Southern Journal of Educational Administration

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Diversity of Research: A Market Place for Scholarship

Paul Watkins, *Editor*
Southeast Missouri State University

For this spring and summer launch of the *Southern Journal of Educational Administration* (*SJEA*), we look at a range of research from technology standards to administrative profiles from Ghana school leaders. It is the rich diversity of research a reader finds in *SJEA*. Our journal offers a forum for new ideas and prevalent challenges that face our readers. *SJEA* is our path of understanding that never ends; instead, it offers learning benchmarks along the way. We encourage action research and support the answers offered through its results. *SJEA* is truly a market place for scholars of education administration. It is critical that we share with colleagues, students, and practitioners. Thank you to everyone who continues to support our efforts.

Profiles of Elementary School Principals: Comparing Ghana and the United States

Tak Cheung Chan, Ed.D.
Kennesaw State University

Sena Kpeglo, Ph.D
University of Cape Coast, Ghana

Robert Morris, Ph.D.
University of West Georgia

Abstract

By comparing elementary school principal profiles in Ghana and the United States, this study would contribute to a better understanding of school leadership in the two countries. Participating principals included 78 from the United States and 49 from Ghana. A researcher-designed questionnaire covered the principals' profiles in seven leadership areas: character, professional knowledge, professional skill, administrative style, administrative duties, personnel management, and student affairs management. This was supplemented by three open-ended questions on principal's major responsibilities, challenges, and fulfillment. Results of data analysis indicated significant differences in four leadership areas: principals' character, knowledge, style, and duties. In almost all areas of the profile, U.S. principals responded to the survey items more agreeably than principals in Ghana.

Introduction

School principals' roles and responsibilities in the United States were well developed and specified in the Educational Leadership Constituent Council (ELCC) Standards. According to these standards, principals should have the knowledge, skills, and dispositions to promote the success of all students by (1) facilitating the development, articulation, implementation, and stewardship of a school vision of learning; (2) promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff; (3) managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment; (4) collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources; (5) acting with integrity, fairly, and in an ethical manner; and (6) understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (National Policy Board for Educational Administration, 2002). Many scholars have witnessed major roles and responsibilities of school principals. They have been identified as school culture architects and builders who have the vision to shape the future direction of the school (Engels, Hotton, Devos, Bouckenooghe, & Aelterman, 2008; Fullan, 2007; Hargreaves & Fink, 2006). Current literature also indicates that school principals are curriculum, assessment and instructional leaders who are able to demonstrate the ability to

implement a systematic approach to instruction by leading collaborative efforts to improve student achievement (Ebmeier, 2003; Kowalski, 2009; Sergiovanni, 2008). Andrews and Quinn (2005) stated that teachers, particularly first-year teachers, need colleague support led by school principals. Cobb and Bowers (1999) and Costa and Garmston (2002) also identified the role of school principals as faculty and staff mentors.

Since its independence in 1957, Ghana has gone through five educational reforms and three major reviews of its educational system. As a result, massive and constant curriculum restructuring and strategy implementation have accompanied these reforms. The goal of these reforms and reviews was to make education more innovatively responsive to the needs of the labor market (Baah-Gyimah, 2010). What it means to educational leadership is that new approaches need to be launched to meet with new challenges.

Innovative leadership practices have been identified as reform strategies to promote effective teaching and learning in Ghana (Norviewu-Morthy, 2010). One of the reform initiatives has been working toward decentralization of educational authorities to empower teacher leaders (Mankoe & Maynes, 1994). However, studies have indicated that Ghanaian school leaders lacked leadership proficiencies because of the absence of leadership preparation (World Bank, 2004; Zame, Hope & Respress, 2008). It has become evident that Ghanaian school leaders require professional training to enable them to meet the complex leadership challenges associated with the country's education for all initiatives especially in principals' leading roles in enrollment management, student retention and student learning (Institute for Educational Planning and Administration, 2009). In fact, most of Ghana's current educational leaders have gone through basic teacher education training to include pedagogy and methodology of teaching in primary and secondary schools. Some have even chosen to pursue the graduate and post graduate degree programs in educational administration/leadership (Kpeglo, 2010). In addition, Oduro (2009) argued that the training for school leaders needed to be a sustained program throughout the duration of school leaders' work. Meanwhile, the effectiveness of school leadership preparation was shown in Amakyi's study (2010) which positively correlated quality leadership preparation with quality leadership in Ghana schools.

The key task of educational leaders in Ghana is to enroll and keep school children in school. They will have to observe the circumstances prevailing and develop plans of action that will facilitate their leadership and bring about solutions to the problems. They must demonstrate their strong leadership through a combination of theory, practical experiences and positive attitudes to achieve positive educational outcomes (Kpeglo, 2010). However, an IEPA (2009) study reported that 85 percent of school leaders saw their roles merely as custodians of school property and as implementers of government policies.

The challenges for most Ghanaian school leaders today are in fostering the policy processes that will help encourage child-centered learning. Meanwhile, the Ghana Ministry of Education (2004) also pointed out that the imminent tasks of school principals were to motivate rural school children to go to school and to facilitate community participation in education. Ghana's educational leaders also grapple with providing quality education against

the backdrop of constant under-funding and frequent changes in the education curriculum over the years (Kpeglo, 2010).

Profiles of school principals in one country would be different from those of another because of their roles and responsibilities that correspond to the particular situation in their countries. Leadership styles, attitudes and practices of European principals were found to play a contributing role in school improvement and effectiveness (German Institute for International Educational Research, 2009). An international comparison of school principalship of England, Germany, Denmark, Japan, and the United States showed that U.S. principals had a more frenetic work day than their international counterparts (McAdam, 1998). In their study of Russia, China, and Ireland, Flanary and Terehoff (2000) found that challenges arising from global changes in economics, politics, and demography confronted school principals. This study of Ghana and U.S. principalship was conducted along similar research tracks with predetermined elements for comparison.

Purpose

Studies on the comparison of school principalship between Ghana and the United States are scarce. There is a need for a holistic and comprehensive comparison of the principalship in these two countries. The purpose of this study was to examine if school principal profiles in Ghana were significantly different from those of the United States. Results of this study would contribute to a better understanding of how schools were administered in Ghana and the United States. The two major research questions were:

(1) How are school principal profiles in Ghana compared with those in the United States? (Principal profiles were examined in seven leadership areas: character, professional knowledge, professional skill, administrative style, administrative duties, personnel management, and student affairs management.)

(2) Do principals' gender and age make any difference in their responses to the survey questions on the principal profiles in Ghana and the United States?

Methodology

Design

This study took a descriptive design with the use of survey questionnaires. Quantitative and qualitative survey data were collected through soliciting responses from current school principals located in Ghana and the United States.

