PSYCHOMETRIC PROPERTIES OF THE SCHOOL LEADER PRACTICE SURVEY (SLPS) TO DETERMINE MISSOURI SCHOOL SUPERINTENDENT PERCEPTIONS ABOUT INTERSTATE SCHOOL LEADERS LICENSURE CONSORTIUM (ISLLC) STANDARDS PERFORMANCE INDICATORS

A dissertation
presented to
the Faculty of the Graduate School
University of Missouri – Columbia

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education

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by
MELODY A. SMITH

Dr. Phillip E. Messner, Dissertation Supervisor

AUGUST 2007

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The undersigned, appointed by the dean of the Graduate School, have examined the

dissertation entitled

PSYCHOMETRIC PROPERTIES OF THE SCHOOL LEADER PRACTICE SURVEY (SLPS) TO DETERMINE MISSOURI SCHOOL SUPERINTENDENT PERCEPTIONS ABOUT INTERSTATE SCHOOL LEADERS LICENSURE CONSORTIUM (ISLLC) STANDARDS PERFORMANCE INDICATORS

presented by Melody A. Smith

a candidate for the degree of Doctor of Education

and hereby certify that, in their opinion, it is worthy of acceptance.

Dr. Phillip Messner

Dr. Joyce Piveral

Dr. Frank Grispino

Dr. Michael Graham

Dr. Kristina Alexander

With eternal gratefulness to Mother and Daddy

for modeling servant leadership

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS……ii

LIST OF TABLES…….vii

LIST OF FIGURES…..…….……ix

ABSTRACT …….....x

CHAPTER

1. INTRODUCTION……...1

   Conceptual Underpinnings of the Study

   Statement of the Problem

   Purpose of the Study

   Summary of Methodology

   Research Questions and Null Hypothesis

   Research Process

   Assumptions

   Limitations

   Delimitations

   Definition of Key Terms

   Anticipated Benefits

   Summary

2. REVIEW OF RELATED LITERATURE…….23
3. RESEARCH DESIGN AND METHODOLOGY…….43

   Overview of Problem and Purpose

   Statement of the Problem

Purpose of the Study

Research Questions and Null Hypotheses

Research Design

Setting and Population

Instrumentation

Data Collection and Analysis

Statistical Analyses Applied

Summary

4. PRESENTATION AND ANALYSIS OF DATA……65

Instrumentation

Results and Discussion of Findings by Research Question

Summary

5. DISCUSSION WITH CONCLUSIONS AND RECOMMENDATIONS…....100

Overview of Study

Discussion of Findings by Research Question

Limitations

Overall Conclusions

Recommendations

Summary

REFERENCE LIST…….109

APPENDIXES

A The School Leader Practice Survey (SLPS) ……...…119

B Email Letter to Superintendents……..126

C Informed Consent …….....127

D ISLLC Standards and Performance Indicators……....129

E Refined Form H of the SLPS……...……135

F Item-Total Analysis of SLPS ……..137

G SLPS Form C Items Retained …….....146

H SLPS Form H Descriptive Statistics by Gender …….147

I SLPS Form H Descriptive Statistics by Years of Experience ……...….150

J SLPS Form H Descriptive Statistics by Year Certified ……..153

K SLPS Form H Descriptive Statistics by Highest Degree ……....156

L SLPS Form H Descriptive Statistics by Assessment Method …….159

M SLPS Form H Descriptive Statistics by Type of Certificate ……...……162

N 1 SLPS Form H Descriptive Statistics by Institution …….165

N 2 SLPS Form H Descriptive Statistics by Institution …….168

N 3 SLPS Form H Descriptive Statistics by Institution……...…..171

N 4 SLPS Form H Descriptive Statistics by Institution ……174

O SLPS Form H Descriptive Statistics by District Description 1 ……..177

P SLPS Form H Descriptive Statistics by District Description 2 ……..180

Q 1 SLPS Form H Descriptive Statistics by District Size ……183

Q 2 SLPS Form H Descriptive Statistics by District Size……..186

R Communication Granting Permission to Use ISLLC Standards …….189

S Communication Discussing Use of Scale 1-9 …….190

VITA..…….191

LIST OF TABLES

Table	Title	Page
1	Summary Listing of Statistical Techniques Applied to Research Questions…….	50
2	Summary Listing of Dependent and Independent Variables Found within the Survey……..60	
3	Initial Eigenvalues and Percentage of Variance for SLPS Components 1-6…….73	
4	SLPS Form E Retained Items by Component after Three Varimax Rotations……...77	
5	Form E SLPS Items Retained by ISLLC Standard……..80	
6	SLPS: All Forms (N, M, SD, Cronbach's alpha, and Reliability…...83	
7	Test of Significance from Discriminant Statistics of Gender for Male and Female Superintendents……93	
8	Test of Significance from Discriminant Statistics by Years of Experience as a Superintendent……93	
9	Test of Significance from Discriminant Statistics of Year Certified Superintendent ……...94	
10	Test of Significance from Discriminant Statistics of Highest Degree Held by Superintendent……..….94	
11	Test of Significance from Discriminant Statistics by Type of Superintendent assessment…….95	
12	Test of Significance from Discriminant Statistics by Type of Certification……96	
13	Test of Significance from Discriminant Statistics by Institution For Program Preparation……96	
14	Test of Significance from Discriminant Statistics by District Description (K-8 and K-12)……..…97	

Table	Title	Page
15	Test of Significance from Discriminant Statistics by District Description (Rural, Suburban, Urban)…….	98
16	Test of Significance from Discriminant Statistics by District Size……..…….	98

LIST OF FIGURES

Figure	Title	Page
1	Concept map depicting conceptual underpinnings……..9	
2	Research matrix used to identify the research paradigm……..47	
3	Scree Plot of eigenvalues for SLPS depicting components……..74	
4	Concept map depicting data reduction process for study…….84	
5	Scree plot of Final SLPS Form H depicting components…….85	

PSYCHOMETRIC PROPERTIES OF THE SCHOOL LEADER PRACTICE SURVEY (SLPS) TO DETERMINE MISSOURI SCHOOL SUPERINTENDENT PERCEPTIONS ABOUT INTERSTATE SCHOOL LEADERS LICENSURE CONSORTIUM (ISLLC) STANDARDS PERFORMANCE INDICATORS

Melody A. Smith

Dr. Phillip Messner, Dissertation Supervisor

ABSTRACT

The study of Missouri superintendent perceptions about the Interstate School Leaders Licensure Consortium (ISLLC) Standards Performance Indicators was conducted to determine psychometric properties of the School Leaders Practice Survey (SLPS). The SLPS was sent to 524 Missouri school superintendents practicing during the 2006-2007 school year of which 73 agreed to complete the survey. Factor analysis and Cronbach's alpha were applied to investigate properties of reliability and validity. Conclusions indicated the instrument was reliable and valid. Principal component analysis yielded three components confirming leadership focused on learning: (a) Ethical Leadership for Learning, (b) Management of Learning, and (c) Culture to Support Learning. A data reduction process produced a refined form of the SLPS, which was also deemed reliable and valid.

CHAPTER ONE

INTRODUCTION TO THE STUDY

In 1994 Missouri and 23 other states joined the Interstate School Leaders Licensure Consortium (ISLLC) and by 1998 adopted the ISLLC Standards as a framework of expectations for future school leaders (Beem, 2002). Accountability for effective school leadership increased in 1985 when the Missouri State Legislature passed the Excellence in Education Act that required aspiring public school superintendents as well as superintendents arriving in Missouri to successfully complete and pass an administrator assessment for certification (Beem, 2002). Previous assessments for public school superintendents included two days of testing, simulations, and other professional activities. In 2000 Missouri became the first state to administer the School Superintendent's Assessment (SSA), a nationally standardized assessment measuring candidates' level of understanding of Standards and propensity for future success as a public school superintendent (Beem, 2002).

Chapter 1 provides background for ISLLC Standards, school leadership, and implications for Missouri superintendents. A conceptual framework describing the research paradigm (positivism) and three conceptual underpinnings (a priori theory, structural frame, and psychometrics) are discussed and subsequently depicted in Figure 1. The problem statement, purpose of the study, research questions, and methodology are discussed and depicted in Figure 2. Terms used throughout this study, assumptions, limitations, and delimitations are discussed. Finally anticipated benefits of this study are proposed, and a summary completes Chapter 1.

Background for ISLLC Standards

ISLLC Standards for School Leaders were developed by educational professionals from 24 state agencies and representatives from a variety of educational professional organizations. The purpose for this consortium was to establish a framework that would foster dialogue and deep thought about educational leadership and ultimately "to enhance the quality of educational leadership throughout the nation's schools" (Shipman & Murphy, 1996, p. iii). Establishing standards of practice with indicators of knowledge, disposition, and performance provided a "drive for improvement efforts along a variety of fronts – licensure, program approval, and candidate assessment" (Shipman & Murphy, 1995, p. 7). ISLLC Standards focused on effective school leadership attributes with teaching and learning at the center practice (Green, 2005; Murphy, 2002, 2005; Sanders & Simpson, 2005; Shipman & Murphy, 1996).

School leadership. School leadership was at the center of the development of ISLLC Standards. According to Green (2005), the ISLLC Standards meet the challenge of a change in thinking about school leadership. Standards are focused on performance related to "high expectations for all children and the accountability of individuals accepting responsibility for their education" with school effectiveness at the center of the development of Standards (Green, 2005, p. 2). Likewise Hoyle, Bjork, Collier, and Glass (2005) purported "the increasingly complex environment in which public schools are embedded is radically changing the work of school administrators and how they lead…" further stating school leadership practices should set direction, develop people, and develop the organization (p. 4). Grogan (2003) concluded that superintendents are to be

"child-centered, relational, community-sensitive, instructionally expert, politically savvy, ethically oriented and efficient, and deeply involved in reform" (p. 21).

Expectations for superintendents. ISLLC Standards provide a framework of expectations for school leadership, including the superintendency (Beem, 2002; Missouri Department of Elementary and Secondary Education [DESE], 2005; ISLLC, 1996). Waters and Marzano (2006) suggested the leader's focus on or failure to focus on effective practices or manage the change established by effective practices is called "differential impact of leadership – leadership that on the surface appears strong, but does not positively influence student achievement" (p. 7). Reeves (2004) challenged that numerous publications address skills evident in effective school leaders, including "resilience, decision-making, and time, task, and project management" paired with effective communication, student achievement, integrity, recognizing the importance of people in an organization, and use of power (p. 68). Reeves also asserted that those same publications do not instruct the leader "how to develop those characteristics in emerging leaders or how to assess those characteristics in incumbent leaders" (p. 68). Harvey and Koff (2005) posed reflective questions for superintendents to consider by asking: "What will it take to lead your schools? How can you transform education in your district as you face the daunting obstacles that make the superintendency what one recent study called 'an impossible job'?" (p. 17). Missouri embraced ISLLC Standards as its framework for school leadership and embedded Standards theory throughout the certification process for superintendents (DESE MOMODESE Compendium).

Missouri certification and ISLLC Standards. ISLLC Standards permeate the certification process for school leaders in Missouri. Currently to receive certification,

public school superintendent candidates in Missouri must complete required courses in an educational leadership program of study and meet a prescribed score on the SSA (DESE MOMODESE Compendium, 2005). Currently 158 is the prescribed score for passing the SSA in Missouri (Educational Testing Service [ETS]-Missouri, 2007). According to Hoyle, et al. (2005), "research is silent about the relationship between the examinations based on the six standards of the Interstate School Leaders Licensure Consortium (ISLLC) and the actual job performance of school public school superintendents" (p. 208). These authors further stated that "research confirming the standards' validity and reliability in preparing exemplary school leaders is limited" (p. 209). The level of importance of ISLLC Standards performance indicators to practice as a superintendent is unknown and there is no known instrument measuring perceptions of Standards related to practice.

Conceptual Underpinnings of the Study

Patton (1997) suggested evaluation should be valued as a process to determine a view of reality or to be in touch with what is really practiced. He coined the term reality testing to describe increased value of evaluating practice and a "willingness to be actively engaged in the work necessary to make the evaluation useful" (p.26). The research paradigm of this study is positivism with research viewed through an objective lens. Further, this study is supported by an "integrated framework" (Sutherland, 2004) of underpinnings: (a) A priori theory or an assumed theory void of practical experience provides support for the question about the theoretical framework of the ISLLC Standards and performance indicators; (b) standards are a framework or structure for effective school leadership and reflect the structural frame, such as the prescription of

policy, process, and practice for Missouri superintendents (Bolman & Deal, 1997); (c) psychometrics are an essential foundation of this study in that the instrument developed to measure perceptions about practice has not been deemed reliable nor has construct validity been established. This study will determine the psychometric properties of the School Leader Practice Survey (SLPS).

Research Paradigm

Merriam (1998) suggested quantitative educational research is grounded in positivism, interpretive, and critical research. This study gathered perceptions from Missouri public school superintendents about the ISLLC Standards and was grounded in positivism whereby "education or schooling is considered the object, phenomenon, or delivery system to be studied" (Merriam, p. 4). Coghlan and Brannick (2005) suggested positivism focuses on a view that "external reality exists and that an independent value-free researcher can examine this reality" (p. 6).

The external reality of this study is unknown in that perceptions of Missouri superintendents regarding ISLLC Standards have not been collected. The assumption is that ISLLC Standards performance indicators are reflective of superintendent practice. This study sought to confirm or disconfirm that reality by viewing the research through an objective, realistic lens focusing on support from three conceptual underpinnings: (a) a priori theory, (b) structural frame, and (c) psychometrics.

A priori theory. The concept of an a priori theory supports this study by posing the tension between theory and practice. By definition, a priori theory is an assumed reality unconfirmed in actual experience (Encarta Dictionary, 2003; Mertler & Vannatta, 2005). By using the statistical technique of confirmatory factor analysis, this study will

confirm or disconfirm the theoretical framework of the ISLLC Standards with regard to importance in Missouri superintendent practice. ISLLC Standards are a framework of attributes that have influenced the structure by which superintendent candidates in Missouri receive certification. Currently, there is no known instrument to confirm or disconfirm the importance of ISLLC Standards to practice as a superintendent.

Structural frame. Another conceptual underpinning of this study is grounded in the structural frame of organizational leadership that designs "a pattern of roles and relationships that will accomplish collective goals as well as accommodate individual differences" (Bolman & Deal, 1997, p. 40). The process for superintendent certification is regulated by Missouri DESE policy and structured to assure all superintendents meet the same qualifications to practice (DESE MOMODESE Compendium, 2005).

Policy is a focus of this study in that in Missouri, policy drives the process for certification and influences practice of superintendency (DESE MOMODESE Compendium, 2005). Fowler (2004) defined policy as the "dynamic and value laden process through which a political system handles a public problem. Policy "…includes a government's expressed intentions and official enactments as well as its consistent patterns of activity and inactivity" (p. 9). In short, Fowler suggested policy makers create processes, regulations, and procedures that define and structure a philosophy

According to Bolman and Deal (1997), policies "…help ensure predictability, uniformity, and reliability" (p. 41), and "…ensure that similar situations will be handled uniformly" (p. 42). The structural frame provides a lens to observe how an organization, in this study the Missouri DESE, maintains appropriate order, coordination and control (Bolman & Deal). The processes by which one is certificated as a superintendent are

prescribed and controlled by the Missouri DESE certification criteria and process. ISLLC Standards performance indicators are linked to these processes (DESE MOMODESE Compendium, 2005). Further, the ISLLC Standards are a purported framework or structure for effective school leadership (ISSLC, 1996).

Psychometrics. Psychoanalytic measurement or psychometrics is a field of study that provides theory and techniques in behavioral sciences such as educational and psychological measurement (Ary, Jacobs, & Razavieh, 1990). Psychometrics considers attitudes, beliefs, traits, and perceptions measurements. Specifically psychometric study determines differences between and among individual respondents as well as groups represented in the study, and involves the development of instruments for research (P. Messner, personal communication, October 2006). Psychometric properties of an instrument, such as the SLPS, are reliability and validity or for this study, the construct validity of the six ISLLC Standards (constructs) and 97 performance indicators (factors) represented as items on the SLPS.

Summary of the conceptual framework. Nonaka and Takeuchi (1995) described knowledge as grounded in "beliefs and commitment…is about action…is about meaning" (p. 58). Tacit knowledge is evident in action and connected to the context in which action is taken and is anchored in present experiences (Nonaka & Takeuchi). Present experiences are represented in practice as a superintendent. The SLPS will measure perceptions of Missouri superintendents with regard to their experiences as a superintendent.

Similarly, ISLLC Standards (1996) encompass knowledge indicators, dispositions or values and beliefs, and performance indicators reflecting expectations of practice

(ISLLC Standards).ISLLC Standards provide a theoretical framework of effective school leadership – commitments to and beliefs about how school leaders should practice (Green, 2005; Murphy, 2003; Reeves, 2004; Shipman & Murphy, 1996). This study did not address knowledge indicators and dispositions since the SLPS measured perceptions about practice. Thus, performance indicators which reflect practice were the focus of this study.

Rooted in positivism, this research was viewed through an objective, realistic lens (Coghlan & Brannick, 2005). Conversely, Patton (1997) claimed "reality testing" is in conflict to a positivist's view of the world. However, Patton's "reality testing" provided a realistic, objective lens through which the SLPS was administered and was a way of "finding out what is happening" (p. 38). As such, the SLPS provided a venue for Missouri superintendents to respond with perceptions about practice and in doing so illuminate "their own sense of reality" about practice as it is related to ISLLC Standards (Patton, p. 38).

To summarize, a conceptual framework underpins this research. With regard to a priori theory, the theoretical framework of ISLLC Standards were confirmed or disconfirmed through the statistical technique of confirmatory factor analysis. ISLLC Standards may be viewed as a structure established for effective school leadership. This study confirmed that ISLLC Standards permeate Missouri's policy, process, and practice of acquiring certification for the superintendency. Psychometric properties of the SLPS were determined by testing reliability and construct validity. A survey of Missouri superintendents to determine their perceptions about ISLLC Standards bridged theory and the reality of practice. Figure1 presents the conceptual framework of this study.

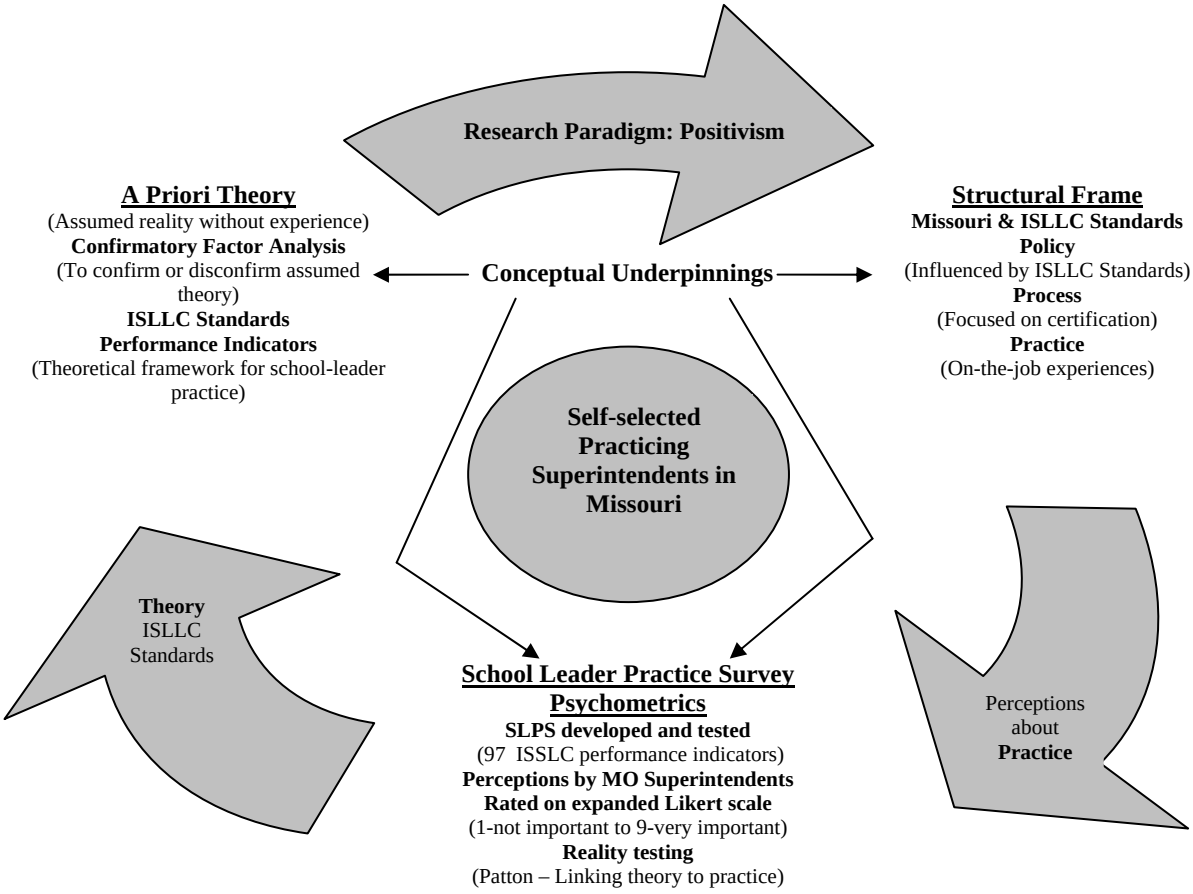

Figure 1. The conceptual framework depicting the research paradigm and three conceptual underpinnings for research related to the School Leader Practice Survey (SLPS).

Statement of the Problem

School leaders, including Missouri school superintendents, are held accountable for the effectiveness with which they lead school districts (Green, 2005; Grogan, 2003; Hoyle et al., 2005; Murphy, 2005; Shipman & Murphy, 1996; Waters & Marzano, 2006). Currently, the Missouri DESE licenses public school superintendents upon completion of an approved program of study that, since 2000, is linked to the ISLLC Standards. Upon

meeting a prescribed score of 158 on the SSA that measures knowledge, dispositions, and performance decisions based ISLLC Standards, initial certification is granted (MODESE Compendium, 2005; ETS – Missouri, 2007). To maintain certification, a school superintendent must have one year of formal mentoring and an annual performance-based evaluation by the Board of Education (MODESE Compendium). The level of importance of the ISLLC Standards and performance indicators to a superintendent's practice is unknown. Because ISLLC Standards performance indicators were not designed as evaluation or audit items potential psychometric properties are unknown (N. Sanders, personal communication, June 19, 2006).

Despite successful completion of approved educational leadership programs, success in passing the SSA or other assessment, and awarding of certification to practice, it is unknown how Missouri school superintendents perceive the level of importance of the ISLLC Standards performance indicators to practice. There is no known tool to measure Missouri superintendents' perceptions about the level of importance ISLLC Standards performance indicators have on practice.

Purpose of the Study

The purpose of the study was to design a survey instrument that determined the psychometric properties contributing to the validity and reliability of use among public school superintendents in Missouri and perceived level of importance ISLLC Standards Performance Indicators are to practice. ISLLC Standards performance indicators describe responsibilities of school leadership, are used as items for the SLPS, and are intrinsic to the current Missouri certification process (Beem, 2002; ISLLC, 1996).

Hessel and Holloway (2002) reported that in the development of the SSA by

Educational Testing Service (ETS), a study was conducted to identify areas of knowledge and responsibilities areas important for beginning superintendents. As such, a job analysis about the superintendency was conducted. Missouri and North Carolina were the two states who participated in a survey about practice. The results informed development of the SSA (Hessel and Holloway). A question left unanswered was whether or not the performance indicators are important to practice; therefore, by surveying superintendents, this study provided self-reported levels of importance of ISLLC Standards performance indicators to the practice of the superintendency.

The SLPS is a reflective tool for Missouri superintendents to self-report the level of importance of each item describing a responsibility for school leaders. Response items of SLPS are the 97 ISLLC Standards performance indicators for superintendents' perceptions relating the indicators to practice. Broadly, the items address a school leader's or superintendent's responsibilities including: (a) establishing a vision for learning, (b) providing a culture of learning, (c) ensuring effective management and organization, (d) collaborating with communities and families, (e) acting with integrity and with ethics, and (f) understanding and responding to politics, society, economic, legal, and cultural issues (Hessel & Holloway, 2002; ISSLC, 1996).

Summary of Methodology

This is a quantitative study using the statistical technique of factor analysis to reduce 97 items to a smaller number of factors or components and to determine reliability and construct validity of the SLPS and refined forms of the SLPS. Missouri superintendents responded to survey items rating the level of importance from 1 (not important) to 9 (very important) of the ISLLC Standards performance indicators to

practice as a superintendent. Valentine (2007) suggested an expanded Likert scale to provide more options that may more accurately determine perceptions of superintendents (personal communication, January 30, 2007). Further analysis identified components and "underlying patterns among factors" (McREL, 2006, p. 55). In addition, this study determined psychometric properties of a survey instrument through confirmatory factor analysis, indicating reliability and validity for future use (Mertler & Vannatta, 2005).

Essentially, this study developed a tool that identified and potentially evaluated the reality of influence the ISLLC Standards performance indicators have on the practice of the superintendency in Missouri. ISLLC Standards performance indicators describing desired attributes of effective school leaders are a theoretical framework that are also items in the instrument. Practice as a superintendent is school leadership and as such is reality.

Patton (1997) suggested reality testing moves beyond beliefs about practice to "identifying that there are useful things to be found out and creating the expectation that testing reality will be a valuable activity, not just an academic or mandated exercise" (p. 29). This study links theory and practice; "how learning is transferred into successful performance on the job of superintendent… [an] important theory-to-practice linkage" (Hoyle et al., 2005, p. 210). Figure 2 describes and defines the methodology of this research.

Work by Engler and Edlefson (2005), Hessel and Holloway (2002), Hiatt (2005), McKerrow, Crawford, and Cornell (2006), Mertler and Vannatta (2005), Messner (1975), and Ury (2003) influenced instrument design, the development of research questions, and methodology that guided this study.

Research Questions and Null Hypotheses

1. a. How many items have internal consistency and are reliable among the 97 ISLLC Standards performance indicators on the School Leader Practice Survey (SLPS)?

   H_o1a: Utilizing the statistical technique of item total analysis and Cronbach's Alpha, the ISLLC Standards performance indicators on the SLPS will not have internal consistency and reliability.

   b. How many reliable and interpretable components are there among the 97 ISLLC Standards performance indicators on the SLPS?

   H_o1b: Utilizing the statistical techniques of Cronbach's Alpha and principal components factor analysis with varimax rotation, reliable and interpretable components cannot be identified within the constructs of ISLLC Standards performance indicators to design the SLPS.

2. Can further application of the statistical techniques of factor analysis be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice?

   H_o2: Further application of the statistical techniques of factor analysis can not be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice.

3. If reliable components are identified, is there construct validity in relationship to six ISLLC Standard clusters of performance indicators on the SLPS?

   H_o3: Use of a varimax rotation will not reveal construct validity with relationship to six ISLLC Standards clusters of performance indicators.

4. Through factor loadings and further use of the statistical technique of Cronbach's Alpha, can alternative forms of the SLPS be built and determined as reliable and valid?

   H_o4: Reliable and valid alternative forms of the SLPS cannot be constructed.

5. What is the baseline data for Missouri superintendents' perceptions of the importance of ISLLC Standards performance indicators to practice for each item, each subscale, and total identified components on short and long forms of the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

   H_o5: Descriptive statistics of mean and standard deviation will not establish a baseline of perceptions of the importance of the ISLLC Standards performance indicators to practice on the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size.

6. a. Using a refined form of the SLPS, can categories be defined for those demographic items that have continuous interval scale responses (total years of experience, years of certification issued in Missouri, and total district enrollment)?

   b. Using a refined form of the SLPS, does the SLPS discriminate between or among demographic categories defined within independent variables of gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

H_o6b: The SLPS does not discriminate between or among demographic categories for the variables listed above.

Research Process

Under the research paradigm of positivism, the problem is viewed through an objective, realistic lens. A conceptual framework includes three underpinnings: (a) confirming or disconfirming an a priori theory, (b) policy, process, and practice viewed through the structural frame, and (c) psychometrics or determining reliability or construct validity of the SLPS. The problem establishes there is no known instrument to measure Missouri superintendent perceptions about ISLLC Standards and is traced through to the purpose statement that establishes the development of said instrument, the SLPS. Research questions are paired with descriptions of statistical techniques and methodology for analysis of data.

Assumptions

The following assumptions were made throughout this study:

1. Participants were practicing Missouri public school superintendents.
2. Missouri public school superintendents completed certification requirements.
3. Participants responded forthrightly and with reflective honesty.
4. Participants chose, without duress or coercion, to participate.
5. ISLLC Standards reflect best practices for school leaders.
6. Not all Missouri public school superintendents are aware of ISLLC Standards Performance Indicators.

