	Vicarious Experiences (VE) Mastery Experiences (ME) Social Persuasion (SP)	2, 4 1, 2, 3, 4
7. Greatest Impact	Arousal (A) Social Persuasion (SP) Mastery Experience (ME)	2, 3, 4
8. Efficacy Realization	All Sources	2, 3, 4
9. Outside Experiences	All Sources	4
10. Program Recommendations	Mastery Experiences (ME) Social Persuasion (SP) Vicarious Experience (VE)	4

Data Analysis

A second coding was completed with respect to data analysis. Interview responses were coded according to the sources of self-efficacy (mastery experiences, vicarious experiences, social persuasion and arousal) from Bandura's (1986) research.   Lincoln and Guba (1985), support the use of inductive analysis of transcript data. The inductive process first employed unitization to examine single pieces (units) of information that stand by themselves and are interpretable. The next step in the process was the categorization of units into categories with similar characterizations. Data analysis of the interview transcripts revealed some crossover where some episodic units fit into more than one category and described more than one phenomenon. Once categories were established, the researcher also looked for links and similarities between categories that would establish relationships between program elements and self-efficacy development. The categories were then coded thematically. Bogan and Biklen (1998) suggest that categorizing data allows the researcher to create a focus or argument. The researcher performed a second member check with interview participants to gain further clarification of specific episodes and to discuss the reasonableness of suggested themes. Participants reviewed the categories and the specific episodes that represented them and gave the researcher feedback about the themes. Following feedback gained from the second member check, the researcher reviewed the data again for case discrepancies and summarized the data and positing theories about program elements and self-efficacy development. The researcher thanked the participants for their assistance in this study by providing them with gift certificates from local restaurants.

Trustworthiness of the data was established as suggested by Lincoln and Guba (1985,

p.290) through four elements. Credibility was established as principal participants fit the

criteria of being graduates of principal preparation programs currently working as

principals in the state of Montana. Using the perceptions of those practicing in the field

lends "credence" to the results of the study. Credibility was also strengthened through

member checking with interview participants to review the accuracy of interview

transcriptions, their interpretations of the patterns, themes and topics identified.

Transferability, a second aspect of trustworthiness that addresses the degree to which the

findings of this study can apply to other projects, occurred through making several of the

data documents available to others. These documents are included in the Appendix

section so that other researchers may transfer the conclusions of this research to other

projects or repeat the procedures of this research in another study.   Dependability, an

assessment of the quality of the study's processes of data collection, analysis and theory

generation, and confirmability, a measure of how well the findings are supported by the

data collected, were addressed through an independent audit of the research methods and

findings by an accomplished researcher from Montana State University.

Chapter Summary

The purpose of this mixed methods study was to examine how the elements of

principal preparation programs contribute to the self-efficacy development of principals.

The study identified specific elements in principal preparation programs which most

contributed to principals' self-efficacy beliefs. The results of this study will be used to

inform education leadership faculties about how those program elements contribute to

principal self-efficacy. The study also makes recommendations about how faculties more purposefully design experiences to further enhance self-efficacy development within preparation programs.

Chapter three described the purpose, participants, design and instruments used to obtain data from practicing principals in Montana regarding their perceptions of their principal preparation programs and self-efficacy development. Chapter three also presented information about how pilot studies in both quantitative and qualitative phases have assisted in establishing validity and reliability. Statistical methods and verification techniques used for this study were also included in this chapter.

Chapter four will present the quantitative and qualitative findings from the Principal Preparation Program Questionnaires and the Self-Efficacy Qualitative Interviews.

CHAPTER 4

RESULTS

Introduction

   The purpose of this mixed methods study examines how the elements of principal

preparation programs contribute to the self-efficacy development of principals. The study

identifies those specific elements in education leadership programs which most

contributed to principals' self-efficacy beliefs. The results of this study will be used to

inform education leadership program faculties about what preparation program elements

most contribute to principal self-efficacy with recommendations about how faculties

might utilize existing experiences to further enhance the sources of self-efficacy

development (mastery and vicarious experiences) within preparation programs. An

additional benefit could be gained as preparation program faculties utilize the results of

this study to further understand the importance of personal interactions and continuous

feedback that provide social persuasion to build aspiring principals' self-efficacy.   The

mixed methods approach was used in this study to "build on the synergy and strength that

exists between quantitative and qualitative research methods in order to understand a

phenomenon more fully than is possible using either quantitative or qualitative methods

alone" (Gay, Miles and Airasian, 2006, p. 490).   Patton suggests that researchers use

mixed methods because "they need to know and use a variety of methods to be

responsive to the nuances of particular empirical questions and the idiosyncrasies of

specific stakeholder needs" (2002, p. 585).

The following questions provide the direction for the investigation of principal

preparation and self-efficacy development in this study.

1. What are the perceptions of practicing principals regarding how well their

   principal preparation programs prepared them for the demands of principal

   leadership?

2. What preparation program elements do principals perceive as contributing to

   the development of principal self-efficacy?

3. How did specific elements within preparation programs contribute to

   principals' self-efficacy development?

4. What unplanned experiences do principals identify that contributed to the

   development of self-efficacy during their preparation programs?

   Chapter four presents the results of the data analysis and findings from the Principal

Preparation Program Questionnaire and the Principal Self-Efficacy Interviews. The

Principal Preparation Program Questionnaire was a 52 item survey modified by the

researcher, and based on findings from the Southern Regional Education Board (SREB)

report, *Schools Can't Wait* (2006) and the Stanford Educational Leadership Institute's

report, *School Leadership Study* (2007). Questionnaires from these studies provided the

research base for the 34 items that asked about preparation program effectiveness.

Additionally, Tschannen- Moran and Gareis' 18 item Principal Self-Efficacy Scale

(PSES, 2005) was included in the quantitative instrument as a means of tying self-

efficacy to principal preparation. Though studies have been done which examine

principal preparation program effectiveness, this study sought to examine preparation

programs in light of principals' self-efficacy.   The researcher also drew inspiration from

the Tschannen- Moran and Gareis study, *Cultivating Principal Self-Efficacy: Supports that Matter* (2005). Recommendations from that research suggested that additional studies examine how preparation programs could more purposefully assist in the development of principal self-efficacy.   Response rates from the Principal Preparation Program Questionnaire will be described as will the demographics of the respondents. Interview participants' demographic characteristics will also be presented. Data analysis and reporting for each of the four research questions is also included in the chapter.

<u>Response Rate</u>

The Principal Preparation Program Questionnaire was sent electronically to practicing principals in Montana's public and private accredited schools. According to the School Administrators of Montana 2007 Directory, there were a total of 574 principals serving Montana's public and private schools who had earned principal certification or who were earning their endorsement through an alternative certification program which was approved by the Montana Office of Public Instruction (SAM, 2007).   That alternative certification was completed through a university intern program where students were completing program requirements for certification while actually employed as principals in Montana schools.   Although 574 emails were sent to practicing principals in the state, 40 email contacts were returned as undeliverable. Despite two more attempts at contacting those principals to gain updated email addresses that would have enabled those principals to participate in the study, only four more email addresses were included in the total sample.

During the third week of January 2008, the Principal Preparation Program Questionnaire was emailed to 538 practicing principals in Montana's public and private accredited schools. By the end of that week, 128 questionnaires had been completed and returned for a response rate of 24%. A follow-up email was sent during the last week of January asking non-respondents for their assistance. The researcher then made a second follow-up contact by phoning non-respondents during the first week of February, 2008. By the end of the first week in February 2008 and as a result of the initial email and the two subsequent follow-up contacts, a total of 292 principals had completed and returned the questionnaire for a response rate of 54%. The response rate for the Principal Preparation Program Questionnaire fell within the guidelines suggested by the University of Texas (2007) which state that acceptable response rates for online and email surveys are between 30% (average) and 60 % (very good). Sheehan (2001) also found that response rates of email surveys had continuously decreased since 1986. Her research described that the average response rate in her analysis of 31 studies over a fifteen year period was only 36%. As computed on surveysystem.com, the confidence interval for the sample size of 54% was 3.87 at a confidence level of 95%. Based on this return rate, the 95% confidence interval is $\pm$ 3.87 percent which indicates if the survey were to be conducted 100 more times, 95 out of 100 trials would yield results that are within 3.87 percent of the current results reported for this sample of principals.

<u>Questionnaire Respondents' Demographic Data</u>

The Principal Preparation Program Questionnaire was sent electronically to 538 practicing principals in Montana's public and private accredited schools. Their

demographic characteristics are presented in Tables 2-7. A brief explanation of those

characteristics follows each table.

Table 2 Gender of Participants

Male	Female
64%	36%
N=186	N=105

Gender of respondent principals is reported in Table 2. Male principals account for 64%

of the sample. Females made up 34% of respondents. On a national scale, males and

females are almost evenly split with males filling 51% of principal positions and females

making up the remaining 49%. In Montana however, female principals only account for

33% of the total number of principals (School Administrators of Montana, 2007). It is

not known why females are underrepresented in school principal positions in Montana.

Table 3 Age of Participants

28-40 Years Old	41-50 Years Old	51-60 Years Old	61-70 Years Old
25%	31%	38%	6%
N=73	N=90	N=111	N=17

Principals' age is represented in Table 3. Fifty-six percent of principal respondents were 50

years of age or younger. Thirty-eight percent of respondents reported being 51 to 60 years old

and represented the largest age group. Principals over the age of 60 made up six percent of the

sample.

Table 4 Years of Principal Experience

Less than 5 Years	6-10 Years	11+ Years
36%	29%	35%
N=106	N=83	N=102

Principal experience was somewhat evenly split among the respondents. There were slightly more principals with less than five years of experience than those with 6-10 years experience or those with greater than 11 years experience.

Table 5 Current Principal Position Held

High School	Middle	Elementary	MS Ass't.	HS Ass't.	Principal/Supt.
21%	12%	39%	9%	4%	15%
N= 63	N=35	N=115	N=24	N=12	N=43

Of those principals who responded to the questionnaire, elementary principals accounted for 39% of the total responses. High school principals made up 21% of the sample, followed by K-12 principal/superintendents who represented 15 % of the respondents. Middle school principals and assistant principals at both middle school and high school levels accounted for the smallest groups of respondents representing 12%, 9 % and 4% of the sample respectively. This study's respondents accurately represent the population of principal positions held in Montana. According to the Office of Public Instruction (2007), 20% of Montana's schools are high schools, 26 % middle schools, junior highs or 7/8 schools within a K-8 district, and 53 % of schools are classified as elementary schools. The Office of Public Instruction acknowledges K-8 schools as elementary schools although for the purposes of this study they are disaggregated as K-8 districts which include middle level students. If this study included K-8 schools in its designation of elementary schools, the respondent sample would be nearly identical to Montana's school population breakout for elementary school configurations (15% K-8 respondents + 39% elementary respondents = 54% of the total respondents represent some configuration of elementary schools).

Table 6 Year Principal Certification Earned

2001-2008	1994-2000	1986-1993	1974-1985
40 %	30%	18%	12%
N= 118	N=86	N=52	N=36

Information about when principals earned their certification is detailed in Table 6.

Principals who earned their certification since 2001 made up 40 % of the respondents.

Those principals who earned certification between the years 1994-2000 accounted for

30 % of the sample, while the final 30% of the sample represented principals who earned

certification between the years 1974 and 1993.

Table 7 Institution Where Certification Earned

Montana State University	University of Montana	Montana State Northern	Out of State Institutions
37%	35%	10%	18%
N=108	N=104	N=28	N= 52

Data regarding where principals earned their principal certification is presented

in Table 7. Most practicing principals in Montana earned their certification from the two

large state universities, Montana State University (total enrollment = 13,000) and the

University of Montana (total enrollment = 14,000). The Education Leadership

Department at Montana State University serves approximately 150 students though

master's level and doctoral programs while the University of Montana's program enrolls

70 students in both master's level and doctoral programs. Montana State University –

Northern has a total enrollment of 1420 students and has less than 12 candidates enrolled

in its principal certification program.   In this study, 37% of the respondents gained

certification from Montana State University, 35% were certified at the University of

Montana, and 10 % of the survey participants earned their principal certification from

Montana State University – Northern. Institutions outside the state of Montana certified

18% of the principals in the sample.

<center>Demographics of Qualitative Interview Subjects</center>

In order to learn how principal preparation programs contributed to the development of

self-efficacy, the researcher sought out principals who reported high levels of self-

efficacy in the principalship and who also rated their preparation programs as effective.

Using the responses from the Principal Preparation Program Questionnaire, 22 principals

were identified who rated their programs highly and who also reported high levels of self-

efficacy in the principalship.   Of those 22 principals, 10 who were within a 200 mile

radius of the researcher were selected for interviews.   To achieve the greatest diversity

possible within that group of potential interview participants and in order to provide a

cross sectional view of experiences, the researcher chose men and women who

represented all levels of principal experience (less than 5 years, 6-10 years and 11+

years), three categories of age (28-40 years old, 41-50 years old and 51-60 years old), and

all levels of school served (elementary, middle school, high school and K-12 small

districts). Additionally, the sample represented a proportional number of principals who

earned their certification in Montana institutions and those who earned certification of

outside the state of Montana. The interview sample also contained subjects who acquired

their certification during each of the four time periods (1974-1985, 1986-1993, 1994-

2000, and 2001-2008). After the interviews began, it was clear that information or data

saturation was reached after six interviews. Data saturation occurs when the researcher

no longer encounters new information regarding an experience or phenomenon and

concludes that the information learned thus far represents the group's experience (Patton 2002). However the six principals who were interviewed still represented all of the total demographics from the quantitative questionnaire sample. Those six interview participants have been given pseudonyms and are described in greater detail below.

"Ken" is a 37 year old principal at a high school with an enrollment of approximately 500 students. Ken earned his principal certification at one of the large Montana universities within the last five years and has less than five years of principal experience. Before becoming a principal, Ken taught secondary English and political science for eight years in another school district in Montana.

"Terri" has been an elementary principal for nine years at a K-5 school with approximately 300 students. Terri earned her principal certification nine years ago at one of the Montana universities. Terri worked as a principal while she was earning her endorsement through an alternative certification program approved by the Montana Office of Public Instruction. Terri has a total of 37 years in education with 28 years as a second grade teacher. She is 59 years old.

"Felicia," age 42, was a secondary math and physics teacher before completing a Montana Office of Public Instruction approved alternative certification program in 2002. In this program, Felicia completed coursework at one of the Montana universities while she worked as a high school assistant principal for two years. Following her two years as a high school assistant, Felicia became a middle school principal in the same school district. She has held that position for the last five years in a school with 400 students.

"Michael," 44, was a K-12 music teacher for six years before gaining his principal certification 16 years ago. Michael's first position was as a high school assistant

principal for one year before moving into a high school principal position in a neighboring district. He has held that position for the past 15 years in a school with an enrollment of 220 students. Michael earned his principal endorsement at a Montana university.

"Maryann" gained her principal certification from a large university on the east coast over 20 years ago. She became a principal and central office administrator in a large district in an eastern state for 20 years before coming to Montana. In her current position, she is a K-12 principal/superintendent of a school with an enrollment of 150 students. Maryann has been employed in that position for the past three years. Maryann's service to the field of education has extended 36 years. She is 58 years old.

"Paul" has been a school principal for 22 years in the same system. He has held the principal position in the district's high school which has 600 students for the last seven years. Prior to his high school position, he was the junior high principal in that district for 15 years. Paul earned his principal certification in the early 1980's from a Montana university. Paul's educational career began in his current system as he was first a history teacher and coach and then became a guidance counselor before moving to the principalship. Paul is 58 years old and has been in education for 35 years.

This study examined four research questions to better understand the perceptions of Montana's practicing principals regarding their preparation programs and how self-efficacy was developed during those programs. Research question 1 was addressed through the Principal Preparation Program Questionnaire that was completed by 292 practicing principals in Montana. The questionnaire was sent through a web-based survey and questionnaire service, SurveyMonkey. Analysis of the responses was achieved by

using the Statistical Package for the Social Sciences (SPSS) program. Descriptive

statistics revealed means and standard deviations for each of the 34 items on the Principal

Preparation Program Questionnaire. A series of multivariate analysis of variance

(MANOVA) were conducted to determine if there were differences in principals'

perceptions of program elements: age, gender, years of experience, institution principals

earned certification, or the year certification was earned.

Question 2 sought to gather data to better understand those specific elements or factors

in preparation programs that principals perceived as most contributing to their self-

efficacy development. That task was accomplished by conducting a factor analysis of the

data from the 34 items in the Principal Preparation Program Questionnaire and the 18

items from Tschannen-Moran and Gareis' Principal Self-Efficacy Scale (PSES). Those

52 items were reduced and four factors were obtained that describe the preparation

program experiences and conditions that most contributed to self-efficacy development.

To answer questions 3 and 4 and to provide greater depth for questions 1 and 2,

qualitative interviews were conducted with six practicing principals of varying age and

experiences whose self-reports indicated high levels of self-efficacy and who also

perceived their preparation programs as effectively preparing them for the principalship.

This study used a mixed methodology approach in order to expand upon the scope of

survey responses and triangulate perceptions with documented experiences of

participants (Greene & Caracelli, 1997). Ten open-ended interview questions (Appendix

C) provided the thick, rich descriptions of preparation program experiences and activities

that further enhanced those participants' self-efficacy development.

Research Question 1 Results

- What are the perceptions of practicing principals regarding how well their principal preparation programs prepared them for the demands of principal leadership?

In Table 8, means and standard deviations reported for this question are based on a nine point semantic differential scale (1 = Not at All to 9 = A Great Deal). Items are reported in descending order with the highest rated preparation program elements reported first.

Questionnaire respondents reported that their preparation programs were most effective in establishing learning communities within cohort groups ($M = 7.40$, $S.D. = 3.37$) whereby students learned from one another and developed collegial relationships ($M = 6.75$, $S.D. =1.17.$). Other highly perceived program elements centered on instructional practices which used case study analyses ($M = 7.18$, $S.D. = 1.55$) and problem based learning strategies ($M = 6.74$, $S.D. = 1.69$) to simulate common issues and concerns faced by modern principals. Respondents recognized the effectiveness of programs that promoted leadership theory ($M = 6.92$, $S.D. = 1.88$) and integrated other research ($M = 6.41$, $S.D. = 1.82$) and theoretical knowledge into instructional leadership practice ($M = 6.14$, $S.D. = 1.79$). Respondents also reported that the faculty in their preparation program possessed recent administrative experience ($M = 6.24$, $S.D. = 1.80$) and promoted rigor and relevance across all areas of the program ($M = 6.1$, $S.D. = 1.93$).