Participants

Seventy-eight elementary school principals in Georgia and South Carolina of the United States and 49 elementary school principals from Ghana were selected by convenience sampling method to participate in the study. Participation in this study was voluntary for both Ghana and U.S. principals.

Instrumentation

A thirty-item Likert-scale questionnaire was designed by the researcher to survey school principals in Ghana and the United States. The questions were derived from current literature of school principalship. It was designed to cover the principals' profiles in seven leadership areas: character, professional knowledge, professional skill, administrative style, administrative duties, personnel management, and student affairs management. The instrument was tested for validity through a panel of ten school principals who critically reviewed its contents, format, and language. Internal consistency of the instrument was tested by using Cronbach's Alpha Test (Overall Alpha = .854). In addition, a questionnaire with three open-ended questions was also constructed to solicit principals' perceptions on their major responsibilities, their challenges, and the fulfillment in their positions as school principals.

Data Analysis

Quantitative data collected from the survey were analyzed in general and by subsets of character, professional knowledge, professional skill, administrative style, administrative duties, personnel management, and student affairs management to determine the extent of the school principals' responses. Data from principal profiles of Ghana and the United States were compared by using Independent t-test. The impact of gender and age on school principal profiles was examined by using one-way Analysis of Variance. A parallel comparison of qualitative data collected from the survey was based on answers to the three open-ended questions. Observation was made to consistencies in themes and patterns as prevailed among the principals' responses. Many qualitative responses were simple and concise. Therefore, in qualitative data analysis, only the most representative responses were quoted to indicate the general tendencies of responses.

Results

Quantitative Data Analysis

Results of data analysis indicated that significant differences were detected in principals' profiles between Ghana and the United States. The average mean responses of Ghanaian principals (4.114) and U.S. principals (4.401) were significantly different (t = 3.850; p < .01). Of the seven profile areas examined, four areas were found to have significant differences between the Ghanaian and the United States principals: character (Ghanaian mean = 3.979; U.S. mean = 4.650; t = 5.652), professional knowledge (Ghanaian mean = 3.711; U.S. mean = 4.056; t = 3.820), administrative style (Ghanaian mean = 4.160; U.S. mean = 4.513; t = 3.195), and administrative duties (Ghanaian mean = 4.186; U.S. mean = 4.545; t = 3.940). No significant difference was found in three profile areas: professional skills (Ghanaian mean = 4.233; U.S. mean = 4.403; t = 1.770), personnel management (Ghanaian mean = 4.380; U.S. mean = 4.383; t = 1.757), and student affairs (Ghanaian mean = 4.202; U.S. mean = 4.230; t = .284) (see Table 1).

Table 1

T-test – Areas of Profile between Principals of Ghana and the United States

DV		Mean (Ghana)	Mean (U.S.)	T-value
Character		3.979	4.650	5.652 **
Knowledge		3.711	4.056	3.820 **
Skills		4.233	4.403	1.770
Style		4.160	4.513	3.195 **
Duties		4.186	4.545	3.941 **
Personnel		4.380	4.383	1.757
Student Affairs		4.202	4.230	0.284
	Total	4.114	4.401	3.850 **

P < .01

When profiles of male principals were compared with those of female principals in Ghana, no significant difference was found in any of the seven profile areas. However, female principal profiles consistently depicted more agreeable responses than those of male principals. Standard deviation comparison also showed that female principals had greater consensus in their responses than male principals (see Table 2).

Table 2

Means of Male and Female Principals' Profiles in Ghana

	Gender	Mean	Standard Deviation	Mean Difference (Male – Female)	N
Character	Male	3.833	1.068		32
	Female	4.271	.278	-.438	16
Knowledge	Male	3.697	.487		31
	Female	3.738	.411	-.041	16
Skills	Male	4.188	.770		32
	Female	4.325	.334	-.137	16
Style	Male	4.145	.755		31
	Female	4.188	.772	-.043	16
Duties	Male	4.067	.743		30
	Female	4.411	.433	-.344	16
Personnel	Male	4.057	.790		31
	Female	4.438	.623	-.381	16
Student Affairs	Male	4.121	.629		31
	Female	4.359	.465	-.238	16
Total	Male	4.041	.572		29
	Female	4.247	.343	-.206	16

The same comparison of principal profiles was performed in between male and female principals in the United States. Five out of the seven comparisons in profile areas were found to be significant at the .05 level or below: character (t = -1.997), knowledge (t =

-2.639), administrative style (t = -2.704), administrative duties (t = -2.854) and personnel (t = -2.362). The overall total profiles of male principals were significantly different from female principals. In almost all the comparisons in the United States, the profiles depicted more agreeable responses in favor of female principals. Female principals showed more consensus as a group than male principals (see Table 3.)

Table 3
Descriptive Statistics –
Means of Male and Female Principals' Profiles in the United States

	Gender	Mean	Standard Deviation	Mean Difference (Male – Female)	N
Character	Male	4.539	.430		39
	Female	4.731	.405	-.192 *	36
Knowledge	Male	3.897	.573		39
	Female	4.200	.408	-.303**	37
Skills	Male	4.323	.396		39
	Female	4.506	.439	-.183	36
Style	Male	4.365	.510		37
	Female	4.657	.398	-.292**	35
Duties	Male	4.425	.327		37
	Female	4.641	.314	-.216**	35
Personnel	Male	4.243	.491		37
	Female	4.500	.435	-.257*	36
Student Affairs	Male	4.243	.512		37
	Female	4.184	.474	.059	34
Total	Male	4.291	.299		37
	Female	4.514	.241	-.223**	30

* P < .05
** P < .01

In age comparison, no significant difference in principals' profiles was detected among various age groups of both Ghana and the U. S. principals. Principals' ages had no impact on their profiles as school administrators.

Qualitative Data Analysis
Analysis of qualitative data indicated that there were similarities between principals of Ghana and the United States in their identification of major responsibilities. Principals in the United States focused on academic progress and safety of students as their major responsibilities. As expressed by some representative principals:

- The major responsibility of the school principal is to see that the school runs efficiently.
- The focus has to be on student achievement and school safety.

- The major responsibility of a school leader is to provide a SAFE, nurturing, and accepting environment for effective academic, emotional, and social progress.

Principals' major responsibilities as perceived by Ghanaian principals were to ensure implementation of instructional supervision resulting in effective teaching and learning. The following selected responses serve as evidence of their perceptions:

- (School principals) ensure a conductive learning environment for effective teaching and learning.
- (School principals) supervise teachers in the discharge of their duties.
- The art of supervision is that the school head sees to it that instructional times are profitably used.
- (School principals) ensure that quality teachers are produced for the basic schools in good instructional skills, excellent moral attitude and self-motivation.