Limitations

The following are limitations identified for the study and should be considered throughout the remainder of the research.

1. ISLLC Standards were not designed for evaluations or surveys (N. Sanders, personal communication, June 19, 2006).
2. Responses were based on self-reported perception.
3. Not all Missouri public school superintendents were trained based on the ISLLC Standards.
4. Not all Missouri public school superintendents were assessed for certification based on the ISLLC Standards.
5. The respondents were bound by time to voluntarily complete the survey that was electronically distributed and returned within one week.
6. Participants were public school superintendents in Missouri during the 2006-2007 school year.
7. The instrument was comprised of existing 97 ISLLC Standards' performance indicators (see Appendix A)
8. Knowledge indicators and dispositions of the ISLLC Standards were not part of the survey instrument.

Delimitations

The following are delimitations identified for the study:

1. Participants were public school superintendents in Missouri during the 2006-2007 school year.
2. The researcher has inside knowledge of ISLLC Standards performance indicators and the level of importance to personal practice as a superintendent.

3. Performance indicators were already identified and categorized relating to six standards of effective leadership developed by the Interstate School Leaders Licensure Consortium (ISLLC) in 1996. (see Appendix D).
4. ISLLC Standards were published in 1996; therefore, related literature about ISLLC Standards is bound by supporting educational research published from 1996 forward.

Definitions of Key Terms

The following are definitions of key terms used throughout the study:

A priori theory. An assumed reality unconfirmed in actual experience.

Baseline data. Descriptive statistics provided mean and standard deviation of dependent variables by item, subscale, and total for the final, refined SLPS. Mean scores were derived from ratings from 1 (not important) to 9 (very important). The SLPS was developed for this study; therefore, data are baseline data.

Cronbach's alpha. "…a measure of internal consistency" (Cronk, 1999, p. 101), "requiring only one test administration" (Fraenkel & Wallen, 2003, p. G-2).

Certification. Missouri Department of Elementary and Secondary Education license to practice as a school administrator.

Confirmatory factor analysis. This theory-based factor analysis "is to confirm – or disconfirm – some *a priori* [known or assumed without reference to experience] theory" (Mertler & Vannatta, 2005, p. 257).

Construct validity. "The degree to which an instrument measures an intended hypothetical psychological construct, or nonobservable trait" (Fraenkel & Wallen, 2003, p. G-2).

Descriptive statistics. An analysis technique yielding data depicted in a table, specifically mean and standard deviation of the SLPS.

Discriminant analysis. A statistical technique that predicts membership in groups or categories between or among variables.

Effective school leadership. School leadership focused on school improvement in three dimensions – increasing student achievement (quality), belief that all students can learn and improvement results are equally distributed (equity), and improvement is a result of the school (value-added); leadership focused on teaching and learning (Murphy, 2005).

Expanded Likert scale. The SLPS uses an expanded Likert scale with a continuum of responses from 1 (not important) to 9 (very important), providing a wider range and more accurate responses (J. W. Valentine, personal communication, January 30, 2007).

Factor analysis. "A technique used to identify factors that statistically explain the variation and co-variation among measures. Factor analysis can be viewed as a data-reduction technique since it reduces a large number of overlapping measured variables to a much smaller set of factors" (Green & Salkind, 2003, p. 296).

ISLLC Standards. A framework comprised of six core principles of expectation for the practice of effective school leadership developed by the Interstate School Leaders Licensure Consortium (ISLLC) (see Appendix D).

ISLLC. Interstate School Leaders Licensure Consortium comprised of 24 state education agency leaders and authors of ISLLC Standards.

ISLLC Standards performance indicators. All 97 descriptors describing desired performance skills for school leadership based on six ISLLC Standards (see Appendix

D). Permission to use these 97 items on the SLPS was granted by the Director of ISLLC (N. Sanders, personal communication, June 19, 2006).

Item-total analysis. Statistical technique providing for analysis of items to determine internal consistency of an instrument.

Likert scale. A measurement scale used on a survey instrument providing for a range of responses, usually but not limited to 1 through 5. The SLPS uses an expanded Likert with a continuum of responses from 1 not important to 9 very important, providing for a wider range and possibility of more accurate responses (J. W. Valentine, personal communication, January 30, 2007).

Positivism. Research paradigm for this study – objective, realistic view of the world.

Principal components factor analysis. A factor analysis technique that extracts factors from original variables, thus creating a new set of variable or components (Mertler & Vannatta, 2005).

Psychometrics. The process of determining reliability and validity of a survey instrument.

Refined forms. Refined forms of the SLPS were developed through factor loadings with reliability determined using Cronbach's alpha. Eight additional refined forms were generated for the SLPS based on coefficient correlations and factor loadings.

Reliability. "The degree to which scores obtained with an instrument are consistent measures of whatever the instrument measures" (Fraenkel & Wallen, 2003, p. G-7).

School Leader Practice Survey (SLPS). A survey developed by the researcher to

measure perceived level of importance Missouri superintendents have regarding ISLLC Standards performance indicators (the 97 response items on the SLPS).

Structural frame. Bolman and Deal (1997) define the structural frame as role definitions, structures within organizations as well as policies and processes identifying the way things work.

Validity. "The degree to which correct inferences can be made based on results from an instrument; depends not only on the instrument itself, but also on the instrumentation process and the characteristics of the group studied" (Fraenkel & Wallen, 2003, p. G-9).

Anticipated Benefits

Anticipated benefits of the study include the opportunity to tie the theoretical framework of ISLLC Standards to actual practice by Missouri superintendents. If reliable and valid, the SLPS established baseline data identifying how important ISLLC Standards performance indicators are to practice of the superintendency. In addition, this study offered opportunities for a variety of additional studies, once the survey was deemed reliable and valid. Educational administration preparation programs may benefit by considering the link between coursework and the importance of performance indicators to the work of superintendents.

Further, the tool may provide a framework for reflection for a superintendent with regard to those performance indicators that emerge as most important. Results may also reveal the opposite and illuminate those items that are not as important to practice. Future studies may replicate this process to establish baseline data for other areas of school leadership, including principals, teacher leaders, and central office directors. Finally,

Hoyle et al., (2005) challenged that “ISLLC standards are primarily written for campus administrators rather than superintendents” (p. 209); therefore, an ultimate benefit is to begin dialogue that may bridge theory and practice for superintendents.

Ultimately, this study determined reliability and construct validity of the SLPS and reduce items creating refined forms of the SLPS and subsequently determining reliability and validity of those forms. Further, it establish baseline data reflecting the level Missouri superintendents perceive the importance of ISLLC Standards performance indicators are to practice as a superintendent by item, subscale, and total, and finally determine the extent to which the SLPS discriminates between and among demographic categories. Ultimately, this study may be deemed as research providing a value-added approach to candidates entering the field of educational leadership and specifically, the superintendency, thus adding to the body of knowledge guiding educational administration. The SLPS may be a value-added instrument confirming or disconfirming the importance of ISLLC Standards performance indicators to practice of the superintendent.

Summary

The research paradigm of positivism supports a conceptual framework focusing on three conceptual underpinnings that provide a lens through which this research may be viewed: (a) a priori theory, (b) structural frame, and (c) psychometrics. This study posed the problem that there is no known instrument to measure perceptions about ISLLC Standards performance indicators and their importance to Missouri superintendent practice. Ultimately, the School Leader Practice Survey (SLPS) was distributed to Missouri superintendents during the 2006-2007 school year and tested for reliability and

construct validity. If deemed so, the SLPS may provide clusters of performance indicators that superintendents identify as most important, establishing baseline data for practice and creating refined forms of the survey.

Chapter 2 is a review of literature providing background to support the problem and purposes of this study. Chapter 3 discusses research design and methodology used to gather and analyze data from Missouri superintendent responses on the SLPS. Chapter 4 presents findings from analysis of data. Chapter 5 provides conclusions to the analysis with recommendations for future use of the SLPS if it is deemed reliable and valid.

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CHAPTER TWO

REVIEW OF LITERATURE

Introduction

With the advent of Nation at Risk in 1983, Goals 2000: Educate America Act in 1994, America 2000: An Education Strategy in 1991, and the No Child Left Behind Act of 2002, the standards movement resulted in high-stakes testing, a push for more effective schools, and concentration on effective school leadership (Hoyle et al., 2005; McGhee & Nelson, 2005; Merrow, 2001). Following the tenor of the effective schools movement, the pronounced role of school leader as manager became a shadow to one of instructional leader who made decisions to positively influence student achievement (Green, 2005; Murphy, 2001; Shipman & Murphy, 1996). School leaders such as principals and school superintendents became immersed in an age of accountability for improving academic achievement and faced a microscopic focus on effective school leadership (Green, 2005; Hoyle et al., 2005; Wallace, Engel, & Mooney, 1997; Marzano, Waters, & McNulty, 2005).

Most recently, criticism has emerged focused on the superintendent as instructional leader. Specifically, preparation programs and practice have been in question because student achievement is steadily decreasing, and accountability for student achievement ultimately lies with the school leader (Johnson, Arumi, & Ott, 2006: Levine, 2005; Murphy, 2005). The ISLLC Standards initiative impacted preparation programs for educational leadership, state policy for educational administration licensure, and more recently evaluation processes for school leadership (Murphy, 2005; Shipman & Murphy, 1996). Educational researchers as well as Missouri's requisites for

superintendent certification, regulated since 2000, reveal ISLLC Standards matter (Beem, 2002; MODESE Compendium, 2005).

Problem, Purpose, Rationale, and Delimitations of the Study

Chapter 1 established the problem and purpose of this study. Delimitations have also been identified in Chapter 1. It is important to note that this study was fostered by a review of literature and intense desire to learn about the superintendency, resulting from the researcher's promotion to superintendent of schools. Although much of the focus of the study had been considered in literature, the problem had not been articulated. The following discussions, specifically the rationale for the study, illuminate the process through which the researcher formulated the problem.

Problem. To explore school leadership further, this study posed a problem that there is no known tool to elicit reflection from superintendents regarding their perceptions about how important ISLLC Standards performance indicators are related to practice as a superintendent. Specifically, this study developed such a tool with explicit connection to the ISLLC Standards performance indicators with the School Leader Practice Survey (SLPS). The SLPS measured superintendent perceptions about their practice related to ISLLC Standards on a continuum of 1 not important to 9 very important.

Purpose of the study. The purpose of the study was to develop and test the SLPS that measures Missouri superintendent perceptions about ISLLC Standards performance indicators with regard to practice. Psychometric properties of the SLPS were determined through this research as well as development of refined forms of the SLPS. Further, this study established baseline data, indicating Missouri superintendent perceptions regarding

the level of importance ISLLC Standards performance indicators to practice and analyzed by item (performance indicator), component (Standard), and total. Finally using discriminant analysis, research determined if categories could be defined for independent variables (demographic items) on a refined form of the SLPS and further ascertain whether or not the SLPS discriminates between or among demographic categories such as gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size.

Rationale for this study. Rationale for this study is buttressed by the lack of information regarding superintendent perceptions about ISLLC Standards performance indicators and how they relate to practice. Hoyle et al. (2005) purported minimal information connects Standards to practice of the superintendency. In fact, they stated:

> "Definitive research linking superintendent job performance to standards remains tenuous at best. Research is silent about the relationship between the examinations based on the six standards of the Interstate School Leaders Licensure Consortium (ISLLC) and the actual job performance of school superintendents" (p. 209).

The rationale for this study rests in this statement, in that it posed a question and presented a lack of information relating ISLLC Standards to practice. This rationale became the problem, which prompted the research design. A related study asked superintendents in Missouri and North Carolina to rate whether or not ISLLC Standards performance indicators were important in relation to knowledge about and responsibilities of the job of superintendent (Hessel & Holloway, 2002). Despite this job analysis study conducted by ISLLC for the purpose of developing a performance based assessment for the Educational Testing Service (ETS), limited or no studies explore

superintendent perceptions about ISLLC Standards performance indicators. Developing a tool, the SLPS, and determining its psychometric properties presents new knowledge in the field of educational administration.

Delimitations of the study. An important delimitation of the study is that research is limited in the area of ISLLC Standards which were developed in 1996. Therefore, literature related to ISLLC Standards, influence of ISLLC Standards on practice, and outcomes related to ISLLC Standards is bound within a time-frame since 1996. Further delimitations related to the review of literature include the researcher's occupation as a superintendent in Missouri who completed a preparation program reflective of the research, completed the School Superintendent Assessment to gain licensure, and is completing a performance-based evaluation process, with all framed around ISLLC Standards. Additional delimitations cited in Chapter 1 are related to the population and survey development. An organizer for Chapter 2 sets the pattern for a review of related literature.

Roadmap for the Review of Literature

A review of related literature for this study provided background information in the introduction about effective school leadership and its relationship to the development of ISLLC Standards. In addition, this review established the influence ISLLC Standards had on Missouri's policy, process, and practice in educational administration. Further, related literature substantiated the ISLLC Standards as a construct for effective school leadership and introduced criticism of the Standards. Hessel and Holloway (2002) argued ISLLC Standards "would apply to nearly all formal leadership positions in education" (p. 4). In contrast, literature revealed what Hoyle et al. (2005) suggested was little

information relating the Standards to actual practice, especially in the superintendency. This review of literature briefly explored conceptual underpinnings of this study, including: (a) positivist research paradigm, (b) a priori theory, (c) structural frame, and (d) psychometrics. Additionally, it established a "knowing-doing gap" between the ISLLC Standards, theoretical framework for school leadership, and how superintendents practice (Reeves, 2004, p. 3). This cumulative review of literature presented a rationale for development of the School Leader Practice Survey (SLPS), an instrument evaluating the level of importance of leadership responsibilities and attributes. Subsequent testing of the SLPS provided psychometric properties for potential use in the future.

Influence of ISLLC Standards

Standards are frameworks identifying behaviors or describing indicators desired in a particular practice and permeate educational practice for teachers, building administrators, and district administrators (Hoyle et al., 2005; Kaplan, 2005; Levine, 2005). As such, accountability to such standards for practice increases (Kaplan, McGhee & Nelson, 2005). According to McGhee and Nelson, "…the impact of high-stakes accountability on school leadership has yet to be deeply explored" (p. 367).

Policy. Standards are inherent in policy guiding development of preparation programs, licensure, professional development, and evaluation of school leaders (Hoyle et al., 2005; Levine, 2005; Murphy, 2005; Murphy, Manning, & Walberg, 2002). ISLLC Standards are inherent in policies and regulations for practice as a school leader in Missouri (MODESE Compendium, 2005; Missouri Professors Educational Administration [MPEA], 2007). Historically, policy has guided the certification process for school leadership in Missouri and is directly administered by The Leadership

Academy at the Department of Elementary and Secondary Education and activities related to continuous licensure (Beem, 2002; Missouri Leadership Academy [MLA], 2007).

Assessment of administrators. In 1985, the Excellence in Education Act was passed and with it came a Missouri statute that established the Principal-Administrator Academy that coordinated a variety of educational and training programs for school leaders across the state (Missouri Professional Development Guidelines [MOPDG], 2007). A component of the Academy was the Administrator Assessment Center that was established for the purpose of assessing aspiring administrators. Assessment strategies included simulations, observations, evaluations, and recommendations for the purpose of certification as an administrator in Missouri (Missouri Revised Statutes §168.405, 2006).

The Administrator Assessment Center used the National Association of Secondary School Principals (NASSP) assessment model that simulated actual practice as an administrator. The assessment process required candidates to spend two days at the assessment center for a series of in-baskets, tests, professional activities, and simulations. Skills assessed included problem solving, judgment, organization, decisiveness, sensitivity, leadership, stress tolerance, oral and written communication, range of interest, interest level, personal motivation, and educational values (Missouri Revised Statute §631.010, 2005). Because the assessment process with the center model was labor intensive, time-consuming, and back-logged, Missouri chose the SSA to replace the assessment center model for assessing superintendents (Beem, 2002; Hoyle et al., 2005).

In 1993 NASSP and the American Association of School Administrators (AASA) identified key skills for the superintendency that included two domains: (a) Taking

education initiatives, and (b) expanding learnings (Hoyle et al., 2005). Skills assessed within the domain of taking education initiatives included innovation, strategic planning, serving diverse stakeholders, awareness and analysis of educational problems, accessing information, avoiding snap decisions and judgments, responding to and resolving problems, building teams for educational purposes, communication of expectations, empowering others to develop, and balancing the demands of the job. Skills within the domain of expanding learnings included understanding one's own strengths and being a learner (Hoyle, et al).

Currently, policy guides decisions that determine expectations for assessment of as well as program preparation in educational leadership, certification processes, and performance-based evaluations (MLA, 2007; Missouri School Boards Association [MSBA], 2006; Murphy, 2005). Clearly, ISLLC Standards influenced educational leadership policy in Missouri and as such guided the process by which school leaders – superintendents – achieved licensure.

Process. In Missouri, a prescriptive course for certification is set in place through a prescribed process. Since 1996, ISLLC Standards have provided the framework of expectation for school leadership to which Missouri policy responds (MODESE Compendium, 2005). The Missouri superintendency is directly linked to ISLLC Standards performance indicators (MODESE Compendium). The process of certification for the superintendency is a structured, efficient process.

The structural frame supports such a process in that it can assure some uniformity of completion or success for superintendent candidates, confirming that an "emphasis on rationality and logical procedure is essential" (Bolman & Deal, 1997, p. 271). The current

process for acquiring superintendent certification in Missouri is influenced by ISLLC Standards and includes completion of coursework, meeting a cut score of 158 on the School Superintendent Assessment (SSA), optional participation in the Administrator's Mentoring Program (AMP), and other requisites for continuous certification (MODESE Compendium, 2005).

Practice. How ISLLC Standards relate to practice for school leaders in Missouri is unknown. The MSBA (2006) developed the Missouri Superintendent Performance Based Evaluation and cited "ISLLC performance standards for school leaders now inform Performance Based tools in forty-two states" (p. 2). ISLLC Standards impact evaluation of superintendents in Missouri. Currently, this framework for evaluation is voluntary by school boards and superintendents. The format is suggested for considering "superintendent performance in comparison to national standards and expectations for school executives" (MSBA, p. 2).

ISLLC Standards as a Construct for Effective School Leadership

A meta-analysis of effective school leadership provided impetus in development of the ISLLC Standards and complementary knowledge, disposition, and performance indicators (Shipman & Murphy, 1996). Murphy (2005) maintained Standards were supported by empirical findings based on effective schools research and school improvement as a whole. Specifically, the study was centered on effective school leadership practices and the impact of such practices on student achievement (Murphy). In short, ISLLC Standards were adopted by state education agencies and became the "framework for reconstructing school leadership" (Murphy, p. 15). Murphy and Shipman (2002) summarized that "the ISLLC Standards marry leadership to learning,

management with measurement of academic growth, and stewardship to the development of productive learning communities" (p. 5).

Effective school leadership. Effective school leadership encompasses instructional and ethical leadership; moral and social advocacy; collaborative, internal and external partnerships; political and legal prowess; school improvement visionary; and administrative and environmental culture (Green, 2005; ISLLC, 1996; Murphy, 2003; Shipman & Murphy, 1996). Effective school leadership was defined as the ability to "contribute to the success of all students" (ISLLC, 1996). Graseck (2005) challenged that the basis of effective school leadership is demonstrating, beyond mere interest, that teaching and learning, professional development opportunities, and attending to the "nurturing dimension of school administration" (p. 375). Sparks (2005) insisted "leaders matter" (p. 8). Fullan (2003) summed up effective school leadership as "the leader's job is to help change context – to introduce new elements into the situation that are bound to influence behavior for the better" (p. 1). ISLLC Standards were developed as constructs for effective school leadership that positively influences student achievement (Green, Hoyle et al., 2005; Murphy, 2002, 2005; Shipman & Murphy, 1996).

Standards and student achievement. ISLLC Standards for School Leaders directly impact student achievement by strengthening a school leader's capacity to "bring the vision of learner-centered leadership embedded in the Standards to life" (Murphy, 2005, p. 18). The Consortium determined effects of school leadership on student achievement by studying examples of effective schools and by identifying 3 dimensions: (a) high student achievement or quality dimension, (b) distributed achievement across the student population or equity dimension, and (c) increased achievement results directly tied to a

school or value-added dimension (Murphy, p. 16; Shipman & Murphy, 1996). Thus, enhancing educational outcomes for students lies at the center of ISSLC Standards (Green, 2005).

ISLLC Standards influence Missouri superintendents. As previously discussed, school leaders in Missouri are influenced by ISLLC Standards in educational leadership preparation programs, the certification process, including continuous certification via portfolio compilation (Beem, 2002; MODESE Compendium, 2005; MPEA, 2007). In addition, policy and regulations guiding licensure of school leaders are heavily influenced by ISLLC Standards, with evaluation processes reflecting ISLLC Standards influencing practice as a school leader (Beem, 2002; MSBA, 2006).

Review of ISLLC Standards and Performance Indicators

ISLLC Standards are a construct for practice, a framework for effective school leadership, and a principal influence on school improvement (Green, 2005; Murphy, 2002, 2005; Shipman & Murphy, 1996). There are 97 performance indicators (PI) reflecting each of six ISLLC Standards. A PI describes behaviors and actions to assure effective and efficient school leadership that produces continuous school improvement (Green; Shipman & Murphy). Ultimately, the vision of the Consortium was to establish standards centering on a primary purpose "to promote the success of all students" (Green, p. 8). ISSLC Standards focused on these broad categories of effective leadership that include: (a) "vision of learning," (b) "the culture of teaching and learning," (c) "the management of learning," (d) "relationships with the broader community to foster learning," (e) "integrity, fairness, and ethics in learning," and (f)

"the political, social, economic, legal, and cultural contexts of learning" (Hessel & Holloway, 2002, p. 27)

Vision of learning. According to Wallace et al. (1997), a vision of learning includes all stakeholders in a school, especially if the vision is to be a learning school. Bolman and Deal (1997) referred to vision as a key attribute of effective leadership, referring to it as a "right stuff" quality essential to having a good school (p. 297). ISLLC Standard 1 stated: "A school administrator is an educational leaders who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community" (ISSLC, 1996, p.10). SLPS items 1-16 are performance indicators supporting Standard 1. Generally, performance indicators for Standard 1 address actions such as communication with the community and rituals and celebrations to promote the vision of learning. Development and implementation of the vision, mission, and goals should include data-driven decision-making, reflecting demographic needs of the community. The school leader should identify barriers to learning through evaluation of existing programs and dedicate resources toward programs supporting learning, evaluating programs, and revising approaches to buttress the learning program (ISLLC) (see Appendix D).

A culture for learning. Student learning and other "school-level cultural variables associated with achievement" including implementation of a strong instructional program, are supported by safety and order (Murphy, 2005, p. 16). Murphy also suggested links between home and school create a learning environment conducive to a teaching and learning community. Schein (1992) suggested culture involves things that

are common or shared by a group, including values, skills, rituals, symbols, and frames of thought guiding how an organization works. ISLLC Standard 2 stated: “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” (ISLLC, 1996, p. 12). SLPS items 17-36 are performance indicators supporting Standard 2 and include actions related to establishing and sustaining a culture for learning.

Performance indicators for Standard 2 promote strong instructional programs focused on student learning and professional development of staff. Standard 2 also addresses performance indicators that address valuing people by being fair, treating them with dignity and respect, and attending to matters of diversity. In establishing a culture for learning, the school leader also promotes life-long learning, sets high expectations, makes data-driven decisions, and aligns resources with learning. Further focus for a school leader should be on supervising facilities and programs and evaluating and refining curricular, co-curricular, and extra-curricular programs to make the greatest impact on student learning (ISLLC, 1996) (see Appendix D).

The management of learning. Yukl (2002) suggested “effective leaders show a dual concern for task and relationships in their day-to-day pattern of behavior” (p. 75). Hessel and Holloway (2002) asserted an effective school leader should operate in a proactive manner, demonstrating acumen in effective organizational strategies as well as instructional programs. ISLLC Standard 3 stated: “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" (ISLLC, 1996, p. 14). SLPS items 37-59 are performance indicators supporting Standard 3, focusing on the impact management and operations have on learning.

The environment for learning should be safe, efficient, and effective and reflective of research trends and school goals set for continuous improvement. Human resources are included in the intent of this Standard, including negotiations and relationships with faculty organizations, processes for conflict resolution, and group processes reflecting consensus building and shared ownership by stakeholders. Standard 3 performance indicators also address the allocation of resources to support the learning environment. A school leader must attend to operation and management of the school in order for the environment to be conducive to learning (ISLLC, 1996) (see Appendix D). According to Jentz and Murphy (2005), effective management and organization is achieved "by putting into place an overt and orderly process" that diminishes confusion and enhances forward movement in the organization (p. 362).

Relationships with the broader community to foster learning. According to Bruffee (1999), collaboration "is of such vital importance to learning that, with it, any of us has a shot at doing whatever we want to do. Without it, few of us stand a chance" (p. 14). Essential to a collaborative environment includes engaging stakeholders in decisions about teaching and learning, with the potential that "a school's atmosphere can undergo a metamorphosis" (Hessel & Holloway, 2002, p. 67). ISLLC Standard 4 stated: "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" (ISLLC, 1996, p. 16). SLPS

items 60-75 are performance indicators that support Standard 4 and focus on collaboration with families and the community.

Paying attention to and including diverse stakeholders are essential collaborative actions for effective practice. Other performance expectations for school leaders in Standard 4 include high visibility in the community, strong communication skills, and strong relationships with media, business, religious, and political organizations. Standard 4 addresses democracy and includes attributes of listening to and respecting conflicting views as well as assuring that the external community is integrated in the school community. An essential skill of the school leader is to model these attributes for the staff, believing in and practicing collaboration (ISLLC, 1996) (see Appendix D).

Integrity, fairness, and ethics in learning. Ethical behavior is a tenant of educational leadership and includes a focus on and modeling of truthfulness, honesty, professionalism, integrity, regard for others, consideration, and morality (Grogan, 2003; Hoyle et al., 2005; Yukl, 2002). ISLLC Standard 5 stated: "A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner" (ISLLC, 1996, p. 18). SLPS items 76-91 are performance indicators supporting Standard 5, having an emphasis on ethical behavior reflecting effective school leadership.

Ethical behavior includes challenging and reflecting on personal and professional values and then putting them into practice. Standard 5 supports integrity as a tenant of ethical behavior. The school leader should accept responsibility for school operations and provide opportunity for scrutiny from the public. Confidentiality of student and personnel records and meeting legal and contractual obligations permeates this Standard.

Ultimately, the school leader must act with integrity and expect others in the organization to act with integrity, keeping student learning at the center of practice (ISLLC, 1996) (see Appendix D). Fullan (2003) asserted that a school leader must be constantly engaged in a context of school improvement by creating learning communities among students and faculty; that is the "moral imperative" of school leadership (p. 41).

The political, social, economic, legal, and cultural context of learning. Hoyle et al. (2005) maintained educators generally are, by nature of their role, removed from external influences such as politics; however, superintendents must have "political acumen and skills to make wise decisions" related to the welfare of students and educational needs (p. 47). According to Grogan (2003), a school leader, particularly the superintendent of schools, must acquire and exhibit human relations skills essential in understanding "diverse and often divisive groups they serve… [and] must work constantly to negotiate and renegotiate trust" (p. 10). ISLLC Standard 6 stated: "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" (ISLLC, 1996, p. 20). SLPS items 92-97 are performance indicators for Standard 6 that respond to the relationship with and attention toward external influences. Dialogue with diverse community organizations contributes to strong lines of communication with external stakeholders.

In addition, a school leader should communicate change in educational trends and any potential operational changes to the community at large, students, and parents. Standard 6 challenges the school leader to attend to the external contexts in which a school or district exists, including political, social, economic, legal, and cultural aspects.

The school leader is expected to work within local, state, and federal policies, contributing to the learning culture of a district (ISLLC, 1996) (see Appendix D).

Criticism of Standards

A review of literature related to ISLLC Standards supported influence and connection to school leadership (Green, 2005; Murphy, 2005; Sanders & Simpson, 2005; Sanders & Simpson, 2006; Shipman & Murphy, 1996). Reeves (2004) emphasized that the word standards in general is often fraught with "ambiguity, multiple meanings, and outright misuse" (p. 43). Hoyle et al. (2005) challenged that ISLLC Standards were written for building principals rather than for superintendents and a disconnect exists between superintendent assessments designed around ISLLC Standards and actual job performance of superintendents. The Educational Leaders Constituent Council (ELCC) advisory board challenged that ISLLC Standards did not provide a framework of standards required in program preparation for principals, associate superintendents, central office administrators, and superintendents and are seeking to update standards for school leaders and educational administration program accreditation (Hoyle et al., Sanders & Simpson). Levine (2005) contended that school leadership lacks scholarship and describes it as "a-theoretical and immature; it neglects to ask important questions; it is overwhelmingly engaged in non-empirical research; and it is disconnected from practice" (p. 5).