Table 8 Effectiveness of Program Elements

Item	Description	Mean	S.D.
Q15	Becoming a Learning Community	7.40	3.37
Q13	Case Study Analyses	7.19	1.17
Q39	Observe Teachers/Practice Supervision	7.18	1.55
Q16	Emphasized Research/Leadership Theory	6.92	1.69
Q14	Encouraged Collegial Relationships	6.75	1.88
Q12	Used Problem Based Learning Strategies	6.74	1.82
Q17	Encouraged Self-Reflective Practices	6.50	1.79
Q25	Promoted Policy/Procedure Knowledge	6.44	1.80
Q18	Integrated Theory into Practice	6.41	1.93
Q11	Faculty Possessed Admin Experience	6.24	1.91
Q10	Faculty Promoted Rigor and Relevance	6.18	1.98
Q19	Emphasized Instructional Leadership	6.14	2.03
Q20	Vision/Mission Development	6.04	2.03
Q21	Leading A Planned Change Effort	5.93	2.00
Q24	Understanding Diversity	5.91	1.91
Q28	Promoted Professional Development	5.66	1.86
Q33	Building Positive School Climate	5.65	2.55
Q35	Communicate Vision in Community	5.61	2.63
Q38	Work with Social, Political Agencies	5.51	2.66
Q27	Data Driven Decisions/Assessment	5.44	2.02
Q23	Understand Facility Management	5.26	2.09
Q29	Parent/Community Involvement Practices	5.23	2.97
Q36	Apply Student Management Procedures	5.22	2.59
Q26	Supervise Instructional Staff	5.21	2.05
Q22	Resource Allocation/Manage Budgets	5.21	2.00
Q32	Support Students and Families	5.11	2.45
Q30	Work w/ Exemplary Principal Mentor	4.92	2.66
Q34	Ethical, Moral Decision Making	4.59	2.53
Q37	Collect Analyze Data	4.56	2.56
Q31	Debrief Field Experiences	4.28	2.52

Program elements which were perceived as less effective came from items that asked about coursework in the areas of data driven decision making and assessments *(M = 5.44, S.D. = 2.02)*, facility maintenance (*M = 5.26, S.D. = 2.09*), community relations (*M = 5.23, S.D. =2.97*), resource allocation and budgeting (*M = 5.21, S.D. = 2.00*). Respondents were also ambiguous about the effectiveness of methods used to supervise and evaluate teachers (*M = 5.21, S.D. = 2.05*), and instruction or coursework about how to help and support students and families (*M = 5.11, S.D. = 2.45*).

The lowest ratings on program effectiveness came exclusively from questions that asked about internships and field experiences. Four of the ten questions on the field experience section had mean scores of less than 5.0 on the nine point scale. The highest mean scores in that section ($M = 7.18$, $S.D. = 1.55$; $M = 5.65$, $S.D. = 2.55$) addressed time spent observing teachers and building positive school climate. Overall, respondents did not feel that their internship/field experiences were structured to provide them with: opportunities to learn from an exemplary mentor principal ($M = 4.92$, $S.D. = 2.66$), chances to demonstrate ethical, moral decision making ($M = 4.59$, $S.D. = 2.53$), or opportunities to collect and analyze school data ($M = 4.56$, $S.D. = 2.56$). Finally, interns were not always given the opportunity to meet with faculty and other interns to debrief field experiences and learn from one another ($M = 4.28$, $S.D. = 2.52$).

While the mean scores of questions asking about clinical field experiences were lower across all groups of principals, multivariate analysis of variance (MANOVA) revealed that there were statistically significant differences in perceptions of principals based on the institution where they earned their certification (Wilks $\Lambda = .730$ F $_{(30, 755)} = 2.85$, p = .000 $\eta^2 = .10$). This magnitude difference is considered to be a large effect (Cohen, 1988). Table 9 shows MANOVA regarding clinical field experiences by institution. For reporting how program graduates perceived the strengths or weaknesses of their preparation programs, the researcher chose to assign letter names to the Montana institutions to protect the reputation of education leadership programs. In examining principals' perceptions about their clinical field experiences, the data revealed that those principals who earned their certification at Institution A or at a program outside the state of Montana rated their clinical field experiences as more effective than did graduates of

the Institution B or Institution C.   Table 9 depicts means, standard deviations, univariate

results for each item assessing perceptions about field experience by institution attended.

As depicted, every item on the Clinical Field Experience section was significant at the *p*

< .05 level. However, only items Q30 (Pairing w/ Exemplary Principal Mentor), Q33

(Policies to Build School Climate), Q34 (Practicing Ethical, Moral Decision Making) and

Q36 (Practicing Student Management Procedures) had medium to large effect sizes ($\eta^2 >$

.101) associated with item significance.

Table 9 Means and Standard Deviations for Clinical Field Experience

| Item | Institution A | | Institution B | | Institution C | | Out of State | | Totals | | Sig. | Partial Eta Square |
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*p*	
Q30	6.47	2.512	4.04	3.162	4.04	2.965	5.56	2.476	5.25	2.982	.000	.137
Q31	5.54	2.416	3.89	2.787	4.72	2.606	5.78	2.315	4.95	2.660	.000	.092
Q32	4.76	2.463	3.48	2.478	4.52	2.694	4.84	2.298	4.31	2.521	.001	.058
Q33	5.83	2.144	4.01	2.553	4.76	2.554	6.02	1.985	5.14	2.454	.000	.128
Q34	6.34	2.061	4.53	2.850	5.24	2.788	6.60	1.927	5.67	2.553	.000	.122
Q35	5.04	2.405	3.86	2.596	4.36	2.782	5.16	2.235	4.60	2.529	.003	.051
Q36	6.39	2.059	4.58	2.951	4.92	2.798	6.20	2.365	5.60	2.641	.000	.101
Q37	5.61	2.273	4.41	2.817	4.84	2.925	6.12	2.182	5.23	2.592	.000	.066
Q38	4.99	2.403	3.71	2.712	5.00	2.661	4.98	2.254	4.55	2.570	.002	.056
Q39	6.36	2.164	4.48	3.004	5.08	2.691	5.78	2.526	5.49	2.703	.000	.092

[a]Table note: Computed at the alpha = .05 level.

In addition to the significant differences in perceptions regarding field experiences, a

significant differences was discovered for MANOVA analysis that examined principals'

perceptions of selection/recruitment and faculty/instruction and by institution, (Wilks Λ

= .795, F $_{(39,765)}$ = 1.582, p =.015 η^2 =.074). Although this result was significant, the

magnitude if the difference was considered to be a moderate effect (Cohen, 1988). Table

10 shows means, standard deviations, and results for the univariate ANOVAs for

questionnaire items 7-19 assessing Selection/Recruitment and Faculty/Instruction.

Principals who earned certification outside the state of Montana as well as Institution

A graduates perceived the above elements in their preparation programs as being more

effective than did graduates of the Institution B or Institution C.

Table 10 Means and Standard Deviations for Selection/Recruitment and Faculty/Instruction

Item	Institution A		Institution B		Institution C		Out of State		Totals		Sig.	Partial Eta Square
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	P	
Selection and Recruitment Questions												
Q7	6.91	1.528	6.46	1.665	5.96	1.899	6.91	1.840	6.67	1.685	.031	.032
Q8	5.58	2.851	5.87	2.953	5.54	2.734	6.32	2.720	5.81	2.853	.495	.009
Q9	5.69	2.616	5.39	2.702	5.04	2.510	5.04	2.510	5.64	2.587	.129	.021
Q10	6.26	2.067	5.93	2.166	5.50	2.341	7.00	1.782	6.20	2.114	.011	.041
Faculty and Instruction Questions												
Q11	6.46	2.006	5.73	2.201	5.58	1.954	6.68	1.855	6.17	2.104	.009	.042
Q12	6.51	1.909	5.82	1.979	5.58	2.062	7.04	1.628	6.28	1.955	.001	.062
Q13	7.07	1.686	6.48	1.877	5.71	1.989	7.23	1.760	6.77	1.840	.001	.059
Q14	7.25	1.719	7.13	1.945	6.58	1.954	7.49	1.443	7.19	1.786	.229	.016
Q15	6.76	1.834	6.63	2.022	6.00	2.022	7.43	1.471	6.76	1.890	.016	.037
Q16	7.90	5.060	7.13	1.824	6.08	1.792	7.64	1.481	7.42	3.455	.091	.024
Q17	7.07	1.658	6.77	1.800	6.13	1.484	7.36	1.566	6.93	1.703	.019	.036
Q18	6.91	1.528	6.08	1.918	5.75	1.847	7.13	1.676	6.55	1.787	.000	.075
Q19	6.66	1.872	6.11	1.989	5.42	1.976	7.09	1.792	6.43	1.957	.001	.058

[a] Table note: Computed at the alpha = .05 level

Eight of the 13 items in Table 10 which asked questions in the areas of

selection/recruitment, and faculty and instructional practices were found to be significant

at the $p < .05$ level. Again however, of those items reported as significant, only Q18

(Integrated Theory into Practice) and Q12 (Used Problem Based Learning) had at least

medium effect sizes ($\eta^2 > .60$). The smaller effect sizes associated with the other items

make it difficult to infer that substantial differences exist among institutions relative to

their recruitment practices or faculty instructional practices. Of the four groups

examined, graduates of Institution C rated these elements in their preparation program

consistently lower than other program graduates. Those principals who earned their

certification outside Montana rated their overall programs mostly higher than did

graduates of Montana institutions.

The MANOVA conducted to compare principals' perceptions about the relevancy of

coursework to instructional practice was also found to be significant, (Wilks Λ = .721, F

$_{(30, 787)}$ = 3.093, p = .000, η^2 = .103). The magnitude if difference between institutions for

this comparison is considered to be a large effect (Cohen, 1988). Table 11 reports the

means, standard deviations and results for univariate ANOVAs for each of the items

assessing principals' perceptions about the relevancy of coursework to instructional

practice.

Table 11 Means and Standard Deviations for Relevancy of Coursework to Practice

Item	Institution A		Institution B		Institution C		Out of State		Totals		Sig.	Partial Eta Square
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	P	
Q20	6.42	2.080	5.98	1.923	5.00	2.194	6.71	1.836	6.17	2.039	.001	.054
Q21	6.64	1.949	5.60	2.055	4.71	1.863	6.67	1.717	6.08	2.042	.000	.107
Q22	6.35	1.963	5.62	1.906	4.50	1.934	6.71	1.803	5.97	2.007	.000	.102
Q23	5.41	1.957	4.92	2.038	5.00	2.126	5.45	1.953	5.20	2.007	.245	.015
Q24	5.40	2.079	4.77	2.049	4.29	1.843	6.45	1.815	5.26	2.099	.000	.101
Q25	6.15	1.977	5.68	1.874	5.04	1.934	6.45	1.629	5.93	1.912	.004	.046
Q26	6.81	1.855	6.30	1.778	5.61	1.548	6.62	1.720	6.48	1.803	.009	.041
Q27	5.36	2.004	5.01	2.101	4.57	2.044	5.84	1.922	5.25	2.051	.028	.032
Q28	5.57	2.104	5.29	1.996	4.82	1.806	6.02	1.912	5.48	2.021	.052	.027
Q29	6.19	1.860	5.24	1.854	4.96	1.774	5.80	1.685	5.86	1.868	.000	.062

[a] Table note: Computed at the alpha = .05 level.

Similar to the data found in Table 9 and Table 10, seven of the ten items associated with relevancy of coursework to practice Q20 (Developing Vision, Mission), Q21 (Leading Planned Change Effort), Q22 Vision in Budgeting, Resource Allocation), Q24 Working with Diverse Populations), Q25 (Implementing Policies for Safe, Effective School Environment), Q26 Supervising, Evaluating Staff) and Q29 (Parent, Community Involvement Practices) were found to be significant at the $p < .05$ level. Of the seven significant items, only four items Q21 (Leading a Planned Change Effort), Q22 (Vision in Budgeting, Resource Allocation), Q24 (Working with Diverse Populations), and Q29 (Parent, Community Involvement Practices) had medium effect sizes where $\eta^2 > .62$. So while differences exist in principals' perceptions of the relevancy of their coursework to instructional practices, only a few items account for larger percentages of variance between the more highly rated institutions (Institution A and Out of State Institutions) Institution B and Institution C which garnered consistently lower ratings for relevancy of coursework to practice.

Results for the MANOVA conducted to compare perceptions of self-efficacy by institution was not found to be significant, (Wilks $\Lambda = .800$, $F_{(54, 718)} = 1.034$, $= .440$ η^2 $= .072$). Table 12 presents means, standard deviations and univariate results for each item assessing principals' perceptions of their self-efficacy.

Despite differences in principals' perceptions about the effectiveness of specific elements of their preparation programs as seen in Tables 9, 10 and 11, there were no significant differences in principals' perceptions of their self-efficacy according to where they earned their principal certification. The data seem to suggest that the perceived effectiveness of principal preparation programs is not wholly responsible for principal

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self-efficacy. It also appears that some principals who report that their preparation

programs were less effective than other programs have gained self-efficacy from other

sources outside their preparation programs.

Table 12 Means and Standard Deviations for Self-Efficacy

Item	Institution A		Institution B		Institution C		Out of State		Totals		Sig.	Partial Eta Square
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	P	
Q40	7.28	1.463	7.22	1.538	7.12	1.966	7.21	1.557	7.23	1.554	.965	.001
Q41	7.28	1.492	7.25	1.592	7.23	1.505	7.56	1.201	7.32	1.479	.647	.006
Q42	6.86	1.748	6.96	1.681	6.62	1.651	7.00	1.598	6.90	1.682	.787	.004
Q43	7.17	1.412	6.96	1.444	6.96	1.428	7.31	1.114	7.10	1.375	.451	.010
Q44	6.95	1.672	7.03	1.747	6.65	1.896	6.98	1.550	6.95	1.695	.797	.004
Q45	7.57	1.471	7.44	1.410	7.19	1.234	7.50	1.130	7.47	1.366	.655	.006
Q46	6.48	1.706	6.46	1.441	6.73	1.638	6.88	1.214	6.57	1.526	.399	.011
Q47	7.28	1.596	7.29	1.324	7.31	1.619	7.50	1.429	7.33	1.470	.849	.003
Q48	6.91	1.337	6.96	1.429	6.38	1.791	6.98	1.345	6.89	1.423	.299	.014
Q49	6.78	1.658	6.84	1.709	6.69	1.379	6.98	1.345	6.83	1.637	.880	.003
Q50	6.49	1.884	6.24	1.969	5.85	1.826	6.33	1.705	6.31	1.877	.450	.010
Q51	6.96	1.606	6.88	1.667	6.73	1.185	7.15	1.353	6.94	1.544	.690	.006
Q52	7.81	1.395	7.47	1.515	7.04	1.356	7.77	1.478	7.61	1.478	.071	.027
Q53	7.61	1.566	7.68	1.124	6.96	1.248	7.77	1.372	7.60	1.366	.080	.026
Q54	6.91	1.799	6.90	1.530	6.38	1.602	6.88	1.496	6.85	1.632	.500	.009
Q55	7.31	1.541	7.14	1.474	6.62	1.602	7.29	1.429	7.18	1.508	.196	.018
Q56	6.83	1.686	6.73	1.609	6.42	1.677	6.63	1.806	6.72	1.676	.709	.005
Q57	7.05	1.394	6.90	1.526	6.31	1.761	7.15	1.271	6.94	1.470	.094	.024

[a] Table note: Computed at the alpha = .05 level.

Unintended Findings from Qualitative Interviews
Which Support Quantitative Findings

During the qualitative phase of the study, interview participants' responses to the

qualitative protocol reinforced many of the findings depicted in Tables 8-12 and further

explained principals' perceptions about specific elements of program effectiveness. Although the researcher did not ask about specific items from the Principal Preparation Program Questionnaire such as: use of case studies, developing self-reflective practices or promoting rigor, qualitative interview participants gave responses which reinforced those and other items that were rated highly on the quantitative questionnaire. Those specific questionnaire items are listed below together with the qualitative data that further explains their perceived importance in preparation programs. The qualitative responses add depth and specificity to some of the highly rated items on the Principal Preparation Program Questionnaire. These items are found above in Table 8.

   Item Q13 Item Q13 (*M = 7.19, S.D. =1.17*), *use of instructional case studies,* was the second most highly rated item from the questionnaire and was mentioned by four of the six interview participants. The instructional use of case studies was viewed as a means by which common educational issues and problems could be dissected and discussed during classes. Principals reported that having the time to uncover the issues and complications inherent in case studies helped them develop confidence in their knowledge of school practices and decision making skills. The following quote captures the effectiveness of case studies in an interview with Terri:

> Case studies really worked for me. I got to put myself in scenarios and try out solutions to problems I had never considered. It made me see how complex the job was and how you had to be sensitive to a range of things all at the same time in making any decision.

Paul reiterated the importance of the use of case studies in his school law class. He said, "When we would read about an administrator that got in trouble, we were always asked what we would have done to alleviate that problem. It showed me how important it was to know the law."

Item Q17   Item Q17 (*M = 6.50, S.D. = 1.79*)*, development of self reflective practices,*

was the 7th most highly rated item. Three principals' comments about effective

preparation program elements discussed the importance of developing self reflective

practices. Terri and Michael related how the kinds of writing and the amount of writing

helped them to think about the principalship and develop their personal philosophies and

critical thinking skills. Michael stated, "I remember doing a significant amount of

writing and reflecting and that I liked that because that's how I tend to process things. It

really helped me to solidify some thoughts and even philosophies that have stayed with

me after 20 years."

Terri talked about how a professor's modeling of reflection and writing challenged her

thinking.

> I felt there was a lot of modeling that took place from my professor, Dr. Y,
> and I really watched and tried to copy that. At first, I had some challenges
> as a writer, but with Dr. Y's encouragement and help, my writing
> improved and I was able to really clarify my thinking. I liked what I had
> grown into as a writer.

Ken felt that the combination of gaining knowledge about law, curriculum and planned

change together with the personal interactions between faculty and classmates exposed

him to a continuous change in thought processes. His comment was, "I was continuously

thinking about everything in law and change - and hearing everyone's perspectives - just

that created a different mindset for me than I had when I first began."

Item Q11   Not surprising, the interviewees touched on program faculty's

administrative experience in K-12 education as relevant to their learning (Q11 – *M =*

6.24, S.D. = 1.91). Those faculty members who possessed recent experience in K-12

education were mostly viewed as having a more realistic perspective on the role of the

principal and the demands of the job. They made deeper connections between theory and practice than did those professors who had little public education experience. Terri said,

> For me, it wasn't so much the coursework, but who taught the class. Some instructors, like Professor Y were more genuine – they had been there before and understood the importance of what they were teaching. Those classes were powerful and I worked hard there. In other classes, I realized that the content was just as important, but how it was taught was pretty unremarkable – I didn't take much away from those classes, because we weren't given a sense of how it would apply to our situations.

Michael discussed how a professor in his curriculum classes made the hard work of curriculum seem attainable. "He would walk us through the curriculum portion and the development of scope and sequence and how you aligned assessment to that and how all those pieces fit together. He shared his experiences and kind of 'de-mystified' the whole thing."

Felicia felt that the professors with administrative experienced tended to create assignments and learning opportunities that were within the context of current educational constraints. She stated,

> The thing I liked most was that Dr. Y's assignments were hands on, very practical. The projects and things you did had a value within the context of what you were already doing. With Dr. Z, the finance class was purely practical – you knew school finance and budgets when you finished that class. His experience with school finance came through in his assignments and the stories he told about other schools and people.

All of the interviewees discussed the importance of having principals practicing in the field as co-teachers of classes or guest presenters. Ken remarked that his classmates "couldn't get enough of what practicing principals had to say because they were in the trenches, doing the work. People really took to heart suggestions they would make." Paul related that a district superintendent was brought in during an emergency to teach his finance class and had brought in a needed dose of relevance.

> The first guy had basically lost touch with what it was like to be out there going 100 mph. But, Mr. Brown was actually in that position – he was the animal, he knew things. We'd go down to his office at school and sit with budgets and discuss problems and fixes. You could ask him anything and you'd actually understand his answer. It was like we were doing an internship with him just in finance.

Maryann had the unique experience in her program where some of the most respected names in education leadership and teaching and learning did guest seminars at her university. She was able to benefit from working with researchers for a week or more participating in actual research projects. She not only read about the research, she got to see it in practice which made coursework learning more relevant. "I met Roland Barth, Jay McTighe, Grant Wiggins and Thomas Sergiovanni. I was very steeped in research by the researchers themselves. They held symposiums where students worked on projects side by side the researchers and presented. That was outstanding!"

Item Q10   Item Q10 (*M = 6.18, S.D. =1.98), faculty reputation for rigor and relevance,* was the highest rated item on the Recruitment/Selection section of the questionnaire. Several of the interviewees discussed how professors promoted rigor in assignments and coursework expectations and how rigor had helped them develop confidence in their abilities. Maryann related a story about working through a rigorous statistics class.