In response to the challenges they were facing, school principals in Ghana and the United States agreed on financial issues as their common challenge. At the same time, principals from Ghana and the United States identified challenges that were unique to them. U.S. principals perceived challenges as issues associated with meeting Academic Yearly Progress of students. U.S. principals reflected their opinions in the following:

- Perhaps, the biggest challenge to a principal is to maintain the high level of faculty enthusiasm with a less than reasonable budget.
- Maintaining an efficient team of faculty and staff in a year of budget cuts is not an easy job. You hate to lose them.
- No Child Left Behind is imposing unreasonable mandates and expectations. These laws have the effect of setting up public education for failure.
- Principals are getting pounded with standardized testing and AYP pressures.

On the other hand, Ghanaian principals perceived their unique challenges as teacher related issues, such as lack of motivation, supervision of instruction, and negative attitudes and behaviors. As complained by some principals,

- It is difficult to find ways to boost the morale of teachers to achieve the school goals.
- Demotivated teachers who are not ready to take up extra responsibilities are teaching.
- (The challenges are) to supervise the lazy and stubborn subordinates.
- Teacher attitude toward work is doubtful.

At the same time, Ghanaian principals worried about community participation in school activities. They realized that parental support translates to school success. Some of them expressed their concerns as follows:

- Parents provide untimely and insufficient support of student needs.
- Community or PTA members do not attend needed meetings but complain about critical educational issues.
- Uncooperative attitudes of some parents together with insufficient funding delay needed school development.

Additionally, inadequate educational facility supports in school diminish teaching and learning effectiveness. Ghanaian principals have said loud and clear that

- Inadequate furniture, equipment and classroom space in schools do not constitute the basic environment for learning.
- Most areas are lack of appropriate facilities for effective school operation.
- Because of funding lacking, facility resources in many schools like chairs, desks, textbooks and instructional supplies are in serious shortage.

In the fulfillment of a school principal's job, school principals in Ghana and the United States shared the same opinion. Most of them highlighted their greatest fulfillment in seeing student achievement, working with professional faculty and staff, and gaining community support. Principals in the United States had the following to say:

- The fulfillment is spending time with students, seeing them mature and grow academically, socially, emotionally, and physically.
- It is satisfying to see teachers that you hire really do a good job and become effective educators.

Ghana principals were particularly overjoyed with seeing improvement in teaching outcome and student achievement. Some of their exciting comments are selected in the following:

- To be a responsible head, to lead a mass of teachers and pupils to achieve their aims and aspiration in life.
- Seeing students making real progress in their academic endeavors and passing their exams with flying colors.
- The joy of seeing pupils excel in their academic work and becoming productive citizens at responsible positions in society and not as liabilities.

Additional comments were made by Ghanaian school principals to reflect their thoughts on professional benefits, school finance and governance as follows:

- The work of a school head is quite enormous and so must be adequately remunerated.
- The government should increase the capitation grants for the school heads to run the school properly.
- Management should allow school heads to implement certain policies within their schools with little or no interference.

In summary, elementary school principals in Ghana and the United States perceive many areas of their major responsibilities in common. They would do everything to ensure school safety, student achievement enhancement and efficient school management. Ghana principals particularly like to pay attention to instructional supervision leading to student success. Principals from both countries face serious school financial challenges that have major impact on school operation. Unique challenges of Ghana principals include low teacher motivation, poor community support and inadequate school facilities whereas U.S. principals identified pressure from Adequate Yearly Progress as a major challenge. In job fulfillment, principals of both countries are overjoyed with student success, teacher professional advancement and increased community support. Because of the uniqueness of the situations they are facing, elementary school principals in Ghana and U.S. perceive their responsibilities, challenges and fulfillment differently leaving much room for further discussion.

Discussion/Conclusion

The findings of this study though not surprising are significantly applicable to daily operation of schools. They pose several educational points of interest worthy of discussion.

First, the United States started its graduate school program of principal preparation much earlier than Ghana. Therefore, it is not surprising to find the results of the study indicating significant differences in school principal profiles of the two countries in favor of the United States. As declared by the Ghana Institute for Educational Planning and Administration, Ghana school principals need professional principalship training to deal with complex school administrative duties of today. This is not uncommon in developing countries where many school principals have not received professional training.

Second, while Ghana is continuously increasing its educational interaction with countries of advanced educational systems, the range of difference in school principals' profiles will be narrowed in coming years. It is simply because the educational concept and anticipated outcome are the same irrespective of cultural differences.

Third, as Ghana school principals are more prepared to handle educational issues in their schools, they need to place the cultural needs of their country in the forefront. This is

also true in the United States. Principals of both countries confront many similar problems in their daily school functions. However, unique political infrastructures of their countries may dictate how school problems are addressed to meet their job requirements.

Fourth, the findings of this study convey significant implications for multicultural countries like the United States where school principals need to safeguard equality of educational opportunities which has been the focus of public attention. Quite contrarily in Ghana, school leaders' mission is to promote national unity under one cultural belief through a commonly agreeable educational process.

Fifth, age of school principals was found to be a factor that carried no significant impact on the roles and responsibilities of school principals in both Ghana and the United States. It is because all the Ghana and U.S. school principals in this study were veteran educators who had developed educational philosophy through professional maturity.

Sixth, school principals in both countries placed a high priority in their daily duties on the promotion of high student achievement. This is in agreement with current literature which identifies the role of a school principal as an instructional leader. In fact, all school principals take pride in improving student achievement.

Seventh, gender of elementary school principals seems to significantly impact their perceptions of their roles and responsibilities. Results of the study indicated that female principals' responses were more agreeable and congruent than those of male principals. This is a clear indication that female educators in both countries showed more participating interest in elementary school leadership than male educators.

To conclude, school principals of Ghana and the United States, despite their perception differences, have much in common particularly that they share the same belief in educational outcomes. Through increased international understanding and collaboration, school principals in both countries can benefit from the experiences of each other in meeting current and future educational challenges.

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Appendix

PROFILE OF SCHOOL PRINCIPAL

School: Elementary_____   Secondary_____   Gender: Male_____   Female_____

Age: 21–30_____   31–40_____   41–50_____   51–60_____   61–70_____

Years in education: 1–5_____   6–10_____   11–15_____   16–20_____   21 or more _____

Indicate the extent to which you agree or disagree with these statements inside the parenthesis of the corresponding statement. Use the following rating scale:

1 = Strongly Disagree	2 = Disagree	3 = No opinion
4 = Agree	5 = Strongly Agree	

A school principal……………………….

CHARACTER
1. (   ) leads the school with strong ethical standards.
2. (   ) models ethical behavior in his/her daily administrative duties.
3. (   ) establishes his/her creditability at work.