Murphy (2005) summarized issues asserted by educational administration researchers related to ISLLC Standards, including a lack of supporting research. Murphy countered the argument by suggesting the empirical base of research should have been more transparent, while other critics noted the Standards were more ideals than

prescriptive practices. In addition, critics maintained that while student learning was addressed in the Standards, other management skills required for leadership were not. Murphy also addressed issues related to lack of specificity of Standards, the lack of legitimacy of dispositions in the Standards, and the exertion of Standards influence on the educational leadership profession. Criticism of ISLLC Standards is evident and in fact may "face the imminent possibility of extinction" (Murphy, p. 177).

Murphy (2005) rebutted criticism by tracing development of the Standards and insisted the influence is due to an intense focus on learning and attention to the well-being of students. Finally, Murphy (2002) purported linking theory and practice is elusive and involves "the development of knowledge in one place and the transfer of it to another" (p. 181). In contrast, Patton (1997) suggested actual intended users (e.g. school superintendents) should provide input that yield results related to reality (p. 20).

Reality Testing – Bridging Theory and Practice

The development of ISLLC Standards reflected what Murphy (2005) referred to as "an empirical knowledge base" while critics maintained the Standards lacked a research base (p. 170). This study sought to bridge theory and practice. ISLLC Standards and complementary performance indicators represent a theoretical framework for school leadership. The SLPS elicited responses from superintendents about the importance of performance indicators to practice. As such, a discussion of a conceptual framework with underpinnings of (a) a priori theory, (b) structural frame, and (c) psychometrics was supported by Patton's (1997) reality testing. Reality testing offers an objective view of practice and promotes a "user-focused theory of action approach" (Patton, p. 221).

A priori theory. Testing a priori theory is at the center of the statistical technique

of confirmatory factor analysis (Mertler & Vannatta, 2005). By definition, a priori theory is an assumed truth but is not based on actual experience (Encarta Dictionary, 2003). This study presented ISLLC Standards and complementary performance indicators as a theoretical framework for school leaders that had not been confirmed nor disconfirmed in reliability or construct validity.

Reeves (2004) suggested educational leadership has a "knowing-doing gap" between what leaders know is important and what they actually do (p. 3). Similarly, Fenstermacher (1994) raised questions about knowledge, exploring the gap between what is known and what is practiced. In this study, the researcher sought to confirm or disconfirm an a priori theory, thus seeking to reconcile theory with practice. This conceptual underpinning provides the lens to test the reality of practice with intended users of ISLLC Standards.

Structural frame. ISLLC Standards are a framework or structure of expectations related to the roles and responsibilities of school leaders. The process by which a Missouri superintendent receives certification may be viewed through the structural frame, specifically related to policies and procedures that are centralized and designed for efficiency and effectiveness much like the machine metaphor (Bolman & Deal, 1997; Donaldson, 1998; Morgan, 1997). Donaldson (1998) also suggested organizations force people to fit into a structure "so that work could be controlled and made efficient" (p. 182). Donaldson (2004) summarized the structural frame by posing the question: "How do we organize?" (p. 4). He also suggested structure offers "ways to buffer and eliminate outside influences to reduce uncertainty and control environmental influences on organizational activities" (p. 8).

Psychometrics. Confirming the reliability and construct validity of ISLLC Standards and performance indicators through the administration of the SLPS was a primary purpose of this study. Objectively viewing ISLLC Standards through a psychometric lens bridged theoretical framework to practice. Other studies have analyzed knowledge indicators and perceptions about dispositions related to Standards; however, the SLPS measured psychometric properties of performance indicators.

The Role of the School Leader Practice Survey (SLPS)

The School Leader Practice Survey (SLPS) was an instrument developed to measure Missouri superintendent perceptions about ISLLC Standards performance indicators as they relate to practice. Engel and Edlefson (2005) conducted a similar study but focused on ISLLC Standards knowledge indicators by surveying educational administration interns enrolled at a university. McKerrow et al. (2006) surveyed principals to analyze their perceptions about the ISLLC Standards dispositions. Both of these studies were related to educational administration preparation programs. Hessel & Holloway (2002) reported findings of a job analysis survey related to the knowledge and responsibilities of beginning superintendents and whether or not items were important to job performance. However, there are no known studies to determine perceptions of superintendents have about the level of importance of ISLLC Standards performance indicators to practice.

Reflection about practice. The SLPS elicited perceptions from Missouri superintendents about practice. Sweeney (2003) suggested reflection of one's work is a part of a learning experience and is paramount to turning learning into action. Persistence to improve one's performance is motivated by previous success (Hoyle et al., 2005). Self-

efficacy – one's process of reflection and personal view of competence, proficiency, accomplishments, or capabilities – impacts performance (Merriam & Caffarella, 1999; Pratt, 1998; Wlodkowski, 1999). Willower and Licata (1997) asserted "genuine internalization means that eventually reflective thinking becomes a habit, a virtually automatic response to problematic situations or, in administrative terms, nonroutine decisions" (p. 45). The SLPS engaged Missouri superintendents in reflection about practice, challenging the superintendent to bridge what they have learned and "how that learning is transferred into successful performance on the job of superintendent" (Hoyle et al., p. 210).

Summary

A review of related literature completed Chapter 2 of this study and supported the problem, purpose, rationale, and delimitations. The SLPS was developed, administered, and tested as an instrument to determine perceptions Missouri superintendents have about ISLLC Standards and supporting performance indicators of practice. The SLPS was introduced as an instrument that enabled Missouri superintendents to reflect on items describing responsibilities and duties related to their practice and rate them on a scale from 1 (not important) to 9 (very important). Items describe performance attributes superintendents should know about. Reeves (2004) summarized survey results from North Carolina finding there are "enormous gaps between what leaders know and what they actually do" (p. 3). Bridging theory and practice is implicit throughout this study. Linking ISLLC Standards to practice was an explicit theme established throughout this study. These themes are evident in Chapter 1, supported by literature in Chapter 2.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

Despite successful completion of an approved sequence of requirements for Missouri superintendent certification influenced by ISLLC Standards, the level of importance ISLLC Standards performance indicators have on practice is unknown. Current preparation for Missouri superintendents includes successful teaching experience, meeting educational leadership criteria for the superintendency, and passing an assessment with a prescribed cut score, currently the 158 on the SSA (MODESE Compendium, 2005). The problem of this study addressed how Missouri school superintendents perceive ISLLC Standards Performance Indicators relate to practice by measuring the level of importance through a survey instrument, the School Leader Practice Survey (SLPS), to be developed and tested. There was no known instrument measuring the level of importance ISLLC Standards performance indicators have on everyday practice for Missouri superintendents. Results from the survey established baseline data of ISLLC Standards performance indicators' importance on an expanded Likert continuum of 1 (not important) to 9 (very important). An expanded Likert scale was chosen by the researcher to provide a wider range of responses thus assuring greater accuracy of perceptions about practice (J. W. Valentine, personal communication, January 30, 2007).

Chapter 3 presents background information about effective school leadership and Missouri policy for educational administration. An overview of the problem and purpose is presented as an introduction to the six research questions, research design, setting and

population, and instrumentation. Data collection and analysis, statistical techniques applied, and a summary conclude Chapter 3.

Effective School Leadership

Like other leaders, superintendents are held accountable for the effectiveness of school districts they lead (Green, 2005; Hoyle et al., 2005; Marzano et al., 2005; Reeves, 2004; Shipman & Murphy, 1996; Wallace et al., 1997). Effective school leadership was the foundation which prompted the development and implementation of the ISLLC Standards with corresponding knowledge, disposition, and performance indicators (Shipman & Murphy). ISLLC Standards provided a framework describing desired attributes for school leaders leading effective schools (Green; Murphy, 2005; Shipman & Murphy). Further, ISLLC Standards reflect research focused on principals and superintendents who were "leading high-performing organizations…," a description synonymous with effective schools having cultures emphasizing "quality, equity, and value-added" outcomes (Murphy, p. 16). Effective school leaders are focused on teaching and learning.

Missouri Policy

The Missouri DESE adopted ISLLC Standards as at the policy level and set regulations reflecting their importance (MODESE Compendium, 2005). Murphy (2005) suggested ISLLC Standards impact state education policy by strengthening school leadership in preparation programs, professional development, assessment for certification, and re-licensure, "developing regulations to make the Standards the basis for the reform of school administration" (p. 17). ISLLC Standards are embedded in Missouri's educational leadership certification processes (MODESE Compendium). This

study developed the SLPS to measure the perceived level of importance of the ISLLC Standards performance indicators in the practice of the Missouri superintendency, determine reliability and construct validity of the survey instrument, and establish a baseline of importance of ISLLC Standards performance indicators for future studies.

Problem and Purpose Overview

A review of literature revealed that effective school leadership defined as establishing a culture prioritizing teaching and learning is paramount to the success as a superintendent of schools (Cambron-McCabe, Cunningham, Harvey, & Koff, 2005; Green, 2005; Hoyle et al., 2005; Reeves, 2004). ISLLC Standards provided a framework for effective school leadership and were implemented in 1996 through an initiative supported by the Council of Chief State School Officers (CCSSO) (Shipman & Murphy, 1996). In Missouri, ISLLC Standards permeate educational leadership programs, state policies governing certification processes, and educational administration evaluation procedures. ISLLC Standards of School Leadership are directly tied to the superintendency. Structurally, through policy and regulation for certification, ISLLC Standards expectations are evident throughout the programs for preparation and processes of licensing as a superintendent (Beem, 2002; MODESE Compendium, 2005; Murphy, 2005).

After a Missouri superintendent candidate completes all requisites for certification, there is a lack of information regarding their perception of the level of importance of the ISLLC Standards. Because ISLLC Standards performance indicators describe performance attributes in practice of the superintendency, this study developed the SLPS that determined reliability and construct validity of the ISLLC Standards

performance indicators as survey items. Data from this survey instrument provided information about how important performance indicators are to Missouri superintendents and may be used in educational leadership preparation programs, studies about other areas of school leadership, and future studies about the superintendency.

The research paradigm is positivism reflecting an objective research process. The conceptual framework includes: (a) a priori theory, an assumed theory without relation to experience; (b) the structural frame supporting policy, practice, and process as well as role identification for Missouri superintendents; and (c) psychometrics, the statistical process for determining reliability and construct validity of the SLPS. Further, a parallel representation of the problem, purpose, research questions identification, description of statistical techniques, and methodology is presented. Figure 2 depicts the parallel nature of the research design, providing a conceptual view of this research.

Research Paradigm: Positivism – This research was viewed through an objective, realistic lens.					
Conceptual Underpinnings	**Problem Phrase**	**Purpose Point**	**Research Question**	**Description**	**Methodology**
Psychometrics	to develop and test internal consistency and reliability of SLPS	To determine internal consistency and reliability	RQ 1 a RQ 1 b	Internal Consistency Reliability	Item Total Reliability Analysis and Cronbach's Alpha
Psychometrics	item reduction	To reduce number of items - item reduction through principal component analysis with varimax rotation	RQ 2	Item Reduction	Principal Component Factor Analysis and with Varimax Rotation eg=1.0 or higher
A Priori Theory	SLPS component identification, confirmatory factor analysis, construct validity	To test construct validity to utilize confirmatory factor analysis	RQ 3	Component Identification Construct Validity with six ISLLC Standards	Cronbach's Alpha and Confirmatory Factor Analysis with Varimax Rotation eg=1.0 or higher
Psychometrics	refined forms of the SLPS	To construct and test refined forms of the SLPS	RQ 4	Identify Refined Forms of SLPS (Reliability)	Factor Loadings to build refined forms and determine reliability using Cronbach's Alpha
Structural Frame	Baseline data for the SLPS will be established	To establish baseline data, indicating superintendent perceptions regarding the level of importance ISLLC Standards performance indicators to practice Reported by: all demographics	RQ 5	Baseline data for SLPS: Gender Years of experience Year of certification Highest degree held Assessment method Type of certificate Training institution District description District enrollment	Descriptive Statistics Mean rank and standard deviation for each item (performance indicator), each subscale (ISLLC Standard), and total
Psychometrics	Determine whether or not the refined forms of the SLPS discriminate between or among independent variables	Using discriminant analysis determine if categories can be defined for independent variables (demographic items) on refined forms of the SLPS and further ascertain whether or not the SLPS discriminates between or among independent variables	RQ 6 a RQ 6 b	Discriminant analysis between and among categories defined by: Gender Years of experience Year of certification Highest degree held Assessment Method Type of Certificate Training institution District Description District enrollment	Discriminant Analysis of independent variables on refined forms of SLPS

Figure 2. A research matrix was used to identify the research paradigm and parallel process of the study.

Problem Statement

Currently, there is no known survey instrument measuring or studies addressing the perceived level of importance ISLLC Standards performance indicators have on practice of the superintendency; therefore, it is unknown how Missouri superintendents

perceive the importance of ISLLC Standards performance indicators to practice. Through the statistical technique of confirmatory factor analysis, this study developed and tested internal consistency, reliability, and construct validity of the SLPS (Cronk, 1999; Mertler & Vannatta, 2005). The SLPS is a survey in which Missouri superintendents rated their perceptions in relation to practice on a continuum of 1 not important to 9 very important. Through item reduction and principal component identification, refined forms of the SLPS were constructed and tested for reliability and validity (Cronk, 1999; Mertler & Vannatta, 2005). Baseline data for the SLPS was established, indicating the mean and standard deviation of Missouri superintendent perceptions regarding the level of importance ISLLC Standards performance indicators to practice. Further, research determined whether or not refined forms of the SLPS discriminate between or among independent variables. Results were be reported by independent variables of gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, training institution, district description, and district size.

Purpose of the Study

The purpose of the study was to develop and test the SLPS that measures superintendent perceptions about ISLLC Standards performance indicators related to practice. Specifically, the purpose was to determine internal consistency and reliability as well as to reduce the number of items and test construct validity of the SLPS through the statistical technique of confirmatory factor analysis (Mertler & Vannatta, 2005). Permission to use ISLLC Standards performance indicators as items was granted by the Director of the ISLLC (N. Sanders, personal communication, June 19, 2006).

Testing the SLPS included application of statistical techniques of item-total analysis and Cronbach's alpha, item reduction through principal component analysis with varimax rotation, confirmatory factor analysis, descriptive statistics, and discriminant analysis. Further purposes were to identify components and to construct and test refined forms of the SLPS for reliability and construct validity through factor loadings. This study established baseline data, indicating Missouri superintendent perceptions regarding the level of importance ISLLC Standards performance indicators to practice and analyzed by item (performance indicator), component (Standard), and total. Finally using discriminant analysis, research determined if categories could be defined for independent variables (demographic items) on a refined form of the SLPS and ascertained whether or not the SLPS discriminated between or among independent variables. Results were reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size. Table 1 describes statistical techniques used in the study and anticipated outcomes of the application of statistical techniques.

Table 1

Summary Listing of Statistical Techniques Applied to Research Questions

Research Questions	Description	Statistical Technique	Anticipated Outcome
RQ1a & b	Reliability	Cronbach's Alpha and Item Total Reliability Analysis	Reliability for the 97 item survey will be established
RQ2	Construct Validity and Item Reduction	Principal components Factor Analysis with varimax rotation eg=1.0 or higher	Factored components identified of Alpha level .05.Weak items will be identified of 0.300 or 0.400 and Alpha level of .05
RQ3	Component ID	Factor Analysis with varimax rotation eg=1.0 or higher	Cross comparison of construct validity with ISLLC Standards
RQ4	ID Refined Forms	Factor Loadings to build refined forms and determine reliability using Cronbach's Alpha	Refined forms of the survey will be developed based on 0.600 or 0.700 Reduction of those items with factor loadings < 0.5
RQ5	Baseline	Descriptive Statistics Mean rank and standard deviation for each item, each subscale, and for total	Reporting based on short form
RQ6 a & b	Discriminant Analysis of independent variables on refined, refined forms of SLPS	Discriminant Analysis	Reporting of discriminant results by categories and between and among independent variables

Research Questions and Null Hypotheses

1. a. How many items have internal consistency and are reliable among the 97 ISLLC Standards performance indicators on the School Leader Practice Survey (SLPS)?

   H_o1a: Utilizing the statistical technique of item-total analysis and Cronbach's Alpha, the ISLLC Standards performance indicators on the SLPS will not have internal consistency and reliability.

   b. How many reliable and interpretable components are there among the 97 ISLLC Standards performance indicators on the SLPS?

   H_o1b: Utilizing the statistical techniques of Cronbach's Alpha and principal components factor analysis with varimax rotation, reliable and interpretable components cannot be identified within the constructs of ISLLC Standards performance indicators to design the SLPS.

2. Can further application of the statistical techniques of factor analysis be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice?

   H_o2: Further application of the statistical techniques of factor analysis can not be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice.

3. If reliable components are identified, is there construct validity in relationship to six ISLLC Standard clusters of performance indicators on the SLPS?

   H_o3: Use of a varimax rotation will not reveal construct validity with relationship to six ISLLC Standards clusters of performance indicators.

4. Through factor loadings and further use of the statistical technique of Cronbach's Alpha, can alternative forms of the SLPS be built and determined as reliable and valid?

   H_o4: Reliable and valid alternative forms of the SLPS cannot be constructed.

5. What is the baseline data of Missouri superintendents' perceptions of the importance of ISLLC Standards performance indicators to practice for each item, each subscale, and total identified components on short and long forms of the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

   H_o5: Descriptive statistics of mean rank and standard deviation will not establish a baseline of perceptions of the importance of the ISLLC Standards performance indicators to practice on the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size.

6. a. Using refined forms of the SLPS, can categories be defined for those demographic items that have continuous interval scale responses (total years of experience, years of certification issued in Missouri, and total district enrollment)?

   b. Using a refined form of the SLPS, does the SLPS discriminate between or among demographic categories defined within independent variables of gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

H_o6b: The SLPS does not discriminate between or among demographic categories for the variables listed above?

Research Design

This study developed a tool that will identify and potentially evaluate the reality of influence the ISLLC Standards performance indicators have on the practice of the superintendency in Missouri. Patton (1997) suggested reality testing moves beyond beliefs about practice to "identifying that there are useful things to be found out and creating the expectation that testing reality will be a valuable activity, not just an academic or mandated exercise" (p. 29). Although ISLLC Standards represent constructs or a structure of indicators for practice, the researcher surveyed Missouri superintendents for perceptions about the constructs – for "their own sense of reality...not some absolute, positivist construct of reality" (Patton, p. 38), regarding the level of importance ISLLC Standards performance indicators to practice.

Fraenkel and Wallen (2005) define a survey study as "an attempt to obtain data from members of a population (or a sample) to determine the current status of that population with respect to one or more variables" (p. G-8). Thomas and Brubaker (2000) describe this type of survey as a direct-data survey which provides direct information centered on practices from individuals who are currently serving as superintendents in Missouri. Ury (2003) stated "surveys are good tools for bringing out the perceived reality of those involved while educating participants and providing a sense ownership" (p. 42).

This study utilized a survey, the SLPS, developed with verbatim items derived from ISLLC Standards performance indicators. Valentine (2007) suggested an expanded Likert continuum from 1 not important to 9 very important in that it provides a

continuum of choices for respondents and increases the potential for more accurate perceptions (J. Valentine, personal communication, January 30, 2007).

Setting and Population

The target population could have been superintendents practicing in states that have embraced ISLLC Standards as the framework for educational leadership. However, for this study the selected population was from among Missouri public school superintendents currently practicing during the 2006-2007 school year. Missouri has 524 public school districts in rural, suburban, and urban communities (MODESE, 2006).

Background about Population

Of the 524 practicing superintendents in Missouri, some were certified since October 2000 and since the ISLLC Standards influenced the assessment process on the SSA, a test "designed to test whether its takers have a good grasp of the ISLLC Standards" (Beem, 2002, p. 3). Others superintendent candidates assessed prior to October 2000 completed certification requirements at the DESE assessment center (Beem). Because the ISLLC Standards performance indicators were developed to describe attributes and actions of effective school leaders who use best practices in their leadership, all practicing superintendents are eligible to rate the level of importance for the performance indicators. How superintendents were assessed to attain certification is moot to how they perceive the level of importance of performance indicators, given the ISLLC Standards are a framework for effective school leadership. All Missouri superintendents may have a perception about the importance of a specific item related to practice.

Ethics for Research

Initial contact. Initial contact of Missouri superintendents was accomplished via personal email with an invitation to participate by linking to a website for anonymous, individual responses. Selecting participants was limited by the focus of the study on Missouri superintendents' perceptions of the level of importance ISLLC Standards performance indicators and practice. Therefore, the sample was from among Missouri superintendents who, voluntarily, chose to participate in the study, yielding a nonrandom, convenient, nonprobability sample (Heppner & Heppner, 2004; Thomas & Brubaker, 2000; Ury, 2003). Participants were consenting adults who are public officials. Participants were not coerced, may not have chosen to participate, or could have withdrawn from the study at any time.

Data manipulation. Data were collected, compiled, analyzed, and reported as a group, not as individuals. Responses to the SLPS were sent via electronic survey to the Northwest Missouri State University Assessment Department where data were collected and exported to a Microsoft Excel application for analysis. At the completion of this study, information will be stored for 7 years in a secure location accessible only to the researcher. Only summary data were reported; therefore, no individual was identified. Approval for the study was granted from the University of Missouri – Columbia Institutional Review Board (IRB).

Demographics

Demographic information for Missouri school superintendents was requested at the end of the SLPS and includes gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, training institution, district

description, and district enrollment (see Appendix A). Superintendents assessed for certification prior to October 2000 did not take the SSA. Although the instrument is comprised of 97 ISLLC Standards performance indicators, those superintendents were still invited to participate in the study. All superintendents still hold a position of leadership in a Missouri school district and by virtue of that appointment have perceptions about practice and school leadership responsibilities (Cambron-McCabe et al., 2005; Green, 2005; Hoyle et al., 2005; Reeves, 2004).

Sample Size

Obtaining a representative sample was essential to this study. Frankel and Wallen (2003) define representative as the "essential, or relevant, characteristics of a population" (p. 110). In this study, a representative sample was from among Missouri superintendents practicing during the 2006-2007 school year. Creative Research Systems (2003) provided a formula for sample size (ss) calculated as ss = z value (e.g. 1.96 for 95% confidence level) x (p) (percentage such as .5 used for sample size needed) x (1-p) divided by c^2 (confidence interval, expressed as a decimal, e.g. .04).

Use of a sample size calculator provided calculations for the sample size (Creative Research Systems, 2003). With a population of 524 Missouri superintendents, if a 95% confidence level with a confidence interval of 10 is desired, a sample size of 81 was desired. With the same population of 524, if a 99% confidence level with a confidence interval of 10 is desired, a sample size of 126 is needed. For this study, a 95% confidence level with a confidence interval of 10 is desired; therefore, a sample of size of 81 respondents is acceptable. The greater number of responses or size of the sample responding could more likely confirm the level of reliability and validity of the

instrument (Fraenkel & Wallen, 2003). Final analysis revealed 73 superintendents participated yielding a 10.65 confidence interval with a 95% confidence level.

Description of the Study

This research is a quantitative, descriptive research design using the statistical techniques of item-total analysis and principal component factor analysis to determine reliability and construct validity of the SLPS. The SLPS was developed to determine the perceived level of importance ISLLC Standards performance indicators are to practice for Missouri superintendents. Use of the SLPS provided opportunity for analysis using descriptive statistics and confirmatory factor analysis. Because confirmatory factor analysis is "used to test a theory about latent processes that might occur among variables…," this theory-based statistical technique served to "confirm – or disconfirm – some *a priori* theory" (Mertler & Vannatta, 2005, p. 257), defined as a theory known or assumed with no reference to actual experience; "conceived or formulated before investigation or experience" (Online Encarta Dictionary, 2007).

The Standards supporting the process by which a Missouri superintendent is prepared, assessed, and certificated confirmed in educational research purporting effective school leadership is reflective of ISLLC Standards and by definition is an *a priori* theory. In summary, this study was a quantitative study of the SLPS in which Missouri superintendents reported their perceived level of importance about the ISLLC Standards performance indicators.

Instrumentation

The SLPS is comprised of 97 ISLLC Standards performance indicators. Permission to use the ISLLC Standards and performance indicators was granted by the

CCSSO with stipulations to provide a brief statement of the research, contact information for the researcher, and a brief report of findings (N. Sanders, personal communication, June 19, 2006). In addition, the Director noted that ISLLC Standards "were not intended to be used as an evaluation or audit tool" (N. Sanders, personal communication).

Survey Items

SLPS items are verbatim statements of ISLLC Standards performance indicators that describe specific performance skills reflecting practice of public school superintendents certified in Missouri (see Appendix A). This survey instrument enabled Missouri superintendents to report perceptions of the importance of the ISLLC Standards performance indicators to practice on a scale of 1 (not important) to 9 (very important) and was modified from an Audit of Principal Effectiveness designed by Valentine and Bowman (1986) (J. W. Valentine, personal communication, May 5, 2006).

Demographics

Demographic information precedes the survey and includes gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, training institution, district description, and district enrollment (see Appendix A). A letter was disseminated via electronic mail to individual Missouri superintendents with an embedded link to the survey, prohibiting multiple responses to the survey (see Appendix B). An informed consent letter accompanied the invitation email for participation (see Appendix C). Instructions for completing the SLPS were included with the electronic survey. Technological assistance to build the electronic SLPS instrument and demographic document were provided by technicians at Northwest Missouri State University. From survey responses, data were exported to an Excel spread sheet which

were imported into Statistical Package for the Social Sciences (SPSS) software.

Data Collection and Analysis

All responses were reported as a group, not as individual data. Nominal data were collected, categorized, and analyzed by demographic categories of gender, age, years of experience as a public school superintendent, decade certification was issued, current level of education completed, type of assessment passed, location of educational leadership preparation, and district description and size using SPSS software.

Data were analyzed through statistical techniques of item-total analysis and principal components factor analysis to determine reliability and construct validity of the SLPS, and item reduction to identify refined forms of the survey as well as discriminant analysis to ascertain whether the SLPS discriminates between and among independent variables (demographics). Item reduction determined whether or not ISLLC Standards performance indicators could be reduced into principal components of practice for Missouri superintendents by reducing the number of questions and establishing reliability and construct validity for refined forms of the SLPS.

Items Identified and Sorted by Standards

ISLLC Standards and indicators in knowledge, disposition, and performance are a framework of expectations for effective school leaders (Green, 2005; Shipman & Murphy, 1996). Items for the survey instrument reflected verbatim representation of 97 ISLLC Standards performance indicators (ISLLC, 1996). Briefly, ISLLC Standard 1 addresses a vision of learning. ISLLC Standard 2 describes a culture for learning. ISLLC Standard 3 defines the impact of management and operations on learning. ISLLC Standard 4 describes expectations for collaboration with the community and families.

ISLLC Standard 5 addresses ethics in leadership. ISLLC Standard 6 describes influences of larger political, social, economic, legal, and cultural contexts. Table 2 depicts independent (demographics) and dependent variables (Standards with 97 items) of the SLPS and provides categories of items or factors by performance indicators on the SLPS into six constructs labeled ISLLC Standards,

Table 2

Summary Listing of Dependent and Independent Variables as Found within the Survey

Independent Variables (n=9)	Constructs: ISLLC Standards for School Leaders Dependent Variables (n=6)	Factors: ISLLC Performance Indicators Rating Level of Importance (Scale 1 not important to 9 very important) Dependent Variables (n=97)
Gender	Standard 1	Standard 1: Items 1-16
Age	Standard 2	Standard 2: Items 17-36
Years as a Superintendent	Standard 3	Standard 3: Items 37-59
Decade of Certification	Standard 4	Standard 4: Items 60-75
Current Level of Education	Standard 5	Standard 5: Items 75-91
Superintendent Assessment	Standard 6	Standard 6: Items 92-97
Location of Superintendent Preparation Program		
District Description		
District Size		

Statistical Techniques Applied

Analysis of ISLLC Standards 1-6 and Items 1-97 was achieved through the statistical technique of factor analysis, including use of Cronbach's alpha and item-total analysis to determine internal consistency and reliability of the SLPS for Research

Question (RQ) 1. RQ 2 was analyzed through principal component factor analysis with varimax rotation to determine if items can be reduced. Construct validity was tested through the statistical techniques of Cronbach's Alpha and confirmatory factor analysis with varimax rotation for RQ3 as well as provide cross-comparison of construct validity with six ISLLC Standards and provide component identification for RQ 3. To address RQ4, factor loadings built refined forms of the SLPS and were developed based on 0.600 or 0.700 loadings. Based on a refined form, RQ5 provided descriptive statistics that produced baseline data and were reported by demographics of gender, years of experience, year of certification, highest degree earned, assessment method, type of certificate, training institution, district description, and district enrollment. RQ6 requires application of the statistical technique of discriminant analysis of independent variables to determine whether or not the SLPS discriminates between and among independent variables (demographics). Figure 2 provides a detailed description of statistical techniques and methodology of this study.