> When I was in statistics class, I was ready to drop out. Many people had dropped out because it was so hard. One day, a group of us decided to meet and form a study group to try to get through the class. We each had our jobs – I was the square root lady and others had other functions. We traded information and helped each other get through it. I learned so much from all of that because it was divide and conquer – divide the work and conquer the thing as a team. I don't know if it was the instructor's intent, but that rigor he held fast to taught us more than just statistics.

Paul first looked at rigorous coursework negatively before he saw its benefits. "I thought that all the writing and papers were just more hoops they were making us jump through. But Dr. X would always talk through those assignments so that you came to realize why it was so important to do things a certain way. It made sense in the end. "

Ken's thoughts on rigor focus on how his professors pushed him to develop a thick skin and deal with difficult situations.

> I saw Professors Y and Z bare their fangs more than once and at the time I didn't like them for it. But then I realized that they were testing us – letting us see how it felt to be in the middle of a conflict – testing our mettle. They knew how hard this job is and they were preparing us for the times that we'd feel pressed. I didn't always get warm, fuzzy encouragement, but the fact that they kept pushing me made me feel more supported by them than anyone else.

The sense of rigor and high expectations professors Y and Z created made Ken work hard to prove himself, but also left him with the feeling that he was valued.

Terri felt that just being able to complete courses and manage all the assignments and expectations that professors had was a sign that she had a level of persistence that would help her in the position of principal. She stated, "While I was working as an intern and completing the entire master's level degree work, I thought that if I could make it through the program, I could manage anything." That sentiment was echoed by another intern, Felicia, who also worked as a principal intern while completing her certification. Felicia said, "I knew if I could survive those first two years that the rest would come much easier."

Online courses got mixed reviews from the interview participants regarding rigor and relevance. For those more recent program completers, they appreciated being able to work on courses from a distance without having to travel several times a week to attend

class. Those online courses which were blended with face to face meetings received the

most favorable marks because the element of personal interaction was retained and

participants could communicate with each other in a more meaningful way. Terri stated

that she looked forward to the once a month class sessions. "I really liked going to class

and seeing everyone. We talked online, but, we became more of a close knit group when

we met for class, ate lunch together – stuff like that. I don't think the delivery of the

instruction mattered as much as the building of relationships with people."

 Felicia also agreed, "Most of my classes were online, but we'd still meet and the

professors were there telling their stories and giving us feedback on our writing or

assignments. The feedback was really important – you got a boost from meeting together

and talking to the professors."

  Ken had a different perspective on his online learning. He reports that some classes

were taught by adjunct instructors who were not very adept at making the coursework

memorable. Because his online classes did not have a component where students met

together with instructors occasionally, Ken reported that the lack of meaningful feedback

made classes feel insignificant.

> My online classes were a failure. It's ridiculous that we are in a people
> business and we engage in learning that doesn't encourage people to have
> meaningful dialogue and share ideas. We need to be able to interact with
> people – having to respond to postings just for the sake of responding to
> postings is a waste of time. Having to do that as part of your grade
> expectation in the class is really ridiculous! I got little more from those
> classes than I could have done on my own just reading the book over a
> weekend.

When asked for more detailed information on the lack of meaningful feedback, Ken

responded,

> In a classroom setting, you can ask a question and have the professor take a minute or two to give you examples – online, that takes too long. So, you write your thoughts out and post them and instead of having a dialogue about them, your instructor responds with something like, 'Good job' or 'That's an interesting idea' nothing more substantive than that. You miss out on often what is the best part of class – hearing other ideas – no matter how good or off base they might be. I think the spontaneity is good. Maybe online instruction can be done well – I've just never experienced it.

The six principals who were interviewed clarified and extended the responses from the

Principal Preparation Program Questionnaire which asked principals about the

perceptions of the effectiveness of their preparation programs. The interviewees

highlighted specific examples of instructional practices, faculty experience and program

rigor that increased the effectiveness of their programs.

Research Question 2

- What preparation programs elements do principals perceive as contributing to the development of principal self-efficacy?

In answering this question a factor analysis was conducted on the data from the

Principal Preparation Program Questionnaire and the Principal Self-Efficacy Scale to

parcel out the underlying constructs in preparation programs that principals point to as

having contributed to their self efficacy development. Principal components factor

analysis was employed in this study because of its usefulness in reducing a large number

of questionnaire items or variables to a few constructs that describe the relationship

between the variables (Gorsuch, 1983).

The correlations matrix of the items was also examined to determine if

multicollinearity existed. Item Q8 was found to have very low correlations ($r < .30$) with

the other self-efficacy items and was removed prior to the exploratory analysis. Items

Q32, Q34, and Q38 were found to correlate highly (r > .80) with the other self-efficacy

items suggesting that these items were assessing similar self-efficacy attributes.

Therefore, the decision was made to remove these items from the analysis and retain the

remaining 48 for the exploratory factor analysis. Cohen (1988) suggests that item

intercorrelations greater than .80 are indicative of severe multicollinearity.

   Principal component analysis with direct oblique rotation was chosen as the preferred

method of analysis because of the likelihood of a correlated factor structure where the

underlying constructs or factors within self-efficacy development are related. The

communalities from the principal component analysis exceeding .500 indicating that the

168 responses were sufficient for providing a good recovery of population factors

(Fabrigar, Wenger, MacCallum & Strahan, 1999). Data screening procedures were also

undertaken to evaluate the factorability of the correlation matrix. Results from the

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.930) and Bartlett's Test of

Sphericity ($\chi^2_{1081} = 8,732, p < .001$) indicated that the data were appropriate for the factor

analysis to proceed. The analysis extracted the four factors that depicted in Table 13.

Those factors are: leadership experiences, motivation, authentic learning practices and

self-regulation/efficiency. These factors accounted for over 62% of the total item

variance. Table 13 present item numbers and their descriptions as well as factor loadings.

Loadings are presented in order of magnitude from most to least substantive. The

Coefficient Alphas for each factor ranged from .95 to .91 indicating a high level of

internal consistency reliability.

<u>Four Factors of Efficacy</u>

Factor 1, Instructional Leadership Experiences, describes the learning outcomes for the coursework and instructional activities in preparation programs. This factor accounted for over 37% of the total item variance. Many of the highest loading elements are experiences fostered by program faculty that promote relationship building and theory into practice.

Items Q12, Q13 and Q14 describe how faculty members use instructional strategies such as problem based learning, case studies and other kinds of small and large group assignments and activities to promote learning community values. Items Q16, Q20, Q19, Q21 and Q22 represent opportunities for students to practice leadership skills such as consensus building, and using research to inform decision-making.

The items listed in Factor 1 can also be viewed as moving away from a teacher-centered instructional orientation where program faculty are engaged in primarily lecture activities to a student- centered orientation. In this student-centered orientation, instructional activities are designed so that students take responsibility for the learning of themselves and others in group projects and presentations and conducting research and analyzing data. These student centered activities have the effect of simulating instructional leadership experiences that the students would be expected to perform in the role of principal. Principals' perceptions of leadership experiences assessed by items captured by factor one are hypothesized to contribute to principal self-efficacy development via mastery experiences and vicarious learning. The student centered experiences representing these items are thought to build self-efficacy because they allow aspiring principals to gain practice with and master the skills to analyze data, work

through case studies and problem based learning activities and apply leadership theory

and research to decision making.

Table 13 Rotated Factor Structure

Item	Factor 1 Leadership Experiences	Factor 2 Motivation	Factor 3 Authentic Learning	Factor 4 Self-Regulation
Q14 – Created a learning climate with collegial relationships.	**.917**	-.059	-.142	.046
Q17 – Created opportunities for students to develop self-reflective practices.	**.863**	-.060	.004	.014
Q16 – Emphasized current research and leadership theories.	**.858**	-.070	-.091	.092
Q15 – Developed learning communities through group projects.	**.838**	-.071	-.052	.037
Q12 – Used PBL, active learning and simulations to master tasks.	**.831**	-.052	-.004	.075
Q13 – Used cases study analysis to discuss current issues.	**.821**	.037	-.106	-.043
Q20 – Developing a school mission and vision that reflects community.	**.794**	-.099	.062	.038
Q19 – Emphasized instructional leadership and student achievement.	**.785**	.042	.108	-.047
Q21 – Leading a planned change effort for school improvement.	**.784**	.058	.004	-.097
Q22 – Vision principles guide resource allocation and budgeting.	**.783**	-.034	.053	.061
Q18 – Learning experiences integrate theory into practice.	**.773**	-.126	-.004	.054
Q25 – Implementing school policies for safe learning environment.	**.703**	.111	.081	-.066
Q24 – Working with diverse environments and students.	**.701**	.095	.084	-.052
Q10 – Faculty had reputation for promoting rigor and relevance.	**.689**	.056	-.030	-.054
Q7 – Coursework and experiences were interesting and challenging.	**.654**	.063	.024	-.103
Q28 – Designing and facilitating professional development for teachers.	**.646**	.037	.154	.054
Q27 – Coaching teachers on use of assessments and data for instruction.	**.645**	-.011	.239	.040
Q29 – Providing opportunities for parent/community involvement and input.	**.581**	.200	.246	-.164
Q26 – Supervising and evaluating instructional staff.	**.547**	.012	.160	.095
Q9 – Other administrators recommended the program.	**.440**	-.031	.048	.087
Q23 – Managing facilities and facility maintenance.	**.394**	.106	.125	.111
Q45 – Create a positive learning environment in your school.	.030	**.874**	-.040	.000
Q49 – Promote the prevailing values of your community in your school.	-.005	**.843**	.010	-.055
Q41 – Generate enthusiasm for a shared vision for the school.	.023	**.833**	.007	-.002
Q44 – Promote school spirit among a large majority of the students.	-.013	**.790**	.062	-.071
Q48 – Motivate teachers.	.124	**.759**	-.084	.006
Q40 – Facilitate student learning in your school.	-.023	**.732**	.049	.003
Q47 – Promote a positive image of your school with the media.	.079	**.679**	-.051	.024
Q43 – Manage change in your school.	-.069	**.638**	.042	.226
Q46 – Raise student achievement on standardized achievement tests.	-.082	**.635**	.069	.149
Q55 – Promote ethical behavior among school personnel.	.234	**.570**	-.204	.204
Q53 – Promote acceptable behavior among students.	-.018	**.563**	.069	.317
Q36 – Allowing me to learn and apply student management procedures.	-.035	-.057	**.912**	.057
Q39 – Allowing me to observe teachers and practice supervision techniques.	-.063	.089	**.870**	-.037
Q33 – Designing policies to build school climate and social justice.	.128	.034	**.835**	-.014
Q31 – Allowing students to process and debrief field experiences.	.111	-.062	**.834**	.046
Q30 – Pairing me with an exemplary principal mentor.	-.002	-.039	**.822**	.061
Q37 – Allowing me to collect and analyze data for decision-making.	.157	-.078	**.768**	.045
Q35 – Communicating school's vision to diverse community groups.	.149	.102	**.758**	-.157
Q54 – Handle the paperwork required for the job.	.075	-.030	-.074	**.894**
Q50 – Maintain control of your own daily schedule.	.009	-.065	.011	**.815**
Q56 – Cope with the stress of the job.	.040	.019	.049	**.787**
Q57 – Prioritize among competing demands of the job.	.094	.190	-.039	**.730**
Q42 – Handle the time demands of the job.	-.004	.213	-.020	**.663**
Q51 – Shape the policies and procedures necessary to manage your school.	-.022	.288	.149	**.527**
Q52 – Handle effectively the discipline of students in your school.	-.070	.360	.210	**.478**
Percent of Total Item Variance	*37.14*	*14.92*	*6.76*	*3.94*
Coefficient Alpha	*.95*	*.93*	*.93*	*.91*

Vicarious experiences contribute to self-efficacy development as students learn from one another through collaborating to solve problems (Bandura, 1997). Modeling also occurs within the context of items Q21, Q11, and Q24. The modeling is accomplished by faculty members as they demonstrate their knowledge and skill in leading students through a change process that requires them to gain consensus with a diverse group of learners.

The second factor to emerge in the exploratory analysis was interpreted as Motivation. The items captured by the motivation factor are primarily those from the Principal Self-Efficacy Scale (PSES). These items assessed principals' perceptions of how emerging leaders learn to exercise their own leadership to motivate and inspire others to help create a positive learning environment (Q45); generate enthusiasm for a shared vision (Q41); promote community values (Q49) and facilitate learning by motivating teachers. This finding is aligned with Bandura's (1997) theory explaining social persuasion. In this study, the self-efficacy source for the factor motivation is social persuasion and positive feedback that the leader uses to build relationships with others in the school. McCormick (2001) found that leader self-efficacy was vital in gaining follower commitment. Modeling or vicarious learning is also important to a leader's ability to motivate and inspire others. Promoting ethical behavior among staff (Q55) and students (Q53) as well as promoting a positive image of one's school (Q47) most likely arises as the leader models those desired behaviors for others. For Factor 2, Motivation, social persuasion and vicarious learning are the primary sources that contribute to self-efficacy development.

The third factor identified was interpreted as Authentic Learning and Practice. The items associated with this factor were primarily those written to assess principals' perceptions of internships or field experiences. The emergence of this item cluster is not surprising when considering that principal internships or field experiences are viewed as an opportunity to master the leadership and management skills necessary for success in the principalship. Most of the items captured by the Authentic Learning and Practice factor describe a specific task that principals must master in order to facilitate learning and promote student achievement. Applying discipline policies and procedures (Q36); observing and supervising teachers (Q39); policy creation (Q33); data collection and analysis (Q37) and communicating with the wider community (Q35) are skills that can be practiced and possibly mastered to some degree in a comprehensive internship or field experience. As these tasks or experiences are practice and mastered, principal self-efficacy increases.

The last factor, Self-Regulation, describes the importance of developing the ability to manage stress and accomplish all the tasks that are required to function at an expected level of competence and efficiency. Coping with stress (Q46); prioritizing among competing demands (Q57); handling the time (Q42) and paperwork (Q54) demands of the job as well as maintaining control of a daily schedule (Q50) all indicate that an important skill a principal must develop is the ability to regulate oneself so that tasks are accomplished efficiently. Handling the stress that is inherent in a rigorous schedule build's an individual's belief in her competence. Likewise, negative feelings or physiological complaints associated with a task or stressful situation can become debilitating and interfere with performance. Bandura (1997) identifies this phenomenon

as the fourth source of self-efficacy development called arousal. The items comprising factor four suggest that self-efficacy is developed as principals learn to effectively manage stressful situations and demanding schedules and responsibilities.

In this study, each of the four sources of self-efficacy as described by Bandura (1997) were identified as a result of the factor analysis conducted on the responses from the Principal Preparation Program Questionnaire. The factors that contribute to self-efficacy development are described in terms of how the different questionnaire items cluster together to describe a construct. Those four factors are instructional leadership experiences, motivation, authentic learning and practices, and self-regulation. An understanding of those factors can also be extended in examining them through self-efficacy sources. Instructional Leadership Experiences contribute to self-efficacy development through mastery experiences and vicarious learning. Self-efficacy is built when instructional leadership experiences are mastered during coursework and through authentic practices which require leaders to work through case studies, lead a planned change effort and work collaboratively with others. Motivation contributes through social persuasion and vicarious modeling as the aspiring leader learns to use meaningful and positive feedback to build relationships and gain follower commitment to reach the goals of the organization. Factor 3, authentic learning and practice, contribute to self-efficacy development by creating mastery experiences similar to what a principal will encounter on the job such as supervising and evaluating staff, managing budgets and facilities, and communicating with the school community and the community at large. Finally, managing stress and efficiently meeting expectations builds self-efficacy by

through empowerment that occurs as aspiring principals learn to develop a system for controlling daily schedules, prioritizing tasks and mitigating stressful situations. .

<center>Research Question 3 Results</center>

- How did specific elements within preparation programs contribute to principals' self-efficacy development?

Qualitative interviews were used to answer this research question. The interview protocol developed for this question took into account the results from the Principal Preparation Program Questionnaire, structuring questions which asked about those elements that were perceived as effective. The protocol examined those program elements through the lens of Bandura's (1997) four sources of self-efficacy (mastery experiences, social persuasion, vicarious experiences and psychological states also known as arousal), asking interview participants how those elements influenced the development of their self-efficacy. From those interviews the data were analyzed by breaking the transcriptions into episodic units of information that stood by themselves and were interpretable. The second step in the analysis process was the categorization of those smaller units into categories with similar characterizations and responses. Once the initial categories were established, the researcher also looked for links and similarities between categories that would establish relationships between program elements and self-efficacy development and allow consolidation into themes. The categories were then coded thematically and named. From this process, three common themes emerged that seemed to describe how self-efficacy was developed for the interview participants. Those themes were: relationships and learning from others, authentic practice and perseverance.

Relationships and Learning From Others.

Faculty Relationships Building relationships and learning from other people either

through some direct experience or vicariously through others were important experiences

for principal self-efficacy development. Bandura (1997) found that a person's self-

efficacy could be developed from positive encouragement and meaningful feedback

given by other people whom the person held in high esteem. The term for this kind of

self-efficacy development is known as social persuasion, where the feedback one receives

from another person reinforces his/her feeling of competence. Self-efficacy development

could also arise out of vicarious experiences in which the person did not actually

experience success or accomplish a task themselves, but instead, learned from watching

another person accomplish a task or a goal and tried to emulate that successful

performance. We know this more commonly as role modeling. Vicarious learning

experiences can also result from negative role models or negative role modeling, when

the learner chooses not to emulate the negative role model. More commonly, this is

associated with learning from someone else's mistakes, rather than having to replicate

them. One of the interviewees referred to these occurrences as "something positive

coming from a negative," in that they were able to see the wisdom in making other

choices.

Principals reported that many relationships were built with faculty members during the

course of principals' preparation programs. Each principal interviewed spoke of at least

one professor or faculty member who they not only recognized as a good instructor, but

who also became a mentor or someone with whom they continued to have a collegial

relationship. Principals reported that as they developed those relationships, they began to

work harder in classes taught by those instructors. Terri talks about feeling encouraged

by a faculty member, but also being held to task.

> I think Dr. Y was very encouraging to me. But besides being friendly and
> encouraging she was also a task master. If something wasn't done well,
> she pointed that out to me, but she also was there to provide suggestions
> and lend a hand. She challenged me on my early writing – she told me
> what I needed to hear, but she also spent time helping me. She didn't
> lower the standard, she helped me reach it. Because I could see my writing
> improve, I took all her words to heart about everything else. I didn't want
> to disappoint her.

In a later portion of the interview, Terri continued to discuss the relationship. "Dr. Y was

and still is someone whom I admire. She seemed interested in us as learners and future

leaders. I worked harder in her classes and got a tremendous amount out of them. She is

someone to emulate." With respect to Bandura's sources of self efficacy, Dr. Y's

encouragement helped to build Terri's self-efficacy through social persuasion. Because

Terri held Dr. Y in high esteem for her teaching, knowledge and adherence to rigorous

standards, the positive feedback that Dr. Y gave Terri built her confidence and belief in

her abilities. That experience contrasts with Terri's remarks about other classes and

faculty.

> There were some instructors who didn't inspire me. Like any good
> teacher, you should come prepared for class and try to present to a
> wide variety of learners in a meaningful and stimulating way. You do
> that through a variety of means and there were some people who didn't
> model that…so those classes didn't have much meaning. And to tell
> you the truth, I can't even remember who taught them – how's that for
> not making a difference.

Terri knew that those other courses were also important, but the fact that those classes

were not taught well and that no memorable relationships evolved, affected Terri's sense

of satisfaction and accomplishment. The content of those other courses was mostly lost

due to a lack of perceived relationship development.

A professor of curriculum and instruction influenced Michael's self efficacy

development in similar ways. Michael reported that Professor X had a way of explaining

curriculum that made sense and that the class assignments were arduous, but realistic.