PROFESSIONAL KNOWLEDGE
4. (   ) understands the politics of working successfully with government agencies.
5. (   ) applies educational philosophies in assisting student academic development.
6. (   ) has a strong background in strategies that improve student academic achievement.
7. (   ) does not need administrative preparation to lead a school.
8. (   ) improves his/her leadership skills by pursuing professional development opportunities.

PROFESSIONAL SKILL
9. (   ) assigns faculty and staff to responsible positions compatible with their abilities.
10. (   ) coordinates the work of different departments in the school.
11. (   ) possesses strong analytical skills to manage daily school business.
12. (   ) makes effective decisions for school improvement.
13. (   ) manages his/her time appropriately to achieve the highest work efficiency.

ADMINISTRATIVE STYLE
14. (   ) promotes democracy in school by involving stakeholders in shared decision-making.
15. (   ) conducts self-evaluation of his/her performance.

ADMINISTRATIVE DUTIES
16. (   ) develops attainable goals and objectives for school improvement plans.
17. (   ) places instructional activities as a first priority.
18. (   ) prepares his/her school to meet future challenges.
19. (   ) manages all school resources to support instructional activities.
20. (   ) implements educational policies by thoroughly understanding their significance.
21. (   ) develops the curriculum based on developmental stages of the students.
22. (   ) creates and supports a conducive environment for learning.

PERSONNEL MANAGEMENT
23. (   ) encourages faculty and staff to continually improve their areas of specialization.
24. (   ) assists faculty and staff to accomplish their professional goals.
25. (   ) encourages faculty and staff to actively participate in managing the school's resources.
26. (   ) assists professional development of faculty and staff by evaluating their performance.

STUDENT AFFAIRS MANAGEMENT
27. (   ) develops a counseling program to assist students with their academic needs.
28. (   ) Develops a positive school-wide student behavior management plan and enforces it consistently
29. (   ) promotes positive learning attitudes among students.
30. (   ) develops student interest in responsible citizenship and civic affairs.

END OF PROFILE

Graduate Program Redesign to Prepare 21st Century Educational Leaders

Michelle Abrego
University of Texas at Brownsville

Chuey Abrego
University of Texas at Brownsville

Timothy W. Gilson
University of Northern Iowa

Nicholas J. Pace
University of Northern Iowa

Mary J. Goggins Selke
Chair, ATE SIG for Educational Leadership

Peggy Smith
Campbell University

Abstract

The content of this article is focused on the theme of curriculum renewal and redesign in three university-based principal preparation programs from diverse sections of the country: Campbell University in North Carolina, the University of Northern Iowa, and the University of Texas at Brownsville.

Questions originally posed to representatives of the three principal preparation programs were as follows:

- *To what state or national standards are the programs aligned?*
- *How did program faculty engage in curriculum redesign and ongoing renewal?*
- *What delivery systems are offered: cohort, online, hybrid, etc.?*
- *How are field experiences and internships conducted?*
- *How do faculty members assess candidates' mastery of standards-aligned competencies?*

The redesign processes undertaken by faculty members from the three leadership preparation programs were explored by addressing common components culled from the questions: standards, curriculum renewal and redesign, field experiences and internships, assessment, and lessons learned. Conclusions summarize the common points that have made the processes successful. It is the authors' hope that the lessons learned from our combined experiences with principal preparation program redesign will be helpful to educational leadership faculty members engaged in similar processes at other colleges or universities.

University-based educational leadership preparation programs are under intense scrutiny to defend their purpose and relevance (Levine, 2005; Murphy, 2006). As early as 1987, the National Commission on Excellence in Educational Administration determined that administrator preparation programs "lacked a definition of good leadership … collaboration between school districts and universities … systemic professional development and … sequence, modern content, and clinical experience" (Milstein & Krueger, 1997). Two and a half decades later, the Southern Educational Regional Board (2011) issued the statement that "too many states continue to produce unnecessary surpluses of poorly qualified school leadership candidates, rather than encouraging partnerships between

districts and universities to create a new system based on producing fewer but better prepared candidates to serve as school leaders" (p. 6).

Recent research has made it clear that the influence of school leadership is second only to that of teacher quality (Seashore, Leithwood, Wahlstrom, & Anderson, 2010). Educational leadership preparation programs play a critical role in preparing those future leaders of America's schools. Educational Leadership preparation programs must produce leaders capable of leading schools for the challenging contexts of increased accountability demands at both the federal and state levels, diminished resources and funding, and changing student demographics (Leithwood & Riehl, 2003).

Attempts to study and improve school leadership preparation have been undertaken by organizations such as the Danforth Foundation, the Institute for Educational Leadership, the Southern Regional Education Board, and the Wallace Foundation. These organizations have released documents with content that has been critical of the quality of principal preparation programs and the lack of systematic succession planning by school districts and states. Many suggestions have been made for the improvement of principal preparation programs including course content and sequence, pedagogy, and internships as well as advice for state and local policy makers.

One such example is a recent report from the Southern Educational Regional Board, *Who's Next: Let's Stop Gambling on School Performance and Plan on School Succession* (2011). Attention was drawn to the lack of high quality principal candidates for future school leadership positions. It also underscored the need for school districts and state-certified university leadership programs to build systems that blend university coursework with quality field-based experiences.

Given the increased scrutiny under which educational leadership programs operate, and the increasing recognition of the importance of the principal's role in school improvement, many university/college principal preparation programs are engaging in curriculum renewal and redesign efforts in an effort to address these concerns. Attempts are increasing to identify those educational leadership programs that are successful in producing strong school leaders (Orr, 2006).

Research on key features and components of effective leadership preparation programs exists which may serve to guide the work of preparation programs engaged in curriculum renewal and redesign. Darling-Hammond, Meyerson, La Pointe, and Orr (2010) noted that exemplary programs implemented program features which had been previously established as 'best practice' in the research literature for the preparation of educational leaders. These features or program elements/characteristics were: 1) purposeful targeted recruitment of teachers; 2) coherent curriculum focused on instructional leadership, organizational growth and development including change management, and strong support and alignment with state and national leadership standards; 3) active problem-based learning; 4) use of cohort structures; 5) strong collaboration/relationships between school systems and university preparation programs; and 6) well designed and supervised internships (p. 50). Contextual components found to support program success included funding for leadership

candidates to complete a full-time internship; state, district and university policies that guide the work of program redesign, and supported it with financial resources; and local individuals that 'championed' the cause of improving principal preparation (Darling-Hammond, Meyerson, La Pointe, & Orr, 2010).