Item-total Reliability Analysis

Item-total analysis assesses the internal consistency of a data, tests reliability of a set of data, measures a single construct, and assesses a number of items to determine whether or not all items "measure the same construct" (Cronk, 1999, p. 97-101). The SLPS has six ISLLC Standards or constructs with 97 items or factors. A test of reliability was conducted with application of Cronbach's Alpha that determined the "degree to which all of the items are measuring the same construct" (Cronk, p. 102).

Factor Analysis – Principal Component Analysis

According to Mertler and Vannatta (2005) factor analysis and principal

component factor analysis are described as a “method of summarizing the relationships among a large set of variables, assumptions regarding the distributions of variables in the population are really not in force” (p. 257). Therefore, if variables are not in force, they do not need to be assessed. As a result, the number of items is reduced. Fraenkel and Wallen (2003) summed up factor analysis as a “technique that allows a researcher to see if many variables can be described by a few factors” (p. 343). The SLPS has 97 dependent variables (items) that may be simplified by doing a factor analysis, thus reducing the number of items. Important variables or factors are identified in the process (Ury, 2003). Then the goal of principal component analysis is to combine “variables with significant correlations into super variables” or components (Ury, p. 48). As a result, items may be reduced to components of practice that will result in refined forms of the SLPS.

In addition, confirmatory factor analysis, with varimax rotation of eg = 1.0 or higher, confirmed or disconfirmed some a priori theory. It determined whether or not assumptions about school leader practice asserted in the theoretical framework of six ISLLC Standards (constructs) were correlated with Missouri superintendent perceptions about the SLPS items (factors) describing attributes of effective leadership practice (Mertler & Vannatta, 2005). Component identification and construct validity were determined.

Discriminant Analysis

In this study, the purpose of discriminant analysis “is to determine dimensions that serve as the basis for reliably – and accurately – classifying subjects into groups” (Mertler & Vannatta, 2005, p. 281). Discriminant analysis enabled the researcher to

determine if categories could be defined for independent variables. Demographic descriptions served as independent variables for the SLPS and include gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, training institution, district description, and district enrollment. Comparison of results between and among these groups allowed prediction of group results in future studies on refined forms of the SLPS.

Summary

There is no known instrument measuring perceptions of school superintendents with regard to importance of ISLLC Standards and their practice. The purpose of this study was to determine if the SLPS is a reliable instrument with construct validity. The SLPS, comprised of 97 ISLLC Standards performance indicators, was distributed to 524 Missouri public school superintendents practicing during the 2006-2007 school year. Respondents provided perceived levels of importance of items on a continuum from 1 (not important) to 9 (very important) on the SLPS. Internal consistency and reliability of the SLPS was measured by statistical techniques of item-total analysis by using Cronbach's Alpha. Items on the SLPS may be reduced to components of practice using principal component factor analysis. Component identification and construct validity of six ISLLC Standards were measured through confirmatory factor analysis and use of Cronbach's Alpha. Refined forms of the SLPS may be constructed through factor loadings with reliability determined using Cronbach's Alpha. Baseline data of the SLPS was determined through descriptive statistics, including mean and standard deviation for each item, each subscale, and total. Finally, discriminant analysis determined if categories can be defined by independent variables on refined forms of the SLPS. Data

collected and analyzed from participant results produced findings reported in Chapter 4 in order to prove or disprove null hypotheses of research questions. Subsequently, Chapter 5 provides conclusions derived from the findings and will present the summation for this study.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Introduction

The problem and purpose of this study established the methodology and analysis of data. In the problem, the researcher determined there was no known tool to determine the perceptions of Missouri school superintendents in identifying their perceptions about practice in relation to the ISLLC Standards performance indicators. The School Leaders Practice Survey (SLPS), developed from verbatim ISLLC performance standards indicators, measured a sample size of 73 Missouri superintendent's perceptions about practice on a continuum of 1 not important to 9 very important.

The purpose of the study was to determine if the SLPS had internal consistency, was reliable, whether or not the number of items could be reduced, and whether or not the SLPS had construct validity. With the number of items reduced for refined forms of the SLPS, further analysis of reliability, descriptive statistics, and discriminant analysis were conducted on the SLPS Form H, the final iteration in the SLPS data reduction process. Figure 4 depicts the item reduction process.

Analysis and presentation of data follows a roadmap with each research question presented (RQ 1a, 1b, 2, 3, 4, 5, 6a, and 6b), results with acceptance or rejection of the null hypothesis, and a discussion of findings with depictions of data through tables and figures. Analysis included interpretation of findings supporting internal consistency of the SLPS, item reduction of the SLPS, reliability of eight iterations of the SLPS, construct validity of the SLPS and ISLLC Standards through principal component analysis, descriptive statistics of final SLPS Form H, and discriminant analysis of SLPS

Form H by independent variable (gender; years of experience; year of certification; highest degree held; assessment method; type of certificate; institution for program preparation; district description 1 K-8 or K-12; district description 2 rural, suburban, urban; and district size).

Instrumentation

The SLPS was a survey comprised of 97 ISLLC Standards performance indicators (ISLLC, 1996). From a population of 524 Missouri superintendents, 73 participated by completing the SLPS. Respondents had opportunity to rate items on a continuum of 1 not important to 9 very important. A discussion about the population and the SLPS follows.

Population

The 2006-2007 Missouri School Directory (MODESE, 2006) identified 524 school districts in Missouri. Superintendents from all 524 school districts were emailed and offered the opportunity to complete the SLPS. Of those 524 superintendents, 83 responded with 9 choosing not to participate in the study. One chose to participate but did not complete the survey.

Sample size. The sample size for analysis of data was 73 or 13.9% of superintendents of Missouri school districts in 2006-2007 school year. The desired sample size of 81 was generated from a formula for sample size (ss) calculated as ss = z value (e.g. 1.96 for 95% confidence level) x (p) (percentage such as 0.500 used for sample size needed) x (1-p) divided by c^2 (confidence interval, expressed as a decimal, e.g. .04) (Creative Research Systems, 2003). Use of a sample size calculator provided calculations for the sample size. With a population of 524 Missouri superintendents, 73 respondents generated a 95% confidence level and a confidence interval of 10.65. For

this study, a 95% confidence level with a confidence interval of 10.65 was reported. Although Mertler and Vannatta (2005) reported a sample size of less than 100 is poor, Stevens (1996) supported a small sample size for similar studies.

The School Leader Practice Survey (SLPS)

The SLPS was comprised of 97 items that described practice of a school leader. Items were verbatim performance indicators of six ISLLC Standards (ISLLC, 1997). Missouri school superintendents were asked to rate items describing practice on a continuum of 1 not important to 9 very important.

Descriptive statistics. Descriptive statistics reported included mean and standard deviation of each item. It is noteworthy that mean responses fell between the lowest mean score of 6.08 (moderately important) and highest mean score of 8.70 (very important). Item 41 with the lowest mean score (collective bargaining and other contractual agreements related to the school are effectively managed) was still deemed important by Missouri superintendents even though at the time of the survey Missouri was not a collective bargaining state. Items 83 (the superintendent treats people fairly, equitably, and with dignity and respect) and 90 (the superintendent fulfills legal and contractual obligations) had the highest with a mean score of 8.70 or very important. Standard deviations of items ranged from 0.997 on item 24 (there is a culture of high expectations for self, student, and staff performance) to 2.448 (collective bargaining item). Appendix F depicts descriptive statistics for the original, full SLPS.

SLPS errors. The researcher missed two errors in the final electronic version of the SLPS sent to Missouri superintendents. On the electronic SLPS, item number 76 (the superintendent examines personal and professional values) was duplicated as number 77

(eventually dropped in item reduction process). Item 79 (the superintendent serves as a role model) was left off the SLPS when administered electronically.

Results and Discussion of Findings by Research Question

Results and a discussion of findings were reported by each research question. RQ 1a and 1b addressed internal consistency and reliability of the original SLPS as well as identification of components through principal component analysis. Through principal component analysis, RQ 2 identified potential for reduction of the number of items on the original SLPS. RQ 3 challenged construct validity of six ISLLC Standards through confirmatory factor analysis. RQ 4 addressed potential to develop refined forms of the original SLPS through factor loadings and to test the reliability of refined forms using Cronbach's alpha. RQ 5 presented descriptive statistics on a refined final Form H for independent variables, including gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description 1 (K-8 or K-12), district description 2 (rural, suburban, or urban), and district size. Through discriminant analysis, RQ 6a and 6b determined whether or not SLPS Form H (final, refined form) discriminated among independent variables. Each research question is presented by RQ, null hypothesis if applicable, results, and discussion of findings supported by tables and figures. A summary concludes Chapter 4.

Research Question 1

Within the conceptual underpinning of psychometrics, the problem and purpose identified the need to develop and test internal consistency and reliability of the School Leaders Practice Survey (SLPS). Research question (RQ) 1 was investigated utilizing

statistical techniques of item-total analysis item reduction strategy. Cronbach's alpha was applied to determine internal consistency and reliability of the SLPS.

Utilizing SPSS, an item-total analysis was conducted to assess the internal consistency of the SLPS data set and refined forms. The purpose of this statistical analysis was to determine the degree to which items in the SLPS measured the constructs of the six ISLLC Standards. Cronk (1999) stated correlations of 0.300 were deemed weak and correlations of 0.700 and above were desirable. Correlations below 0.300 were eliminated from further calculations. There were no reverse scale items; therefore, there were no negative correlations in this analysis. Correlations in the item-total analysis were summed in the total.

Research question 1a. How many items have internal consistency and are reliable among the 97 ISLLC Standards performance indicators on the SLPS?

H_o1a: Utilizing the statistical technique of item total analysis and Cronbach's Alpha, the ISLLC Standards performance indicators on the SLPS will not have internal consistency and reliability.

Results. The null hypothesis is rejected for RQ 1a. Items on the SLPS do have internal consistency and reliability. Further analysis using Cronbach's alpha revealed the SLPS is reliable and has a Cronbach's alpha of 0.989. The item reduction process is explained below. Throughout the process of reducing the number of items refined forms of the SLPS had Cronbach's alpha results of 0.900 or above, indicating each refined form of the SLPS had items with internal consistency and were reliable.

Findings for internal consistency. For analysis of internal consistency, Cronk's (1999) description of 0.300 (weak correlation) and 0.700 and above (desirable) was used.

For the additional purpose of item reduction, standards for item-total pair wise correlations determined by the researcher included below 0.300 as weak, 0.300 to 0.499 as moderately low, 0.500 to 0.699 as moderate, and 0.700 and above as high or desirable. These item-total pair wise correlations served two purposes: (a) to analyze internal consistency and (b) to reduce items on the SLPS.

Findings for item-reduction process. Item reduction of the SLPS was conducted. As shown in Appendix F, through statistical analysis of the SLPS it was determined that 95 of the 97 items on the SLPS had item-total pair wise correlations of 0.300 and above. Therefore, two SLPS items (1 and 41) were dropped from the inventory. Of the eight iterations of the SLPS, three refined forms were developed based on the researcher's item reduction process in which standards of acceptance were set based on correlations of 0.300 as weak, 0.300 to 0.499 as moderately low, 0.500 to 0.699 as moderate, and 0.700 and above as high or desirable.

SLPS Form B dropped another eleven items (2, 3, 4, 6, 7, 9, 10, 22, 55, 77, and 89) because each correlation was below 0.500, the standard used for moderately low items. SLPS Form C dropped an additional 33 items (5, 8, 11, 12, 13, 15, 16, 23, 25, 29, 30, 31, 35, 36, 39, 42, 43, 45, 47, 49, 52, 57, 59, 60, 61, 62, 65, 67, 68, 70, 71, 75, and 94) because each correlation was below 0.700, the desired high correlation.

Appendix F also depicts item-total pair wise correlations for the full SLPS analysis with mean or average level of importance for each item as perceived by Missouri superintendents on a continuum of 1 not important to 9 very important. Items that were kept for Form C have no designation but were retained with 0.700 or above coefficient correlations (see Appendix F). A notation at the end describes items that were eliminated

based on each step of the data reduction process of Forms A, B, and C. Figure 4 depicts the process of data reduction for this study.

Reliability. Utilizing SPSS Cronbach's alpha statistical technique was conducted to determine the reliability of the SLPS. Cronk (1999) suggested Cronbach's alpha measures internal consistency of an instrument and also tests the reliability of an instrument. The full SLPS with 97 items produced a Cronbach's alpha of 0.989. SLPS Form A produced a Cronbach's alpha of 0.990. SLPS Form B had a Cronbach's alpha of 0.990. SLPS Form C produced a Cronbach's alpha of 0.988. Therefore, using Cronk's (1999) criteria of close to 1.00 as a strong reliability coefficient, the SLPS is reliable in each version (full, A, B, and C) produced through the analysis process.

The 97 items on the SLPS are the 97 performance indicators related to the six ISLLC Standards. Through this reduction process using item-total analysis, items from these Standards were dropped by the level of internal consistency. Appendix G depicts items retained from each ISLLC Standard to comprise the item-total analysis Form C of the SLPS.

Research question 1 b. How many reliable and interpretable components are there among the 97 ISLLC Standards performance indicators on the SLPS?

H_o1b: Utilizing the statistical techniques of Cronbach's Alpha and principal components factor analysis with varimax rotation, reliable and interpretable components cannot be identified within the constructs of ISLLC Standards performance indicators to design the SLPS.

Results. Utilizing the statistical techniques of Cronbach's alpha and principal components factor analysis with varimax rotation, an analysis was conducted to

determine how many reliable and interpretable components there were among the 97 ISLLC Standards performance indicators on the SLPS. The null hypothesis was rejected as reliable and interpretable components (factors) were identified through the analysis process. Items from all six ISLLC Standards were retained with factor loadings of 0.700 and above. Construct validity of ISLLC Standards was confirmed through principal component analysis.

Findings of principal component analysis. Principal components analysis of the SLPS was conducted utilizing a varimax rotation on all 97 items. From that analysis, fifteen components were generated with eigenvalues of 1.00 or above (Mertler & Vannatta, 2005). Mertler and Vannatta (2005) suggested retention of "components that account for at least 70% total variability" (p. 260). However, strong items of 0.700 and above factor loadings in six components were identified. The researcher focused on six components which accounted for 75.47% of the variance. After one rotation, the first component accounted for 54.12% of the variance, component 2 accounted for 6.96%, component 3 for 4.64%, component 4 for 3.76%, component 5 for 3.22%, and component 6 for 2.76% of the variance.

Eigenvalues and variance. Eigenvalues for all six components retained were above 1.0 as suggested by Kaiser's rule (Mertler & Vannatta, 2005). Table 3 depicts eigenvalues for Components 1-6, reflecting 75% of variance. Components 1 and 2 were retained and components 3-6 were combined as the third component, resulting in three components identified: (a) Component 1 – Ethical Leadership for Learning, (b) Component 2 – Management of Learning, and (c) Culture to Support Learning.

Table 3

Initial Eigenvalues and Percentage of Variance for SLPS Components 1-6

Component	Initial Eigenvalues	% of Variance
1 Ethical Leadership for Learning	52.498	54.122
2 Management of Learning	6.753	6.962
3 Culture of Collaboration Supporting Learning	4.504	4.643
4 Culture of Collaboration Supporting Learning	3.650	3.763
5 Culture of Collaboration Supporting Learning	3.129	3.226
6 Culture of Collaboration Supporting Learning	2.677	2.760
Total		75.476

Scree plot. Mertler and Vannatta (2005) suggested in addition to retaining components with eigenvalues of 1.000 or above, a scree plot further depicts all components with retention of "all components with a sharp descent, before eigenvalues level off" (p. 260). Scree plot criteria is more reliable if the number of individuals is >250 and communalities are >0.300 (Mertler & Vannatta). Figure 3 depicts a scree plot which identifies the strength of component 1 compared to other components. In identifying the bend on the scree plot, it appears that two components are strongest with four others prominent just before the line levels. As such, the researcher determined that the principal component factor analysis identified three primary components.

Fields (2005) suggested where there is a sharp descent of the line and a tailing-off occurs, analysis should focus on the breakpoint. In Figure 3, the breakpoint is visible after component 2, and tailing-off begins with components 3-6. A note to consider is that

the sample size is <200; therefore, there is less reliability of this method for extraction (Fields; Mertler & Vannatta, 2005; Stevens, 1996).

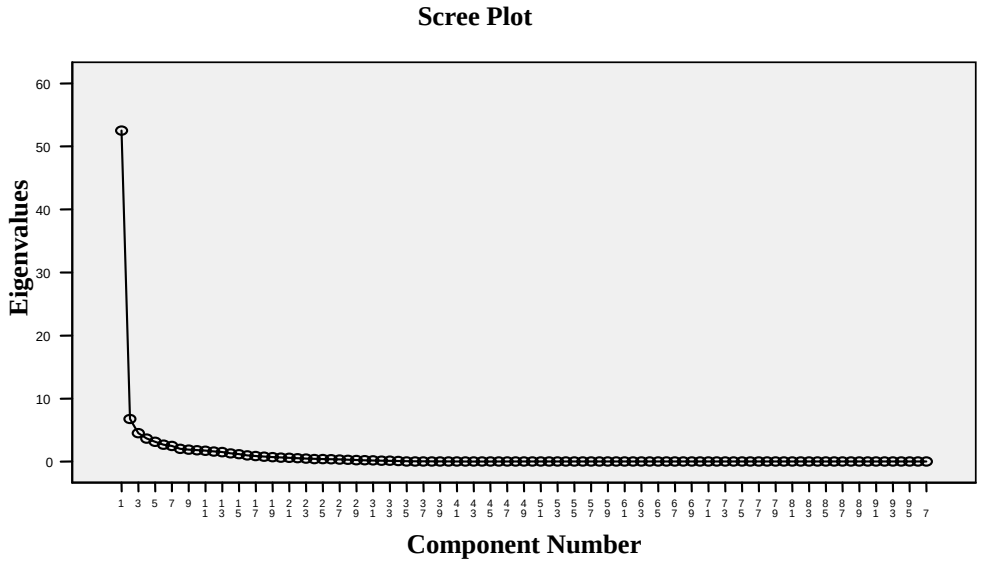

Figure 3. Scree plot of the eigenvalues for original, full SLPS identifying components generated through principal component analysis.

Data reduction process. In addition to principal component analysis, an additional analysis of factor loadings was conducted to determine correlation of items and strength of items. Through a data-reduction process, additional forms were developed based on the researcher's determination for standards of acceptance. Mertler and Vannatta (2005) provided examples of factor loadings 0.700 (closer to 1.000) as strong and reliable, specifically when there are "components with four or more loadings above 0.600 in absolute value" (p. 258).

Standards determined by the researcher included 0.300 to 0.499 as low-moderate or weak, 0.500 to 0.699 as moderate, and 0.700 and above as high or desirable. The researcher adopted the same process and standards stated above using factor loadings to

reduce the number of items through the factor analysis process. Two additional forms (D and E) were generated through this analysis. Figure 4 depicts the data-reduction process using factor analysis.

To create SLPS Form D, 9 items (11, 12, 24, 40, 41, 55, 63, 64, and 75) with factor loadings of 0.300 to 0.499 were dropped from the rotated components matrix of correlations. To create SLPS Form E, 61 items (1, 2, 3, 4, 5, 7, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 28, 29, 31, 32, 36, 37, 38, 39, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 60, 61, 62, 65, 66, 67, 68, 69, 70, 71, 74, 85, 87, 89, 92, 93, 94, 95, 96, and 97) with factor loadings of 0.500 to 0.699 were dropped from the rotated components matrix of correlations. As a result, using factor loadings SLPS Form E retained 26 items that had strong factor loadings of 0.700 and higher as items that were desirable (Mertler and Vannatta, 2005; Stevens, 1996).

Reliability. Utilizing the statistical technique of Cronbach's alpha, reliability of Forms D and E were analyzed. Both were considered reliable with a Cronbach's alpha close to 1 (Cronk, 1999). Form D had an alpha of 0.989 and Form E had an alpha of 0.969. Table 6 depicts reliability of all forms, including forms D and E.

Research Question 2

Within the conceptual underpinning of psychometrics, the problem and purpose posed the need to complete an item reduction of the SLPS from 97 items, if deemed statistically sound. Utilizing the statistical technique of principal component factor analysis and varimax rotation with eigenvalues of 1.000 or higher (Mertler & Vannatta, 2005), analysis was conducted to reduce the number of items on the SLPS.

Research question 2. Can further application of the statistical techniques of factor analysis be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice?

H_o2: Further application of the statistical techniques of factor analysis cannot be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice.

Results. Utilizing SPSS with data from the original SLPS and applying the statistical technique of factor analysis, the null hypothesis was rejected and in fact the number of items was reduced from 97 on the original SLPS to 26 on Form E. These items represent indicators that are deemed important to practice after multiple rotations of factor loadings. After the final rotation, items 45 (0.449) and 72 (0.530) fell below the desire 0.700 standard for desirable factor loadings. However, the researcher kept these items as they had survived through multiple rotations and as such were deemed important to practice. Item 77 was a repeated item and fell into component 4. As a result, it was dropped.

Table 4 depicts SLPS Form E 26 items deemed important with factor loadings of 0.700 and higher after three rotations. Listed in order from the original SLPS, retained items were categorized into three components: (a) Ethical Leadership for Learning, (b) Management of Learning, and (c) Culture to Support Learning.

Table 4

SLPS Form E Retained Items by Component after Three Varimax Rotations

Items	Component	Factor Loadings
6: Progress toward the vision and mission is communicated to all stakeholders.	3: Culture to Support Learning	0.840
8: The vision shapes the educational program, plans, and activities.	3: Culture to Support Learning	0.879
9: The vision shapes the educational programs, plans, and actions.	3: Culture to Support Learning	0.868
22: Diversity is considered in developing learning experiences.	2: Management of Learning	0.890
30: Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	2: Management of Learning	0.827
33: Student learning is assessed using a variety of techniques.	2: Management of Learning	0.761
34: Multiple sources of information regarding performance are used by staff and students.	2: Management of Learning	0.744
35: A variety of supervisory and evaluation models is employed.	2: Management of Learning	0.727
45: Problems are confronted and resolved in a timely manner.	2: Management of Learning	0.449
72: A comprehensive program of community relations is established.	2: Management of Learning	0.530
54: Effective communication skills are used.	1: Ethical Leadership for Learning	0.785
56: Fiscal resources of the school are managed responsibly, efficiently, and effectively.	1: Ethical Leadership for Learning	0.882
59: Confidentiality and privacy of school records are maintained.	1: Ethical Leadership for Learning	0.738

Items	Component	Factor Loadings
73: Public resources and funds are used appropriately and wisely.	1: Ethical Leadership for Learning	0.771
76: Examines personal and professional values.	1: Ethical Leadership for Learning	0.806
78: Demonstrates a personal and professional code of ethics.	1: Ethical Leadership for Learning	0.892
79: Accepts responsibility for school operations.	1: Ethical Leadership for Learning	0.913
80: Considers the impact of one's administrative practices on others.	1: Ethical Leadership for Learning	0.907
81: Uses the influence of the office to enhance the educational program rather than for personal gain.	1: Ethical Leadership for Learning	0.910
82: Treats people fairly, equitably, and with dignity and respect.	1: Ethical Leadership for Learning	0.892
83: Protects the rights and confidentiality of students and staff.	1: Ethical Leadership for Learning	0.923
84: Demonstrates appreciation for and sensitivity to the diversity in the school community.	1: Ethical Leadership for Learning	0.919
86: Recognizes and respect the legitimate authority of others.	1: Ethical Leadership for Learning	0.750
88: Expects that others in the school community will demonstrate integrity and exercise ethical behavior.	1: Ethical Leadership for Learning	0.870
90: Fulfills legal and contractual obligations.	1: Ethical Leadership for Learning	0.911
91: Applies laws and procedures fairly, wisely, and considerately.	1: Ethical Leadership for Learning	0.920

Research Question 3

Within the conceptual underpinning of a priori theory, the problem and purpose posed to test the construct validity of the SLPS. Under the goal of confirmatory factor

analysis to confirm or disconfirm the construct validity with six ISLLC Standards, statistical techniques of Cronbach's alpha and factor analysis and varimax rotation with eigenvalues of 1.0 or greater were used.

Research question 3. If reliable components are identified, is there construct validity in relationship to six ISLLC Standard clusters of performance indicators on the SLPS?

H_o3: Use of a varimax rotation will not reveal construct validity with relationship to six ISLLC Standards clusters of performance indicators.

Results for RQ3. In the final varimax rotation, construct validity of the SLPS in relationship to six ISLLC Standards was confirmed. Results indicated that five of six ISLLC Standards clusters of performance indicators were retained, including Standard 1 Vision of Learning, Standard 2 Culture for Learning, Standard 3 Management of Learning, Standard 4 Community Relationships and Learning, and Standard 5 Ethics and Learning. Standard 6 External Influences on Learning was not retained. However, the null hypothesis is rejected because previous rotations retained items with .400 or above correlations from all six ISLLC Standards. Construct validity was confirmed on the original, full SLPS and SLPS Form D. Table 5 depicts SLPS Form E items retained after three rotations and identifies items by each ISLLC Standard.

Table 5

Form E SLPS Items Retained by ISLLC Standard (n=26)

ISLLC Standard: A school administrator is an educational leader who promotes the success of all students by…	Items Retained
Standard 1: Items 1-16 …facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.	6, 8, 9
Standard 2: Items 17-36 …advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.	22, 30, 33, 34, 35
Standard 3: Items 37-59 …ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.	45, 54, 56, 59
Standard 4: Items 60-75 …collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.	72, 73
Standard 5: Items 76-91 …acting with integrity, fairness, and in an ethical manner.	76, 78, 79, 80, 81, 82, 83, 84, 86, 88, 90, 91
Standard 6: Items 92-97 …understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.	No items retained in third and final rotation

Research Question 4

Within the conceptual underpinning of psychometrics, the problem and purpose of the study stated that refined forms of the SLPS would be constructed. Refined forms of the SLPS were constructed utilizing a two-pronged process: (a) item-total analysis and (b) factor loadings. Using the statistical technique of Cronbach's alpha, further analysis revealed reliability of refined forms. Figure 4 depicts the data-reduction process used to generate the final SLPS Form H.

Research question 4. Through factor loadings and further use of the statistical technique of Cronbach's Alpha, can refined forms of the SLPS be built and determined as reliable and valid?

H_o4: Reliable and valid refined forms of the SLPS cannot be constructed.

Results for RQ4. The null hypothesis was rejected for research question 4. Reliable and valid refined forms of the SLPS were constructed. The process of constructing refined forms was two-fold: (a) Reduction of items through item-total analysis and (b) reduction of items through factor analysis. In both processes, reliability was determined through use of Cronbach's alpha calculations of 0.700 or above for each of the eight forms generated (Cronk, 1999).

Findings. As reported previously, the SLPS was deemed reliable with a Cronbach's alpha level of 0.989. Utilizing item-total analysis and correlation coefficients of 0.700 and higher, items were reduced and refined forms were generated. Form A had an alpha level of 0.990 and N= 95, Form B had an alpha level of 0.990 and N= 84, and Form C had an alpha level of 0.988 and N=51. All three forms generated through item-

total analysis were deemed reliable with a high Cronbach's alpha level of > 0.900 and close to 1.000 (Cronk, 1999; Mertler and Vannatta, 2005).

Two additional forms were generated through factor analysis and factor loadings with correlations of 0.700 and higher. Items were reduced and refined forms were generated. Form D had an alpha level of 0.989, and Form E had an alpha level of 0.969. Both forms (D and E) generated through factor loadings were deemed reliable with a high Cronbach's alpha level of > 0.900 and close to 1.000 (Cronk, 1999; Mertler and Vannatta, 2005).