Michael also cited that Professor X provided him with lots of feedback and always talked

about student achievement and improving schools.

> I got a ton of good feedback from Professor X – and it wasn't just 'atta boy' stuff. His feedback was specific and it was somewhat critical, but in a good way. He always put things in the context of what would make your work better. When he was complimentary of my work and showed confidence in me that inspired me. Dr. X was the first one to really communicate the idea of school improvement and student achievement.

Michael goes on to discuss the fact that in the late 1980's, some of the faculty in his

program still maintained a management mindset and that instruction was mostly didactic

and did not seem to promote relationship building or collegiality. Michael considered

those classes to be unfulfilling. He also reported that one particular professor had nearly

turned him off completely to the program because of the nature of instruction and

grading.

> I remember thinking 'Is this it?' 'Are we just reading six reams of plagiarized material so that Dr. K can pretend his classes are tough?' I think he got some kind of pleasure piling the work on us. In the end, I really didn't get anything out of those classes. I got a B in my first class from him and I asked him for a copy of my final papers with his remarks. He never sent them so when I came back the next summer; I went to his office and asked again. He shuffled around, pretending to look for it and asked if I was upset about my grade. I said yes, because I had produced much better work than many other students in the class. I let him know that I had also talked with other people about how I felt about his class. He never really responded to me, but he never gave me a poor grade again.

The vicarious experience of learning from Dr. K still had an influence on Michael's self-efficacy. Michael judged Dr. K to be a less than effective instructor and poor role model for principals. Because his experience with Dr. K was mostly negative, Michael used that experience to motivate himself to be a different kind of leader than Dr. K modeled.

   Felicia related that she benefited from relationships that developed with faculty even though she did a lot of her classes in a hybrid format which was a combination of online instruction and face to face meetings. Felicia was working as an intern assistant principal at the high school in her district while she was taking classes. She reported that one faculty member in particular drove out to schools to check on interns and stopped to see her frequently. During those times, Felicia took the opportunity to ask Dr. Z for suggestions about how to deal with difficult situations with students and faculty and law issues. She felt that some of her best learning occurred during those conversations and that if she hadn't been comfortable in the relationship that had been built, she would have been hesitant to ask for help.

> Dr. Z was tough, but I always felt that he genuinely cared about my success. During my internship, I was hired to replace an assistant principal who in turn had replaced another administrator who was under fire from central office. It was a big fiasco and things were always in the paper. I was even mentioned a few times even though I had nothing to do with the situation. One day, Dr. Z called me out of the blue to ask how I was doing and handling the whole situation. He talked to me for quite a while and listened to my concerns. At the end, he said 'Remember, they came looking for you to do this job. You'll be fine.' That made me feel like, 'if he thinks I can do this job maybe I really can.' Knowing that I can call and talk gives me a lifeline when things get sticky or I need some advice.

Dr. Z's reassurance instilled confidence in Felicia. Because the reassurance was unsolicited, Felicia felt even more that the relationship she had with Dr. Z was genuine and was not just Dr. Z performing some required duty to monitor her internship

experience. Felicia's self-efficacy grew from the social persuasion feedback she got from Dr. Z.

Ken related a situation while he was a graduate teaching assistant during his preparation program in which he was making summer living accommodations for a group of students and numerous problems were encountered all along the way. His advisor, Dr. Y, had been particularly upset about the situation and had expressed her disappointment in the entire process. Finally, after Ken had met with several different groups on campus to solve the problem, he went to Dr. Y to discuss the resolution. Because so many of their other meetings about the summer accommodation issue were heated, Ken did not look forward to meeting with Dr. Y.

> I went in and told her the situation and the resolution, which was not the optimal resolution, and waited for the other shoe to drop. Instead, she thanked me for all the work I had done and said, 'that's why I would not trust this job to anyone but you. That's why we picked you to do this grad assistant work in the first place, because we knew you could and would do it.' Knowing that she felt that way about me and realizing her position on campus made me feel like I was really set apart from the other people in the program and that maybe I had something to offer this field after all.

Maryann related how she was able to work alongside well known researchers who were brought into her preparation classes at the university she attended. She appreciated being exposed to the best minds in education and was thankful that students in the program got to work with the researchers on small projects, designing studies and collecting data. Maryann was especially proud when she would offer up an idea or opinion in class that no other student had thought about and she was praised by the researchers for her ideas. Because the researchers had so much influence in education, having them publicly praise her gave her the sense that she indeed understood the issues and that she too, was set apart in skills and knowledge from the rest of her colleagues.

Maryann began to look at herself as having more aptitude for school leadership because of some of these interactions with researchers and their positive reactions to her. She was the beneficiary of social persuasion comments from experts in the field of education, but she also benefited from measuring herself against others in vicarious experiences.

Relationships with Others and Internships Relationships that were built outside the university setting were also reported as influencing principals' self-efficacy development. Most of the relationships were built or enhanced during meaningful internship experiences either in or outside aspiring principals' home districts. Four of the six principals were in long term internships of a year or longer. Two of the principals, Terri and Felicia, were actually doing principal work as state approved interns in the districts where they had been teachers. Michael had worked at his internship in a variety of elementary schools and in one high school where he had been a music teacher. He was in his internship for a year. Maryann got her internship experience in university "lab" schools, which came about as a result of a partnership between the university she attended and some local schools within five miles of the university. The goal of those schools was to use research to support all facets of instruction and school improvement. Some of the lab schools Maryann worked in had training and classes for pre-service teachers right in the school itself. From there, pre-service teachers were able to get immediate access to classrooms and students to further authenticate their learning. Maryann spent more than a year fulfilling her internship requirements in the district.

Ken's internship experience took place in two schools in different districts close to the university he attended. Ken was mentored by two experienced principals, one a high

school principal, the other a middle school principal. His internship experience lasted

about six months.

When Paul earned his certification in the early 1980's, there was no requirement for

an internship at the university he attended. Instead, he built relationships during his work

as a counselor in his home district. Paul said,

> I always enjoyed good relationships with people, so when the rest of the
> administrators knew I was getting my principal endorsement; they would
> ask me to fill in here and there for them. I did some student discipline
> stuff and covered games and events. I also did all the scheduling stuff and
> made decisions of who was teaching what – which is really the principal's
> job. We also started to have meetings that I was in on with the principals
> and I got a chance to share my ideas from what I learned in class and the
> counseling side of things. The more those guys got to see what I could do,
> the more complimentary they were of me and that made me feel good.

Michael talked about how the relationships he built during his yearlong internship

exposed him to the real work of principals such as teacher supervision, curriculum

development, staff training and overall school improvement.

> When the principals knew I was working toward my endorsement and saw
> that I had leadership skills, they allowed me to work through a lot of
> school improvement efforts at the high school. I led the faculty in the
> development of vision and mission and from there we looked at data. I
> got to really see how to use data for curriculum and school improvement
> focus, but the most important part of that was my work with the faculty.
> Even though I had relationships there to begin with, they grew as people
> saw me in a different role.

Michael credits the growth of those relationships to the kinds of internship work he was

allowed to do. When the work centered on supervision or school improvement, Michael

felt more fulfilled and noticed that he was able to enjoy discussions with faculty members

about teaching and what was happening in their classes. "Some people I knew only got

to help write policy or do student discipline in their internship – they never got a chance

to learn school improvement or even really get to know the staff very well. I'm lucky my situation was different."

Felicia and Terri credit the encouragement and assistance of other administrators from their home districts as having an influence on their self-efficacy development. Both were working as principal interns for 2-3 years during their certification process. Felicia commented about how important the support of her former superintendent was to her success.

> Our district had been going through some pretty tremendous times of change and I was in the middle of it during my internship. Once, Mr. M. sent me a card that had a cat walking by a line of German Shepherds that were lying down next to a sign that said 'Beware of Dogs'. He wrote on the inside of the card, 'Now that is confidence.' He was a great mentor to me and that kind of thing – the card thing - taught me a little about how important it would be to do the same thing for teachers and I have.

Terri shared that her superintendent was a champion for her also. "From the very beginning, I felt a lot of acceptance from people in this district. My superintendent had lots of one on one meetings with me to give me direction, but also to listen to my perspective – he made me feel that what I thought was important." Being part of a highly functioning administrative team was also important to Terri's self-efficacy development. "I loved feeling part of the team. We had so much fun – enjoyed each other's company, but we also got a lot of work done. I looked forward to going to our meetings to get energized and focused – those meetings were enlightening and productive. I also liked being right next to the middle school - I could just walk over any time and meet with the middle school principal. I'd ask questions or sometimes just blow off steam, and that was good, too."

Maryann worked with a variety of assistant superintendents and principals during her internship in a large district. When the inner city schools were made over into "lab schools," Maryann saw that for that to work, the principals had to really open themselves and their schools up for change. "I admired how some of the principals allowed themselves to be somewhat vulnerable and let people see everything, good, bad or indifferent. They knew they needed change and that they had to learn new things. They put their egos aside and really tried to learn and make things better." Maryann credits that experience and the relationships with those principals in helping set her vision of the kind of principal she wanted to become. "I knew that those people would be successful in developing good schools, because they had the attitude that whatever it takes is whatever we'll do. You didn't always need to have all the answers; you just needed to be willing to look." Maryann commented that she continues to live by the philosophy of 'whatever it takes is whatever I'll do.'

In addition to encountering people with whom principals enjoyed positive and efficacy building relationships, some had to work with difficult people who could not build effective relationships or who were not good role models. Maryann offered a perspective about an assistant superintendent she worked with during her internship. "She knew what she was doing from a nuts and bolts perspective – she was task oriented but she didn't have people skills. So while I tried to learn the tasks and curriculum work, I figured out I'd better do the people stuff a whole lot better." In this situation, Maryann learned vicariously from the assistant superintendent's lack of people skills, how important it was for her to develop relationships with others. Maryann goes on to say that that assistant superintendent actually moved into a number of superintendent positions,

but that her lack of ability to maintain effective relationships and lack of ability to build

coalitions prevented her from achieving long term success at any one district.

A few of the principals described having to work alongside principals or other

administrators who were simply "putting in their time." "They were the hardest ones for

me to work with," said one principal, "because they were so negative about everything.

Then they'd start complaining about kids, teachers, everybody else – I thought to myself

'No wonder people are negative about things; listen to you!' That was kind of my

introduction to the 'good old boys' club and I didn't like it."

Every principal related an experience where they learned vicariously from another

person's poor performance. Most all used the phrase, "I knew I could do better than that"

when referring to another administrator or principal they had encountered during their

preparation program or more specifically their internship work. For most of the

principals, this measuring against someone else already in a leadership position helped

them not only develop the belief that they could be successful doing the job of principal;

it also helped in their development of a personal philosophy about how they wanted to be

viewed by other people and the importance of building relationships in their own schools.

Ken offered that he encountered a number of capable people during his preparation

program, but that some just didn't seem to have the ability or desire to develop

relationships or interact with a wide variety of people. Ken felt that ultimately, the ability

to make connections with others influenced a person's success. "You have to be

believable and set yourself apart."

<u>Authentic Learning Opportunities and Mastery Experiences</u>

A second theme that emerged from the interviews centered on authentic learning

opportunities and mastering those experiences that involved working with people. Some

of the authentic learning opportunities came as a result of internships or field

experiences; others arose out of class assignments or course requirements.

Although the point of internship experiences is to give aspiring principals practice in

doing the work of a school leader, the kind of practice principals are exposed to seems to

make a difference in building self-efficacy. Interviewees identified particular

experiences where working with other people through committee work, teacher

improvement practices and professional development especially helped them build self-

efficacy.   Maryann discussed an example of how she gained authentic learning while in

her internship.

> While I was doing part of my internship at central office, they let me work
> on organizing some writing training for a group of elementary teachers.
> Really all they had in mind for me was just doing the just nuts and bolts –
> schedules and notifications, contacting the consultant, things like that. I
> asked to take it a step farther and actually attend the trainings. When I did,
> and I was the only person there from central office, the consultant put me
> to work as his assistant. As the trainings continued, I was able to learn
> how to collect and analyze data and talk with teachers about what it all
> meant.   I had never done anything like that before and I was learning right
> alongside the teachers, which they seemed to think, was great. No one else
> from central office was there and gained the insights I gained.   I got
> incredible feedback from teachers for being involved in that way.

Maryann acknowledged that learning to complete the organizational piece of the

professional development plan was helpful in mastering the skills necessary to promote

good professional development. However, even more valuable than mastering

organizational skills, was the opportunity for her to work with people, provide for their

needs and resolve conflicts that occurred.   She explained, "Anybody can schedule a

consultant and organize the nuts and bolts of a training session, but actually working side by side the teachers taught me so much more about what I could realistically expect people to accomplish and how I had to be an integral part of that to truly make it work."

Michael also related the importance of authentic learning and mastering the art of working with people during his internship as positively affecting his self-efficacy. Michael had been a music teacher and credited that experience with helping to develop his skills in the areas of organization for student travel and concerts, budgets, and designing programs and classes for students. Michael perceived that his teaching experience in particular gave him an advantage with regard to mastering some of the management kinds of tasks principals perform. "When I began the master's level work, I realized how lucky I was to have had the experiences I had as a music teacher – traveling with students, making arrangements, keeping a budget, all the programmatic work. I felt pretty good about my organizational abilities in that regard, but the process of working with the staff was what I was really after." Through his work with school improvement plans, Michael began to seek feedback from staff members about how he was doing and how he could improve. He understood the important of working with people and resolving conflict. He said, "I asked them to give me feedback about things they thought were going well, my leadership style, and how some things could be made better."

Though Paul did not serve an official internship during his preparation program, he remembers having the opportunity to observe teachers and practice some of what he was learning in class. When Paul attended his master's program, the leadership orientation was still focused from a management perspective where there were clear role distinctions

between teachers and principals and where one – way communication dominated the

interactions between teachers and principals.

> We had been talking a lot in supervision class about writing evaluations. Most of the talk was from a legal sense – what to say, what not to say. The way the teacher supervision class was presented I got the impression that evaluation was something done *to* a teacher, not *with* a teacher, so I decided I wanted to see how working *with* teachers would be different. I practiced observing teachers using all the data collection models we learned from that class and then before showing the teachers what I had written down, I talked to them first in generalities about teaching and their classes. Doing that made them open up more and not be so defensive about what I had written in my observation. I began to show the other guys (principal and assistant principal) what I had done and they decided to try it, too.

Paul elaborated that he reported on his 'experiment' to his professor and the class and

that the professor admonished him to just learn the observation techniques and keep

personal interactions out of the evaluation process.

> I don't think he was too keen on the idea – he just made a remark about how that was my counseling background coming out and that being too friendly with teachers would get you in trouble. But my mind was set, I had figured out that being successful with teacher evaluation would mean working with teachers and getting them to listen to you without being defensive or shutting you out. I didn't agree with his perspective about evaluation. But I did learn something from that class and I think it was an important lesson. I learned that no matter what, you need to figure out a way to work with people. You can have all kinds of knowledge, but unless you're willing to try to understand that little thing that causes people to be upset, you won't have much success in solving the problem.

Maryann shared how authentic practices and working with people in genuine

educational contexts also had their genesis in course expectations and class assignments

during her preparation program.

> The mantra of our program was authentic practice in everything we did from internship work to course work; there always had to be a component that was authentic and actually done or completed in a school setting. When I was taking the research class, we had researchers presenting their theories and research. Some of those people stayed for symposiums where

> the graduate students would work with them in conducting research in the schools. We didn't just read about how to do research or what the findings were, we actually got out there and asked the questions and then got back together, analyzed the data and wrote up our findings.

Maryann's research class went beyond merely studying research designs or writing research article reviews and as a result she benefited from mastering not only the techniques associated with designing a research project, collecting and analyzing data and reporting results, she continued to have experiences working with other people in collaborative settings and engaging them in discussions about teaching and learning. The research course experiences were helping her to master the art instructional leadership in working collaboratively with others.

Terri also recounts how the expectations and assignments from her supervision of instruction class combined with her internship to create opportunities to more effectively work with teachers. Terri had been a teacher for more than 20 years before taking over the principalship of the school where she had previously taught. She admitted that most of her teaching time had been in the isolated setting of her own classroom. Although Terri had numerous close friendships and positive relationships with other teachers in the building, she seldom had the opportunity to work collaboratively with them on any substantive educational issues.

> I knew that I was a good teacher and I thought there were other good teachers here, but I never really knew what they did. The supervision class made me look at not only how other teachers could be successful even though their approaches were unlike mine, it also made me see how kids learn at all levels. Working with all the varied staff members made me think about the whole kid experience both vertically and horizontally. What we were asked to read and the kinds of projects we were asked to complete really broadened my knowledge and increased my respect for people.

Terri reported that that first supervision of instruction class she took where she learned to supervise teachers and work collaboratively with them during her internship, provided the affirmation she needed to believe she had made the right decision in moving to the principalship. When asked whether she had an "aha" moment where she knew she had made the right decision and would be successful as a principal, Terri again identified the supervision class during her internship. She stated, "I started the internship in September and in October I was working on a project with some teachers that I had to do for supervision class. The teachers seemed to really like working together with me and I remember thinking, 'I really like doing this.' It was exactly what I was looking for." Bandura (1997) identifies mastery experiences as the primary source of self-efficacy development. There are many experiences that have been identified as being important for principals to master to meet the demands of school leadership. Certainly, implementing policies and procedures for school safety, maintaining effective student discipline, managing facilities and scheduling maintenance, maintaining budgets, and accurately completing reports and paperwork are all skills and experiences necessary to successfully lead schools. However, what the interview participants in this study identified as important mastery experiences in the development of their principal self-efficacy were those experiences that found them working other people collaboratively in groups or one to one with teachers.

Persistence and Perseverance in Preparation Programs

A final theme that arose from the interviews was the notion of how difficult circumstances and rigorous coursework and high expectations tested the mettle of the principals, but ultimately helped them to identify an inner strength that would serve them

well in the role of principal. An emotional or physiological reaction to a difficult situation

or stress was identified by Bandura (1997) as the fourth source of self-efficacy. Bandura

found that when people were exposed to stressful situations those with low levels of self-

efficacy experience debilitating thoughts that interfere with their problem solving efforts,

while people with high levels of self-efficacy are able to remain task focused.

In this study, every principal identified at least one element in their preparation

program or during their preparation program that was particularly stressful, but had the

effect of reinforcing the principal's commitment to completing the program. Several of

the principals talked about this phenomenon as "turning a negative into a positive."

Maryann identified the stressful element in her program as the university's inflexible

policies and requirements. Maryann details how she had to advocate for herself in a

number of areas including changing advisors and choosing classes that interested her.

> My first advisor took the year off to travel out of the country. I didn't
> want to wait for him to return so I tried to figure out how to make the
> change, but the university had a policy that said you could only change
> advisors after so many semesters and I had just started that semester. I
> talked to a number of people up the chain of command until I was able to
> get the policy waived. It was surprising how something that should have
> made sense to those people didn't and required so much effort on my part.
> Later in my program, I made a second advisor change when I realized that
> one of my committee members would be a roadblock to everything that I
> wanted to do.

MaryAnn continued her thoughts:

> Another example of their inflexibility was that the university wanted to
> make me re-take a course that I had already taken. I had to really fight
> them on that. Challenge them and prove that I knew everything they
> wanted to cover in the course. Finally, they would bend, but they didn't
> do that for everyone. I knew other people who either didn't have the
> persistence or knowledge, background or skill to argue for what it was
> they needed – and the program didn't work for them.

Maryann admits that though it was difficult to put herself in an adversarial relationship with university faculty and administration in order to make the changes she thought were necessary to her success, she learned even from those difficult circumstances. "I learned advocacy skills and how important it was to advocate for yourself and what you needed."