University/college principal preparation programs are faced with their own additional challenges of diminished resources, faculty pressures for tenure and promotion, and lack of value often placed on the collaborative work that accompanies building and developing relevant research based programs and working with school districts (Chenoweth, Carr, & Ruhl, 2002). How do programs handle such institutional barriers? What support do universities/colleges provide principal preparation programs for curriculum renewal work? To what extent are 'best practices' from the literature actually included in curriculum renewal processes for leadership preparation programs? We know we can't do business as usual and expect our students to provide leadership in 21st century schools. How do we prepare school leaders to not only have knowledge but wisdom, and the ability to use that knowledge well?

Answers to those questions will be provided by examining how three leadership preparation programs engaged in the work of curriculum renewal and redesign. In each case this was done in an effort to produce quality leaders for the 21st century in light of the ongoing scrutiny of principal preparation programs and university barriers.

The University of Texas at Brownsville Educational Leadership Program

The College of Education at the University of Texas at Brownsville recently celebrated its 20th Anniversary. The university serves a predominantly Hispanic student and community population and is situated directly on the US Mexico border

Standards

For the last 20 years, the Educational Leadership Program (EDLR) at the University of Texas at Brownsville (UTB) had focused on meeting local and state standards. Recently, however, the focus has shifted toward aligning to national standards for both the principal and superintendent programs. During the 2010 academic year, the Dean shared his mission and vision of having all the programs within the College of Education aligned to National Council for Accreditation of Teacher Education (NCATE) standards and the national standards of their respective Specialty Professional Associations (SPAs). The EDLR program received notification that it had achieved national NCATE SPA recognition, with the condition of collecting assessment data in February of 2012.

What follows is a description of the work undertaken by UTB EDLR faculty to align their educational leadership programs with NCATE standards. The alignment to national standards involved leading the program through a curriculum renewal process that will help the program continue improvements based on the evaluation of student performance data aligned to the Educational Leadership Constituent Council (ELCC) Standards.

Before discussing the work involved in aligning the program to NCATE standards, it is important to consider the program courses, field experiences, and final clinical experiences required for the UTB Educational Leadership programs designed to prepare school principals. The next few sections include a brief description of the requirements for the master's educational leadership program and the administrative certification-only program.

Master of education in educational leadership. The 36-hour Master of Education in Educational Leadership program at UTB is designed to produce change-oriented administrators. Graduates are prepared to provide administrative leadership and are competent in site-based school management, organization, school law, finance, curriculum leadership, and contemporary personnel practices. Upon completion of the degree and the additional six semester credit hours (for certification), the students may apply for the Principal Certificate in Texas. In addition, successful completion and defense of an electronic portfolio is required. (The electronic portfolio is not required for state certification.)

Certification-only program. This program offers a certification-only route to students who already have a master's degree in an education field other than educational leadership. Thus, completion of 18 post-graduate semester credit hours will meet requirements for certification.

Curriculum Renewal and Redesign

The curriculum renewal process began about a year before the department submitted the report to NCATE, involving many lengthy discussions and multiple drafts of program component revisions and additions. The faculty met as often as possible to discuss potential changes to program courses, internships, and related assessments. Courses were carefully examined and revised where necessary to demonstrate alignment to the ELCC standards. The e-portfolio content for students in the Master's Degree Program was aligned with both the TeXes competencies (State of Texas standards) and the ELCC standards. An assessment calendar was developed for collection of assessment data. Two cycles of data were readied by the fall 2012 semester as required by NCATE, using TK20 software as the data collection system.

During that same period of time, the department took initiative by contacting the ELCC SPA representative to discuss alignment issues, standards, the NCATE/SPA process, logistics for implementing assessments, and how to best gather and submit data. The existing curriculum was examined against both state and national standards to identify gaps in existing coursework. Additionally, UTB faced the challenge of ensuring that the curriculum adequately prepared school leaders to successfully work with large numbers of Latino students, a majority of whom are English Language Learners.

Assessment

Program faculty designed seven assessments to serve as evidence for meeting the ELCC standards. NCATE requires that all programs provide a minimum of six assessments;

the State of Texas requires a state licensure test in the content area. Table 1 represents a breakdown of each assessment for building level and district level administrative preparation programs, the type or form of assessment, and when it is administered in the program at UTB. Assessment rubrics were carefully designed to align with leadership standards, placed into select courses and implemented beginning with the fall 2011 semester. Data collection is ongoing.

Table 1
UTB Assessments for Building Level Administrative Certification

Type and Number of Assessment	Name of Assessment	Type or Form of Assessment	When Assessment Is Administered
Assessment #1: Licensure assessment or other content based assessment (required)	TeXes	Content	State Licensure
Assessment #2: Assessment of student learning (required)	Developing a Vision	Content	6338 Principalship
Assessment #3: Assessment of ability to design, align, and evaluate curriculum, guide professional learning (required)	Staff Professional Growth Plan	Professional Skills	6397 Analysis of Teaching Behavior
Assessment #4: Assessment of internship/clinical practice (required)	Internship – Guidelines & Evaluation	Professional Skills	6398 Internship
Assessment #5: Assessment of ability to support student learning and development (required)	Family Support	Professional Skills (Effects)	6386 Admin. of Pupil Personnel
Assessment #6: Additional assessment that addresses ELCC standards (optional)	Campus Based Strategic Plan	Content	6337 Special Pops
Assessment #7: Additional assessment that addresses ELCC standards (optional)	Campus Budget	Prof. Skills	6389 Administration of School Business Services/School Finance

Field Experiences and Internships

A major change to the program was increasing the number of internship hours above the state requirement. Prior to curriculum renewal, field hours were limited to the internship capstone course. Field experiences are now embedded throughout the program culminating with a one semester internship during the candidate's final semester. Both the field hours and the one semester capstone experience require direct interaction of the candidate with staff, students, parents and community leaders. School leaders in the university's service area have been supportive of the change in the field experience.

Candidates conduct internship activities in a variety of settings including both campus-based K–12 settings and community agency settings. These activities are planned

cooperatively by the candidate, site supervisor, and university faculty. The internship requirements are based on the Texas Principal Competencies and Texas Administrative Code as well as the Educational Leadership Consortium Council (ELCC) Standard 7. Responsibilities are augmented over time in quantity and difficulty and include direct communication with staff, parents, and community.

The types of internship experiences completed in these courses include, but are not limited to: developing a school communications plan; leading a curriculum review or implementation process; participating in budget planning; chairing a school improvement committee; or serving as administrative designee for special education IEP meetings. Interns also participate in interviews, plan and implement professional development, conduct clinical supervision, and participate in student discipline hearings.

The candidates maintain a log of all experiences by activity and setting or level for a total of 240 hours (minimum) throughout the field and capstone internship activities. Interns are required to complete 140 hours of pre-internship field experiences that are documented in seven of the courses in the educational leadership program and 100 hours in the internship.