SLPS Form F (n=58) was generated by combining items from Form C (item-total analysis correlations) and Form E (factor loadings) and was deemed reliable with a Cronbach's alpha of 0.988. Seventeen of the items on Form C and Form E matched, and with those 17 items Form G (n=17) was generated as a short form. Form G was deemed reliable with a Cronbach's alpha of 0.982. Finally, final SLPS Form H was generated from factor analysis conducted for Form F. Factor loadings of 0.600 were accepted as strong in the eighth iteration of the SLPS. Form H was deemed reliable with a Cronbach's alpha of 0.976. Figure 4 depicts the process of developing refined forms of the SLPS. Table 6 depicts number of items, mean, and reliability of the original SLPS and eight iterations of refined forms (Forms A, B, C, D, E, F, G, and H).

Table 6

SLPS: All Forms (N, M, SD, Cronbach's alpha, and Reliability)

Form	N	M	Cronbach's alpha	Reliability
Full SLPS	97	7.662	0.989	High
Form A	95	7.686	0.990	High
Form B	84	7.805	0.990	High
Form C	51	8.012	0.988	High
Form D	88	7.673	0.989	High
Form E	27	8.052	0.969	High
Form F (Combined)	58	7.985	0.988	High
Form G (Short)	17	8.447	0.982	High
Form H (Final)	32	8.107	0.976	High

Data reduction. The data reduction process produced eight iterations of the SLPS. Each iteration was generated by one of two statistical techniques: (a) item-total analysis with coefficient correlations of 0.700 or higher and (b) factor analysis using factor loadings of 0.700 or higher. The researcher accepted 0.600 and higher factor loadings to produce final SLPS Form H (see Appendix E). Each of the eight forms was deemed reliable through Cronbach's alpha with an alpha of 0.900 or above. Figure 4 depicts the data reduction process for the SLPS.

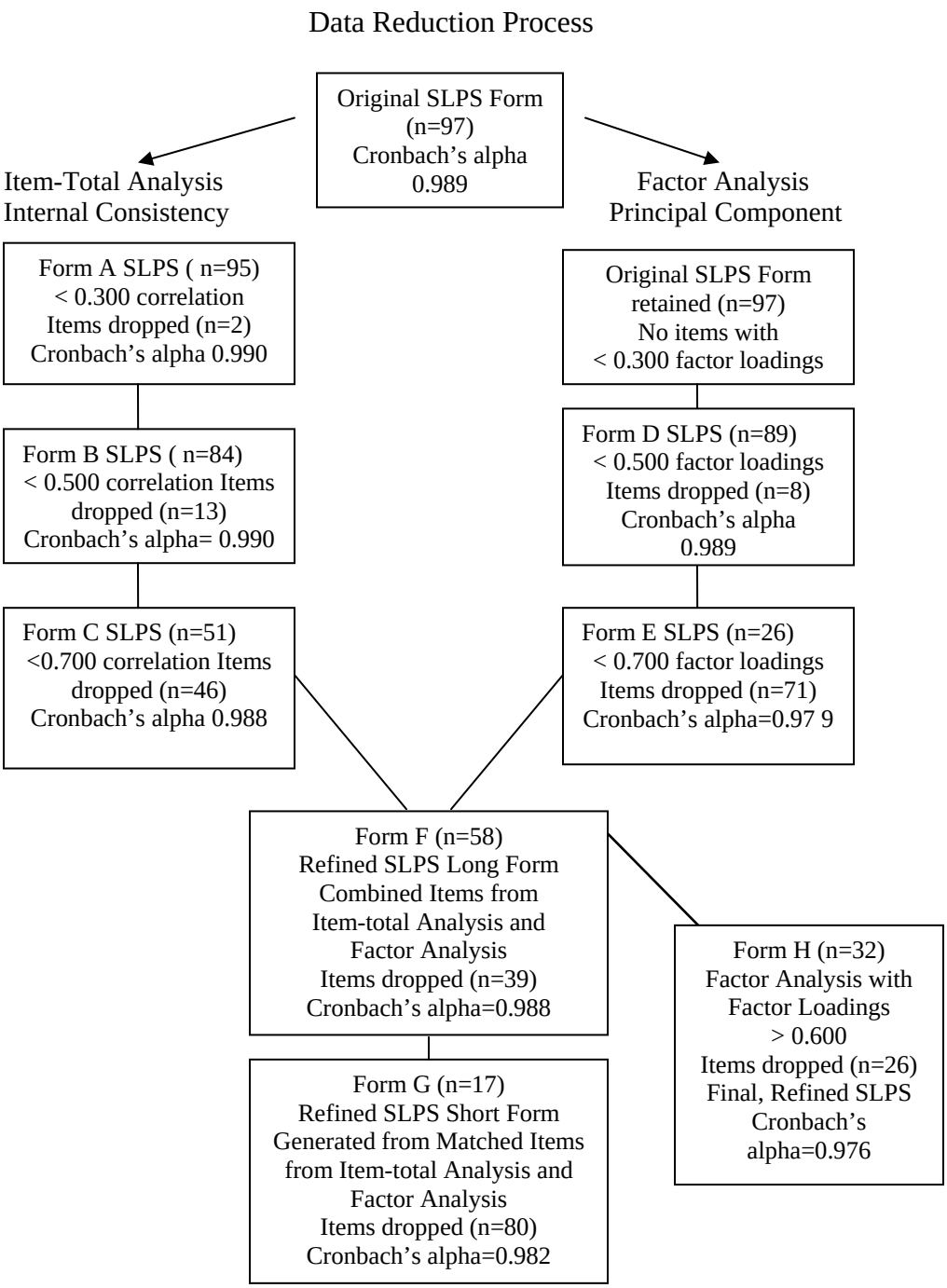

Figure 4. Data-reduction process of SLPS with Item-Total Analysis and Factor Analysis.

Final SLPS Form H principal components. Through principal component analysis, four components were identified with components 3 and 4 combined to garner six items in the component. All extractions were 0.521 and above. Components 1-4 had eigenvalues of 1.000 and above. Components 1-3 accounted for 75% of the variance. Components identified through principal component analysis of SLPS Form H included: (a) Component 1 Ethical Leadership for Learning, (b) Component 2 Management of Learning, and (c) Component 3 Culture to Support Learning.

Final SLPS Form H scree plot. Analysis of a scree plot of Form H revealed a sharp descent between component 1 and 2. Four components had eigenvalues of 1.000 or above. However, the breakpoint is definite at component 2 before tailing off at components 3 and 4. A note to consider is that the sample size is <200; therefore, there is less reliability of this method for extraction (Fields, 2005; Mertler & Vannatta, 2005; Stevens, 1996).

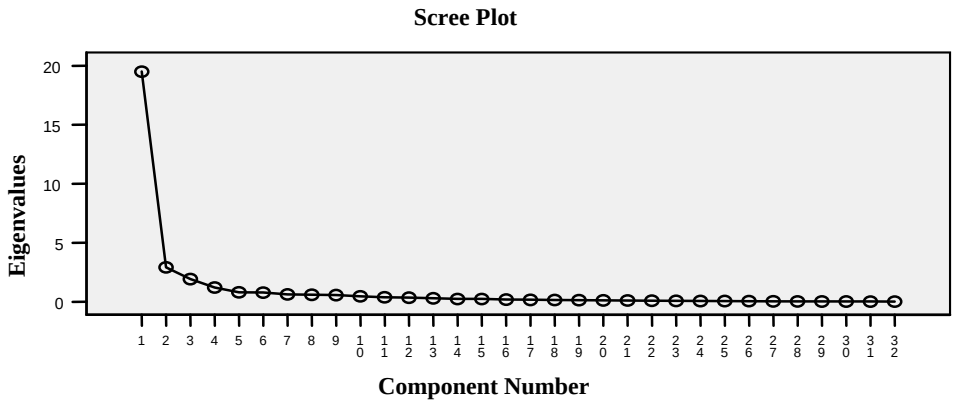

Figure 5. A scree plot of final SLPS Form H depicts the breakpoint for (a) Component 1 Ethical Leadership for Learning, (b) Component 2 Management of Learning, and (c) Culture to Support Learning.

Research Question 5

Descriptive statistics, including mean, standard deviation, and number were generated for items on the original, full SLPS by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description category code 1 (K-8 or K-12), district description category code 2 (rural, suburban, or urban), and district size. Descriptive statistics, including mean, standard deviation, and number were generated for items on the final SLPS Form H and reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description 1 (K-8 or K-12), district description 2 (rural, suburban, or urban), and district size. The purpose of descriptive statistics is to establish a baseline of data about practice as perceived by Missouri superintendents on the refined SLPS Form H.

Research question 5. What is the baseline of Missouri superintendents' perception of the importance of ISLLC Standards performance indicators to practice for each item, each subscale, and total identified components on a final refined form of the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

H_o5: Descriptive statistics of mean and standard deviation will not establish a baseline of perceptions of the importance of the ISLLC Standards performance indicators to practice on the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size.

Results of RQ5. After eight iterations of the SLPS, a baseline indicating perceptions of Missouri superintendents about practice was established by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description 1 (K-8 or K-12), district description 2 (rural, suburban, or urban), and district size. The null hypothesis was rejected in that a baseline of data indicating perceptions of Missouri superintendents about practice on a refined form (SLPS Form H) was established. Findings were reported for each demographic category.

Thirty-two items were categorized into three components generated through principal component analysis of SLPS Form H. Component 1: Ethical Leadership for Learning had the greatest number of means 8.00 and above among all demographic categories. Component 2: Management of Learning had the greatest number of means 7.00 and lower. Item 12 (the superintendent treats people fairly, equitably, and with dignity and respect) was consistently the highest mean (n=40) among demographic categories. Item 25 (a variety of supervisory and evaluation models is employed) was consistently the lowest mean (n=30) among demographic categories.

Findings by gender. Analysis of data by gender determined means for males (n=55) ranged from 6.86 (low) to 8.63 (high). Means for females (n=18) ranged from 7.25 (low) to 9.00 (high). Total means by gender ranged from 6.95 (low) to 8.72 (high). Appendix H depicts descriptive statistics by gender and includes means and standard deviations for males, females, and total.

Findings by years of experience. Analysis of data by years of experience determined means for superintendents with 1-5 years experience (n=33) ranged from 6.77

(low) to 8.87 (high). Means for superintendents with 6-14 years experience (n=26) ranged from 6.75 (low) to 8.50 (high). Means for superintendents with 15 years experience or more (n=14) ranged from 7.18 (low) to 8.82 (high). Total means by years of experience ranged from 6.95 (low) to 8.72 (high). Appendix I depicts descriptive statistics by years of experience and includes means and standard deviations.

Findings by year of certification. Analysis of data by year of certification determined means for superintendents certified before 2001 (n=41) ranged from 7.03 (low) to 8.56 (high). Means for superintendents certified in 2001 through March 2007 (n=28) ranged from 6.57 (low) to 8.87 (high). Total means by year of certification ranged from 6.91 (low) to 8.69 (high). Appendix J depicts descriptive statistics by year of certification and includes means and standard deviations.

Findings by highest degree held. Analysis of data by highest degree held determined means for superintendents with only master's degrees (n=7) ranged from 6.67 (low) to 8.83 (high). Means for superintendents with specialist degrees (n=39) ranged from 6.83 (low) to 8.66 (high). Means for superintendents with doctorates (n=27) ranged from 6.96 (low) to 8.79 (high). Total means by highest degree held ranged from 6.95 (low) to 8.72 (high). Appendix K depicts descriptive statistics by highest degree held and includes means and standard deviations.

Findings by assessment method. Analysis of data by assessment method determined means for superintendents who certified by taking the SSA (n=56) ranged from 6.90 (low) to 8.67 (high). Means for superintendents who certified by some other method (n=3) ranged from (low) to (high). Total means by assessment method ranged from 6.67 (low) to 9.00 (high). Means for superintendents who marked no assessment

(n=12) ranged from 7.22 (low) to 9.00 (high). Appendix L depicts descriptive statistics by assessment method and includes means and standard deviations.

Findings by type of certificate. Analysis of data by type of certificate determined means for superintendents with career certificates (n=49) ranged from 6.93 (low) to 8.63 (high). Means for superintendents with initial certificates (n=17) ranged from 6.93 (low) to 8.87 (high). Means for superintendents with provisional certificates (n=4) ranged from 6.50 (low) to 9.00 (high). Means for superintendents with no superintendent certificate (n=2) ranged from 6.50 (low) to 9.00 (high). Total means by type of certificate ranged from 6.94 (low) to 8.72 (high). Appendix M depicts descriptive statistics by type of certificate and includes means and standard deviations.

Findings by program institution. Analysis of data by institution where superintendents received program preparation determined means for superintendents who attended University of Missouri – Columbia (n=13) ranged from 6.71 (low) to 9.00 (high). Means for superintendents from Northwest Missouri State University (n=10) ranged from 6.67 (low) to 9.00 (high). Means for superintendents from Saint Louis University (n=5) ranged from 6.40 (low) to 8.60 (high). Means for superintendents from Southeast Missouri State University (n=4) ranged from 7.00 (low)to 8.50 (high). Means for superintendents from University of Central Missouri (n=9) ranged from 6.73 (low) to 8.91 (high). Means for superintendents from Missouri State University (n=3) ranged from 5.00 (low to 9.00 (high. Means for superintendents from Southern Missouri State University (n=1) ranged from 8.00 (low)to 9.00 (high. Means for superintendents from Truman State University (n=1) ranged from 5.00 (low) to 9.00 (high). Means for superintendents from University of Missouri – Kansas City (n=1) ranged from 7.00 (low)

to 9.00 (high). Means for superintendents from Southwest Baptist University (n=1) ranged from 8.00 (low)to 9.00 (high). Means for superintendents certified from out of state (n=4) ranged from 6.80 (low) to 9.00 (high). Means for superintendents marking non-applicable (n=1) ranged from 6.00 (low) to 8.67 (high). Total means by institution ranged from 6.98 (low) to 8.81 (high). Appendix N depicts descriptive statistics by institution and includes means and standard deviations.

Findings by district description (K-12 or K-8). Analysis of data by district description coded category 1 (K-8 or K-12) determined means for superintendents of K-12 (n=65) districts ranged from 6.92 (low) to 8.69 (high). Means for superintendents of K-8 (n=7) districts ranged from 7.00 (low) to 9.00 (high). Total means by year of certification ranged from 6.95 (low) to 8.72 (high). Appendix O depicts descriptive statistics by district description *(K-12 or K-8)* and includes means and standard deviations.

Findings by district description (rural, suburban, or urban). Analysis of data by district description coded category 2 (rural, suburban, or urban) determined means for superintendents in rural districts (n=56) ranged from 6.86 (low) to 8.68 (high). Means for superintendents in suburban districts (n=12) ranged from 7.09 (low) to 8.91(high). Means for superintendents in urban districts (n=4) ranged from 7.00 (low) to 9.00 (high). Total means by district description (rural, suburban, or urban) ranged from 6.95 (low) to 8.72 (high). Appendix P depicts descriptive statistics by district description (rural, suburban, or urban) and includes means and standard deviations.

Findings by district size. Analysis of data by district size determined means for superintendents in districts with enrollment 5,000 and above (n=7) ranged from 7.14

(low) to 9.00 (high). Means for superintendents in districts with enrollment between 1,000 and 4,999 (n=21) ranged from 7.00 (low) to 8.83 (high). Means for superintendents in districts with enrollment between 500 and 999 (n=16) ranged from 6.44 (low) to 8.25 (high). Means for superintendents in districts with enrollment below 500 (n=28) ranged from 6.96 (low) to 9.00 (high). Total means by district size ranged from 6.95 (low) to 8.72 (high). Appendix Q depicts descriptive statistics by district size and includes means and standard deviations.

Research Question 6

Research question 6 focused on SLPS Form H which is the refined and final form of the SLPS. RQ 6a posed the question of whether demographic items that have continuous interval scale responses could be defined in categories. RQ 6b involved discriminant analysis of Form H by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size. Research questions, null hypotheses, results, and findings are presented through discussion and depiction of data in tables and figures.

Research question 6a. Using a refined form of the SLPS, can categories be defined for those demographic items that have continuous interval scale responses (total years of experience, year of certification issued in Missouri, and total district enrollment)?

Form H SLPS was the final or refined form of the SLPS. In preparation for analysis, nominal data were transformed into categoricals for demographic items that have continuous interval scale responses, including total years experience, year of certification issued in Missouri, and total district enrollment. Total years of experience

ranged from 1 to 38 and were grouped into three categories: (a) 1-5 years (*N*=33*)*, (b) 6-14 years (*N*=26), and (c) above 15 years (*N*=14). Years of certification ranged from 1970 to 2007 with groupings into two categories: (a) before 2001 (*N*=41) and (b) 2001 to 2007 (*N*=28). Total district enrollment ranged from 35 students enrolled in a K-8 district to 17,000 students enrolled in a K-12 urban district with four groupings: (a) Above 5,000 enrolled (*N*= 7), (b) 1,000 to 4,999 enrolled (*N*=21), (c) 500-999 enrolled (*N*=16), and (d) Below 500 enrolled (*N*=28). All respondents did not provide information for every response opportunity; therefore, the number (*N*) varies among categories.

Research question 6 b. Using a refined form of the SLPS, does the SLPS discriminate between or among demographic categories defined within independent variables of gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size?

H_o6b: The SLPS does not discriminate between or among demographic categories for the variables listed above?

An analysis of ten dependent variables was conducted. Discriminant analysis was used to identify significant dependent variables that defined differences between and among demographic categories (gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size) on the refined Final SLPS Form H. The hypothesis is accepted in that the SLPS Form H does not discriminate between or among demographic categories.

Discriminant analysis by gender. A discriminant analysis by gender was conducted to identify significant dependent variables that defined differences between men and women superintendents. No significant discriminant function was found (Wilk's

lambda=0.583; *p*=0.793). Only one function (Eigenvalue=0.714) was identified and accounted for 100.00% of the variance. The null hypothesis was accepted based on findings. Table 7 depicts discriminant statistics.

Table 7

Test of Significance from Discriminant Statistics of Gender for Male and Female Superintendents

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	0.714	100.000	0.583	25.322	0.793

Discriminant analysis by years of experience. A discriminant analysis by years of experience conducted to identify significant dependent variables that defined differences among years of experience (1-5 years, 6-14 years, and 15 years and above). Two functions were identified. No significant discriminant function was found for either function. Function 1 (Eigenvalue=1.008) was identified and accounted for 58.5% of the variance (Wilk's lambda=0.291; *p*=0.705). Function 2 (Eigenvalue=0.714) was identified and accounted for 41.5% of the variance (Wilk's lambda=0.583; p=0.765). The null hypothesis was accepted based on findings. Table 8 depicts discriminant statistics.

Table 8

Test of Significance from Discriminant Statistics by Years of Experience as a Superintendent

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.008	58.5	0.291	57.458	0.705
2	0.714	41.5	0.583	25.050	0.765

Discriminant analysis by year of certification. A discriminant analysis by year of certification was conducted to identify significant dependent variables that defined differences between Missouri superintendents certified prior to 2001 and those certified

between 2001 and March 2007. No significant discriminant function was found (Wilk's lambda=0.393; *p*=0.348). Only one function (Eigenvalue=1.542) was identified and accounted for 100.00% of the variance. The null hypothesis was accepted based on findings. Table 9 depicts discriminant statistics.

Table 9

Test of Significance from Discriminant Statistics of Year Certified as a Superintendent

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.542	100.000	0.393	34.522	0.348

Discriminant analysis by highest degree held. A discriminant analysis by years of experience was conducted to identify significant dependent variables that defined highest degree (master's, specialist, and doctorate) held by respondents. Two functions were identified. No significant discriminant function was found for either function. Function 1 (Eigenvalue=1.125) was identified and accounted for 57.4% of the variance (Wilk's lambda=0.256; *p*=0.501). Function 2 (Eigenvalue=0.836) was identified and accounted for 42.6% of the variance (Wilk's lambda=0.545; p=0.608). The null hypothesis was accepted based on findings. Table 10 depicts discriminant statistics.

Table 10

Test of Significance from Discriminant Statistics of Highest Degree Held by Superintendents

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.125	57.4	0.256	63.308	0.501
2	0.836	42.6	0.545	28.248	0.608

Discriminant analysis by assessment method. A discriminant analysis by type of superintendent assessment was conducted to identify significant dependent variables that defined type of superintendent assessment (School Superintendent Assessment and other)

taken by respondents. Two functions were identified. No significant discriminant function was found for either function. Function 1 (Eigenvalue=1.917) was identified and accounted for 69.2% of the variance (Wilk's lambda=0.185; *p*=0.132). Function 2 (Eigenvalue=0.852) was identified and accounted for 30.8% of the variance (Wilk's lambda=0.540; p=0.619). The null hypothesis was accepted based on findings. Table 11 depicts discriminant statistics.

Table 11

Test of Significance from Discriminant Statistics by Type of Superintendent Assessment

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.917	69.2	0.185	76.755	0.132
2	0.852	30.8	0.540	28.040	0.619

Discriminant analysis by type of certificate. A discriminant analysis by type of superintendent certificate was conducted to identify significant dependent variables that defined types of certificates (career, initial, provisional, or none). Three functions were identified. No significant discriminant function was found for any of the functions. Function 1 (Eigenvalue=1.466) was identified and accounted for 52.4% of the variance (Wilk's lambda=0.147; *p*=0.753). Function 2 (Eigenvalue=0.803) was identified and accounted for 28.7% of the variance (Wilk's lambda=0.363; p=0.941). Function 3 (Eigenvalue=0.528) and accounted for 18.9% of the variance (Wilk's lambda=.654; p=0.938). The null hypothesis was accepted based on findings. Table 12 depicts discriminant statistics.

Table 12

Test of Significance from Discriminant Statistics by Type of Certificate

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.466	52.4	0.147	86.221	0.753
2	0.803	28.7	0.363	45.602	0.941
3	0.528	18.9	0.654	19.088	0.938

Discriminant analysis by program institution. A discriminant analysis by Missouri program preparation for the superintendency was conducted to identify significant dependent variables that defined differences among institutions (University of Missouri—Columbia; Northwest Missouri State University; Saint Louis University; Southeast Missouri State University; University of Central Missouri; Missouri State University; Southern Missouri State University; Truman State University; University of Missouri—Kansas City; Southwest Baptist University; out of state; non-applicable). No significant discriminant function was found for any of the functions. Table 13 depicts findings.

Table 13

Test of Significance from Discriminant Statistics by Institution for Program Preparation

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	24.955	36.1	0.000	379.279	0.152
2	19.875	28.8	0.000	301.126	0.630
3	7.992	11.6	0.000	228.200	0.969
4	5.814	8.4	0.001	175.489	0.998
5	4.909	7.1	0.005	129.434	1.000
6	1.720	2.5	0.027	86.800	1.000
7	1.597	2.3	0.073	62.781	1.000
8	1.133	1.6	0.190	39.890	1.000
9	0.643	0.9	0.405	21.708	1.000
10	0.316	0.5	0.665	9.794	1.000
11	0.143	0.2	0.875	3.203	1.000

Discriminant analysis by district description (K-8 or K-12). A discriminant analysis by district description was conducted to identify significant dependent variables that defined differences between Missouri superintendents of K-8 districts and K-12 districts. No significant discriminant function was found (Wilk's lambda=0.568; *p*=0.739). Only one function (Eigenvalue=0.739) was identified and accounted for 100.00% of the variance. The null hypothesis was accepted based on findings Table 14 depicts discriminant statistics.

Table 14

Test of Significance from Discriminant Statistics by District Description (K-8 and K-12)

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	0.759	100.000	0.568	26.547	0.739

Discriminant analysis by district description (rural, suburban, or urban). A discriminant analysis by district description was conducted to identify significant dependent variables that defined differences between Missouri superintendents of rural, suburban, and urban districts. No significant discriminant function was found. Two functions were identified. Function 1 (Eigenvalue=1.638) was identified and accounted for 65.8% of the variance (Wilk's lambda=0.205; *p*=0.190). Function 2 (Eigenvalue=0.851) was identified and accounted for 34.2% of the variance (Wilk's lambda=0.540; *p*=0.589). The null hypothesis was accepted based on findings. Table 15 depicts discriminant statistics.

Table 15

Test of Significance from Discriminant Statistics by District Description (Rural, Suburban, Urban)

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	1.638	65.8	0.205	73.729	0.190
2	0.851	34.2	0.540	28.627	0.589

Discriminant analysis by district size. A discriminant analysis by district size was conducted to identify significant dependent variables that defined district enrollment size (above 5,000; 1,000-4999; 500-999; and below 500). Three functions were identified. No significant discriminant function was found for any of the functions. Function 1 (Eigenvalue=1.466) was identified and accounted for 52.4% of the variance (Wilk's lambda=0.147; p=0.753). Function 2 (Eigenvalue=0.803) was identified and accounted for 28.7% of the variance (Wilk's lambda=0.363; p=0.941). Function 3 (Eigenvalue=0.528) and accounted for 18.9% of the variance (Wilk's lambda=.654; p=0.938). The null hypothesis was accepted based on findings. Table 16 depicts discriminant statistics.

Table 16

Test of Significance from Discriminant Statistics by District Size

Function	Eigenvalue	% Variance	Wilk's Lambda	Chi Square	*p*-value
1	2.018	48.5	0.081	115.453	0.086
2	1.541	37.0	0.245	64.646	0.384
3	0.605	14.5	0.623	21.756	0.863

Summary

A discussion of results and findings was presented in Chapter 4 for research questions 1-6. For RQ 1 the null hypothesis was rejected as the SLPS had internal

consistency and was deemed a reliable instrument. For RQ 2, the null hypothesis was rejected as the item reduction process was achieved through principal component analysis, with the number of items on the SLPS were reduced from 97 to fewer items through a process of eight iterations. For RQ 3, the null hypothesis was rejected as the SLPS was deemed to have construct validity with six ISLLC Standards through the statistical technique of confirmatory factor analysis. New components were identified as: (a) Component 1 – Ethical Leadership for Learning; (b) Component 2 – Management of Learning; (c) Component 3 – Culture to Support Learning. For RQ 4, the null hypothesis was rejected as refined forms of the SLPS were generated through factor loadings. Refined forms (A, B, C, D, E, F, G, and H) were all deemed reliable through use of the statistical technique of Cronbach's alpha. For RQ 5, the null hypothesis was rejected in that baseline data were established by independent variable by reporting descriptive statistics for the SLPS Form H, the final refined form. For RQ 6, discriminant analysis determined that the null hypothesis was accepted in that no discriminating factors were identified between and among independent variables (demographic categories). Chapter 5 will provide conclusions and recommendations as a result of the study.

CHAPTER FIVE

DISCUSSION WITH CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research study was conducted based on the problem that there was no known instrument measuring the level of perceptions Missouri superintendents have with regard to ISLLC Standards performance indicators. The purpose of the study was to establish psychometric properties of the School Leaders Practice Survey (SLPS). Chapter 5 presents an overview of the study, a summary and discussion of findings by research question, limitations of the research, the researcher's conclusions about the study, and recommendations for the future. A summary will conclude Chapter 5.

Overview of the Study

In 1998, Missouri adopted the ISLLC Standards as a basis of policy, process, and practice for educational leadership and in 2000 for superintendent certification (Beem, 2002; MODESE Compendium). Prior to this study, there was no known instrument to determine the level of importance perceived about ISLLC Standards performance indicators by Missouri superintendents. The instrument developed for this study was the School Leader Practice Survey (SLPS).

This study was designed to determine psychometric properties of the SLPS through analysis of internal consistency, reliability, and construct validity. Further, a purpose was to determine whether items on the SLPS could be reduced from 97 items to a shorter, yet still reliable, number of items and to identify new components. In addition, baseline data for a final, refined form of the SLPS Form H was determined, and discriminant analysis was conducted to determine discriminates among independent

variables (demographic descriptors) on the final, refined SLPS Form H.

A three-pronged conceptual framework established the conceptual underpinnings of the study: (a) ISLLC Standards as a priori theory, (b) policy, process, and practice in Missouri as the structure by which superintendents are licensed to practice, reflecting the structural frame, and (c) analysis of the SLPS instrument through psychometrics. Figure 1 depicts a concept map of the study. Figure 2 depicts a research matrix of the research study.

The researcher used quantitative research methods in response to research questions and for the purpose of developing a reliable and construct valid instrument to enable superintendents to rate the level of importance of SLPS items to their practice. Principal Components Analysis was utilized to determine construct validity, and Cronbach's alpha was utilized to determine reliability of the SLPS.

The SLPS was designed with 97 performance indicators identified in the ISLLC Standards (ISLLC, 1996). It was administered in April 2007 to 524 Missouri school superintendents appointed for the 2006-2007 school year. The sample of respondents was small with 73 superintendents agreeing to complete the SLPS. Analysis, results, conclusions, and recommendations were based on the sample represented. Information gleaned from the study will inform the body of knowledge representing educational leadership and specifically, the superintendency.