Paul related a story about a professor he had who had really lost touch with what it was like to be in K-12 public education. Sometimes, the professor presented outdated information about laws and policies and when students tried to correct him, he became angry and defensive. Paul admitted having verbal confrontations with the professor and that he dreaded even going to class because of what the professor would say. Here are Paul's comments about the situation.

> He had been a professor for about 20 years, but had never changed his material and had never been out and around in the state to see what really was going on in schools. He harassed me all the time about having a counseling background and being too soft for the job of principal. There were times that things even got heated during class. When we had the chance to write our evaluation of the class and instructor, I wrote everything I was feeling and signed my name to it so he would know how I felt. I also recommended that he get out in the field to see what was going on. Later that year, he stopped by our school and he thanked me for what I wrote. In the next few years after I was working as a principal, he invited me up to speak to his classes about how I did things at my school. I think all the conflict I had with him and the evaluation I wrote really opened his eyes and maybe made him a little better.

Michael also discussed a situation with a faculty member that caused him the most stress during his program. Michael described how the professor tried to create a false sense of rigor by requiring his students to purchase several books for his courses and then never using them and also by requiring students to read or write numerous papers and articles that were never discussed during class. He also related that assignments were

frequently handed back late with only a grade and no meaningful feedback. Michael said,

> It wouldn't have been so bad if it had only been one class, but I had him for three or four classes and nothing changed. Late papers, meaningless readings, boring, boring lectures - those were the worst classes I had ever taken anywhere. The only thing that I really got out of those classes was the notion that I could survive anything and I did. I wasn't going to let that experience deter me from getting my degree.

Ken described how his situation of being a graduate teaching assistant while taking several education leadership courses developed a sense of being able to manage multiple tasks. Having the emotional energy to complete assignments for classes, while doing the work of his graduate assistantship, helped Ken develop self-efficacy about his ability to persevere in a principal position consisting of long hours and many things that needed to be accomplished. Ken commented, "It was a combination of taking so many classes while I was doing all my teaching assistantship stuff that taught me perseverance. It was really as good a preparation as I could get for this job."

Terri developed perseverance during her program due to relationship issues that occurred with a few staff members. Because Terri took over the principalship in the school where she had worked as a teacher, some of her former friends had difficulty accepting her in this new position. Friendships that were once strong disappeared. For Terri, that made working with those teachers difficult. The loss of those friendships also had an emotional impact on Terri at a time when she could have benefited from the support of those friends. She describes her situation below.

> I'm a person who really values relationships and a lot of this job is about relationships. So that was a tough thing too when my friends decided they could no longer be friends with me since I was now the boss. I don't know what they wanted – maybe they thought I'd quit or maybe they were jealous of what I was accomplishing. I just know that it wasn't easy, but I

was determined to work past all that and prove that nothing had changed. I have worked through all that over the years and it no longer gets to me like it used to.

Terri has said that she felt the biggest obstacle during her preparation program was working through all the relationship issues that she had with some of her former friends.

Felicia encountered a similar experience as she was transitioning out of the classroom and into the principal's office. Felicia's rise through the teacher ranks to be appointed assistant high school principal rankled teachers and administrators with whom she had previously worked. She states,

> People were divided over the former principal's demotion and since I was appointed to my job by the superintendent, I was somehow seen as disloyal. I was supported by some people and undermined by others. Our superintendent was instrumental in mentoring me and supporting me through those first two years, but I always thought, 'if I can survive this, I can survive anything.'

It is ironic that Felicia's undermining came from the same people with whom she had previously enjoyed good relationships. Because relationships and relationship building have been identified as a major source of principals' self-efficacy development, the brokenness of relationships would also seem to have a negative impact on self-efficacy development. Terri and Felicia might have been more susceptible to that negative impact if it were not for the new relationships they were developing with other people.

Research Question 4 Results

- What unplanned experiences do principals identify that contributed to the development of self-efficacy during their preparation programs?

The purpose of this question was to identify those experiences that although may have occurred simultaneously were not a part of any regular preparation program curricula or

planned experience. As data from the qualitative interview transcriptions were broken into units and categorized, it was soon evident that only a single theme would emerge that answered the last research question. Principals identified prior leadership experiences as having an effect on their readiness for preparation program work. That information, gleaned from this research question, can be valuable for program faculties to consider how they might try to replicate part of these experiences or integrate them within existing preparation programs so that aspiring principals can benefit from them.

Prior Leadership Experiences Create Readiness

Graduate Assistantships One unplanned experience for Ken that contributed to his self-efficacy development to a marked degree was his graduate teaching assistantship within the education leadership department at his university. Though a graduate teaching assistantship can serve several purposes that assist program faculty in carrying out important work in their department, many teaching assistantships exist to simply aid in the completion of a variety of clerical and organizational tasks that are considered too time consuming and not cost effective to be completed by university faculty. Ken reported that his graduate teaching assistantship required that he mostly perform clerical and organizational kinds of duties. Ken did not have any kind of teaching load nor was he responsible for student grades. He was not asked to work on research, except to input data. The primary function of his graduate teaching assistantship was to provide clerical and organizational support to program faculty. However, in that position, Ken still was exposed to experiences that contributed to his self-efficacy about the principalship.

One aspect of Ken's work involved supporting recruitment, selection and registration activities for a large cohort of Native American students who were joining the educational leadership program. Ken made numerous personal contacts with the potential students, counseling them about the kinds of registration documents they had to submit for entrance to the program. When a glitch occurred in the registration process, he had to inform program faculty and help problem solve solutions to the issues many of those potential students faced. In this capacity, he learned how to provide support to people and assist them in finding solutions to problems they encountered. This problem solving function occurs frequently in the authentic work of principals in areas such as teacher supervision, curricular and placement decisions, and building school climate. One could make the case that Ken's acting as the liaison between the cohort students and program faculty placed him in a position similar to the one principals experience when they find themselves acting as liaison between teachers or their school and the central office administration. Ken performed other functions in his graduate assistantship that were more of a management orientation such as making housing arrangements and coordinating schedules. Though Ken reported that "any 9th grader could do those things," he learned the importance of double checking arrangements and contacting other people early and often to make certain that the arrangements were carried forth as requested.

Ken believed that the combination of the graduate assistantship and the courses he was taking contributed to his ability to be persistent and persevere, but that experience also taught him more about time management and the multitasking skills necessary to prioritize and complete important tasks. Ken commented, "It was a combination, and I don't know if they could mimic this, but, for me it was taking so many classes at the

same time as my teaching assistantship. I was a good multi-tasker before, but being in that position where I was constantly interrupted really helped me to learn prioritization and I think, focus."

Ken cited his teaching assistantship as helping prepare him for his position as principal through what it was he learned through multitasking and working with other people. "This job challenges even the best multi-taskers and organizers and my teaching assistant work was some of the best training I got. It was never an intentional part of the program, but it really worked for me because even though most of the work was mundane, it was 'real' work. And, that I also had to learn how to work with a variety of people, some more competent, some less."

Maryann related that an unplanned experience for her that contributed to her self-efficacy development arose from a graduate assistant position she had in which she had to schedule and supervise student teachers. She also discussed how she was put in the position of advocating for student teachers in schools that were not hers and how she felt she had to also balance student teacher needs with the needs and desires of the cooperating classroom teachers. Maryann said that the system of placing student teachers allowed anyone to apply for a student teacher and sometimes the cooperating teacher was not a teacher she wanted student teachers to emulate. "That was a difficult position for me, because I had no real power in the schools – I couldn't change anyone's placement or anything. In those cases, I spent lots of time with those student teachers talking to them about the right way to do things, not necessarily what they were seeing day to day." Maryann began to look at ways that student teachers could observe each other and learn from each other's experiences as well as their own. "I realized that what I was doing was

really beginning some good professional development work that I could also use with teachers in my own school." Maryann's graduate teaching assistantship provided her with opportunities to discuss good teaching and learning while searching for ways to solve problems that would be acceptable considering the political nuances she faced as a university supervisor with no power in public schools. Later Maryann's work with student teachers became the impetus for a dissertation study that changed how the university placed student teachers and how cooperating teachers were trained differently to be able to mentor student teachers in a yearlong intern position.

When Maryann began her graduate teaching assistantship, her responsibilities included mainly scheduling and some limited observing of student teachers. The circumstance she found herself in caused her to develop instructional leadership skills as she learned to counsel and train student teachers and find ways for them to learn despite being in less than optimal circumstances. Her desire to change what she had experienced in that position also created the need for her to design research and collect data to problem solve the issues student teachers faced.

Teacher Leader Experiences Neither Paul nor Michael could identify an unplanned experience that contributed to the development of their self-efficacy. However, both mentioned that their teacher leader experiences before they began their preparation programs gave them an advantage over other aspiring principals. Paul believed that his counseling and coaching background gave him experiences in working with people during difficult times that carried over into his principal work. Additionally, some of his counseling duties included handling academic concerns of students and communicating with parents to try and propose solutions to problems students were encountering.

Michael thought that his experience as a music teacher taught him how to maintain

budgets, make co-curricular decisions and arrangements for band travel and

performances and most importantly, since he taught music to all grades K-12, he felt he

had a more in depth understanding about how curriculum functioned and the importance

of vertical alignment and consistency.

Michael stated,

> I was the one who made all the arrangements and decisions – it was my
> program K-12 and I was responsible for its success or failure. Other
> people who teach a subject like history or math don't get that sense of
> being responsible for everything. They don't often get to see the overall
> big picture because they teach only one thing and they get isolated from
> what else is happening in other grades and with other teachers. Their
> focus is pretty narrow and you need a broad focus for this job.

While the teacher leader experiences that Paul and Michael describe took place even

before they decided to pursue the principalship, it is important to acknowledge that two

principals believed that their teacher experiences made a difference to the development of

their self-efficacy during their principal preparation program. Although educational

leadership program faculty would not be able to replicate teacher leader experiences

during preparation programs, understanding that subject matter and teaching or

counseling experiences are not all equal could potentially inform recruitment and

selection practices.

Chapter Summary

Chapter four has presented the results of the data analysis and findings from the

Principal Preparation Program Questionnaire and the Principal Self-Efficacy Interviews.

Response rates from the Principal Preparation Program Questionnaire were described as

were the demographics of the respondents. Qualitative interview participants'

demographic characteristics were also presented. Data analysis and reporting was

included for each of the four research questions. Qualitative interview data was supplied

to reinforce quantitative findings from the Principal Preparation Program Questionnaire.

Chapter five will present an overview of this mixed methods study and the answers to

the four research questions. A discussion of the findings, recommendations and

suggestions for further research will also be presented.

CHAPTER 5

DISCUSSION and IMPLICATIONS

<u>Introduction</u>

Chapter 5 will present a summary of the study, its intent, research methodology and

findings.   Conclusions of the study will be presented through reviewing the answers to

the four research questions. The theoretical contributions of this study to the existing

body of literature will also be addressed in the implications section of the chapter.

Fourth, recommendations for further research and its importance will be discussed.

Finally, an overall summary of the study will conclude the chapter.

<u>Intent of the Study and Literature Summary</u>

Much attention has been given to the importance of principal preparation programs in

equipping principals with the knowledge and skills necessary to effectively lead schools.

However despite this attention, many critics from both inside and outside the higher

education community do not believe preparation programs have gone far enough or have

made the necessary changes to insure that principal candidates are not only qualified, but

adequately prepared for the demands of leadership in contemporary schools. Recent

studies commissioned by the Wallace Foundation done by Davis, Darling-Hammond, La

Pointe and Meyerson (2007) and Fry, O'Neill and Bottoms (2006) suggest that several

research based program elements are necessary to insure that principal candidates gain

the skills and knowledge needed to find success in school leadership.   However,

Bandura (1997) found that people's judgments of their personal capabilities rather than their actual skills and knowledge drive people to achieve the goals they set for themselves. It is quite possible that equally important to a principal's acquisition of knowledge and skills is the belief in one's ability to accomplish specific tasks and produce desired results; self-efficacy, therefore, is also important to school leader success. Since little research exists that examines principal self-efficacy, or how preparation programs contribute to self-efficacy development, preparation program faculty have limited understanding about how instructional practices and program experiences could positively influence self-efficacy development. It is within this question that this study finds its genesis and significance.

The overarching purpose of this mixed methods study was to examine how the elements of principal preparation programs contribute to the self-efficacy development of principals. The study identified program elements which most contributed to self-efficacy development and sought to understand how those elements functioned in contributing to principal self-efficacy. The intent of the research was to identify the program elements that were credited with enhancing self-efficacy beliefs so that preparation program faculty could more fully integrate those self-efficacy sources into existing instructional experiences and coursework and also purposefully design other experiences and interactions which would act as catalysts for further self-efficacy development.

Preparation Program Criticisms

Principal preparation continues to be the topic of much discussion from those both inside and outside the field. Farkas and associates reported in the *Public Agenda* (2001)

that 69% of principals and 80% of superintendents believe that preparation programs are out of touch with the needs and challenges of contemporary principals. Researchers have assailed preparation programs for a variety of reasons including selection and recruitment, disconnect between theory and practice, inadequate clinical practice, and weak faculty and instructional practices (Creighton & Jones, 2001; Browne-Ferrigno & Shoho 2003; Levine, 2005).   Creighton and Jones (2001) reviewed 450 preparation programs and found that the criteria to select and recruit principal candidates was inadequate and relied mostly on GRE scores and undergraduate grades. They also found that only 40% of universities listed prior teaching experience as a condition of admittance to their programs. Browne-Ferrigno and Shoho (2003) also suggested that recruitment and selection criteria should focus on recruiting successful teachers using interview protocols, performance portfolios and writing samples to insure that only the best candidates enter programs.   Levine (2005) blames poor selection and recruitment criteria for the lack of rigor present in many preparation programs. When candidates of low intellectual capacity and questionable work ethic make up the bulk of programs' education leadership cohorts, the resulting coursework and academic expectations will drop as well. In those programs, the remaining high quality candidates therefore, suffer from a lack of program coherence and meaningful experiences.

In Arthur Levine's (2005) stinging criticism of preparation programs, he cited the disconnect between theoretical knowledge and authentic educational practices as a problem in training principals in good decision making. According to Levine, schools of education leadership often have to resort to hiring lower-cost, part time and adjunct faculty to teach classes and handle the student advising load that has become too large for

the full time professors to adequately manage. Frequently, these adjunct faculties are not well steeped in current research and fail to provide the aspiring principals with a philosophical framework that marries the best research with real world practices. On the opposing side of this argument, Joseph Murphy (2003) stated that many universities and schools of education leadership placed too much emphasis on theory without any practical experiences in school leadership thereby creating a "bridge to nowhere." Murphy also criticizes university program faculty for having little or no K-12 administrative experience and being out of touch with education in today's schools. John Daresh (2002) weighs in on this topic to say that field based knowledge has practical value, but is limited by the fact that it is oriented around existing knowledge and practices rather than future thinking for needed reforms and that schools of education leadership must blend practical and academic knowledge.

   Inadequate clinical practice was another preparation program element drawing criticism from a wide array of sources. Although more than 90% of preparation programs employ some kind of internship, many do not expose principal candidates to meaningful "hands-on" leadership experiences which are akin to real issues principals encounter (Murphy, 1992; Fry, Bottoms & O'Neill, 2005.) Levine, (2005) also found that many internship experiences were fulfilled through small projects and report writing, which lacked any substantial application to improving student learning. Because few universities have developed partnerships with school districts, expert principals have not been adequately identified to serve as mentors to aspiring principals. Another finding was that failing to pair expert principal mentors with aspiring principal candidates is counterproductive to their learning, especially if aspiring principals are instead paired

with ineffective leaders who can model little about school leadership. A final criticism of

clinical practice was highlighted by Levine (2005) who reported that in 23 of the 25

schools surveyed in his research, students could complete internships in their home

districts with their current administrator as their internship supervisor. Even if those

administrators were competent schools leaders, interns lost out on valuable new

perspectives because they were not exposed to any thing new outside their home districts.

Rather than gain a broad perspective for how other schools were accomplishing school

improvement goals, aspiring principals completed their internships with limited

knowledge about promising new programs and practices that promoted meaningful

educational change and gains in student achievement.

A final area of concern was weak faculty and instructional practices. Dembowski

(1999) faulted education leadership programs for embracing a "professor-centered" rather

than "student-centered" orientation. Dembowski in referencing Daggett (1997) said that

instructional methodologies needed to change to reflect rigorous content through relevant

experiences in order to prepare principals for the demands of leadership. The professor-

centered orientation which utilized mostly lectures on theory produced passive learners

who were not challenged to master skills through assignments that integrated theory into

relevant practices. A student-centered orientation moved theory into practice as students

were required to actively engage in rigorous assignments through case studies, and

various problems based learning exercises. An ancillary issue mentioned was that in

many programs, the program itself has been ill-defined in terms of curriculum and

program expectations. These programs have relied on faculty members alone to design

and maintain program components. Therefore, without a coherent set of program

standards and curricular expectations, individual faculty members become the defacto curriculum. In this scenario, students attending the same school of education leadership could be subjected to very different preparation experiences due to the individual preferences and whims of faculty members.

Levine's (2005) criticism of education leadership faculty offered a unique paradox. Levine promoted the necessity of faculty having K-12 administrative experience and posited that too many professors have little, if any, experience. Levine (2005) found that only 6% of faculty reported any prior principal experience. By not possessing relevant school experience, university professors were less likely to provide learning opportunities that integrate theory into the authentic contexts of school leadership. Non-practitioner faculty also lacked a critical perspective to appropriately mentor aspiring principals. Mentoring opportunities were reported as infrequent as full time faculty were too busy teaching classes and conducting research to spend adequate time advising and assisting aspiring principals. Young and Petersen (2002) reported .that teaching, conducting research and service to the field were requirements for education leadership faculty pursuing tenure at research universities. However, gaining external funding and publishing research seem to outweigh all other expectations in terms of focus and attention. Young and Petersen (2002) posited that the reality of those expectations was in direct conflict with mentoring and supporting aspiring principals. However, Levine was also critical of programs which rely too much on part-time adjunct faculty. While adjuncts may possess relevant experience in the K-12 world, many lack current knowledge and scholarly expertise in research and theory and are weak in integrating theory into practice. Levine (2005) stated that in many cases the "dominant mode of

instruction…was telling war stories about their adventures as school administrators" (p. 36).   Another criticism of overuse of adjunct faculty was that adjuncts had little meaningful interaction with full-time tenure track faculty regarding issues of program quality and therefore quality control suffered.

Recommendations for Exemplary Programs

    Much like the criticisms of programs, the recommendations for change have also come from a variety of sources mostly inside the education community (Browne-Ferrigno & Shoho, 2002; Hess & Kelley, 2005; Jackson & Kelley, 2002; Young & Petersen, 2002). Several groups including the National Commission for the Advancement of Educational Leadership Preparation (NCAELP), established in 2001 by the University Council Educational Administration were formed to specifically address the issue of improving the quality of preparation programs. Foundational work on program standards and accreditation expectations was accomplished prior to NCAELP's establishment by the Interstate School Leadership Licensure Consortium (ISLLC), the National Policy Board in Educational Administration (NPBEA), and the National Council for the Accreditation of Colleges of Teacher Education (NCATE). In NCAELP's review of exceptional program practices, the commission identified ten characteristics that contributed to program effectiveness. Those were: 1) planned recruitment and selection of students, 2) planned recruitment and retention of core faculty with contemporary experiences, 3) professional development of faculty, 4) involvement of practitioners in program planning, teaching and internships, 5) reasonable teaching and advising loads, 6) advisory boards of practitioners, 7) collaboration with state agencies, 8) alignment to best practices of adult learning theories, cohorts, authentic internship experiences and

mentoring, 9) coherent program design and delivery and 10) on-going program evaluation and enhancement. After the NCAELP recommendations, Hale and Moorman (2003) found that specific policy changes adopted by some states also had the effect of increasing program effectiveness. Those policy changes included shoring up licensing requirements and promoting stringent evaluations of education leadership programs. The Institute for Education Leadership (IEL, 2003) report, "Preparing School Principals: A National Perspective on Policy and Program Innovations" also found that collaborations with school districts to select and mentor exemplary candidates, cohort structures for nurture and support, competency based courses in leadership, finance, school law, curriculum and learning theory and diversity and social justice also produced excellent results. Still, Hale and Moorman (2003) acknowledged that policy changes alone have not guaranteed program improvements.