Candidates also maintain an electric portfolio of internship artifacts to be reviewed and assessed by university faculty members and site supervisors. The portfolio includes a weekly log with observations and reflections during the internship. The candidate's experiences are planned cooperatively by the individual, the site supervisor, and educational leadership faculty to provide inclusion of appropriate opportunities to apply skills, knowledge, and research contained in the ELCC standards.

Lessons Learned

Probably the most valuable lesson learned throughout this journey is that it takes a team of committed faculty to work together to accomplish the task of curriculum renewal across a program. A related challenge involves identifying the specific roles for each faculty member and the components with which each will be directly involved to ensure that the program meets deadlines. In other words, roles needed clear delineation so time can be set aside to follow up with key staff to monitor designated tasks.

Additionally, it is important that faculty develop concrete methods to gather and confirm the accuracy of data. Consequently, another area that deserves close scrutiny is how the department and college gather and archive data. Fine-tuning the process is an ongoing challenge.

The process of preparing our ELCC program report took about a year and a half. The process of curriculum renewal continues as UTB faculty gather data on candidate performance, analyze it and adjust curriculum accordingly.

The University of Northern Iowa Principal Preparation Program

In a climate in which educational leadership programs, even at prestigious institutions, have been labeled "inadequate to appalling" (Levine, 2005), educational leadership faculty at

the University of Northern Iowa (UNI) engaged in an extensive, two-year process of conceiving and implementing improvements for the principalship preparation program. The comprehensive process incorporated both internal and external reviews, review of recent research on promising programs across the country, analysis of student outcome data, and practitioner input. The resulting changes included additional course offerings, a more rigorous internship, and an enhanced connection between theory and practice in a distance education program (fiber optics TV, face-to-face, online, and hybrid), without adding time required for completion or more credit hours to the program. In addition, the revisions have earned praise from external program reviewers and an Iowa Department of Education site visit team.

As the revision process began, two major review processes loomed: a university required external review and a state approval visit. Program faculty determined that these reviews would be most useful if reviewers examined the proposed program, rather than existing and already approved program. This reasoning made sense to College of Education administrators and both review teams; the revision process moved forward.

Faculty, students, and members of the program advisory group consistently identified meaningful relationships with faculty and a strong, practical, field-based internship experience as being of the utmost importance. The same groups identified a need for increased structure of candidates' internship experiences while maintaining oversight from on-site mentors, faculty field supervisors, and campus-based faculty. This input came at a time of diminishing resources, faculty attrition, and central administration warnings that new courses would be viewed very skeptically.

Standards

Faculty members initially developed a common format for program syllabi, in which all assignments were aligned with the Iowa Standards for School Leaders (ISSL). This standard set mirrors the Educational Leadership Constituent Council (ELCC) Standards and McREL's Principal Responsibilities. It also aligns with the UNI Conceptual Framework which challenges each candidate to become a Leader of Service, a Leader of Change, and a Leader of Learning.

Curriculum Renewal and Redesign

In the fall of 2008, program faculty convened the UNI Educational Leadership Advisory Council for a work session focused entirely on program improvement. Practitioners from across the state reviewed the existing program's requirements and courses, and thought critically about what must be present in a new program. Concepts and skills identified included expertise in curriculum/instruction/assessment, the importance of relationships, experience leading a change initiative, and skill at conflict resolution. This input, along with graduates' outcome data, the literature, and faculty observation formed an important foundation for the revised program. This input ultimately yielded six proposed courses.

The Principal as Instructional Leader course aimed to replace the *Foundations of Instructional Psychology* course to feature a much greater emphasis on the principal as both an instructional leader and facilitator of adult learning. This was a major change in that the program for many years had included the *Foundations* course as a Graduate College requirement not taught by educational leadership faculty. Student feedback indicated that the course needed a "principalship context" that we felt was best delivered by educational leadership faculty.

Program faculty had long held the goal of finding ways to intermingle its urban and rural/suburban cohorts. Utilizing Advisory Council input and feedback from graduates and candidates, a sequence of two new elective courses was proposed: leading school activity programs and enhancing school/community connections. Both elective strands were designed to provide students with an introduction to the literature around activities and engagement/outreach in the first course, while providing an opportunity for direct, field-based applications in unique school settings in the second course.

Activities Administration I and II were designed to meet the preparation need for administration of school activities programs in a way that enhanced schools' overall missions. Activities were aimed at preparing candidates to better understand research into the academic and social impact of student participation in activities. Designers also sought to help future activities administrators navigate the complexities that exist between athletics and other activities such as speech and debate, drama, and music.

Community Connections (CC) I and II represent the second strand available to students. These proposed courses gave students the opportunity to better understand the importance of parental and community involvement in increasingly diverse settings, providing a well-rounded grasp of the cultural competencies vital in today's schools. Community Connections was aimed at examining research into promising practices for effectively engaging all stakeholders, not merely those that are most frequently engaged with their schools.

A third course change involved the only time in which students in UNI's distance education principalship cohort are physically present together on campus. A *Seminar in School Leadership* was added to the three week on-campus requirement during students' first summer in the program. The seminar was designed to more effectively utilize candidates' time on campus with activities that do not lend themselves to distance education.

A primary example is a role-playing experience entitled A Day in The Office that places students in a mock office while agitated parents, teachers, and students come to express concerns and problems. Other areas addressed in the seminar include public speaking, field trips, balancing personal/family life with the new demands of school leadership, and a poverty simulation activity.

Although budget cuts had prompted central administration to admonish faculty members not to propose new courses, faculty members were able to add the courses described above by reallocating credit hours that had previously been awarded for internship experiences. This allowed the program's credit hour requirement to remain at 37 hours. Program faculty also demonstrated to central administration that proposed courses did not

add credit hours to be taught, since faculty members' supervision of internship hours had been counted against teaching loads. The revised internship experience was strengthened even as the number of credit hours allocated was reduced.

Internships

A 425-hour internship experience is now a key attribute of the UNI principalship preparation program. This requirement, which exceeds the state minimum, includes supervision by an on-site mentor, a faculty field supervisor, and a campus-based faculty advisor/professor. Experiences in the revised program were framed around the six ISSLC Standards and the accompanying 35 skills-focused functions distributed across the standards, rather than skill areas defined by a commercially produced text. The revised program expanded the internship structure to include three components: field-based experiences, course-embedded experiences, and program-required experiences.

Field-based experiences are part of a collaboratively developed personalized internship plan, assembled by each student, the advisor, the faculty field supervisor, and an on-site mentor. The plan must include specified hours in Special Education, Early Childhood Education, and both Elementary and Secondary Education. As students complete field-based internship experiences, they record their experiences on UNI's web-based Student Management System, where they are evaluated and commented on by department staff.