Discussion of Findings

Six research questions guided the study. In a brief discussion of findings, the research questions are restated and discussion is based on data analysis provided in Chapter 4. Results of analysis are provided.

Research Question 1

To determine internal consistency and reliability of the SLPS, research question 1 was divided into two questions 1a and 1b. Item-total pair wise analysis was conducted to determine internal consistency and use of Cronbach's alpha determined reliability.

Research question 1a. How many items have internal consistency and are reliable among the 97 ISLLC Standards performance indicators on the SLPS? Based on item-total analysis and Cronbach's alpha, the null hypothesis was rejected, indicating the SLPS had internal consistency and was reliable.

Research question 1 b. How many reliable and interpretable components are there among the 97 ISLLC Standards performance indicators on the SLPS? Utilizing the statistical techniques of Cronbach's alpha and principal components factor analysis with varimax rotation to analyze data, the null hypothesis was rejected as reliable and interpretable components (factors) were identified. Items from all six ISLLC Standards were retained with high factor loadings. Construct validity of ISLLC Standards was confirmed through principal component analysis of the SLPS.

Research Question 2

Can further application of the statistical techniques of factor analysis be utilized to reduce the number of items in order to refine and more specifically identify indicators that are deemed important to practice? Utilizing SPSS with data from the original SLPS and applying the statistical technique of factor analysis, the null hypothesis was rejected and in fact the number of items was reduced from 97 on the original SLPS to 26 on Form E after multiple rotations and elimination of weak items. Retained items were categorized into three components: (a) Ethical Leadership for Learning, (b) Management of Learning,

and (c) Culture to Support Learning.

Research Question 3

If reliable components are identified, is there construct validity in relationship to six ISLLC Standard clusters of performance indicators on the SLPS? In the final varimax rotation, construct validity of the SLPS in relationship to six ISLLC Standards was confirmed. Results indicated that five of six ISLLC Standards clusters of performance indicators were retained, including Standard 1 Vision of Learning, Standard 2, Culture for Learning, Standard 3 Management of Learning, Standard 4 Community Relationships and Learning, and Standard 5 Ethics and Learning. Standard 6 External Influences on Learning was not retained. The researcher determined the null hypothesis was rejected because previous rotations retained items with moderate to high correlations from all six ISLLC Standards. The six ISLLC Standards are embedded in policy, process, and practice of the superintendency in Missouri (Beem, 2002; MODESE Compendium, 2005). By rating the level of importance of performance indicators supporting the ISLLC Standards, Missouri superintendents in the sample confirmed the importance of ISLLC Standards to practice.

Research Question 4

Through factor loadings and further use of the statistical technique of Cronbach's Alpha, can refined forms of the SLPS be built and determined as reliable and valid? The null hypothesis was rejected for RQ 4. Reliable and valid refined forms of the SLPS were constructed. The process of constructing refined forms was two-fold: (a) Reduction of items through item-total analysis and (b) reduction of items through factor analysis. In both processes, reliability was determined through use of Cronbach's alpha calculations

for each of the eight forms generated (Cronk, 1999). Constructing refined forms of the SLPS provided a reduction of items which could reduce the amount of time consumed to complete the SLPS with 97 items. Further, through the reduction of items those items proving strongest survived and provided a refined tool representing Missouri superintendent perceptions about practice. All refined forms of the SLPS were deemed reliable using Cronbach's alpha.

Research Question 5

What is the baseline of Missouri superintendents' perception of the importance of ISLLC Standards performance indicators to practice for each item, subscale, and total identified components on a final refined form of the SLPS reported by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size? After eight iterations of the SLPS, a baseline indicating perceptions of Missouri superintendents about practice was established by gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description 1 (K-8 or K-12), district description 2 (rural, suburban, or urban), and district size. The null hypothesis was rejected in that a baseline of data indicating perceptions of Missouri superintendents about practice on a refined form (SLPS Form H) was established. SLPS Form H had 32 items that were categorized into three components generated through principal component analysis of SLPS Form H.

Research Question 6

Research question 6 determined whether discriminant factors emerged between and among independent variables (demographic categories). RQ 6a determined categories

for demographic responses. Through discriminant analysis, RQ 6b determined no discriminates among demographic categories.

Research question 6a. Using a refined form of the SLPS, can categories be defined for those demographic items that have continuous interval scale responses (total years of experience, year of certification issued in Missouri, and total district enrollment)? Form H SLPS was the final or refined form of the SLPS. In preparation for analysis, nominal data were transformed into categoricals for demographic items that have continuous interval scale responses, including total years experience, year of certification issued in Missouri, and total district enrollment.

Research question 6b. Using a refined form of the SLPS, does the SLPS discriminate between or among demographic categories defined within independent variables of gender, years of experience, year of certification, highest degree held, assessment method, type of certificate, institution, district description, and district size? An analysis of ten independent variables was conducted for SLPS Form H. The hypothesis is accepted in that on the SLPS Form H no discriminating factors were identified.

Limitations

Limitations for analysis of data in this study were primarily the result of a small sample size (N=73). Mertler and Vannatta (2005) suggested factor analysis results are poor when the sample size is 100 or less. The researcher's decision to survey only Missouri superintendents contributed to this limitation. An additional limitation related to sample size was due to the electronic survey method in which some school district sites quarantined the survey. Further, the responses were self-reported perceptions about

practice of the superintendency. Generalizability of the results should be considered due to these limitations.

Overall Conclusions

Data generated and analyzed during this study confirmed the level of importance perceived by Missouri superintendents with regard to ISLLC Standards performance indicators. Psychometric data generated from use of statistical techniques of factor analysis and Cronbach's alpha supported that the SLPS was reliable and valid. Further, principal component analysis determined that ISLLC Standards have construct validity.

The review of literature presented support of effective school leadership focused on learning processes and outcomes (Murphy, 2005). The foundation for ISLLC Standards was supported by educational research about effective schools and the leaders who led them (Shipman & Murphy, 1996). The opening phrase of ISLLC Standards state the administrator should support learning (ISLLC, 1996). Learning is the focus of school leadership as established in ISLLC Standards. Results of this study confirm Missouri superintendents perceive that their practice should reflect ethical practices, management and operations that support learning, and creating a culture to support learning.

Leadership is focused on learning. This study produced a refined instrument with 32 items organized into three components: (a) Ethical Leadership for Learning, (b) Management of Learning, and (c) Culture to Support Learning. Those 32 items represent the strongest ISLLC Standards performance indicators. Three new components are reflective of themes found in the six ISLLC Standards. Items in the refined SLPS (Form H) and components identified through principal components analysis are also indicative of indicators important to school leadership as perceived by Missouri superintendents.

After a data reduction process, items that remained indicated that Missouri school superintendent perceived that ethical practices, managing an environment for learning by providing resources to support learning and effectively managing operations for learning, and creating a culture to support learning by engaging the community were the most important attributes of their practice.

Recommendations

The School Leaders Practice Survey could be utilized by educational leadership programs as a pre and post survey or predictive tool for educational administration candidates preparing for the superintendency. The SLPS could serve as a value-added tool in that results of the study confirmed the level of importance of ISLLC Standards to practice as perceived by Missouri superintendents in the sample. Results indicate what superintendents think about ISLLC Standards performance indicators. Since the items on the SLPS reflect verbatim ISLLC Standards performance indicators, the SLPS is supported by policy, process, and practice of educational leadership (the superintendency) in Missouri. Results of this study could inform policy, process, and practice in the future.

Miller (2007), a Missouri state school officer, stated after 10 years of implementation a revision of ISLLC Standards is beginning at the national level through the CCSSO (D. Miller, personal communication, February 3, 2007). Results of this study reporting Missouri superintendent perceptions about current ISLLC Standards performance indicators could inform the revision process, especially with regard to the three new components: (a) Ethical Leadership for Learning, (b) Management of Learning, and (c) Culture to Support Learning. Use of this study to support the construct

validity of ISLLC Standards could inform the revision process as well. In addition, this study could begin dialogue to bridge theory and practice of the superintendency.

Future studies could expand on the SLPS by adding open-ended responses regarding practices that are missing from the survey. Data from such a study would inform policy, process, and practice impacting certification for the superintendency. Future studies could utilize the original SLPS as well as the refined SLPS (Form H) with building administrators, other district administrators, and program administrators to ascertain their perceptions about practice.

Summary

A valid and reliable instrument for determining the perceived level of importance of ISLLC Standards performance indicators was developed through this study. The SLPS was developed from ISLLC Standards, so it is rooted in practices aligned with effective school leadership (Murphy & Shipman, 1996). Missouri superintendents in the study self-reported their perceptions about practice by rating each ISLLC Standards performance indicator from 1 not important to 9 very important. A refined SLPS was generated through factor analysis and deemed reliable through Cronbach's alpha. This study may provide a springboard for future studies about practice in the field of educational administration. Leadership for learning matters. In closing, this study has developed the SLPS as an instrument to measure the level of importance of ISLLC Standards performance indicators as perceived by Missouri superintendents. The study has come full circle from a problem statement of no known instrument that is reliable and valid to a conclusion of a known instrument deemed reliable and valid through quantitative analysis.

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Appendix A

School Leader Practice Survey
(SLPS)

Directions: The following 97 statements describe practices related to school leadership. The School Leader Practice Survey (SLPS) enables you, as a superintendent, to be reflective about the importance of various aspects of practice. Within your role as a practicing Missouri public school superintendent, please rate each item indicating your perceived level of importance.

Please use the following nine-point scale to select a rating that best describes your perception of HOW IMPORTANT EACH PERFORMANCE INDICATOR IS TO SUPERINTENDENCY PRACTICE.

1---------2---------3---------4---------5----------6----------7----------8----------9
(Not Important) (Moderately Important) (Very Important)

1. The vision and mission of the school are effectively communicated to staff, parents, students, and community members.

2. The vision and mission are communicated through the use of symbols, ceremonies, stories, and similar activities.

3. The core beliefs of the school vision are modeled for all stakeholders.

4. The vision is developed with and among stakeholders.

5. The contributions of school community members to the realization of the vision are recognized and celebrated.

6. Progress toward the vision and mission is communicated to all stakeholders.

7. The school community is involved in school improvement efforts.

8. The vision shapes the educational programs, plans, and activities.

9. The vision shapes the educational programs, plans, and actions.

10. An implementation plan is developed in which objectives and strategies to achieve the vision and goals are clearly articulated.

11. Assessment data related to student learning are used to develop the school vision and goals.

12. Relevant demographic data pertaining to students and their families are used in developing the school mission and goals.

.

13. Barriers to achieving the vision are identified, clarified, and addressed.

14. Needed resources are sought and obtained to support the implementation of the school mission and goals.

15. Existing resources are used in support of the school vision and goals.

16. The vision, mission, and implementation plans are regularly monitored, evaluated, and revised.

17. All individuals are treated with fairness, dignity, and respect.

18. Professional development promotes a focus on student learning consistent with the school vision and goals.

19. Students and staff feel valued and important.

20. The responsibilities and contributions of each individual are acknowledged.

21. Barriers to student learning are identified, clarified, and addressed.

22. Diversity is considered in developing learning experiences.

23. Life ling learning is encouraged and modeled.

24. There is a culture of high expectations for self, student, and staff performance.

25. Technologies are used in teaching and learning.

26. Student and staff accomplishments are recognized and celebrated.

27. Multiple opportunities to learn are available to all students.

28. The school is organized and aligned for success.

29. Curricular, co-curricular, and extra-curricular programs are designed, implemented, evaluated, and refined.

30. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.

31. The school culture and climate are assessed on a regular basis.

32. A variety of sources of information is used to make decisions.

33. Student learning is assessed using a variety of techniques.

34. Multiple sources of information regarding performance are used by staff and students.

35. A variety of supervisory and evaluation models is employed.

36. Pupil personnel programs are developed to meet the needs of students and their families.

37. Knowledge of learning, teaching, and student development is used to inform management decisions.

38. Operational procedures are designed and managed to maximize opportunities for successful learning.

39. Emerging trends are recognized, studied, and applied as appropriate.

40. Operational plans and procedures to achieve the vision and goals of the school are in place.

41. Collective bargaining and other contractual agreements related to the school are effectively managed.

42. The school plant, equipment, and support systems operate safely, efficiently, and effectively.

43. Time is managed to maximize attainment of organizational goals.

44. Potential problems and opportunities are identified.

45. Problems are confronted and resolved in a timely manner.

46. Financial, human, and material resources are aligned to the goals of schools.

47. The school acts entrepreneurially to support continuous improvement.

48. Organizational systems are regularly monitored and modified as needed.

49. Stakeholders are involved in decisions affecting schools.

50. Responsibility is shared to maximize ownership and accountability.

51. Effective problem-framing and problem-solving skills are used.

52. Effective conflict resolution skills are used.

53. Effective group-process and consensus-building skills are used.

54. Effective communication skills are used.

55. There is effective use of technology to manage school operations.

56. Fiscal resources of the school are managed responsibly, efficiently, and effectively.

57. A safe, clean, and aesthetically pleasing school environment is created and maintained.

58. Human resource functions support the attainment of school goals.

59. Confidentiality and privacy of school records are maintained.

60. High visibility, active involvement, and communication with the larger community is a priority.

61. Relationships with community leaders are identified and nurtured.

62. Information about family and community concerns, expectations, and needs is used regularly.

63. There is outreach to different businesses, religious, political, and service agencies and organizations.

64. Credence is given to individuals and groups whose values and opinions may conflict.

65. The school and community serve one another as resources.

66. Available community resources are secured to help the school solve problems and achieve goals.

67. Partnerships are established with area businesses, institutions of higher education, and community groups to strengthen programs and support school goals.

68. Community youth family services are integrated with school programs.

69. Community stakeholders are treated equitably.

70. Diversity is recognized and valued.

71. Effective media relations are developed and maintained.

72. A comprehensive program of community relations is established.

73. Public resources and funds are used appropriately and wisely.

74. Community collaboration is modeled for staff.

75. Opportunities for staff to develop collaborative skills are provided.

76. Examines personal and professional values.

77. Examines personal and professional values.

78. Demonstrates a personal and professional code of ethics.

79. Demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.

80. Accepts responsibility for school operations.

81. Considers the impact of one's administrative practices on others.

82. Uses the influence of the office to enhance the educational program rather than for personal gain.

83. Treats people fairly, equitably, and with dignity and respect.

84. Protects the rights and confidentiality of students and staff.

85. Demonstrates appreciation for and sensitivity to the diversity in the school community.

86. Recognizes and respect the legitimate authority of others.

87. Examines and considers the prevailing values of the diverse school community.

88. Expects that others in the school community will demonstrate integrity and exercise ethical behavior.

89. Opens the school to public scrutiny.

90. Fulfills legal and contractual obligations.

91. Applies laws and procedures fairly, wisely, and considerately.

92. The environment in which schools operate is influenced on behalf of students and their families.

93. Communication occurs among the school community concerning trends, issues, and potential changes in the environment in which schools operate.

94. There is ongoing dialogue with representatives of diverse community groups.

95. The school community works within the framework of policies, laws, and regulations enacted by local, state, and federal authorities.

96. Public policy is shaped to provide quality education for students.

97. Lines of communication are developed with decision makers outside the school community.

SLPS items are based on ISLLC Standards Performance Indicators used with permission from the ISLLC (N. Sanders Director, personal communication, July 2006). SLPS 1-9 scale is adapted from Audit of Principal Effectiveness developed by Jerry W. Valentine and Michael L. Bowman (1986).

Demographics

Gender
- Male
- Female

Total Years of Superintendent Experience _____

Year Certification Issued in Missouri _____

Highest Degree Held
- Masters
- Educational Specialist
- Doctorate

Assessment Method
- School Superintendent's Assessment (SSA)
- Other
- If other, identify _____
- None

Type of Certificate
- Initial
- Career
- Provisional
- None

Missouri Department of Elementary and Secondary Education
Certifying institution for educational leadership program _____

District Description
1. K-8
   K-12
2. Rural
   Urban
   Suburban
   Other

Total District Enrollment _____

Appendix B

Invitation Email to Missouri Superintendents

Dear Colleague:

I am a doctoral candidate in the Department of Educational Leadership and Policy Analysis at the University of Missouri – Columbia and superintendent of schools in St. Joseph, Missouri. As such, I am conducting research asking you to explore perceptions about practice. Your responses will enable you to rate your perceptions about practice and how important each item of responsibility is. Your responses will also enable me to test School Leader Practice Survey (SLPS) instrument I have developed. The electronic survey will take approximately 20 minutes of your valuable time.

I have included an informed consent document at the beginning of the survey. If you choose to participate in this study, please complete the on-line SLPS by connecting to the link before April 10, 2007. As noted in the informed consent document, there are no risks in your participating. Your responses will be reported as a group, not as an individual. Also, you may withdraw from the study or skip survey items without penalty. All information is confidential and anonymous.

If you have questions about the survey, please contact me at 816.671.4000 (w) or 816.279.3625 (h). You may also contact my advisor, Dr. Philip Messner, at Northwest Missouri State University at 660.562.1478.

Thank you in advance for your participation. I appreciate your giving thought and time to assist me in this research. If you would like results from this survey, please contact me at melody.smith@sjsd.k12.mo.us . I look forward to your participation in this research.

Respectfully,

Melody A. Smith

Link to survey:
http://survey.nwmissouri.edu/pres/rws3.pl?FORM=SchoolLeaderPracticeSurvey

Appendix C

Written Consent Form

The accompanying email invites you to participate in research conducted by Melody A. Smith, a doctoral candidate in the department of Educational Leadership and Policy Analysis at the University of Missouri-Columbia. The purpose of the study is to investigate the perceived level of importance practicing Missouri public school superintendents have about ISLLC Standards performance indicators.

Request for participation: You are invited to participate in research developing a survey instrument related to practice as a Missouri superintendent. Participation is by individual choice and without penalty. You may skip items on the survey and withdraw from the study at any time.

Exclusions: You must be superintendent of a Missouri public school district during the 2006-2007 school year.

Survey Instrument: This research requests your participation in completing a survey consisting of 96 items related to practice as a superintendent. You will be asked to rate your perception about each item on a scale of 1 or not important to 9 or very important. The demographic response and survey will take about 20 minutes to complete. If you wish to know the results of this survey, contact Melody A. Smith at melody.smith@sjsd.k12.mo.us or 816.279.3625.

Privacy: All information you provide through this research is confidential. Findings will be reported in a group, not by individual. Your personal identification will be protected at all times.

Risks: There are no anticipated risks in your participating in this study beyond the risks of daily life.

Benefits: Results of this study will inform the greater body of knowledge regarding Missouri superintendent perceptions about practice.

Questions about Your Rights: If you are concerned or have questions about your rights as a participant in this research, please contact the University of Missouri - Columbia Institutional Review Board by calling 573.882.9585.

If you have questions about the survey, please contact me at 816.279.3625 (h). You may also contact my advisor, Dr. Philip Messner, at Northwest Missouri State University at 660.562.1478 or at pemday@nwmissouri.edu If you have additional concerns about this study, you may contact Dr. Phillip Messner, Dissertation Advisor, at PEMDSAY@NWMISSOURI.EDU or by phone at 660-562-1478.

Having read the above statement, do you choose to participate in the School Leader Practice Survey?

Yes – I willingly choose to participate.

No – I would rather not participate in this study.

Continue

Appendix D

ISLLC Standards and Performance Indicators

ISLLC Standard 1: “A school administrator is an educational leaders who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community” (ISSLC, 1996, p.10).

Performance Indicators:
The vision and mission of the school are effectively communicated to staff, parents, students, and community members.

The vision and mission are communicated through the use of symbols, ceremonies, stories, and similar activities.

The core beliefs of the school vision are modeled for all stakeholders.

The vision is developed with and among stakeholders.

The contributions of school community members to the realization of the vision are recognized and celebrated.

Progress toward the vision and mission is communicated to all stakeholders.

The school community is involved in school improvement efforts.

The vision shapes the educational programs, plans, and activities.

The vision shapes the educational programs, plans, and actions.

An implementation plan is developed in which objectives and strategies to achieve the vision and goals are clearly articulated.

Assessment data related to student learning are used to develop the school vision and goals.

Relevant demographic data pertaining to students and their families are used in developing the school mission and goals.

.

Barriers to achieving the vision are identified, clarified, and addressed.

Needed resources are sought and obtained to support the implementation of the school mission and goals.

Existing resources are used in support of the school vision and goals.

ISLLC Standard 2: “A school administrator is an educational leaders 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” (ISLLC, 1996, p. 12).

Performance Indicators:
The vision, mission, and implementation plans are regularly monitored, evaluated, and revised.

All individuals are treated with fairness, dignity, and respect.

Professional development promotes a focus on student learning consistent with the school vision and goals.

Students and staff feel valued and important.

The responsibilities and contributions of each individual are acknowledged.

Barriers to student learning are identified, clarified, and addressed.

Diversity is considered in developing learning experiences.

Life ling learning is encouraged and modeled.

There is a culture of high expectations for self, student, and staff performance.

Technologies are used in teaching and learning.

Student and staff accomplishments are recognized and celebrated.

Multiple opportunities to learn are available to all students.

The school is organized and aligned for success.

Curricular, co-curricular, and extra-curricular programs are designed, implemented, evaluated, and refined.

Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.

The school culture and climate are assessed on a regular basis.

A variety of sources of information is used to make decisions.

Student learning is assessed using a variety of techniques.

Multiple sources of information regarding performance are used by staff and students.

A variety of supervisory and evaluation models is employed.

ISLLC Standard 3: “A school administrator is an educational leaders who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment” (ISLLC, 1996, p. 14).

Performance Indicators:

Pupil personnel programs are developed to meet the needs of students and their families.

Knowledge of learning, teaching, and student development is used to inform management decisions.

Operational procedures are designed and managed to maximize opportunities for successful learning.

Emerging trends are recognized, studied, and applied as appropriate.

Operational plans and procedures to achieve the vision and goals of the school are in place.

Collective bargaining and other contractual agreements related to the school are effectively managed.

The school plant, equipment, and support systems operate safely, efficiently, and effectively.

Time is managed to maximize attainment of organizational goals.

Potential problems and opportunities are identified.

Problems are confronted and resolved in a timely manner.

Financial, human, and material resources are aligned to the goals of schools.

The school acts entrepreneurially to support continuous improvement.

Organizational systems are regularly monitored and modified as needed.

Stakeholders are involved in decisions affecting schools.

Responsibility is shared to maximize ownership and accountability.

Effective problem-framing and problem-solving skills are used.

Effective conflict resolution skills are used.

Effective communication skills are used.

There is effective use of technology to manage school operations.

Fiscal resources of the school are managed responsibly, efficiently, and effectively.

A safe, clean, and aesthetically pleasing school environment is created and maintained.

Human resource functions support the attainment of school goals.

Confidentiality and privacy of school records are maintained.

ISLLC Standard 4: "A school administrator is an educational leaders 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" (ISLLC, 1996, p. 16).

Performance Indicators:

High visibility, active involvement, and communication with the larger community is a priority.

Relationships with community leaders are identified and nurtured.

Information about family and community concerns, expectations, and needs is used regularly.

There is outreach to different businesses, religious, political, and service agencies and organizations.

Credence is given to individuals and groups whose values and opinions may conflict.

The school and community serve one another as resources.

Available community resources are secured to help the school solve problems and achieve goals.

Partnerships are established with area businesses, institutions of higher education, and

community groups to strengthen programs and support school goals.

Community youth family services are integrated with school programs.

Community stakeholders are treated equitably.

Diversity is recognized and valued.

Effective media relations are developed and maintained.

A comprehensive program of community relations is established.

Public resources and funds are used appropriately and wisely.

Community collaboration is modeled for staff.

Opportunities for staff to develop collaborative skills are provided.

ISLLC Standard 5: “A school administrator is an educational leaders who promotes the success of all students by acting with integrity, fairness, and in an ethical manner” (ISLLC, 1996, p. 18).

Performance Indicators:

Examines personal and professional values.

Demonstrates a personal and professional code of ethics.

Demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.

Serves as a role model.

Accepts responsibility for school operations.

Considers the impact of one’s administrative practices on others.

Uses the influence of the office to enhance the educational program rather than for personal gain.

Treats people fairly, equitably, and with dignity and respect.

Protects the rights and confidentiality of students and staff.

Demonstrates appreciation for and sensitivity to the diversity in the school community.

Recognizes and respect the legitimate authority of others.

Examines and considers the prevailing values of the diverse school community.

Expects that others in the school community will demonstrate integrity and exercise ethical behavior.

Opens the school to public scrutiny.

Fulfills legal and contractual obligations.

Applies laws and procedures fairly, wisely, and considerately.

ISLLC 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” (ISLLC, 1996, p. 20).

Performance Indicators:

The environment in which schools operate is influenced on behalf of students and their families.

Communication occurs among the school community concerning trends, issues, and potential changes in the environment in which schools operate.

There is ongoing dialogue with representatives of diverse community groups.

The school community works within the framework of policies, laws, and regulations enacted by local, state, and federal authorities.

Public policy is shaped to provide quality education for students.

Lines of communication are developed with decision makers outside the school community.

Appendix E

School Leader Practice Survey
(Form H SLPS)

Directions: The following 32 statements describe practices related to school leadership. The School Leader Practice Survey (SLPS) enables you, as a superintendent, to be reflective about the importance of various aspects of practice. Within your role as a practicing Missouri public school superintendent, please rate each item indicating your perceived level of importance.

Please use the following nine-point scale to select a rating that best describes your perception of HOW IMPORTANT EACH PERFORMANCE INDICATOR IS TO SUPERINTENDENCY PRACTICE.

1---------2---------3---------4---------5----------6----------7----------8----------9
(Not Important) (Moderately Important) (Very Important)

1. All individuals are treated with fairness, dignity, and respect.
2. Effective communication skills are used.
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.
4. Confidentiality and privacy of school records are maintained.
5. Public resources and funds are used appropriately and wisely.
6. The superintendent examines personal and professional values.
7. The superintendent demonstrates a personal and professional code of ethics.
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.
9. The superintendent accepts responsibility for school operations.
10. The superintendent considers the impact of one's administrative practices on others.
11. The superintendent uses the influence of the office to enhance the educational program rather than for personal gain.
12. The superintendent treats people fairly, equitably, and with dignity and respect.

13. The superintendent protects the rights and confidentiality of students and staff.

14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.

15. The superintendent recognizes and respects the legitimate authority of others.

16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.

17. The superintendent fulfills legal and contractual obligations.

18. The superintendent applies laws and procedures fairly, wisely, and considerately.

19. Professional development promotes a focus on student learning consistent with the school vision and goals.

20. Barriers to student learning are identified, clarified, and addressed.

21. Diversity is considered in developing learning experiences.

22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.

23. Student learning is assessed using a variety of techniques.

24. Multiple sources of information regarding performance are used by staff and students.

25. A variety of supervisory and evaluations models is employed.

26. Knowledge of learning, teaching, and student development is used to inform management decisions.

27. Progress toward the vision and mission is communicated to all stakeholders.

28. The vision shapes the educational programs, plans, and activities.

29. The vision shapes the educational programs, plans, and actions.

30. There is outreach to different businesses, religious, political, and service agencies and organizations.

31. A comprehensive program of community relations is established.

32. Community collaboration is modeled for staff.

SLPS items are based on ISLLC Standards Performance Indicators used with permission from the ISLLC (N. Sanders, personal communication, June 19, 2006). SLPS 1-9 scale is adapted from Audit of Principal Effectiveness developed by Jerry W. Valentine and Michael L. Bowman (1986).