Since the establishment of NCALEP, two other organizations stand out with regard to promoting preparation program revision. The Southern Education Regional Board, (SREB) and the Stanford Education Leadership Institute, (SELI) have conducted numerous studies associated with school leader development and preparation program effectiveness. In their 2006 report, Fry, O'Neill and Bottoms identify a set of four core conditions necessary for successful preparation program redesign. Those are: 1) establishing formal school district university partnerships, 2) utilizing standards, research based practices that transform course content and learning experiences, 3) developing continuous field experiences that allow candidates to demonstrate leadership competencies, 4) designing and implementing program evaluation strategies that address graduates' competencies and the program's impact on schools.

A second important study in identifying preparation program elements necessary to producing successful educational leaders was commissioned by the Wallace Foundation in 2003 and completed in 2007 by Davis, Darling-Hammond, LaPointe, and Meyerson. That study examined eight exemplary programs through case study analysis and found seven common elements that each exemplary program included. Those findings revealed:

- Exemplary programs possess a comprehensive and coherent curriculum aligned to state and professional standards. The ISLLC standards which emphasize instructional leadership are particularly important.

- The overall program goals emphasize leadership in terms of instruction and continuous school improvement.

- Instructional methodologies in exemplary programs utilize active, student centered pedagogy that facilitates the integration of theory into practice. Instructional strategies include: problem-based learning, action research, field-based projects, journal writing and self reflection. Portfolios which demonstrate substantive feedback from faculty and peers and highlight ongoing assessment are also important features of the instructional process.

- Exemplary programs boast knowledgeable faculty with relevant practitioner experience in school administration.

- Social and professional support is another essential component to program success. The use of cohort groupings and formal mentoring and advising from expert principals stands out.

- Recruitment and selection practices are purposeful and proactively target expert teachers with leadership potential for the principalship.

- Administrative internships are well designed and supervised. There are opportunities for candidates to engage in leadership responsibilities for substantial periods of time under the guidance of expert veterans.

Despite the promise of exemplary programs, there is no guarantee that redesigning principal preparation programs alone will produce the school leaders capable of improving schools. In addition to knowledge and skills, McCormick (2001) credits

leader self-efficacy with positively affecting goals, motivation, the development of functional leadership strategies, and the skillful and successful execution of those strategies.   Moreover, Tschannen-Moran and Gareis (2005) suggest that combining the elements of exemplary programs along with purposefully developing leader self-efficacy seems to hold promise in effectively training school leaders.

Self-Efficacy Theory

    In 1977, Dr. Albert Bandura penned *Self-Efficacy: Toward a Unifying Theory of Behavioral Change* and sought to present self-efficacy as the missing piece for understanding how people's beliefs about their capabilities influence their actions. Two tenets of social cognition theory influenced Bandura's theory of self-efficacy; those tenets are self regulation and self reflection. Bandura (1986) posited that people control, or regulate their behavior by creating standards for evaluating their actions. As people regulate their own behaviors, they also reflect on their thoughts and actions. Through self reflection, people analyze past events and determine future actions.   Bandura (1997) found that beliefs and judgments about personal capabilities, rather than their actual abilities drive people to accomplishing goals they set for themselves. The stronger their self-efficacy, the more vigorous and persistent are people's efforts (p. 394). Perceptions of self-efficacy can be either positive and empower people to action, or can be negative, and cause people doubt, resulting in inaction. Those individuals with high levels of self-efficacy about a given task will undoubtedly perform better than those without such beliefs. Bandura identified four sources of self-efficacy; mastery experiences, vicarious experiences, social persuasion and arousal.

Importance of Self-Efficacy to Principal Leadership

Although there is a growing conceptual consensus about the preparation program elements essential in leadership training programs, Orr (2006) also argues that not only what graduates learn is important, but what they come to believe about being a principal and how much they identify with the principal role is also important. Bandura (2000) promotes the importance of self-efficacy in leadership situations by stating, "When faced with obstacles or setbacks…those with a strong belief in their capabilities will redouble their efforts to master the challenge" (p.120). Self-efficacy is vital to leaders' success, because it determines the degree of effort exerted on a particular task as well as the kinds of aspirations and goals that leaders set (Bandura, 1986; Gist & Mitchell, 1992). In studies by Chemers, Watson and May (2000), leader self-efficacy was found to be important in affecting the attitudes and performance of followers. Leaders' beliefs also increased their followers' commitments to organizational tasks and had a positive effect on employee's engagement with their work. Leader self-efficacy helped to create an environment that could more effectively overcome obstacles to change (Luthans & Peterson, 2002). Efficacious school leaders were found to possess qualities that allow them to be more persistent in pursuing goals. However, efficacious leaders were also pragmatic in the sense that they adapted their strategies to the present context so that they would not waste time trying unsuccessful strategies (Osterman & Sullivan, 1996).

Methodology of the Study

Mixed methodology that blends quantitative investigation with qualitative finesse was chosen to add a depth of understanding of the phenomenon of principal preparation and

self-efficacy that likely could not have been possible using only one method of study.

Patton suggests that using mixed methods to study a social phenomenon has come to be

accepted as a beneficial practice (2002). Because biases are inherent in any one type of

study, researchers can conduct stronger research by reducing those biases through using a

mixed methods approach. This study asked four research questions that would be

answered using both quantitative and qualitative methodologies. The first two research

questions would be answered under the quantitative lens through the Principal

Preparation Program Questionnaire. Those questions are included below.

1. What are the perceptions of practicing principals regarding how well their

   principal preparation programs prepared them for the demands of principal

   leadership?

2. What preparation program elements do principals perceive as contributing to

   the development of principal self-efficacy?

Questions 3 and 4 were answered through qualitative interviews of principals who

reported themselves as having high degrees of self-efficacy. Those questions follow.

3. How did specific elements within preparation programs contribute to

   principals' self-efficacy development?

4. What unplanned experiences do principals identify that contributed to the

   development of self-efficacy during their preparation programs?

 The quantitative phase of this study occurred first through surveying all 538 practicing

principals in Montana regarding their perceptions of the effectiveness of their principal

preparation programs. Thirty-four of the 52 items on the Principal Preparation Program

Questionnaire were based on two Wallace commissioned studies about exemplary

preparation programs by Fry, ONeill and Bottoms (2006) and Davis, Darling-Hammond, LaPointe and Meyerson (2007). The researcher chose survey questions from both studies and modified them to fit this study. The remaining 18 items on the questionnaire were taken from the Tschannen-Moran and Gareis' (2005) study of principal self-efficacy. Of the 538 principals who were sent questionnaires, 292 principals completed and returned the survey for a 54% response rate. Analysis of the quantitative data was done using descriptive statistics to examine perceptions by demographic groups. Means and standard deviations showed the range of all responses to items measured on the nine point semantic differential scale used on the questionnaire. MANOVA was used to determine if statistical significances existed among the responses of groups by gender, years of principal experience, year completed principal certification and institution where certification was earned. The second research question was answered through a factor analysis that reduced the 54 items on the questionnaire and extracted four factors that were found to contribute to principal self-efficacy development in preparation programs. The four factors that were extracted were: instructional leadership experiences, motivation, authentic learning and practice, and self-regulation/efficiency.

Following the data analysis of the results of the Principal Preparation Program Questionnaire, the researcher sought to identify those principals who not only rated their principal preparation programs as effective, but also rated themselves as highly efficacious. The purpose of identifying highly efficacious principals was to interview them in order to better understand the phenomenon of principal self-efficacy and examine how preparation program elements contributed to self-efficacy development. Principals who ranked each item regarding principal preparation as a 7 or higher on the nine point

semantic differential scale and who also ranked each self-efficacy item as a 7 or higher

on the nine point scale were identified as potential candidates for qualitative interviews.

Of the 22 principals identified for possible qualitative interviews, 10 principals who lived

within a 200 mile radius of the researcher were contacted and agreed to interviews. The

researcher developed a 10 question interview protocol that examined preparation program

elements through the lens of Bandura's (1997) four sources of self-efficacy (mastery

experiences, social persuasion, vicarious experiences and psychological states also

known as arousal), asking interview participants how those elements influenced the

development of their self-efficacy. After six interviews, saturation was reached and no

new information was gained. The six interview participants, Ken, Terri, Felicia, Michael,

Paul and Maryann represented Montana principals of varying experience and age who

served schools of varying sizes and levels, including elementary, middle and high school

as well as a K-12 district. Interviews were transcribed and analyzed. Three common

themes emerged which described self-efficacy development for the interviewees; those

themes were relationships and learning from others, authentic practice, and perseverance

and persistence.

<u>Findings</u>

<u>Research Question 1</u>

- What are the perceptions of practicing principals regarding how well their
  principal preparation programs prepared them for the demands of principal
  leadership?

The results from the Principal Preparation Program Questionnaire indicate that respondents reported that their preparation programs were most effective in: establishing learning communities within cohort groups ($M = 7.40$, $S.D. = 3.37$), developing collegial relationships among students ($M = 6.75$, $S.D. = 1.78$), and using instructional strategies such as case studies ($M = 7.18$, $S.D. = 1.17$) and problem based learning ($M = 6.74$, $S.D. = 1.82$) to simulate authentic conditions of school leadership. Faculty were viewed as possessing relevant administrative experience ($M = 6.24$, $S.D. = 1.91$) and promoting rigor and relevance throughout the program.

Program elements perceived as less effective came from items addressing coursework in general. Some ambiguity was reflected in questions that addressed coursework regarding data driven decisions and assessments ($M = 5.44$, $S.D. = 2.02$), facility maintenance ($M = 5.26$, $S. D. 2.09$), community relations ($M = 5.23$, $S. D. = 1.98$) and resource allocation and budgeting ($M = 5.21$, $S.D. = 2.00$). Respondents were also ambiguous about the effectiveness of methods used to supervise and evaluate teachers ($M = 5.21$, $S.D. = 2.05$), and instruction or coursework about how to help and support students and families ($M = 5.11$, $S.D. = 2.45$).

Program elements that garnered consistently low marks for effectiveness mostly came from the section on field experience and internships. Many of those items' means were less than 5.0 on the 9 point scale. Overall, respondents did not perceive their field experiences as providing them with: opportunities to learn from an exemplary mentor principal ($M = 4.92$, $S.D. = 2.66$), chances to demonstrate ethical, moral decision making ($M = 4.59$, $S.D. = 2.53$), or opportunities to collect and analyze school data ($M = 4.56$, $S.D. = 2.56$). Finally, interns were not always given the opportunity to meet with faculty

and other interns to debrief field experiences and learn from one another ($M = 4.28$, *S.D.* $= 2.52$). While the mean scores of the field experience items were low across all groups, a separate MANOVA revealed that significant differences did exist regarding the institution where principals earned their certification. Graduates of programs from outside the state of Montana as well as those who completed certification at Institution A, perceived their internships as more effective than graduates of Institution B and Institution C.

These statistical results were consistent with findings from (Davis et al, 2007; and Fry et al, 2006) especially in light of the low rankings on items from clinical field experience. Many of this study's quantitative findings were also reinforced during qualitative interviews. Although the researcher did not ask about specific program elements, principal interviewees identified several high ranking elements and discussed their importance. Case studies were viewed as a means by which common educational issues and problems could be dissected and discussed during classes. Interviewees discussed putting themselves in the case study scenarios and trying to find solutions. Reflection was also mentioned by several interview participants who credited the practice with changing their thought processes about decision making and helping them develop and solidify leadership philosophies. Reflection and the expectation of rigor in writing and communication were tapped as beneficial in helping students learn to synthesize and evaluate research and its practical implications. Several principals identified rigor in programs as the constant that helped them develop persistence and perseverance that they would later rely upon in the position of principal. All participants identified faculty members who possessed recent administrative experience. Those faculty members were

able to better relate to the concerns aspiring principals had regarding specific issues in today's schools. They also challenged principal candidates with practical kinds of projects and assignments that had a value within the context of school improvement.

Research Question 2

- What preparation programs elements do principals perceive as contributing to the development of principal self-efficacy?

A factor analysis was conducted to parcel out the underlying constructs in preparation programs that principals point to as having contributed to their self efficacy development. The four factors that were extracted were: leadership experiences, motivation, authentic learning practices and self-regulation/efficiency. The items listed in Factor 1, Leadership Experiences, represent a student- centered orientation where instructional activities were designed so that students take responsibility for their learning and the learning of others in group projects and presentations, and through conducting research and analyzing data. These student-centered activities had the effect of simulating instructional leadership experiences that the students would be expected to perform in the role of principal. Factor 1, *Instructional Leadership Experiences* contributed to principal self-efficacy development via mastery experiences and vicarious learning. The student centered items described in Factor 1 built self-efficacy because they allowed aspiring principals to gain practice with and master the skills to analyze data, work through case studies and problem based learning activities and apply leadership theory and research to decision making. Vicarious experiences contribute to self-efficacy development as students learn from one another through collaborating to solve problems.

Factor 2, *Motivation*, was made up primarily of items from the Principal Self Efficacy

Scale (PSES) and addressed how emerging leaders learn to exercise their own leadership

to motivate and inspire others. Similar to McCormick's (2001) theory, this study finds

that self-efficacy source for motivation is social persuasion and positive feedback that the

leader uses to build relationships with others in the school and gain follower

commitment. Questionnaire items that addressed promoting ethical behavior of others

and promoting the prevailing values of the community were areas where principals could

model desired behaviors and thereby vicariously motivate and inspire others by leading

through example.

In Factor 3, many of the items that clustered around the construct of *Authentic*

Learning and Practice come from the section of the Principal Preparation Program

Questionnaire that asked about principals' internships or field experiences.   Most of the

items in Factor 3 describe a specific task that a principal must master in order to facilitate

learning and promote student achievement. Creating school policies and collecting and

analyzing data are skills that can be practiced and possibly mastered to some degree in a

comprehensive internship or field experience. In Bandura's (1997) self-efficacy theory,

mastery experiences increase self-efficacy development through repeated, successful

practices with new tasks and responsibilities. Repeated successful practices with new

leadership skills during field experiences develop self-efficacy

Factor 4, *Self-Regulation*, clarifies the importance of developing the ability to manage

stress and accomplish all the tasks that are required to function at an expected level of

competence and efficiency. The items making up the construct of self-

regulation/efficiency indicate that an important skill a principal must develop is the

ability to regulate oneself so that tasks are accomplished efficiently. Handling the stress

that is inherent in a rigorous schedule build's an individual's belief in her competence.

Likewise, negative feelings or physiological complaints associated with a task or stressful

situation can become debilitating and interfere with performance. Bandura (1997)

identifies this phenomenon as the fourth source of self-efficacy development called

arousal. In Factor 4, self-regulation, self-efficacy is developed as principals learn to

effectively manage stressful situations as well as demanding schedules and

responsibilities.

<u>Research Question 3</u>

- How did specific elements within preparation programs contribute to principals'
    self-efficacy?

The interview protocol developed for this question utilized the results from the

Principal Preparation Program Questionnaire, structuring questions to elicit responses

about program elements perceived as contributing to self-efficacy development. The

protocol examined those program elements through the lens of Bandura's (1997) four

sources of self-efficacy: mastery experiences, social persuasion, vicarious experiences

and arousal. Common themes emerging from the six interview participants were:

relationships and learning from others, authentic learning opportunities and mastery, and

perseverance and persistence.

<u>Relationships and Learning from Others</u> In this study, building relationships and

learning from other people either through some direct experience or vicariously through

others' experiences were important factors in principal self-efficacy development. Each

principal cited a relationship with an education leadership program faculty member that had the effect of building self-efficacy. As faculty gave positive encouragement and meaningful feedback, principals reported that they would work harder to reach rigorous standards, and please professors. Interviewees also related that they tried to model themselves after the faculty members with whom they enjoyed mentoring relationships. These findings reflect teachings from Bandura who said that "competent models command more attention and exert greater instructional influence than incompetent ones" (1997, p10.)

Principals also reported that they benefited from relationships that were built outside the university setting, primarily through their internship work. Four principals participated in internships of a year or longer and credited those experiences with building key relationships with superintendents and superiors who later advocated for them in employment decisions. Also mentioned was the relationship building that occurred with teachers throughout the internship. By developing relationships with teachers, principal interns were allowed to reach deeper into school improvement processes and lead teachers in change efforts. Teachers were more open to trying new ideas and innovative practices with interns due to the relationships that had been forged.

Principals also revealed that not all learning came from positive experiences and relationship building. Sometimes learning occurred through negative experiences with people inside their preparation programs as well. Principals reported having confrontational interactions and unpleasant experiences with difficult faculty members who could not build effective relationships and inspire students. Other principals had to work with district level administrators during their internships who were not good role

models or who did not practice effective team building strategies. Despite the negative contexts, vicarious learning still occurred and left principals with a clearer picture of not only the right kinds of people to emulate, but also the kinds of personal behaviors to avoid.

Authentic Learning Opportunities and Mastery A second theme emerging from interviews was that principals gained self-efficacy through experiences that required them to work collaboratively with other people. Some of these authentic learning opportunities came as a result of internships or field experiences; others arose out of class assignments or course requirements. Although the point of internship experiences is to give aspiring principals practice in doing the work of a school leader, the kind of practice principals are exposed to made a difference in building self-efficacy. Interviewees identified particular experiences where working with other people through committee work, teacher improvement practices and professional development planning especially helped them build self-efficacy. Instructional experiences such as small group projects were credited with helping aspiring principals gain practice in group problem solving and consensus building efforts that they would need to master in the role of principal. Even working one to one with a teacher who was observed for a supervision class was viewed as an enormous benefit to building principals' beliefs in their abilities to master the tasks of instructional leadership.

The difference here seems to be in the kinds of authentic learning experiences that are mastered. Much of the initial literature that discusses authentic practices does so in terms of specific tasks such as writing performance appraisals, creating policies or managing budgets that had a "real world" application in schools. Authentic learning was viewed as

the means to bridge the gap between theory and actual practice. The authentic learning experiences detailed in this study address the need for activities that develop people's capacity to lead. Authentic practices must reflect instructional leadership and not simply a managerial orientation to competence; authentic practices must embed "real world" relevance in social practice.

Perseverance and Persistence The final theme of qualitative interviews centered on how the demands of rigorous coursework and academic expectations along with difficult situations and stressful encounters with other people actually contributed to the development of principal self-efficacy. Interviewees credited rigorous coursework and academic expectations, though stressful, with causing them to be better at handling more than one problem at a time. Principals related that they had to improve their multitasking and organizational skills in order to handle the tasks inherent in a rigorous program. These examples reinforce Bandura's claim that "moderate levels of arousal (stress) heighten attentiveness and facilitate deployment of skills" (1997, p.108).

Principals also identified strained relationships with faculty and advisors, maneuvering through the endless requirements of the program, and questioning the value of specific coursework and assignments as stressful situations that had the potential to cause aspiring principals to quit their programs. For two of the candidates, broken relationships with former teacher friends actually caused them to lose self-efficacy. However, despite the difficult situations and stress from a rigorous program, principals were able to locate an inner strength and determination. They acknowledged practicing self advocacy skills and consciously strengthening their resolve to complete their degrees and become principals.

Research Question 4

- What unplanned experiences do principals identify that contributed to the
  development of self-efficacy during their preparation programs?

   Other experiences, besides those that are directly attributable to curricula or planned

as a specific element of preparation programs, also contributed to leader self-efficacy.