Course-embedded field experiences consist of assignments that are explicitly aligned with ISSLC, McREL, and UNI's conceptual framework, as well as specific objectives from courses in which students are enrolled. These experiences engage students in authentic leadership experiences in their buildings and districts, drawing upon course content for their completion.

In response to the faculty's desire to increase students' experiences and awareness of issues in buildings and districts that are different from their own (ethically/racially, demographically, socioeconomically, geographically, enrollment size, etc.), students must complete three required internship activities. The first program required activity is to spend a full day shadowing an out-of-district principal. Second, in response to growing diversity and changing demographics in Iowa, candidates must gain four to six hours' experience in a non-profit/social-service agency. Finally, candidates must complete four to six hours in a business/industry setting to become better acquainted with the expectations of leaders in fields outside of education.

To make a stronger connection to the UNI Educational Leadership Conceptual Framework, candidates are required to specify how their internship experiences have shown their abilities to function as leaders of learning, service, and change. Additionally, the new program includes a document that allows students to provide feedback to mentors regarding how effective they were in providing guidance to the student.

Assessment

Assessment and the way student progress is tracked during all phases of the program has also been strengthened. This begins with the admission process when references are asked to specifically assess applicants' performance and potential related to ISSLC. Faculty provide students the opportunity to revise sub-standard assignments to mastery level so that the professor and student, once they are in the program, are both comfortable with the quality of final work products.

Four required critical element papers, as well as all other major writing assignments, are now evaluated using a writing rubric collaboratively developed by faculty. Specific guidance for completing the critical element papers appears in the streamlined program handbook, which is available to students online.

As candidates near completion of the program, they begin assembling an ISLLC-aligned, rubric-assessed professional portfolio, in electronic or hard copy. They also have the opportunity to view a presentation by a recent program graduate who shares tips and suggestions for assembling and formally presenting the portfolio. Finally, a new capstone end-of-program experience requires candidates to synthesize internship experiences, prior learning, and course material to address dilemmas of practice in a comprehensive exam format.

As a result of campus academic program review requirements, program assessments have been formalized and enriched. In the past, program faculty made changes informally and as necessary. The revised program features a specific student outcomes assessment plan with specific objectives. Most important, these objectives are examined at specific times of the year, rather than on an occasional basis. Outcomes assessments are independent of university-required instructor evaluations and are collaboratively examined by faculty in a professional learning community format to share ideas and suggestions.

This allows program faculty to discuss the importance of learning communities and, more legitimately, to *function as one*. Program faculty believe this process should receive serious consideration from faculty in other departments and disciplines. Finally, as a result of suggestions from the department's advisory council and a state department of education site visit team, a three year post-graduation survey is under development.

Lessons Learned

Although program reviews are understandably often viewed with dread, the process at UNI worked as intended—to drive program improvement. As a result of the preparation and the actual review, department faculty are able to provide additional learning opportunities to students. They are also better able to incorporate the literature-based best practices as well as student, graduate, and practitioner feedback in ways that fit within the university's constraints. Continued changes are anticipated as students cycle through the revised program in the next few semesters.

The Campbell University Licensure Program for School Executives: Principals Standards

Campbell University is a small, private university in rural central North Carolina. Faculty based its licensure program for School Executives: Principals upon the new North Carolina Standards for School Executives: Principals. These seven research-based standards align with both the ISLLC and ELCC standards.

Assessment

There are critical elements within each State standard and descriptors within each element, which define the skills needed to be a school leader at the proficient level. The candidate must be deemed proficient in each standard (n = 7), element (n = 20), and descriptor (n = 37). Candidates who are emerging or developing in any single descriptor are not recommended for licensure until they are deemed proficient.

In addition to demonstrating competency in the State standards, each candidate must be deemed proficient in twenty-one specific competencies defined and required by the State Board of Education. Candidates who have not yet achieved the level of proficient are also not recommended for licensure until they achieve this level.

Ability to demonstrate proficiency in the State standards and State competencies is evaluated by the candidate's internship supervisor, the instructor of the course in which the evidence for the descriptors are completed, the university supervisor, and one or more public school partners. These evaluators must agree that the candidate is ready to assume an entry level leadership position in a school. Following State certification procedures, candidate portfolios are submitted to the North Carolina licensing agency and then to a panel of reviewers from other universities who assess the accuracy of Campbell University's evaluation. Should the university not submit quality evidences in the portfolios, the university may receive sanctions up to and including disbanding the degree/licensure program.

All candidates must produce electronic portfolio evidences containing seven evidences (see Table 2) to assure that they meet each standard, element, and descriptor. These evidences include descriptors from two or more standards and illustrate leadership in these areas: strategic, instructional, cultural, human resource, managerial external development, and micro-political.

The seven evidences require specific products designed to give candidates authentic experiences as an administrator. Six of these products are required by the State of North Carolina and Campbell University requires one additional evidence relating to ethics. Candidates are required to complete the following electronic evidences at the proficient level.

Table 2

Electronic Evidences in the Campbell University Principal Preparation Program

EE #1 Required – POSITIVE IMPACT ON STUDENT LEARNING AND DEVELOPMENT   <u>Name of evidence</u>: Student Learning and Development Case Study
EE #2 Required – TEACHER EMPOWERMENT AND LEADERSHIP   <u>Name of Evidence</u>: Human Resource Development Handbook
EE #3 Required – COMMUNITY INVOLVEMENT AND ENGAGEMENT   <u>Name of Evidence:</u> Staff and Community Involvement Tool Kit
EE #4 Required – ORGANIZATIONAL MANAGEMENT   <u>Name of Evidence</u>: A Management Manual
EE #5 Required – SCHOOL CULTURE AND SAFETY   <u>Name of Evidence</u>: "A Good Place to Be" production
EE #6 Required – SCHOOL IMPROVEMENT   <u>Name of Evidence</u>: Making a good school better action plan
EE #7 ETHICAL LEADERSHIP (Campbell University only)   <u>Name of evidence</u>: Doing the Right Thing

In addition to the electronic evidences, candidates at Campbell University are required to take a four-hour comprehensive examination. This examination is reflective in nature and provides candidates with case studies which require that they use all of their leadership skills and competencies. The examination is assessed by university professors using a rubric which reflects the standards.

Once candidates acquire a formal leadership position, surveys are sent from the State to assess supervisor satisfaction. Those survey results are returned to Campbell University in order for the program to respond to weak areas. For example, the feedback indicated that there was a need for candidates to have more experience with crucial conversations with students, parents and staff. A course, "Leadership Interactions", was added to the program to provide these experiences.