Demographics

Gender Male
Female

Total Years of Superintendent Experience _____

Year Certification Issued in Missouri _____

Highest Degree Held
Masters
Educational Specialist
Doctorate

Assessment Method
School Superintendent's Assessment (SSA)
Other
If other, identify _____
None

Type of Certificate Initial
Career
Provisional
None

Missouri Department of Elementary and Secondary Education
Certifying institution for educational leadership program _____

District Description
1. K-8
K-12
2. Rural
Urban
Suburban
Other

Total District Enrollment _____

Appendix F

Descriptive Statistics and Item-Total Analysis of SLPS

Table F 1

Full SLPS Descriptive Statistics and Item-Total Analysis (n=97)

Items	*M*	*SD*	Total Correlation	*N*
Standard 1: Vision of Learning				
1. The vision and mission of the school are effectively communicated to staff, parents, students, and community members.	7.85	1.361	0.258*	73
2. The vision and mission are communicated through the use of symbols, ceremonies, and similar activities.	6.78	1.563	0.354**	68
3. The core beliefs of the school vision are modeled for all stakeholders.	7.88	1.210	0.472**	72
4. The vision is developed with and among stakeholders.	7.71	1.429	0.308**	73
5. The contributions of school community members to the realization of the vision are recognized and celebrated.	7.67	1.237	0.500***	73
6. Progress toward the vision and mission is communicated to all stakeholders.	7.85	1.186	0.352**	73
7. The school community is involved in school improvement efforts.	7.99	1.173	0.379**	73
8. The vision shapes the educational programs, plans, and activities.	7.97	1.138	0.504***	72
9. The vision shapes the educational programs, plans, and actions.	7.97	1.184	0.422**	73
10. An implementation plan is developed in which objectives and strategies to achieve the vision and goals are clearly articulated.	7.73	1.158	0.394**	71
11. Assessment data related to student learning are used to develop the school vision and goals.	8.26	1.175	0.606***	72

Item	*M*	*SD*	Total Correlation	*N*
12. Relevant demographic data pertaining to students and their families are used in developing the school mission and goals.	7.29	1.428	0.540***	72
13. Barriers to achieving the vision are identified, clarified, and addressed.	7.40	1.206	0.660***	72
14. Needed resources are sought and obtained to support the implementation of the school mission and goals.	7.85	1.238	0.740	71
15. Existing resources are used in support of the school vision and goals.	8.06	1.047	0.691***	72
16. The vision, mission, and implementation plans are regularly monitored, evaluated, and revised.	7.94	1.112	0.678***	72
Standard 2: Culture for Learning	8.47	1.289	0.743	72
17. All individuals are treated with fairness, dignity, and respect.				
18. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.22	1.064	0.735	72
19. Students and staff feel valued and important.	8.40	1.070	0.713	72
20. The responsibilities and contributions of each individual are acknowledged.	7.94	1.149	0.747	72
21. Barriers to student learning are identified, clarified, and addressed.	7.97	1.210	0.735	72
22. Diversity is considered in developing learning experiences.	7.20	1.440	0.497**	71
23. Lifelong learning is encouraged and modeled.	7.87	1.241	0.604***	71
24. There is a culture of high expectations for self, student, and staff performance.	8.45	0.997	0.769	71
25. Technologies are used in teaching and learning.	7.49	1.473	0.590***	72

Item	*M*	*SD*	Total Correlation	*N*
26. Student and staff accomplishments are recognized and celebrated.	7.92	1.230	0.717	72
27. Multiple opportunities to learn are available to all students.	8.01	1.144	0.712	72
28. The school is organized and aligned for success.	8.14	1.025	0.805	72
29. Curricular, co-curricular, and extra-curricular programs are designed, implemented, evaluated, and refined.	7.57	1.351	0.678***	72
30. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.71	1.305	0.597***	72
31. The school culture and climate are assessed on a regular basis.	7.64	1.142	0.639***	72
32. A variety of sources of information is used to make decisions.	7.83	1.187	0.805	72
33. Student learning is assessed using a variety of techniques.	8.10	1.153	0.792	72
34. Multiple sources of information regarding performance are used by staff and students.	7.89	1.090	0.761	71
35. A variety of supervisory and evaluations models is employed.	7.04	1.496	0.535***	72
36. Pupil personnel programs are developed to meet the needs of students and their families.	7.39	1.042	0.546***	72
Standard 3: Management of Learning				
37. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.92	1.084	0.769	72
38. Operational procedures are designed and managed to maximize opportunities for successful learning.	7.78	1.153	0.707	72
39. Emerging trends are recognized, studied, and applied as appropriate.	7.07	1.202	0.696 ***	72

Item	*M*	*SD*	Total Correlation	*N*
40. Operational plans and procedures to achieve the vision and goals of the school are in place.	7.59	1.116	0.709	71
41. Collective bargaining and other contractual agreements related to the school are effectively managed.	6.08	2.448	0.160*	71
42. The school plan, equipment, and support systems operate safely, efficiently, and effectively.	7.82	1.313	0.562***	71
43. Time is managed to maximize attainment of organizational goals.	7.82	1.117	0.642***	72
44. Potential problems and opportunities are identified.	7.79	1.210	0.764	72
45. Problems are confronted and resolved in a timely manner.	8.04	1.238	0.681***	72
46. Financial, human, and material resources are aligned to the goals of the schools.	8.03	1.175	0.815	72
47. The school acts entrepreneurially to support continuous improvement.	7.22	1.406	0.563***	72
48. Organizational systems are regularly monitored and modified as needed.	7.46	1.150	0.703	72
49. Stakeholders are involved in decisions affecting schools.	7.58	1.306	0.691***	71
50. Responsibility is shared to maximize ownership and accountability.	7.58	1.179	0.711	71
51. Effective problem-framing and problem-solving skills are used.	7.62	1.189	0.816	69
52. Effective conflict resolution skills are used.	7.48	1.335	0.676***	69
53. Effective group-process and consensus-building skills are used.	7.32	1.216	0.719	71
54. Effective communication skills are used.	8.40	1.096	0.771	72
55. There is effective use of technology to manage school operations.	7.53	1.289	0.482**	72

Item	*M*	*SD*	Total Correlation	*N*
56. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.39	1.205	0.716	72
57. A safe, clean, aesthetically pleasing school environment is created and maintained.	7.96	1.238	0.654***	72
58. Human resource functions support the attainment of school goals.	7.89	1.056	0.754	72
59. Confidentiality and privacy of school records are maintained.	8.15	1.307	0.651***	72
Standard 4: Relationships with Community for Learning				
60. High visibility, active involvement, and communication with the larger community is a priority.	7.94	1.206	0.657***	71
61. Relationships with community leaders are identified and nurtured.	7.71	1.264	0.678***	70
62. Information about family and community concerns, expectations, and needs is used regularly.	7.38	1.067	0.610***	72
63. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.29	1.054	0.567***	72
64. Credence is give to individuals and groups whose values and opinions may conflict.	7.10	1.218	0.753	70
65. The school and community serve one another as resources.	7.79	1.174	0.689***	72
66. Available community resources are secured to help the school solve problems and achieve goals.	7.39	1.108	0.712	72
67. Partnerships are established with area businesses, institutions of higher education, and community groups to strengthen programs and support school goals.	7.19	1.349	0.623***	72
68. Community youth family services are integrated with school programs.	6.92	1.392	0.641***	72

Item	*M*	*SD*	Total Correlation	*N*
69. Community stakeholders are treated equitably.	7.92	1.148	0.743	72
70. Diversity is recognized and valued.	7.32	1.500	0.520***	72
71. Effective media relations are developed and maintained.	7.83	1.374	0.684***	72
72. A comprehensive program of community relations is established.	7.42	1.295	0.735	71
73. Public resources and funds are used appropriately and wisely.	8.28	1.349	0.718	69
74. Community collaboration is modeled for staff.	7.28	1.322	0.764	71
75. Opportunities for staff to develop collaborative skills are provided.	7.48	1.472	0.657***	71
Standard 5: Integrity, Fairness, and Ethics in Learning				
76. The superintendent examines personal and professional values.	8.17	1.242	0.831	71
77. The superintendent examines personal and professional values. (repetition error)	7.20	2.777	0.358**	50
78. The superintendent demonstrates a personal and professional code of ethics.	8.59	1.077	0.786	71
79. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.58	1.104	0.816	71
80. The superintendent accepts responsibility for school operations.	8.68	1.053	0.806	71
81. The superintendent considers the impact of one's administrative practices on others.	8.45	1.119	0.806	71
82. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.59	1.103	0.718	71
83. The superintendent treats people fairly, equitably, and with dignity and respect.	8.70	1.034	0.785	71

Item	*M*	*SD*	Total Correlation	*N*
84. The superintendent protects the rights and confidentiality of students and staff.	8.68	1.025	0.808	71
85. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.14	1.397	0.777	71
86. The superintendent recognizes and respects the legitimate authority of others.	8.39	1.243	0.822	70
87. The superintendent examines and considers the prevailing values of the diverse school community.	8.28	1.256	0.810	71
88. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.43	1.111	0.728	70
89. The superintendent opens the school to public scrutiny.	7.70	1.870	0.438**	71
90. The superintendent fulfills legal and contractual obligations.	8.70	1.047	0.799	71
91. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.66	1.055	0.813	71
Standard 6: Political, Social, Economic, Legal and Cultural Contexts of Learning				
92. The environment in which schools operate is influenced on behalf of students and their families.	8.06	1.275	0.840	71
93. Communication occurs among the school community concerning trends, issues, and potential changes in the environment in which schools operate.	7.62	1.176	0.799	71
94. There is ongoing dialogue with representatives of diverse community groups.	7.21	1.413	0.696***	71
95. The school community works within a framework of policies, laws, and regulations enacted by local, state, and federal authorities.	8.24	1.247	0.705	71
96. Public policy is shaped to provide quality education for students.	8.03	1.230	0.768	71

Item	*M*	*SD*	Total Correlation	*N*
97. Lines of communication are developed with decision makers outside the school community.	7.79	1.206	0.771	71

Note: *=Form A deletion, **=Form B deletion, ***=Form C deletion, and Items retained $\geq$ 7

Appendix G

SLPS Forms C Items Retained by ISLLC Standard

Table G 1

SLPS Form C Items Retained by ISLLC Standard Using Item-Total Analysis

ISLLC Standard: A school administrator is an educational leader who promotes the success of all students by…	Items Retained for Form C (n=51)
Standard 1: Items 1-16 …facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.	14 (n=1)
Standard 2: Items 17-36 …advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.	17, 18, 19, 20, 21, 24, 26, 27, 28, 32, 33, 34 (n=12)
Standard 3: Items 37-59 …ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.	37, 38,40, 44, 46, 48, 50, 51, 53, 54, 56, 58 (n=12)
Standard 4: Items 60-75 …collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.	63, 64, 66, 69, 72, 73, 74 (n=7)
Standard 5: Items 76-91 …acting with integrity, fairness, and in an ethical manner.	76, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91 (n=14)
Standard 6: Items 92-97 …understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.	92, 93, 95, 96 , 97 (n=5)

Appendix H

SLPS Form H Descriptive Statistics by Gender

Table H 1

SLPS Form H Descriptive Statistics by Gender

Item	Male		Female		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	8.31	1.503	9.00	0.000	8.48	1.336
2. Effective communication skills are used.	8.20	1.258	8.94	0.250	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.29	1.369	8.75	0.577	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	7.92	1.455	8.81	0.544	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.10	1.531	8.75	0.577	8.26	1.384
6. The superintendent examines personal and professional values.	8.02	1.377	8.69	0.704	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.51	1.227	8.88	0.500	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.45	1.276	8.94	0.250	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.57	1.225	9.00	0.000	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.22	1.279	8.94	0.250	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.43	1.291	9.00	0.000	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.63	1.202	9.00	0.000	8.72	1.053
13. The superintendent protects the rights and confidentiality of students and staff.	8.55	1.209	9.00	0.000	8.66	1.065

Item						
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	7.90	1.558	8.88	0.342	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.14	1.414	9.00	0.000	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.31	1.278	8.75	0.447	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	8.59	1.240	9.00	0.000	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.53	1.243	9.00	0.000	8.65	1.096
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	7.94	1.162	8.88	0.342	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	7.63	1.286	8.88	0.342	7.94	1.248
21. Diversity is considered in developing learning experiences.	6.96	1.499	7.75	1.065	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.57	1.384	7.94	1.124	7.66	1.326
23. Student learning is assessed using a variety of techniques.	7.88	1.269	8.69	0.602	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	7.71	1.208	8.31	0.602	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	6.86	1.568	7.25	1.438	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.73	1.169	8.31	0.873	7.88	1.125
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	7.67	1.265	8.19	0.981	7.80	1.214

Item						
28. The vision shapes the educational programs, plans, and activities.	7.86	1.173	8.19	0.981	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	7.76	1.267	8.25	0.931	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.10	1.123	7.56	0.814	7.22	1.068
31. A comprehensive program of community relations is established.	7.20	1.384	7.75	1.000	7.34	1.314
32. Community collaboration is modeled for staff.	7.08	1.426	7.81	0.911	7.26	1.350

Appendix I

SLPS Form H Descriptive Statistics by Years of Experience

Table I 1

SLPS Form H Descriptive Statistics Years of Superintendent Experience

Item	1 - 5		6 - 14		15 & Above		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning								
1. All individuals are treated with fairness, dignity, and respect.	8.73	0.868	8.13	1.895	8.55	0.688	8.48	1.336
2. Effective communication skills are used.	8.40	0.932	8.21	1.532	8.73	0.467	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.50	0.820	8.21	1.769	8.55	0.688	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	8.00	1.114	8.29	1.732	8.18	0.982	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.63	0.669	7.88	1.963	8.09	1.136	8.26	1.384
6. The superintendent examines personal and professional values.	8.53	0.776	7.83	1.736	8.00	1.000	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.80	0.484	8.33	1.659	8.64	0.674	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.77	0.626	8.29	1.654	8.64	0.674	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.83	0.461	8.42	1.666	8.82	0.405	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.63	0.669	8.21	1.641	8.18	0.874	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.70	0.651	8.38	1.689	8.64	0.674	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.87	0.434	8.50	1.642	8.82	0.405	8.72	1.053
13. The superintendent protects the rights and confidentiality of students and staff.	8.83	0.461	8.42	1.640	8.73	0.467	8.66	1.065

Item								
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.27	1.112	7.88	1.918	8.36	0.809	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.50	0.938	8.21	1.769	8.27	0.786	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.57	0.679	8.25	1.675	8.36	0.674	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	8.83	0.461	8.46	1.693	8.82	0.405	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.83	0.461	8.42	1.692	8.64	0.505	8.65	1.096
Component 2: Management of Learning								
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.13	1.106	8.04	1.268	8.55	0.522	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	8.03	1.217	7.79	1.474	8.00	0.775	7.94	1.248
21. Diversity is considered in developing learning experiences.	7.23	1.612	6.96	1.429	7.36	0.924	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.67	1.322	7.50	1.532	8.00	0.775	7.66	1.326
23. Student learning is assessed using a variety of techniques.	8.07	1.081	8.04	1.398	8.18	1.079	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	7.93	0.944	7.71	1.334	8.00	1.095	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	6.77	1.695	6.88	1.541	7.64	0.809	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.93	1.048	7.75	1.359	8.00	0.775	7.88	1.125
Component 3: Culture to Support Learning								
27. Progress toward the vision and mission is communicated to all stakeholders.	7.80	1.215	7.50	1.351	8.45	0.522	7.80	1.214

Item								
28. The vision shapes the educational programs, plans, and activities.	7.97	1.159	7.75	1.260	8.27	0.647	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	7.97	1.159	7.58	1.412	8.27	0.647	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.27	1.081	7.13	1.076	7.27	1.104	7.22	1.068
31. A comprehensive program of community relations is established.	7.53	1.167	7.04	1.574	7.45	1.036	7.34	1.314
32. Community collaboration is modeled for staff.	7.70	1.055	6.75	1.567	7.18	1.250	7.26	1.350

Appendix J

SLPS Form H Descriptive Statistics by Year Certified

Table J 1

SLPS Form H Descriptive Statistics by Year Certified

Item	Before 2001		2001 & After		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	8.34	1.578	8.52	1.201	8.42	1.423
2. Effective communication skills are used.	8.25	1.391	8.48	0.898	8.35	1.205
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.09	1.594	8.65	0.714	8.33	1.320
4. Confidentiality and privacy of school records are maintained.	7.84	1.668	8.35	0.885	8.05	1.407
5. Public resources and funds are used appropriately and wisely.	7.84	1.780	8.61	0.722	8.16	1.475
6. The superintendent examines personal and professional values.	7.94	1.625	8.52	0.665	8.18	1.335
7. The superintendent demonstrates a personal and professional code of ethics.	8.41	1.456	8.78	0.518	8.56	1.167
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.34	1.494	8.74	0.619	8.51	1.215
9. The superintendent accepts responsibility for school operations.	8.47	1.459	8.83	0.491	8.62	1.163
10. The superintendent considers the impact of one's administrative practices on others.	8.13	1.497	8.65	0.647	8.35	1.236
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.44	1.501	8.57	0.728	8.49	1.230
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.56	1.435	8.87	0.458	8.69	1.136
13. The superintendent protects the rights and confidentiality of students and staff.	8.50	1.437	8.78	0.518	8.62	1.147

Item						
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	7.97	1.694	8.22	1.242	8.07	1.514
15. The superintendent recognizes and respects the legitimate authority of others.	8.16	1.568	8.43	1.037	8.27	1.367
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.22	1.475	8.57	0.728	8.36	1.223
17. The superintendent fulfills legal and contractual obligations.	8.50	1.481	8.87	0.458	8.65	1.174
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.44	1.480	8.87	0.458	8.62	1.178
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.19	1.061	7.91	1.276	8.07	1.152
20. Barriers to student learning are identified, clarified, and addressed.	7.88	1.185	7.78	1.476	7.84	1.302
21. Diversity is considered in developing learning experiences.	7.25	1.244	6.78	1.783	7.05	1.496
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.78	1.184	7.35	1.613	7.60	1.382
23. Student learning is assessed using a variety of techniques.	7.97	1.257	8.04	1.261	8.00	1.247
24. Multiple sources of information regarding performance are used by staff and students.	7.81	1.256	7.78	1.085	7.80	1.177
25. A variety of supervisory and evaluations models is employed.	7.16	1.394	6.57	1.903	6.91	1.636
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.88	1.264	7.70	1.063	7.80	1.177
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	7.59	1.341	7.96	1.107	7.75	1.250

Item						
28 The vision shapes the educational programs, plans, and activities.	7.75	1.270	8.04	1.022	7.87	1.171
29. The vision shapes the educational programs, plans, and actions.	7.63	1.385	8.04	1.022	7.80	1.253
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.03	1.150	7.30	1.063	7.15	1.113
31. A comprehensive program of community relations is established.	7.25	1.414	7.52	1.275	7.36	1.352
32. Community collaboration is modeled for staff.	7.16	1.505	7.35	1.265	7.24	1.401

Appendix K

SLPS Form H Descriptive Statistics by Highest Degree

Table K 1

SLPS Form H Descriptive Statistics Highest Degree

Item	Masters		Specialist		Doctorate		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning								
1. All individuals are treated with fairness, dignity, and respect.	8.67	0.816	8.37	1.610	8.58	0.974	8.48	1.336
2. Effective communication skills are used.	7.83	1.329	8.49	1.292	8.38	0.824	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.33	1.033	8.40	1.499	8.42	0.830	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	8.33	1.033	8.31	1.471	7.83	1.204	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.67	0.516	8.23	1.646	8.21	1.103	8.26	1.384
6. The superintendent examines personal and professional values.	8.33	0.816	8.06	1.494	8.33	1.007	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.83	0.408	8.49	1.401	8.71	0.624	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.67	0.816	8.49	1.401	8.67	0.702	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.83	0.408	8.63	1.374	8.71	0.624	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.67	0.816	8.34	1.434	8.42	0.717	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.67	0.816	8.49	1.422	8.67	0.702	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.83	0.408	8.66	1.371	8.79	0.509	8.72	1.053
13. The superintendent protects the rights and confidentiality of students and staff.	8.83	0.408	8.57	1.378	8.75	0.532	8.66	1.065

Item								
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.00	0.894	8.09	1.616	8.25	1.260	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.33	1.033	8.29	1.545	8.46	0.884	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.33	0.816	8.37	1.416	8.50	0.722	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	8.83	0.408	8.66	1.392	8.71	0.624	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.83	0.408	8.60	1.397	8.67	0.637	8.65	1.096
Component 2: Management of Learning								
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.00	1.265	8.09	1.147	8.33	1.007	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	8.17	1.329	7.89	1.345	7.96	1.122	7.94	1.248
21. Diversity is considered in developing learning experiences.	7.67	1.366	6.83	1.445	7.50	1.383	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.50	1.378	7.49	1.560	7.96	0.859	7.66	1.326
23. Student learning is assessed using a variety of techniques.	7.83	1.169	8.09	1.337	8.13	0.992	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	7.83	0.983	7.77	1.239	8.00	0.978	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	6.67	1.033	7.00	1.534	6.96	1.681	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.83	1.329	7.71	1.178	8.13	0.992	7.88	1.125
Component 3: Culture to Support Learning								
27. Progress toward the vision and mission is communicated to all stakeholders.	7.17	1.472	7.86	1.089	7.88	1.329	7.80	1.214

Item								
28. The vision shapes the educational programs, plans, and activities.	7.83	1.472	7.94	0.998	7.96	1.268	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	7.83	1.472	7.86	1.115	7.92	1.316	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.00	1.265	7.20	1.183	7.29	0.859	7.22	1.068
31. A comprehensive program of community relations is established.	7.33	1.211	7.26	1.421	7.46	1.215	7.34	1.314
32. Community collaboration is modeled for staff.	7.17	1.472	7.03	1.505	7.63	1.013	7.26	1.350

Appendix L

SLPS Form H Descriptive Statistics by Assessment Method

Table L 1

SLPS Form H Descriptive Statistics Assessment Method

Item	SSA		None		Other		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning								
1. All individuals are treated with fairness, dignity, and respect.	8.46	1.421	8.89	0.333	8.00	1.732	8.50	1.333
2. Effective communication skills are used.	8.37	1.221	8.33	0.866	8.67	0.577	8.38	1.148
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.37	1.358	8.44	0.527	8.67	0.577	8.39	1.242
4. Confidentiality and privacy of school records are maintained.	8.17	1.368	7.89	1.453	8.67	0.577	8.16	1.348
5. Public resources and funds are used appropriately and wisely.	8.15	1.513	8.78	0.441	8.67	0.577	8.27	1.394
6. The superintendent examines personal and professional values.	8.17	1.382	8.33	0.707	8.33	0.577	8.20	1.275
7. The superintendent demonstrates a personal and professional code of ethics.	8.54	1.212	8.89	0.333	8.67	0.577	8.59	1.109
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.50	1.245	8.89	0.333	8.67	0.577	8.56	1.139
9. The superintendent accepts responsibility for school operations.	8.60	1.192	9.00	0.000	9.00	0.000	8.67	1.085
10. The superintendent considers the impact of one's administrative practices on others.	8.38	1.239	8.44	0.726	8.33	1.155	8.39	1.163
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.48	1.260	9.00	0.000	8.67	0.577	8.56	1.153
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.67	1.167	8.89	0.333	9.00	0.000	8.72	1.061
13. The superintendent protects the rights and confidentiality of students and staff.	8.62	1.174	8.89	0.333	8.67	0.577	8.66	1.072

Item								
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.08	1.557	8.44	0.726	8.33	0.577	8.14	1.435
15. The superintendent recognizes and respects the legitimate authority of others.	8.29	1.391	8.67	0.707	8.67	0.577	8.36	1.289
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.37	1.253	8.56	0.527	8.67	0.577	8.41	1.151
17. The superintendent fulfills legal and contractual obligations.	8.65	1.203	8.78	0.441	9.00	0.000	8.69	1.097
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.63	1.205	8.78	0.441	8.67	0.577	8.66	1.101
Component 2: Management of Learning								
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.08	1.186	8.44	0.527	8.67	0.577	8.16	1.101
20. Barriers to student learning are identified, clarified, and addressed.	7.90	1.317	8.33	0.707	7.67	1.528	7.95	1.253
21. Diversity is considered in developing learning experiences.	7.02	1.527	7.78	0.972	7.67	0.577	7.16	1.450
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.48	1.407	8.33	0.500	8.67	0.577	7.66	1.336
23. Student learning is assessed using a variety of techniques.	8.02	1.276	8.44	0.726	8.33	0.577	8.09	1.191
24. Multiple sources of information regarding performance are used by staff and students.	7.83	1.167	8.00	1.000	8.33	0.577	7.88	1.120
25. A variety of supervisory and evaluations models is employed.	6.90	1.660	7.22	0.972	7.00	1.000	6.95	1.547
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.79	1.194	8.44	0.726	8.00	0.000	7.89	1.129
Component 3: Culture to Support Learning								
27. Progress toward the vision and mission is communicated to all stakeholders.	7.81	1.269	7.89	0.928	7.00	1.000	7.78	1.215

Item								
28. The vision shapes the educational programs, plans, and activities.	7.98	1.146	8.00	1.000	7.33	1.528	7.95	1.133
29. The vision shapes the educational programs, plans, and actions.	7.92	1.218	8.00	1.000	7.00	1.732	7.89	1.210
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.19	1.085	7.56	0.882	6.67	1.528	7.22	1.076
31. A comprehensive program of community relations is established.	7.27	1.416	7.78	0.667	7.67	0.577	7.36	1.314
32. Community collaboration is modeled for staff.	7.19	1.442	7.56	1.014	7.67	0.577	7.27	1.360

Appendix M

SLPS Form H Descriptive Statistics by Type of Certificate

Table M 1

SLPS Form H Descriptive Statistics by Type of Certificate

Item	Career		Initial		Provisional		None		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning										
1. All individuals are treated with fairness, dignity, and respect.	8.30	1.582	8.73	0.594	9.00	0.000	9.00	0.000	8.47	1.345
2. Effective communication skills are used.	8.35	1.270	8.47	0.834	8.50	1.000	8.00	1.414	8.38	1.148
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.26	1.432	8.73	0.594	8.25	0.957	9.00	0.000	8.39	1.242
4. Confidentiality and privacy of school records are maintained.	8.02	1.535	8.27	0.884	8.25	0.957	9.00	0.000	8.13	1.351
5. Public resources and funds are used appropriately and wisely.	8.14	1.582	8.47	0.915	8.25	0.957	9.00	0.000	8.25	1.392
6. The superintendent examines personal and professional values.	8.05	1.479	8.33	0.724	8.75	0.500	8.50	0.707	8.17	1.279
7. The superintendent demonstrates a personal and professional code of ethics.	8.49	1.316	8.80	0.414	8.75	0.500	9.00	0.000	8.59	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.49	1.316	8.67	0.724	8.75	0.500	9.00	0.000	8.56	1.139
9. The superintendent accepts responsibility for school operations.	8.60	1.294	8.80	0.414	8.75	0.500	9.00	0.000	8.67	1.085
10. The superintendent considers the impact of one's administrative practices on others.	8.21	1.337	8.73	0.594	8.75	0.500	9.00	0.000	8.39	1.163
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.56	1.315	8.47	0.834	8.75	0.500	9.00	0.000	8.56	1.153
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.63	1.273	8.87	0.352	9.00	0.000	9.00	0.000	8.72	1.061
13. The superintendent protects the rights and confidentiality of students and staff.	8.58	1.277	8.73	0.458	9.00	0.000	9.00	0.000	8.66	1.072

Item										
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	7.98	1.611	8.40	0.986	8.75	0.500	8.00	1.414	8.13	1.431
15. The superintendent recognizes and respects the legitimate authority of others.	8.23	1.477	8.53	0.743	9.00	0.000	8.00	1.414	8.34	1.288
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.35	1.325	8.47	0.743	8.50	0.577	9.00	0.000	8.41	1.151
17. The superintendent fulfills legal and contractual obligations.	8.60	1.294	8.80	0.561	9.00	0.000	9.00	0.000	8.69	1.097
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.53	1.297	8.80	0.561	9.00	0.000	9.00	0.000	8.64	1.104
Component 2: Management of Learning										
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.09	1.192	8.13	0.915	9.00	0.000	8.00	1.414	8.16	1.101
20. Barriers to student learning are identified, clarified, and addressed.	7.81	1.296	8.07	1.280	8.50	0.577	8.00	1.414	7.92	1.251
21. Diversity is considered in developing learning experiences.	7.09	1.540	7.07	1.223	7.75	1.258	7.00	1.414	7.13	1.431
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.60	1.466	7.80	1.014	7.50	1.291	8.00	1.414	7.66	1.336
23. Student learning is assessed using a variety of techniques.	8.00	1.291	8.33	1.047	8.25	0.957	7.50	0.707	8.08	1.199
24. Multiple sources of information regarding performance are used by staff and students.	7.81	1.277	7.87	0.834	8.25	0.500	8.00	0.000	7.86	1.125
25. A variety of supervisory and evaluations models is employed.	6.93	1.580	6.93	1.710	6.50	0.577	8.00	0.000	6.94	1.542
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.91	1.211	7.73	1.033	8.00	0.816	8.00	1.414	7.88	1.134
Component 3: Culture to Support Learning										
27. Progress toward the vision and mission is communicated to all stakeholders.	7.67	1.304	8.07	1.100	7.75	0.957	8.00	0.000	7.78	1.215