An efficacy building experience that occurred during a graduate teaching assistantship

involved supporting student recruitment activities, organizing registration processes and

even making arrangements for student travel and housing. What the graduate assistant

gained in this valuable practice was learning how to resolve people problems, using

subtle negotiation and communications skills and acting as a liaison between groups of

people – all skills used daily by principals as they mediate disputes between teachers and

parents and make placement and program decisions for students. Another graduate

teaching assistantship built efficacy through the practice of supervising and organizing

student teachers.   As the graduate assistant learned how to help student teachers with

daily lessons and instructional organization and effectiveness, she gained valuable

practice in organizing teacher training that would later become the cornerstone of her

professional development work. Although the graduate teaching assistantships

mentioned above were not tapped as efficacy building experiences, they had that effect

because they required the graduate assistants to successfully work with people in problem

solving capacities and gave them valuable practice in improving instruction.

   Educational experiences principals had before they entered preparation programs

were identified as other experiences that developed leader self-efficacy.   Principals felt

that through being a music teacher, a school counselor and even through athletic

coaching, they gained an advantage over single subject teachers who were not required to do much beyond preparing and teaching daily lessons. Inherent in some educational programs such as music and counseling, are greater demands for program development, budgeting, organizing afterschool events and student travel, and a more in depth understanding of curricular coherence. One principal felt that his counseling and coaching background gave him practice in dealing with a variety of conflicts as well as understanding the academic programming and limitations of schools. All felt they had learned to communicate effectively with parents as a result of the demands and requirements of their teaching and counseling experiences. Although educational leadership program faculty would not be able to replicate these experiences during preparation programs, understanding that some teaching or counseling experiences can inherently build self-efficacy could potentially inform recruitment and selection practices.

<u>Implications</u>

The purpose of this dissertation was to address a topic that had not been fully explored in the empirical literature: how principal self-efficacy is developed in principal preparation programs. This topic was addressed by surveying practicing principals asking about the effectiveness of their preparation programs and querying their self-efficacy in their principal positions. From their responses on the Principal Preparation Program Questionnaire, principals were identified who reported high levels of self-efficacy and who also perceived their programs as effective. Because these self-efficacious principals also rated their preparation programs as effective, the study sought to discover what elements of effective programs contributed to principal self-efficacy and

how that was manifested. The study also sought to discover what, if any, unplanned elements contributed to principal self-efficacy during principal preparation programs.

In reviewing the results of this study, four main implications arose that seem especially significant for faculty and administration involved with ongoing evaluation or further redesign of principal preparation programs. Those implications are: a) that instructional experiences that promote mastering the ability to work with other people are important to efficacy development; b) highly efficacious principals enjoyed long term internships with breadth and depth; c) prior leadership experiences created a readiness for success in preparation programs; d) principals in "grow your own" programs experienced a loss of self-efficacy after they were chosen for leadership roles because of the breakdown of prior relationships. The discussion of each of these implications follows.

Mastery Experiences Working with People

Bandura (1997) identified mastery experiences as the primary source of self-efficacy development. The SREB (2006) and Stanford (2007) studies of exemplary programs also identify the importance of instructional methodologies that create authentic learning and further link theory to practice. The quantitative phase of this study reinforced the importance of mastery experiences and authentic learning to principal self-efficacy development. Survey results from *Research Question 1* of this study's quantitative phase suggest that instructional methodologies that create mastery experiences and further link theory to authentic practice were viewed as especially effective when those experiences required face to face interactions with other people. Establishing learning communities within cohort groups, developing collegial relationships among students, and using instructional strategies such as case studies and problem based learning to simulate

authentic conditions of school leadership were the preparation elements that had the highest mean scores of any item on the Principal Preparation Program Questionnaire. In examining these items, it is clear that they are representative of expectations for instructional leadership development based on research by Lashaway 2002; Bottoms, et al, 2001; and Elmore, 2000.

The second part of the quantitative phase used factor analysis to extract the factors from the survey results that most contributed to principal self-efficacy development. One of those factors was *authentic learning and practice.* Authentic learning and practice can also be viewed as a collection of mastery experiences where specific tasks and skills are learned, practiced and mastered. There are a great variety of skills and knowledge that principals need to successfully lead their schools.   For example, understanding school finance and managing a budget is a task that must be mastered to keep schools and districts financially solvent. This particular skill and others similar to it can be built and possibly even mastered through projects assigned during preparation program courses and frequently are.

Where this study breaks some new ground and reinforces the research regarding instructional leadership, is in its qualitative findings which suggest that it's not just any mastery experience that contributes to principal self-efficacy, but in mastery experiences that require principals to work with other people even if that collaboration is accomplished around managerial tasks. Consider the budget example above; it is not in the arithmetic of budgeting that makes school finance difficult. It is instead in the difficult decisions that result as school funding lags behind needs and expenses. Anyone can do the math of putting together a budget, but it takes a leader with communication

and consensus building skills to take people through a process whereby everyone understands the constraints of the school's financial reality and yet continues to balance their own needs with what's consistent with the school's mission.

The quantitative phase of this study, through survey results from *Research Question 1* and factor analysis from *Research Question 2*, reinforced prior research about the importance preparation programs have in providing opportunities for students to master the technical skills needed to run today's schools. It was in the qualitative findings, nonetheless, that provided the context for understanding self-efficacy development within program elements. Those qualitative findings continued to reinforce the notion that mastery experiences are important to self-efficacy development. However, and more importantly, this study's qualitative findings also revealed that self-efficacy is built when aspiring principals learn to *master the art of working with people* to problem solve, mediate conflict, and bring people together around common goals or ideals. So to reiterate, mastery experiences are important to self-efficacy development, but mastery experiences which provide opportunities for interaction with other people are especially valuable to principal self-efficacy. Returning to the budget example, assigning students to create a budget for a school finance course would seem at the outset as an example of authentic learning. However, the assignment alone is not enough to build self-efficacy. An authentic practice must have a people-centered context in which students are required to work with others, advocating for conflicting interests and ultimately reaching consensus on solutions to problems. Indeed, a variety of technical skills are needed to manage the schools of today, but mastering the ability to lead people is the hallmark skill

necessary to success in the contemporary education world where accountability in school improvement drives everything.

  Online Learning Challenges Although no specific question was asked about principals' online learning experiences, information emerged during interviews that related to the results and implications of this study. For education leadership faculties, providing meaningful opportunities for students to master the art of working with people is a vital component of helping them develop self-efficacy about the principalship. In the traditional university classes where groups of students sit alongside one another, conversing about theories and educational ideals, designing instructional activities that require students to work together assume leadership roles can easily be accomplished. However, insuring that students benefit from those kinds of opportunities in an online setting can be more of a challenge (Dede, 1997). During qualitative interviews, principals were asked about effective instructional strategies and discussion emerged about the topic of online learning. These interview participants felt that while it was not impossible to develop relationships and learn from others in an online environment, they preferred traditional delivery methods for the most part because of face to face nature of interactions and the quality of instructor feedback. This research suggests that hybrid courses, where students had a combination of face to face learning with online study, were viewed as more effective than strictly courses delivered online. In Terri's interview, she discussed how relationships were built with her classmates primarily during the weekend sessions where students met at the university. It was there that she looked forward to sharing her thoughts and ideas with her classmates and benefitted from the immediate feedback instructors provided her and others. Terri said, "I really liked

going to class and seeing everyone. We talked online, but, we became more of a close knit group when we met for class, ate lunch together – stuff like that. I don't think the delivery of the instruction mattered as much as the building of relationships with people." Felicia also commented on the benefit of face to face meetings in her hybrid classes by stating, "The feedback was really important – you got a boost from meeting together and talking to the professors." Meaningful feedback given by professors was another way that aspiring principals learned about how to work with other people. The face to face context of meeting together provided students with a model of how to give meaningful feedback to people. Giving meaningful feedback is critical to mastering the art of working with others.

A final point exists about online learning in preparation programs and its place in promoting the development of leader self-efficacy. The factor analysis from *Research Question 2* suggested that *instructional leadership experiences* and *motivation* were two of the factors in preparation programs associated with self-efficacy development. The nature of leadership experiences is inherently working with other people in a problem solving capacity or modeling capacity. In an online setting, it can be more difficult to establish meaningful relationships that promote a problem solving mindset due to the nature of communications that lack the spontaneity of verbal discourse with others and students feeling isolated (McInnerney & Roberts, 2004). A leadership role requires principals to respectfully listen to both sides of an argument and mediate disputes in a non-judgmental way. Whereas the online world gives the illusion that one has time to thoughtfully construct a reply to any difficult question or unflattering remark, principals understand that difficult situations arise with people that require immediate, sometimes

on the spot, resolution. Ken's remarks about his online experience sum up the reasons why online learning may not be as effective in creating opportunities for principals to master the art of working with others. Ken said, "We are in a people business, and we engage in online learning that doesn't encourage people to have meaningful dialogue and share ideas. You miss out on often what is the best part of class – hearing other ideas – no matter how good or off base they might be. We need to be able to interact with people."

Coursework expectations must include elements that require aspiring principals to master the art of working with other people to resolve conflicts and work collaboratively with others to find effective solutions to problems. The following recommendations serve as guidelines for improving online learning to enhance mastery experiences working with others:

1. Hybrid experiences which allow some face to face interactions between students and faculty as well as online study should be utilized.

2. Instruction must go beyond simply the read and respond types of format. Online learning should promote opportunities for relationship building with colleagues in aspiring principals' home schools. Peer coaching a colleague and organizing a book study group are examples of activities that would build relationships while promoting leadership experiences. Other assignments should require students to master working with others in conflict resolution and problem solving kinds of activities such as chairing committees and reporting back about the experience.

3. Faculty who teach online courses need to have individual conversations with students that go beyond academic feedback in order to build meaningful

relationships. Planning times to call students on the phone to monitor their

progress or structuring time to visit students in their home schools would also

help build relationships with students.

4. All faculty members, but particularly adjuncts who deliver online instruction,

need specific training about how to effectively teach with strategies that cause

relationship building and create opportunities for students to master the art of

working with others.

Long Term Internships with Breadth and Depth

The second implication of this research is that to build self-efficacy, principals should

be exposed to a variety of authentic learning activities in field experiences or internships

that are at least a year in length. The internship must also have both breadth in the

number and kinds of experiences the principal is exposed to, and depth in the quality of

interactions and relationships built with others. This finding is consistent with studies

such as the Stanford *School Leadership Study* (2007) that suggest that longer internships

are effective for training principals, but extends those findings to discuss the nature and

importance of internships that encourage meaningful interactions with teachers in school

improvement related activities. In this study, the principals who enjoyed internships of a

year or longer were more able to benefit from a variety of collaborative experiences and

build relationships with teachers. Because of that relationship building, principals gained

cooperation and commitment from teachers to better plan and execute school

improvement activities. The depth of those relationships was a direct result of the length

of the field experiences, because longer field experiences gave aspiring principals more

opportunities to work with others and encouraged meaningful and sustainable collaboration. As Michael's internship included work in curriculum, teacher supervision responsibilities, staff training and professional development. As the year progressed, Michael was able to see projects through to fruition and understand how designing curriculum led to specific professional development and teacher training activities and how they were intertwined in the big picture of school improvement. The kinds of experiences and relationship building Michael enjoyed in his internship directly prepared him for the current demands of school leadership. Conversely, Michael's contemporaries often served internships of shorter length that mostly entailed policy writing and practice at student discipline techniques which, in turn, prepared them for a management mindset that, unfortunately, is inconsistent with the current era of accountability and achievement.

Maryann, Terri and Felicia also report that as they became engaged in the work of chairing committees, organizing teacher training opportunities and meeting with teachers one on one, they were able to recognize the effects of long term planning and felt that their understanding of the overall educational process was deepened. Here are Terri's words that reiterate the importance of breadth in the internship experience and share how relationships were built because of those broad experiences, "Supervision made me look at not only how other teachers could be successful even though their approaches were unlike mine, it also made me see how kids learn at all levels. Working with all the varied staff members made me think about the whole kid experience both vertically and horizontally…it really broadened my knowledge and increased my respect for people."

Despite the importance of an internship or field experience, principals' responses on the Principal Preparation Program Questionnaire showed that principals ranked their

experiences in that area as the least effective element in their preparation program. While a number of principals were not required to complete an internship, others reported dissatisfaction with their experience. For education leadership faculty, creating field experience requirements that address both length and breadth of experience could positively impact principal preparation. By encouraging depth through relationship building with others, education leadership faculty could also insure greater self-efficacy development for their students. The following recommendations serve as guidelines for improving internship experiences:

1. Internships should be served over the course of a full academic year so that interns can experience and understand the entire cycle of school improvement planning, implementation and evaluation. Relationship building during school improvement activities should be the major focus of the internship.

2. The intern should be exposed to and master a number of principal responsibilities including: building positive academic environments, designing teacher training that improves instruction, coordinating data collection and analysis, leading professional development, goal setting, and representing the school at various meetings with outside community agencies.

3. Mentor principals should be identified through university/district partnerships so that clear and specific expectations can be shared. Ongoing communication and evaluation should occur frequently with the mentor principal and the university supervisor.

Long term internships that require interns to master a wide variety of skills and build relationships with teachers and other administrators during the implementation of school improvement activities will build principal self-efficacy.

Prior Leadership Experiences Create Readiness

Some candidates in principal preparation programs have a decided advantage over other candidates due to the nature of prior leadership experiences they have enjoyed. Students who enter preparation programs with K-12 experiences such as school counseling, music, special education, physical education, or athletic coaching have benefitted from a more diverse set of leadership experiences than students who enter the program have only teaching experience in a single subject at one level. Many of the daily tasks performed by teachers who teach at multiple grade levels require them to implement curriculum across multiple grade levels, make scheduling and programmatic decisions on behalf of students and organize and facilitate student activities. Teachers who teach special education for instance, are frequently called upon to supervise paraprofessionals and thereby gain experience in evaluating performance. Others, such as music teachers, might have gained important organizational experiences through budgeting, making arrangements for student travel and designing programs. Additionally, the training K-12 teachers receive encompasses the entire development of the child within the context of a specific curriculum. In this sense, K-12 teachers benefit from a broadened knowledge of student needs at all levels, and a deeper and more complex understanding of the curriculum process and of vertical and horizontal articulation and alignment. Because they can readily understand and apply these curricular principles,

they seem to be more able as principals, to transfer their knowledge and understanding to other subject areas and assist teachers in aligning instruction, assessment and resources. Teachers who may have learned and mastered conflict resolution strategies might gain an advantage for the principalship. For instance, school counselors often have the unenviable job of notifying parents of academic or social difficulties their child is encountering. Those people who can create opportunities for growth out of bad circumstances can bring about more meaningful collaboration between home and school in order to better support students. Equally, efficacious principals are able to do the same thing by modeling compassion for parents, listening non-judgmentally to their concerns and working with them to achieve solutions that are in the students' best interests. Developing the skills to communicate clearly and successfully resolve conflict will build relationships and gain support for the school and its mission.

Principals who had served as graduate teaching assistants before or during their preparation programs also felt they had benefitted from learning to balance their preparation coursework and expectations with their assistantship responsibilities. They reported learning to more effectively manage time and manage several tasks simultaneously. Another advantage they reported was that they learned to "supervise adults" as they taught classes, supervised student teachers, or became clerical support in the recruitment and selection of program candidates. By supervising student teachers, one graduate assistant felt that she was more able to better understand teaching and learning and thereby more effectively plan professional development and teacher training opportunities. For the graduate assistant who supported candidate recruitment, he reported gaining skills in conflict resolution and in collaboratively working with other

agencies and groups on campus. Designing professional development and learning to work collaboratively with outside agencies are also skills that contemporary principals must master in order to effectively support student growth and achievement. For educational leadership faculty, there are several practical implications for these findings.

1. Recruitment and selection practices should more purposefully look to recruit teachers who have had quality experiences in organizing people, developing programs and in understanding and resolving conflict. Candidates who had leadership experiences as teachers should be specifically recruited.

2. Candidates without practical experience in conflict resolution or who have not had experience in organizing people or developing programs should be required participate in some additional experiences that encourage them to develop effective conflict resolution skills and organizational and multitasking strategies. This would mean participating in such activities as: chairing curricular committees, acting as the drug prevention liaison between school and community agencies, or facilitating a series of community forums regarding school closures or redistricting.

3. Redesign some of the tasks and responsibilities assumed by graduate assistants as additional leadership practicum experiences that allow preparation program candidates to gain some authentic learning and practice under the supervision and tutelage of university faculty.

4. Create instructional activities in coursework or internships that will require

    students to demonstrate leadership by effectively communicating to resolve

    conflicts.

When preparation programs begin to more purposefully recruit and select principal

candidates who possess proven leadership experiences, or expose candidates to authentic

leadership experiences within the program, aspiring principals will be able to more

readily apply their learning to the context of school and school improvement.

Loss of Self-Efficacy in "Grow Your Own" Programs

There are two scenarios that typically are referred to as "grow your own" programs.

The first is when district leadership encourages strong teachers to pursue education

leadership programs in an effort to identify individuals who may one day be hired into

principal positions within the district. In this scenario, teachers gain principal certification

first and then wait for the desired position to open and go through the standard hiring

process before they are selected for the job. Although no promises are made about future

positions, teachers are nonetheless encouraged to gain certification for future

advancement. In the second case, strong teachers are hand-picked for immediate

principal openings and are actually hired into principal positions before they complete the

principal certification process; sometimes hiring can occur before the teacher even starts

a certification program. Despite the advantages associated with school districts that

target their natural teacher leaders for principal leadership positions, there is a danger that

those "hand-picked" leaders will suffer a loss of self-efficacy if prior relationships with

teacher friends become broken or change substantially. In this study, two of the

interviewees were "grow your own" candidates who had not completed a certification

program, but who were still hired as principals within the same schools where their

friends and colleagues continued to teach. During the interviews, one of the principals

speculated that her relationships with others changed because her former friends and

colleagues had come to view her as somehow being "anointed by the administration" to

"do their bidding" during a time of union strife and conflict surrounding other personnel

issues. Although that was not the case, those beliefs impacted her relationships with

colleagues and made the transition to the principal position stressful and difficult. People

who were once friendly and inclusive became suspicious and avoided any personal

contact with the principal outside the ordinary flow of daily activities. For the other

interviewee, a long-time and close friendship was lost when a teacher friend perceived

that the new principal would no longer be able to be empathetic to the teacher's position

and concerns. The principal was told that the friendship would end because the two no

longer had anything in common.

The result of these unfortunate interactions was that both principals actually lost self-

efficacy during these experiences and questioned not only if they had made the correct

decision in moving to the principalship, but more importantly, whether they had the

requisite skills and abilities to be successful as leaders in their schools. From Bandura's

self-efficacy theory, it is known that positive feedback and the favorable opinions of

others held in high esteem can be a source of self-efficacy development (1997, pp.100-

101). However, in the cases of Terri and Felicia, the negative feedback they received

from colleagues and friends had the opposite effect. If it were not for the positive

relationships they were developing with other administrators in their districts, both

principals may have quit their preparation program or moved to another school or district to continue their teaching careers.

Two observations are worth noting that have practical implications that could potentially affect the success of "grow your own" principal recruitment and development programs in school districts.   It would appear that there is a difference between principals who pursue school leadership on their own, gain certification and then later are hired from a pool of candidates for a principalship, and, those principals who are appointed to a principal position before completion of certification. Seemingly, principals who "work their way up the ranks" through their own initiative and are hired into principal positions within their home districts gain acceptance and cooperation from their former friends and colleagues more readily than those principals who are perceived to have been "given the job" by the administration. Some potential solutions to the problem are offered below that still attempt to preserve the idea of recruiting the best and brightest teachers to serve in school leadership positions:

1. Publicly announce the district's intentions to develop internal candidates for leadership positions. Encourage and support several candidates in pursuit of the principalship simultaneously. Require all candidates to perform some leadership functions within the district so that other teachers can gain an appreciation for their work. Allow the strongest candidates to rise from the group and hire principals through a formal and transparent hiring process.