Item										
28. The vision shapes the educational programs, plans, and activities.	7.86	1.246	7.87	0.915	8.25	0.500	9.00	0.000	7.92	1.131
29. The vision shapes the educational programs, plans, and actions.	7.77	1.342	7.87	0.915	8.25	0.500	9.00	0.000	7.86	1.207
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.05	1.068	7.53	1.060	7.75	0.957	7.00	1.414	7.20	1.072
31. A comprehensive program of community relations is established.	7.19	1.402	7.47	1.125	8.50	0.577	7.00	1.414	7.33	1.322
32. Community collaboration is modeled for staff.	7.16	1.379	7.33	1.291	8.25	0.957	6.50	2.121	7.25	1.357

Appendix N 1

SLPS Form H Descriptive Statistics by Program Preparation Institution

Table N 1

SLPS Form H Statistics by Institution

Item	MU		NWMSU		SLU		SEMO	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning								
1. All individuals are treated with fairness, dignity, and respect.	8.43	1.512	8.83	0.408	8.20	1.789	8.00	1.414
2. Effective communication skills are used.	9.00	0.000	8.67	0.516	8.20	0.837	8.50	0.577
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.71	0.756	8.67	0.516	8.60	0.894	8.00	0.816
4. Confidentiality and privacy of school records are maintained.	8.43	0.976	8.17	0.983	7.80	1.095	8.25	0.957
5. Public resources and funds are used appropriately and wisely.	8.71	0.488	8.00	1.673	7.60	1.673	8.00	1.414
6. The superintendent examines personal and professional values.	8.71	0.488	8.17	0.408	8.40	0.894	7.75	1.258
7. The superintendent demonstrates a personal and professional code of ethics.	9.00	0.000	8.83	0.408	8.40	0.894	8.00	0.816
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	9.00	0.000	8.67	0.516	8.40	0.894	7.75	0.957
9. The superintendent accepts responsibility for school operations.	9.00	0.000	8.83	0.408	8.20	1.095	8.25	0.500
10. The superintendent considers the impact of one's administrative practices on others.	8.86	0.378	8.33	0.816	8.40	0.894	7.75	0.500
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.86	0.378	8.33	0.816	8.00	1.000	7.50	0.577
12. The superintendent treats people fairly, equitably, and with dignity and respect.	9.00	0.000	9.00	0.000	8.60	0.894	8.25	0.500
13. The superintendent protects the rights and confidentiality of students and staff.	9.00	0.000	8.83	0.408	8.40	0.894	8.25	0.500

Item								
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.71	0.488	8.67	0.516	7.80	1.789	7.25	1.500
15. The superintendent recognizes and respects the legitimate authority of others.	8.86	0.378	8.67	0.516	8.00	1.414	7.50	1.000
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.43	0.787	8.83	0.408	8.20	0.837	8.25	0.500
17. The superintendent fulfills legal and contractual obligations.	9.00	0.000	9.00	0.000	8.60	0.894	8.00	0.816
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	9.00	0.000	9.00	0.000	8.60	0.894	8.00	0.816
Component 2: Management of Learning								
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.43	1.134	8.00	0.632	8.00	1.732	8.00	1.414
20. Barriers to student learning are identified, clarified, and addressed .	8.43	1.134	8.00	0.894	7.20	1.789	7.75	0.500
21. Diversity is considered in developing learning experiences.	7.00	1.826	6.67	1.033	7.80	1.789	7.00	0.816
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.14	1.676	7.33	0.816	8.20	0.837	7.25	0.957
23. Student learning is assessed using a variety of techniques.	8.29	1.113	8.50	0.548	8.00	1.225	8.00	0.816
24. Multiple sources of information regarding performance are used by staff and students.	8.14	1.069	8.00	0.632	8.00	1.225	7.75	0.500
25. A variety of supervisory and evaluations models is employed.	6.71	1.604	7.00	1.095	6.40	2.702	7.00	1.414
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	8.14	0.900	7.67	0.816	8.20	1.304	7.75	0.500
Component 3: Culture to Support Learning								
27. Progress toward the vision and mission is communicated to all stakeholders.	8.14	1.215	7.50	0.837	7.40	1.817	8.00	1.414

Item								
28. The vision shapes the educational programs, plans, and activities.	8.14	1.215	7.67	0.816	7.40	1.817	8.25	0.500
29. The vision shapes the educational programs, plans, and actions.	8.14	1.215	7.50	0.548	7.40	1.817	8.25	0.500
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.43	0.976	6.67	0.816	7.60	1.140	7.50	0.577
31. A comprehensive program of community relations is established.	8.00	0.816	6.83	1.169	7.20	1.483	7.25	1.500
32. Community collaboration is modeled for staff.	7.29	1.254	7.33	1.506	7.80	0.837	7.25	1.500

Appendix N 2

Continuation of Descriptive Statistics by Institution

Table N 2

SLPS Form H Descriptive Statistics by Institution

Item	UCM		MSU		SMSU	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	8.64	0.674	7.50	2.121	9.00	.(a)
2. Effective communication skills are used.	8.36	0.809	8.50	0.707	9.00	.(a)
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.45	0.934	8.50	0.707	9.00	.(a)
4. Confidentiality and privacy of school records are maintained.	8.36	0.924	7.50	0.707	9.00	.(a)
5. Public resources and funds are used appropriately and wisely.	8.55	0.820	9.00	0.000	9.00	.(a)
6. The superintendent examines personal and professional values.	8.00	1.000	8.50	0.707	9.00	.(a)
7. The superintendent demonstrates a personal and professional code of ethics.	8.55	0.688	9.00	0.000	9.00	.(a)
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.55	0.688	9.00	0.000	9.00	.(a)
9. The superintendent accepts responsibility for school operations.	8.91	0.302	9.00	0.000	9.00	.(a)
10. The superintendent considers the impact of one's administrative practices on others.	8.36	0.809	9.00	0.000	9.00	.(a)
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.91	0.302	9.00	0.000	9.00	.(a)
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.73	0.467	9.00	0.000	9.00	.(a)
13. The superintendent protects the rights and confidentiality of students and staff.	8.64	0.505	9.00	0.000	9.00	.(a)

Item						
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.36	0.809	7.00	2.828	9.00	.(a)
15. The superintendent recognizes and respects the legitimate authority of others.	8.45	0.820	7.00	2.828	9.00	.(a)
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.64	0.505	9.00	0.000	9.00	.(a)
17. The superintendent fulfills legal and contractual obligations.	8.82	0.405	9.00	0.000	9.00	.(a)
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.82	0.405	9.00	0.000	9.00	.(a)
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.09	0.831	7.00	1.414	9.00	.(a)
20. Barriers to student learning are identified, clarified, and addressed.	7.73	1.348	5.50	0.707	9.00	.(a)
21. Diversity is considered in developing learning experiences.	7.09	1.044	5.00	4.243	8.00	.(a)
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.82	0.982	6.00	4.243	8.00	.(a)
23. Student learning is assessed using a variety of techniques.	8.36	0.809	6.50	2.121	9.00	.(a)
24. Multiple sources of information regarding performance are used by staff and students.	7.82	0.874	6.50	2.121	9.00	.(a)
25. A variety of supervisory and evaluations models is employed.	7.45	0.934	5.00	4.243	9.00	.(a)
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.82	1.079	7.00	1.414	9.00	.(a)
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	7.82	1.328	7.50	2.121	9.00	.(a)

Item						
28. The vision shapes the educational programs, plans, and activities.	7.82	1.250	8.00	1.414	9.00	.(a)
29. The vision shapes the educational programs, plans, and actions.	7.82	1.250	7.50	2.121	9.00	.(a)
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.36	1.120	6.50	2.121	8.00	.(a)
31. A comprehensive program of community relations is established.	7.55	1.293	6.00	1.414	8.00	.(a)
32. Community collaboration is modeled for staff.	6.73	1.191	7.50	0.707	9.00	.(a)

a. Insufficient data

Appendix N 3

Continuation of Descriptive Statistics by Institution

Table N 3

SLPS Form H Descriptive Statistics by Institution

Item	TSU		UMKC		SWBU	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	9.00	.(a)	9.00	.(a)	9.00	.(a)
2. Effective communication skills are used.	9.00	.(a)	9.00	.(a)	8.00	.(a)
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	9.00	.(a)	9.00	.(a)	8.00	.(a)
4. Confidentiality and privacy of school records are maintained.	9.00	.(a)	9.00	.(a)	8.00	.(a)
5. Public resources and funds are used appropriately and wisely.	6.00	.(a)	9.00	.(a)	9.00	.(a)
6. The superintendent examines personal and professional values.	8.00	.(a)	9.00	.(a)	9.00	.(a)
7. The superintendent demonstrates a personal and professional code of ethics.	9.00	.(a)	9.00	.(a)	9.00	.(a)
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	9.00	.(a)	9.00	.(a)	9.00	.(a)
9. The superintendent accepts responsibility for school operations.	8.00	.(a)	9.00	.(a)	9.00	.(a)
10. The superintendent considers the impact of one's administrative practices on others.	9.00	.(a)	9.00	.(a)	9.00	.(a)
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	9.00	.(a)	9.00	.(a)	9.00	.(a)
12. The superintendent treats people fairly, equitably, and with dignity and respect.	9.00	.(a)	9.00	.(a)	9.00	.(a)
13. The superintendent protects the rights and confidentiality of students and staff.	9.00	.(a)	9.00	.(a)	9.00	.(a)

Item						
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	7.00	.(a)	9.00	.(a)	9.00	.(a)
15. The superintendent recognizes and respects the legitimate authority of others.	8.00	.(a)	9.00	.(a)	9.00	.(a)
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.00	.(a)	8.00	.(a)	9.00	.(a)
17. The superintendent fulfills legal and contractual obligations.	9.00	.(a)	9.00	.(a)	9.00	.(a)
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	9.00	.(a)	9.00	.(a)	9.00	.(a)
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.00	.(a)	9.00	.(a)	8.00	.(a)
20. Barriers to student learning are identified, clarified, and addressed.	8.00	.(a)	9.00	.(a)	8.00	.(a)
21. Diversity is considered in developing learning experiences.	6.00	.(a)	9.00	.(a)	8.00	.(a)
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	8.00	.(a)	9.00	.(a)	8.00	.(a)
23. Student learning is assessed using a variety of techniques.	6.00	.(a)	9.00	.(a)	8.00	.(a)
24. Multiple sources of information regarding performance are used by staff and students.	7.00	.(a)	9.00	.(a)	8.00	.(a)
25. A variety of supervisory and evaluations models is employed.	7.00	.(a)	9.00	.(a)	8.00	.(a)
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.00	.(a)	9.00	.(a)	8.00	.(a)
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	8.00	.(a)	7.00	.(a)	9.00	.(a)

Item						
28. The vision shapes the educational programs, plans, and activities.	8.00	.(a)	9.00	.(a)	9.00	.(a)
29. The vision shapes the educational programs, plans, and actions.	8.00	.(a)	9.00	.(a)	9.00	.(a)
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	8.00	.(a)	8.00	.(a)	8.00	.(a)
31. A comprehensive program of community relations is established.	6.00	.(a)	8.00	.(a)	8.00	.(a)
32. Community collaboration is modeled for staff.	5.00	.(a)	8.00	.(a)	8.00	.(a)

a. Insufficient data

Appendix N 4

Continuation of Descriptive Statistics by Institution

Table N 4

SLPS Form H Descriptive Statistics Institution

Item	Out of State		N/A		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	9.00	0.000	8.33	1.155	8.53	1.060
2. Effective communication skills are used.	8.40	0.894	7.33	1.528	8.47	0.776
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.60	0.548	8.00	1.000	8.51	0.748
4. Confidentiality and privacy of school records are maintained.	8.80	0.447	7.67	1.155	8.28	0.902
5. Public resources and funds are used appropriately and wisely.	8.60	0.548	8.00	0.000	8.32	1.086
6. The superintendent examines personal and professional values.	9.00	0.000	7.67	0.577	8.32	0.810
7. The superintendent demonstrates a personal and professional code of ethics.	9.00	0.000	8.33	0.577	8.68	0.594
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	9.00	0.000	8.00	1.000	8.62	0.677
9. The superintendent accepts responsibility for school operations.	9.00	0.000	8.67	0.577	8.77	0.520
10. The superintendent considers the impact of one's administrative practices on others.	8.40	0.548	7.33	0.577	8.40	0.742
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	9.00	0.000	8.00	1.000	8.57	0.715
12. The superintendent treats people fairly, equitably, and with dignity and respect.	9.00	0.000	8.67	0.577	8.81	0.449

Item						
13. The superintendent protects the rights and confidentiality of students and staff.	9.00	0.000	8.33	0.577	8.72	0.498
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.20	1.789	7.67	0.577	8.19	1.191
15. The superintendent recognizes and respects the legitimate authority of others.	9.00	0.000	8.00	1.000	8.40	0.970
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	9.00	0.000	8.00	1.000	8.55	0.619
17. The superintendent fulfills legal and contractual obligations.	9.00	0.000	8.67	0.577	8.81	0.495
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	9.00	0.000	8.33	0.577	8.79	0.508
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.20	0.837	7.67	1.528	8.09	1.039
20. Barriers to student learning are identified, clarified, and addressed.	8.40	0.548	7.33	1.155	7.83	1.222
21. Diversity is considered in developing learning experiences.	7.20	1.643	6.67	1.155	7.04	1.488
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.80	1.304	7.67	1.528	7.60	1.296
23. Student learning is assessed using a variety of techniques.	8.40	0.894	7.33	1.528	8.13	1.055
24. Multiple sources of information regarding performance are used by staff and students.	7.80	0.837	7.33	1.528	7.85	0.978
25. A variety of supervisory and evaluations models is employed.	6.80	1.304	6.67	0.577	6.98	1.567
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	8.20	0.447	7.33	1.155	7.89	0.938

Item						
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	8.40	0.548	7.33	2.082	7.85	1.251
28. The vision shapes the educational programs, plans, and activities.	8.40	0.894	7.67	1.528	7.98	1.132
29. The vision shapes the educational programs, plans, and actions.	8.60	0.548	7.67	1.528	7.96	1.141
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.40	1.140	6.00	1.000	7.26	1.052
31. A comprehensive program of community relations is established.	7.40	1.517	7.00	1.000	7.34	1.221
32. Community collaboration is modeled for staff.	7.80	1.304	7.00	1.000	7.28	1.228

Appendix O

SLPS Form H Descriptive Statistics by District Description 1

Table O 1

SLPS Form H Descriptive Statistics District Description K-12 and K-8

Item	K-12		K-8		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	8.42	1.392	9.00	0.000	8.48	1.336
2. Effective communication skills are used.	8.41	1.161	8.17	0.983	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.36	1.283	8.83	0.408	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	8.07	1.388	8.83	0.408	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.20	1.436	8.83	0.408	8.26	1.384
6. The superintendent examines personal and professional values.	8.14	1.319	8.67	0.516	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.58	1.148	8.83	0.408	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.54	1.179	8.83	0.408	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.64	1.126	9.00	0.000	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.37	1.188	8.67	0.816	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.54	1.194	8.83	0.408	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.69	1.103	9.00	0.000	8.72	1.053

Item						
13. The superintendent protects the rights and confidentiality of students and staff.	8.64	1.110	8.83	0.408	8.66	1.065
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.12	1.475	8.33	0.816	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.34	1.321	8.50	0.837	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.39	1.189	8.67	0.516	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	8.66	1.139	9.00	0.000	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.63	1.143	8.83	0.408	8.65	1.096
Component 2: Management of Learning						
19 Professional development promotes a focus on student learning consistent with the school vision and goals.	8.15	1.127	8.33	0.816	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	7.90	1.282	8.33	0.816	7.94	1.248
21. Diversity is considered in developing learning experiences.	7.05	1.431	8.17	1.169	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.59	1.353	8.33	0.816	7.66	1.326
23. Student learning is assessed using a variety of techniques.	8.03	1.217	8.50	0.837	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	7.80	1.141	8.50	0.548	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	6.92	1.568	7.33	1.211	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.83	1.147	8.33	0.816	7.88	1.125

Item						
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	7.81	1.238	7.67	1.033	7.80	1.214
28. The vision shapes the educational programs, plans, and activities.	7.90	1.125	8.33	1.211	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	7.83	1.206	8.33	1.211	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.24	1.023	7.00	1.549	7.22	1.068
31. A comprehensive program of community relations is established.	7.29	1.327	7.83	1.169	7.34	1.314
32. Community collaboration is modeled for staff.	7.22	1.340	7.67	1.506	7.26	1.350

Appendix P

SLPS Form H Descriptive Statistics by District Description 2

Table P 1
SLPS Form H Descriptive Statistics Rural, Suburban, Urban

Item	Rural		Suburban		Urban		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning								
1. All individuals are treated with fairness, dignity, and respect.	8.38	1.483	8.73	0.647	9.00	0.000	8.48	1.336
2. Effective communication skills are used.	8.40	1.229	8.18	0.874	8.75	0.500	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.40	1.340	8.27	0.905	8.75	0.500	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	8.22	1.375	7.82	1.328	8.00	1.155	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.26	1.468	8.36	0.674	8.00	2.000	8.26	1.384
6. The superintendent examines personal and professional values.	8.10	1.374	8.45	0.934	8.50	0.577	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.54	1.232	8.82	0.405	8.75	0.500	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.52	1.249	8.73	0.647	8.75	0.500	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.64	1.191	8.91	0.302	8.50	1.000	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.44	1.264	8.18	0.751	8.50	0.577	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.48	1.282	8.91	0.302	8.75	0.500	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.68	1.186	8.82	0.405	9.00	0.000	8.72	1.053
13. The superintendent protects the rights and confidentiality of students and staff.	8.62	1.193	8.82	0.405	8.75	0.500	8.66	1.065

Item								
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.14	1.443	8.27	1.272	7.75	1.893	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.32	1.377	8.64	0.674	8.00	1.414	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.36	1.258	8.64	0.674	8.50	0.577	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	8.66	1.222	8.82	0.405	8.75	0.500	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.60	1.229	8.82	0.405	8.75	0.500	8.65	1.096
Component 2: Management of Learning								
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.10	1.182	8.27	0.786	8.75	0.500	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	7.92	1.322	8.00	0.894	8.00	1.414	7.94	1.248
21. Diversity is considered in developing learning experiences.	7.00	1.471	7.45	1.293	8.25	0.957	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.60	1.429	7.82	0.982	8.00	0.816	7.66	1.326
23. Student learning is assessed using a variety of techniques.	7.98	1.270	8.36	0.924	8.50	0.577	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	7.78	1.200	8.09	0.831	8.25	0.500	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	6.86	1.629	7.27	1.009	7.25	1.708	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	7.80	1.161	8.18	0.874	8.00	1.414	7.88	1.125
Component 3: Culture to Support Learning								
27. Progress toward the vision and mission is communicated to all stakeholders.	7.76	1.238	8.27	0.905	7.00	1.414	7.80	1.214

Item								
28. The vision shapes the educational programs, plans, and activities.	7.88	1.118	8.36	0.809	7.50	1.915	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	7.80	1.212	8.36	0.809	7.50	1.915	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.22	1.166	7.09	0.701	7.50	0.577	7.22	1.068
31. A comprehensive program of community relations is established.	7.30	1.329	7.55	1.214	7.25	1.708	7.34	1.314
32. Community collaboration is modeled for staff.	7.16	1.390	7.45	1.214	8.00	1.155	7.26	1.350

Appendix Q

SLPS Form H Descriptive Statistics by District Size

Table Q 1

SLPS Form H Descriptive Statistics District Size

Item	Above 5,000		1,000-4,999		500-999	
	M	*SD*	*M*	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning						
1. All individuals are treated with fairness, dignity, and respect.	9.00	0.000	8.33	1.085	7.81	2.287
2. Effective communication skills are used.	8.29	0.756	8.56	0.705	8.13	1.893
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.57	0.535	8.28	0.895	7.94	1.982
4. Confidentiality and privacy of school records are maintained.	7.86	1.574	7.83	0.924	8.00	2.098
5. Public resources and funds are used appropriately and wisely.	8.14	1.464	8.39	0.850	7.69	2.056
6. The superintendent examines personal and professional values.	8.57	0.535	8.22	1.003	7.75	1.983
7. The superintendent demonstrates a personal and professional code of ethics.	8.86	0.378	8.67	0.594	8.19	2.007
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.86	0.378	8.61	0.778	8.06	2.016
9. The superintendent accepts responsibility for school operations.	8.71	0.756	8.83	0.383	8.06	1.982
10. The superintendent considers the impact of one's administrative practices on others.	8.43	0.535	8.39	0.778	7.94	2.016
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.71	0.488	8.72	0.669	7.94	2.048
12. The superintendent treats people fairly, equitably, and with dignity and respect.	9.00	0.000	8.72	0.461	8.25	2.017
13. The superintendent protects the rights and confidentiality of students and staff.	8.86	0.378	8.72	0.461	8.25	2.017

Item						
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.29	1.496	7.94	1.211	7.94	2.112
15. The superintendent recognizes and respects the legitimate authority of others.	8.43	1.134	8.33	0.840	8.06	2.048
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.57	0.787	8.56	0.616	7.69	1.957
17. The superintendent fulfills legal and contractual obligations.	9.00	0.000	8.61	0.608	8.19	2.040
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	9.00	0.000	8.56	0.616	8.19	2.040
Component 2: Management of Learning						
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.71	0.488	8.22	0.878	7.69	1.621
20. Barriers to student learning are identified, clarified, and addressed.	8.14	1.069	7.94	0.998	7.69	1.621
21. Diversity is considered in developing learning experiences.	7.86	1.069	7.33	0.970	6.94	1.806
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	8.00	0.816	7.61	0.979	7.44	1.788
23. Student learning is assessed using a variety of techniques.	8.57	0.787	8.00	0.686	7.56	1.825
24. Multiple sources of information regarding performance are used by staff and students.	8.29	0.756	7.83	0.514	7.25	1.693
25. A variety of supervisory and evaluations models is employed.	7.14	1.345	7.00	1.085	6.44	2.032
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	8.29	1.113	7.83	0.707	7.38	1.628
Component 3: Culture to Support Learning						
27. Progress toward the vision and mission is communicated to all stakeholders.	8.00	1.528	7.83	1.295	7.56	1.413

Item						
28. The vision shapes the educational programs, plans, and activities.	7.71	1.496	7.83	1.150	7.88	1.310
29. The vision shapes the educational programs, plans, and actions.	7.71	1.496	7.78	1.215	7.63	1.500
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.57	0.535	7.22	0.808	7.31	1.250
31. A comprehensive program of community relations is established.	7.43	1.272	7.33	1.138	7.56	1.590
32. Community collaboration is modeled for staff.	8.00	1.000	7.28	1.018	6.88	1.821

Appendix Q 2

SLPS Form H Descriptive Statistics by District Size

Table Q 2

SLPS Form H Descriptive Statistics District Size

Item	Below 500		Total	
	M	*SD*	*M*	*SD*
Component 1: Ethical Leadership for Learning				
1. All individuals are treated with fairness, dignity, and respect.	8.88	0.338	8.48	1.336
2. Effective communication skills are used.	8.46	0.833	8.38	1.141
3. Fiscal resources of the school are managed responsibly, efficiently, and effectively.	8.75	0.847	8.40	1.235
4. Confidentiality and privacy of school records are maintained.	8.54	0.779	8.14	1.345
5. Public resources and funds are used appropriately and wisely.	8.58	1.060	8.26	1.384
6. The superintendent examines personal and professional values.	8.33	0.963	8.18	1.273
7. The superintendent demonstrates a personal and professional code of ethics.	8.75	0.532	8.60	1.101
8. The superintendent demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance.	8.79	0.415	8.57	1.131
9. The superintendent accepts responsibility for school operations.	8.96	0.204	8.68	1.077
10. The superintendent considers the impact of one's administrative practices on others.	8.71	0.550	8.40	1.157
11. The superintendent uses the influence of the office to the enhance educational program rather than for personal gain.	8.83	0.381	8.57	1.145
12. The superintendent treats people fairly, equitably, and with dignity and respect.	8.96	0.204	8.72	1.053
13. The superintendent protects the rights and confidentiality of students and staff.	8.83	0.381	8.66	1.065

Item				
14. The superintendent demonstrates appreciation for and sensitivity to the diversity in the school community.	8.38	0.970	8.14	1.424
15. The superintendent recognizes and respects the legitimate authority of others.	8.54	0.932	8.35	1.280
16. The superintendent expects that others in the school community will demonstrate integrity and exercise ethical behavior.	8.75	0.442	8.42	1.144
17. The superintendent fulfills legal and contractual obligations.	9.00	0.000	8.69	1.089
18. The superintendent applies laws and procedures fairly, wisely, and considerately.	8.92	0.282	8.65	1.096
Component 2: Management of Learning				
19. Professional development promotes a focus on student learning consistent with the school vision and goals.	8.29	0.859	8.17	1.098
20. Barriers to student learning are identified, clarified, and addressed.	8.04	1.233	7.94	1.248
21. Diversity is considered in developing learning experiences.	6.96	1.546	7.15	1.439
22. Curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies.	7.75	1.359	7.66	1.326
23. Student learning is assessed using a variety of techniques.	8.33	0.963	8.08	1.190
24. Multiple sources of information regarding performance are used by staff and students.	8.17	0.917	7.86	1.116
25. A variety of supervisory and evaluations models is employed.	7.21	1.503	6.95	1.535
26. Knowledge of learning, teaching, and student development is used to inform management decisions.	8.13	0.900	7.88	1.125
Component 3: Culture to Support Learning				
27. Progress toward the vision and mission is communicated to all stakeholders.	7.88	0.947	7.80	1.214

Item				
28. The vision shapes the educational programs, plans, and activities.	8.13	0.900	7.94	1.130
29. The vision shapes the educational programs, plans, and actions.	8.17	0.868	7.88	1.206
30. There is outreach to different businesses, religious, political, and service agencies and organizations.	7.04	1.233	7.22	1.068
31. A comprehensive program of community relations is established.	7.17	1.308	7.34	1.314
32. Community collaboration is modeled for staff.	7.29	1.268	7.26	1.350

Appendix R

Communication Granting Permission to Use ISLLC Standards

From: Nancy Sanders nancys@ccsso.org
Subject: RE: Survey for dissertation
Date: Mon, 19 Jun 2006 00:06:26 -0400
To: Melody Smith melody.smith@sjsd.k12.mo.us
Cc: Joe Simpson JoeS@ccsso.org

The Council gives permission for all appropriate research uses of the ISLLC Standards. We ask for a brief statement of the research, contact information, and a short report on findings.

You may want to check with Wisconsin as well as other states that have looked at the indicators and changed them or regrouped them. Several are working on superintendent standards (e.g. Ohio).

Also, recent reviews of literature by Kenneth Leithwood and Waters & McNulty raise a number of questions about the Standards defining leadership in the current policy context. You might also note that the Standards background information indicates that they were not intended to be used as an evaluation or audit tool.

CCSSO is currently working with other national organizations to update the Standards through a national process that will be completed this fall. They will look quite different, which, may be something you want to consider.

Good luck with your study.

Nancy Sanders

Appendix S

Communication Discussing Use of Scale: 1-9

From: Valentine, Jerry W.
Sent: Tue 1/30/2007 11:00 AM
To: Smith, Melody Ann (UMC-Student)
Subject: RE: Dissertation

Melody
I have used the 1-9 scale over the years because it provides more opportunity for variance of responses. You may or may not find a cite that supports that…I have not looked in 20 years for one…I can only tell you that in the mid eighties I found a statement in a stat book that implied what I mentioned. If you need to, just use the items and set up a 4 or 5 point scale…it does not matter what scale you use as long as you have enough to offer a range of responses and gradations for the respondent. Most common response patterns are 4 or 5 or 6 as you may know if you have been looking. That's all I can tell you…the use of a 9-point reference has never been challenged in the years we have used the APE. It just makes more sense to offer a broader range of possible options as long a there are clear descriptions to the options.

Jerry

VITA

Melody A. Smith, Ed. D.

The Educational Doctorate from the Department of Educational Leadership and Policy Analysis at the University of Missouri – Columbia completes a thirty-year journey in reaching a personal and professional goal. Melody was born September 26, 1957. She graduated from North St. Francois County High School in 1976. In 1987 Melody graduated Summa Cum Laude from Missouri Western State University with a Bachelor of Science in Education – English degree. She earned a Master's of Science in Education – Reading degree in 1998 and an Educational Specialist – Secondary Administration degree in 2001 from Northwest Missouri State University. In 2007, Melody earned a Doctorate in Education degree from the University of Missouri – Columbia.

Melody's personal mission is to do what is good for others in whatever capacity service presents itself. She is married to Larry E. Smith. Her son Brad and his wife Tabitha have two children Elizabeth and Max – Melody's grandchildren who bring her immeasurable joy. Melody currently serves as the Superintendent of Schools for the St. Joseph School District in St. Joseph, Missouri.