2. One possible strategy to mitigate the loss of a principal's existing friendships and relationships with teachers from a specific school would be to transfer the principal to a different school within the district. This would allow the new

principal to develop relationships and earn teachers' respect based on the merit of

his decisions.

3. It is important that preparation program faculty understand the loss of efficacy

phenomenon so that they are available to offer counsel and advice to candidates

who may be experiencing doubts about their leadership abilities. Also important

is the communication with the interns' administrative colleagues so that they

might provide additional support for the new leaders in their district.

4. In small, rural districts where a "grow your own" principal is often the only

administrator, there is a need for purposeful networking with principals from

other districts to provide a system of support and encouragement. This network

could be devised in schools of education leadership and function as a mentoring

cadre.

Understanding the contexts that potentially contribute to a loss of self-efficacy is

important if preparation program faculty members are to develop and maintain an

environment that nurtures and supports aspiring principals.

Preparation Programs Not Wholly
Responsible for Self-Efficacy Development

Despite the significant differences found in *Research Question 1,* for the effectiveness

of preparation program elements by institution, no significant differences were found in

self-efficacy of respondent principals according to where certification was earned. Even

though some preparation programs garnered lower rankings on effectiveness, their

graduates nonetheless reported self-efficacy ratings consistent with graduates of highly

ranked programs. This study indicates that as important as effective preparation

programs are to self-efficacy development, preparation programs do not totally determine

principal self-efficacy. This suggests that self-efficacy can still be developed outside

preparation programs, and perhaps is also developed "on the job." Findings from this

study portend that principals who developed their self-efficacy "on the job" entered the

principalship with teacher leader experiences that had the effect of creating self-efficacy

about leadership in general and that those beliefs transferred to an instructional leadership

mindset. This implication makes it all the more important that preparation programs

adopt selection and recruitment procedures that require candidates to gain teacher leader

experiences prior to entering an education leadership program.

Recommendations for Further Research

The importance of principal self-efficacy is well documented as it affects teacher self-

efficacy and ultimately student achievement. However, more study is needed in regards

to how principal self-efficacy development occurs. In reviewing the results from the

Principal Preparation Program Questionnaire, many principals who reported that their

preparation programs were effective did not necessarily report themselves as possessing

high levels of self-efficacy. Conversely, there were principals who did not perceive that

their preparation programs were particularly effective, but they still reported having high

levels of self-efficacy about the principalship. If preparation program effectiveness is not

the sole factor influencing self-efficacy development, what other factors might contribute

to or detract from principal self efficacy? This study did not examine the self-efficacy of

aspiring principals prior to entering their preparation programs. It is quite possible that

self-efficacious people were more likely to gain what they needed from preparation

program experiences than those who did not possess high levels of efficacy upon entering

a certification program. An obvious area of study would be to measure the levels of self-

efficacy of new recruits in preparation programs and then conduct a follow-up study after

they have been employed in a position as principal to examine how their self-efficacy had

changed over time.

   A second set of recommendations centers on online learning self-efficacy

development. Because so many education leadership programs feel the need to complete

with online purveyors of quick and easy principal certification, another area of study

should focus on how self-efficacy is developed in online preparation programs. For

principals who considered their online programs to adequately prepare them for principal

leadership, it would be interesting to understand what kinds of instructional or

programmatic experiences they believed were most helpful in their efficacy

development? An even more basic investigation would be to compare the self-efficacy

beliefs of principals who gained certification from online programs with principals who

earned certification through traditional university programs. Still, other questions beg a

response. What are the self-efficacy sources for principals who complete online

certification or master's degree programs? If principals report that face to face

interactions with faculty had an important impact on their self-efficacy development, how

do online programs replicate that that element of social persuasion with its program

candidates? If mastering experiences working with other people is important to self-

efficacy development, state certification departments could require additional coursework

or supervised experiences for principal candidates who gain certification online to insure

that they have the requisite practice and skills in collaborative situations. To assert that the quality of human interactions is vital to principal success and then not require those kinds of experiences in preparation programs would be incongruous.

The phenomenon of loss of self-efficacy also presents opportunities for study. One question would be to discover what other conditions or experiences besides broken relationships cause principals to lose self-efficacy? Studying potential causes for self-efficacy loss may make it easier for faculty to help candidates avoid those circumstances or, at least, understand what assistance could be offered to mitigate the loss of self-efficacy.

Final Summary

Principal preparation programs have been criticized inside and outside the field of education for not producing leaders capable of meeting the challenging demands of contemporary schools. Despite the recommendations for program redesign and a renewed focus on instructional leadership, many programs have been slow to change or have not gone far enough in providing instruction and experiences that not only impart knowledge but develop skills and the belief in one's ability to execute those skills. Principals with high levels of self-efficacy are more able to persist in the face of difficulty, overcome obstacles and perform at a higher level than those with lower levels of self-efficacy. Additionally, self-efficacious principals will set higher goals for themselves and their schools and will influence the motivation and commitment of followers. If schools of education leadership can purposefully design experiences that enhance self-efficacy development, principals will enter school leadership armed not only

with skills and knowledge, but the belief in their abilities to make welcome and needed change.

This study attempts to fill a gap that exists in the literature about what preparation program elements most contribute to the self-efficacy development of principals and how that occurs. The study examined the perceptions of practicing principals in Montana regarding the effectiveness of their preparation programs and the program factors that contributed to principal self-efficacy. The survey also asked principals about their self-efficacy regarding the principalship. Qualitative interviews with highly efficacious principals revealed the ways in which program elements contributed to their self-efficacy development. A final goal of the study was to identify unplanned experiences that contributed to self-efficacy development.

The findings of this study have identified four factors in preparation programs that contribute to self-efficacy: leadership experiences, motivation, authentic learning and practice and self-regulation/efficiency. The common themes that emerged from interviews exemplified the importance of: relationships and learning from others, authentic learning experiences where principals mastered the art of working with people, and persistence and perseverance that helped principals develop advocacy skills. Many of the findings from the quantitative questionnaire as well as the interviews reinforced prior research including: the importance of continuous internships with expert principal mentors, the importance of faculty feedback and relationships and the benefits of rigor and relevance across all aspects of preparation programs.

The implications of this research may serve to assist preparation program faculty as they evaluate program effectiveness and consider program designs that provide principals

with the highest quality experiences possible. This study suggests that creating instructional experiences that build relationships and promote experiences working with others is central to self-efficacy development. Equally important is the understanding how prior leadership experiences can create readiness for principal leadership. The study would also suggest that internships and field experiences be sufficient in length to support a breadth of learning and a depth in relationship building. Finally, this study asserts that acknowledging that a loss of self-efficacy can occur when relationships change or become broken can compassionately support principals through unfortunate and difficult circumstances.

In conclusion, the value in this work may not be in the questions that are answered, but instead, in the new questions that arise because of it. What is known for certain is that principal self-efficacy and the contribution that preparation programs can make to that end is worthy of greater study. A more purposeful commitment toward developing principal self-efficacy within preparation programs will undoubtedly yield leaders who possess not only the skills and knowledge necessary for the job, but who also believe in their abilities to make a difference.

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APPENDICES

<u>APPENDIX A</u>

PRINCIPAL PREPARATION PROGRAM QUESTIONNAIRE

Principal Preparation Program and Self-Efficacy Questionnaire

Dear Colleague,

Thank you for volunteering to complete this survey. Your input and insight are important to the study of principal preparation programs and self-efficacy development of aspiring principals. The purpose of this questionnaire is to collect data about principals' perceptions of their education leadership program experiences. A second purpose of the questionnaire is to determine what elements of your preparation program had an effect on your self-efficacy beliefs, or your belief in your ability to be successful in your role as principal.

Please complete the demographic information below. Following the demographic information, there are four sections of survey items. Each item requires you to select the response that best describes your feelings and thoughts about elements of your principal preparation program. The second part of the survey asks about your self efficacy beliefs in relation to specific tasks of your principal position.

Please complete the questionnaire by **January 10, 2008**. Thank you for your time and input in making this study possible.

Demographic Information

1. Gender: Male_____ Female_____
2. Age: _____
3. Years of principal experience: Less than 5 years____ 6-10 years____ 11+ years____
4. Year earned MA in Education Leadership:_____
5. University or College where you earned your MA _____
6. Current position: (please check one)

    High School Principal _____ High School Assistant _____
    Middle School Principal _____ Middle School Assistant _____
    Elementary Principal _____ K-12 Principal/Superintendent _____

Selection/ Recruitment

Please indicate your opinion about each of the items in the **Selection /Recruitment** section by selecting one of the nine responses in the columns on the right side. The response scale ranges from "Not at All" (1) to "A Great Deal" (9), with "To Some Degree" (5) representing the mid point between extremes. You may choose any of the nine since each represents a degree on the continuum.

The education leadership program I completed appealed to me because:	Not at All	Very Little	To Some Degree	Quite a Bit	A Great Deal
7. The coursework and classroom experiences were interesting and challenging.	1 2 3 4 5 6 7 8 9				
8. It was near to my home and convenient.	1 2 3 4 5 6 7 8 9				
9. Other administrators recommended the program.	1 2 3 4 5 6 7 8 9				

10. The program faculty had a reputation for promoting rigor
and relevance across the entire program.   1 2 3 4 5 6 7 8 9

Faculty and Instruction

Please indicate your opinion about each of the items in the **Faculty and Instruction** section by selecting one of the nine responses in the columns on the right side. The response scale ranges from "None at All" (1) to "A Great Deal" (9), with "some Degree" (5) representing the mid point between extremes. You may choose any of the nine since each represents a degree on the continuum.

The faculty in my education leadership program:	Not at All	Very Little	To Some Degree	Quite a Bit	A Great Deal

11. Possessed recent administrative experience to bring
relevant knowledge and practices to coursework.   1 2 3 4 5 6 7 8 9

12. Used problem based learning, active problem solving and   1 2 3 4 5 6 7 8 9
simulations in order to help students master specific tasks or
skills.

13. Used analyses of case studies to discuss current educational   1 2 3 4 5 6 7 8 9
issues.

14. Created a learning climate, encouraging collegial   1 2 3 4 5 6 7 8 9
relationships and learning from one another.

15. Developed learning communities through small and large   1 2 3 4 5 6 7 8 9
group assignments and projects.

16. Emphasized current research and leadership theory as a   1 2 3 4 5 6 7 8 9
framework for decision-making.

17. Created opportunities for students to develop self reflective   1 2 3 4 5 6 7 8 9
practices through scholarly research and writing.

18. Provided learning opportunities and experiences that   1 2 3 4 5 6 7 8 9
integrated leadership theories into practice.

19. Emphasized instructional leadership and student   1 2 3 4 5 6 7 8 9
achievement in every course.

Relevancy of Coursework to Practice

Please indicate your opinion about each of the items in the **Relevancy of Coursework to Practice** section by selecting one of the nine responses in the columns on the right side. The response scale ranges from "None at All" (1) to "A Great Deal" (9), with "some Degree" (5) representing the mid point between extremes. You may choose any of the nine since each represents a degree on the continuum.

My education leadership program included coursework and learning experiences that helped me gain practice in:

	Not at All	Very Little	To Some Degree	Quite a Bit	A Great Deal

20. Developing a school vision and mission that reflects the larger political, social, economic and cultural contexts of the community.
1 2 3 4 5 6 7 8 9

21. Leading a planned change effort for school reform and improvement.
1 2 3 4 5 6 7 8 9

22. Using vision and mission principles to guide decision-making in managing budgets and allocating resources to accomplish educational objectives.
1 2 3 4 5 6 7 8 9

23. Managing facilities and facility maintenance.
1 2 3 4 5 6 7 8 9

24. Working with diverse school environments and with students from differing socio-economic groups
1 2 3 4 5 6 7 8 9

25. Implementing school policies and procedures that contribute to a safe, effective learning environment and encourage social justice.
1 2 3 4 5 6 7 8 9

26. Supervising and evaluating instructional staff.
1 2 3 4 5 6 7 8 9

27. Coaching teachers in the use of assessments and data for instructional decision making.
1 2 3 4 5 6 7 8 9

28. Designing and facilitating professional development to strengthen teachers' knowledge and skills.
1 2 3 4 5 6 7 8 9

29. Supporting student learning by providing opportunities for parent and community involvement and input.
1 2 3 4 5 6 7 8 9

Clinical Field Experience

Please indicate your opinion about each of the items in the **Clinical Field Experience** section by selecting one of the nine responses in the columns on the right side. The response scale ranges from "None at All" (1) to "A Great Deal" (9), with "some Degree" (5) representing the mid

point between extremes. You may choose any of the nine since each represents a degree on the continuum.

My field experience or internship helped me prepare for the role of principal by:	Not at All	Very Little	To Some Degree	Quite a Bit	A Great Deal

30. Pairing me with an exemplary principal mentor with knowledge and skills in school improvement.

    1 2 3 4 5 6 7 8 9

31. Including ongoing class discussions that allowed students to process and debrief their field experiences.

    1 2 3 4 5 6 7 8 9

32. Creating opportunities to collaborate with community agencies to support diverse students and families.

    1 2 3 4 5 6 7 8 9

33. Creating opportunities to design and implement school policies and procedures, which build positive school climate and social justice.

    1 2 3 4 5 6 7 8 9

34. Creating opportunities to model ethical and moral principles in decision-making.

    1 2 3 4 5 6 7 8 9

35. Providing opportunities to communicate the school's vision and mission to diverse community groups.

    1 2 3 4 5 6 7 8 9

36. Allowing me the chance to learn and apply student management (discipline) procedures fairly and equitably.

    1 2 3 4 5 6 7 8 9

37. Allowing me an opportunity to collect and analyze data for decision-making.

    1 2 3 4 5 6 7 8 9

38. Providing opportunities for me to work with other social, political and economic systems in the community in the service of students and families.

    1 2 3 4 5 6 7 8 9

39. Allowing me to observe teachers and practice supervision techniques.

    1 2 3 4 5 6 7 8 9

Principal Self Efficacy

Self-efficacy is the belief in one's ability to accomplish a specific task or to set a course of action in place to produce a desired result. For the following questions, please indicate your opinion by marking one of the nine responses in the columns in the right. The response scale ranges from "None at All" (1) to "A Great Deal" (9), with "some Degree" (5) representing the mid point between extremes. You may choose any of the nine since each represents a degree on the continuum.

	Not at All	Very Little	To Some Degree	Quite a Bit	A Great Deal

In your current role as principal, to what extent can you:

40. Facilitate student learning in your school? 1 2 3 4 5 6 7 8 9

41. Generate enthusiasm for a shared vision for the school? 1 2 3 4 5 6 7 8 9

42. Handle the time demands of the job? 1 2 3 4 5 6 7 8 9

43. Manage change in your school? 1 2 3 4 5 6 7 8 9

44. Promote school spirit among a large majority of the student population? 1 2 3 4 5 6 7 8 9

45. Create a positive learning environment in your school? 1 2 3 4 5 6 7 8 9

46. Raise student achievement on standardized achievement tests? 1 2 3 4 5 6 7 8 9

47. Promote a positive image of your school with the media? 1 2 3 4 5 6 7 8 9

48. Motivate teachers? 1 2 3 4 5 6 7 8 9

49. Promote the prevailing values of the community in your school? 1 2 3 4 5 6 7 8 9

50. Maintain control of your own daily schedule? 1 2 3 4 5 6 7 8 9

51. Shape the operational policies and procedures that are necessary to manage your school? 1 2 3 4 5 6 7 8 9

52. Handle effectively the discipline of students in your school? 1 2 3 4 5 6 7 8 9

53. Promote acceptable behavior among students? 1 2 3 4 5 6 7 8 9

54. Handle the paperwork required of the job? 1 2 3 4 5 6 7 8 9

55. Promote ethical behavior among school personnel? 1 2 3 4 5 6 7 8 9

56. Cope with the stress of the job? 1 2 3 4 5 6 7 8 9

57. Prioritize among competing demands of the job? 1 2 3 4 5 6 7 8 9

Would you agree to be contacted for a possible interview regarding this study and your principal preparation experiences?

Yes_____   No_____

<u>APPENDIX B</u>

CONSENT FORM

APPENDIX B
Consent Form

Subject Consent Form
For
Participation in Human Research at
Montana State University
Self Efficacy Development of Principals
Tena M. Versland
430 South 7th Street
Livingston, MT 59047
406-220-1063

The study in which you will be participating is a study that examines how school leaders' sense of self efficacy beliefs are developed in principal preparation programs. The results from this study may help us better understand how to effectively prepare principals for school leadership.

If you agree to participate in this study, you will asked to participate in a 30-60 minute interview regarding your perceptions of how your school leader self efficacy beliefs were developed. You will be asked about the kinds of experiences and interactions you had during your principal preparation program that most contributed to your belief about your ability to be a successful school leader. The interview will be audio taped and the tape will be transcribed verbatim by a paid transcriptionist. A follow-up contact will be made with you after the interview to review the transcriptions for accuracy, and to ask clarifying questions regarding the interpretation of the data from your interview. Only Tena Versland and the transcriptionist will have access to the tapes. These tapes will be erased by July 15, 2008. Because your identity will be protected by use of a code and pseudonym, there are no risks. **Although your insights will help us better understand principal preparation and self efficacy, this study is of no benefit to you personally.**

Your participation in this study is voluntary. You are free to stop participating at any time or may decline to answer any specific question. You may ask about the research procedures and I will answer to the best of my ability. **Your participation in this study is confidential.** Your investigator will treat your identity with professional standards of confidentiality. Following our initial conversations, I will identify information about you using a code number. Results from this study will be reported using pseudonyms. If I believe that any information from the interview could result in you being identified, I will decline to disclose that information.

If you have any questions regarding this research project, you can contact Dr. Joanne Erickson (406-994-2290) at Montana State University. Any additional questions about the rights of human subjects can be answered by Chair of the MSU Human Subjects Committee, Dr. Mark Quinn (406-994-5721).

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.

_____   _____

Participant Signature   Date

_____   _____

Witness Signature   Date

_____   _____

Investigator Signature   Date

APPENDIX C

SELF-EFFICACY INTERVIEW PROTOCOL

APPENDIX C

Self-Efficacy Interview Protocol

Principal Self-Efficacy Study Protocol
Tena Versland, Principal Investigator

Please think back to your principal preparation program as you answer and elaborate on these questions.

1. What did you first believe about your ability to be successful as a principal as you began your preparation program?
   - How did those beliefs change or develop while you were in the program?

2. Did specific kinds of instructional experiences have an impact on your self-efficacy? Please elaborate.

3. What specific kinds of course work had the most impact on your beliefs about being successful in the role of principal?
   - If not, what kinds of coursework would have had more of an impact?

4. What kinds of personal interactions did you have during your principal prep program that had an influence on your self efficacy beliefs?
   - How did those interactions develop – were they a result of purposeful instruction or did they come about in another way?
   - Were there specific faculty members who contributed to your self efficacy development?

5. What people most influenced your self-efficacy beliefs while you were in the principal prep program?
   - What were the reasons for their influence or lack of influence?

6. Were there experiences that other aspiring principals had that affected your self-efficacy beliefs?
   - How did their experiences influence you?

7. If you had to go through the principal preparation program again, what experiences or interactions would you want to replicate?
   - If not, what specific experiences or interactions should be central to the program?

8. Was there a stressful element, experience or interaction in the program that caused you to question your belief in your ability to be successful as a principal?
   - How could those experiences or interactions be mitigated to lessen the stress?

9. Were there any unplanned experiences during your program that contributed to your self-efficacy development?

10. What could principal preparation programs do better to positively affect aspiring principals' self-efficacy development?