Curriculum Renewal and Redesign

Program evaluation at Campbell University is multifaceted. Courses and instructors are evaluated at the end of each term. These student assessments are used to make modifications in staffing, textbooks, and instructional activities. Monthly seminars also enable candidates to share concerns about curriculum, meeting the standards, and growth opportunities.

When all of the North Carolina school leader licensure programs were re-visioned in 2008, the Campbell University program coordinator studied relevant literature, held focus groups, and conducted surveys. The focus groups included interns, program completers, professors from Campbell and other universities, practitioners, and candidates who were

applying for admission. The coordinator also served on state-wide committees which designed the standards, rubrics, evidence requirements, and assessment approaches. The data gathered from these sources enabled a new approach to the graduate degree and licensure process. Changes suggested by focus groups continued through a Master of School Administration Advisory Council.

Once the program design was thoroughly vetted, the program was submitted to a committee of university professors of educational leadership and Department of Public Instruction officials. This review led to changes in the products which candidates would use as submitted evidences. The final version of the re-visioned program was then submitted for approval to the Curriculum Committee of Campbell University and the North Carolina State Board of Education.

Candidates are allowed to take as few as one 3-credit course or one 1-credit internship module per term or as many as two courses and up to ten internship modules per term. The pacing of their programs is totally based upon their personal needs.

All courses are at least 50% face-to-face. Two courses (Creating and Sustaining School Culture and Special Needs Students) are hybrid courses with topics that lend themselves to on-line rather than face-to-face collaboration.

Core courses are all taught face-to-face due to the amount of authentic materials within them. Internship activities occur at school sites with a face-to-face Saturday seminar monthly from September through April to review standards-aligned experiences and candidate presentations.

Internships

When the program was re-visioned, the internship changed from an hours-based experience to one focusing on actual work as an administrator. Previously, two 6-credit internship courses required 300 contact hours each. For the add-on candidate with a previous Master's degree, the requirement was one 7-credit internship course with 450 contact hours required.

These requirements were changed to ten 1-credit modules, each of which addresses a specific skill or evidence. These modules assure that candidates are engaged in meaningful work and service to the school(s) in which they complete their electronic evidence products. Seven of the modules correlate with the seven electronic evidences. Candidates may complete their internship activities in their own school, at another school, or in a combination of the two field sites.

Internship site supervisors are oriented by the program coordinator, usually at the school site and in the presence of the candidate. All three participants sign a written agreement which addresses expectations for all three (site supervisor, university supervisor, and candidate). Site supervisors evaluate the candidate at the end of the candidate's program on both internship work and required competencies.

Observations/Conclusions

The three university programs profiled for discussion purposes evidence implementation of several components cited by Darling-Hammond (2010) as indicators of quality programs for the preparation of school leaders. This was the case despite representing public or private universities; small or large; from the Midwest, Southeast, or Southwest. Several components were found to be common factors in the redesign of the three programs.

Faculty in all three programs capitalized on external mandates to review and improve programmatic curricula. Collaboration between K–12 and university personnel was a part of the process in each case.

The UNI program went farthest with practitioner involvement, taking an inductive approach to program design in that practicing principals and current or recent candidates were asked what holes they had experienced in the preparation program and what skills or knowledge needed to be not only maintained but expanded. From that starting point, standards were aligned to what could be viewed as a skills-focused knowledge base of practice. It was interesting that when asked, practicing administrators wanted what has been identified as key to strong re-visioned programs: curriculum focused on the nuts and bolts of instructional leadership that includes real or carefully simulated practice in facilitating organizational growth, directing change processes, and productively managing conflict.

All three programs were carefully and systemically aligned with their respective state (IA, NC, TX)) and national (ELCC) standards. The McRel and ISLLC standards were also used to guide work in some cases along with reflective consideration of recent reports from myriad sources that criticized the status quo of university-based administrator preparation.

Standards were implemented in ways that exceeded perfunctory alignment. Course-embedded practica that require candidates to demonstrate competence in specific standards-aligned skills have become part of each program. Required numbers of hours ranged from 250 to 425 to 450 but merely racking up hours is no longer the point.

Readers who have been university supervisors of administrative interns in the past have probably encountered practicum logs that were heavy on hours but light on experience that went much beyond bus duty, cafeteria duty, and after-school student supervision. Experience with curriculum was often limited to the grade level or content area taught.

This is no longer sufficient because the emphasis is no longer limited to defining internship quality in terms of hours spent. The implicit question, "spent doing what?" is now driving the design of capstone field experiences. The focus is on observable, specific, skills and experiences whether they are acquired in a candidate's own building or at another site.

None of the programs specified a cohort delivery model yet the aspect of developing candidate learning communities was present. Learning cultures were also described among collaborators that some highly competitive university cultures would view as an unexpected source: the faculty. The Texas and Iowa programs expressly described the importance of a collaborative culture among university faculty, a higher education PLC of sorts, in which

colleagues became comfortable with critical conversations designed to solve problems and improve programs. The collaboration and program approval process of the North Carolina program could also not have been accomplished without strong, shared faculty involvement.

Assessment in these three programs has evolved past traditional tests and papers into the realm of standards-aligned artifacts in e-folios. (The Iowa program also provides an option for traditional, hard copy portfolios.) Technology usage ranges from a focus on the e-folio, to two courses delivered in hybrid format, to interactive television so candidates from urban, suburban, and rural areas of the state can share context-specific experiences.

In all cases, program faculty and leadership have learned to circumvent limited financial resources, diminished staffing, and a lack of time for curriculum work to develop stronger programs that better prepare administrators for the realities of being functioning school leaders in today's schools. Business as usual is changing in these schools and in others as we seek to implement the kinds of administrator preparation programs that will help our candidates adjust to a leadership future we cannot predict, just as K–12 teachers strive to prepare students for jobs, technologies, and situations that cannot be fathomed at this point. To paraphrase Collay (2006), we must prepare future educational leaders by seeking to analyze patterns of professional socialization, learn what supports or hinders leadership, and continue to construct the kinds of administrative preparation programs that model transformative pedagogy.

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Perceptions of Technology Leadership in Schools

Christopher G. Pritchett
Troy University

Marie Kraska
Auburn University

Abstract

Technology leadership by school administrators is critical to the success of technology education in twenty-first century schools. This research study was designed to examine the perceptions of school administrators and teachers for administrator use of technology to meet the Alabama Instructional Standard for technology and to identify barriers to the use of technology. School administrators and teachers at 34 different schools completed a survey for a total population of 842. Collected data were analyzed using descriptive statistics, t tests, and Pearson chi-square tests. The results of the study support the conclusion that administrators are meeting the technology standards for Alabama instructional leaders. Additionally, lack of time and lack of necessary knowledge and skills were identified as the two most significant barriers preventing the use of technology by educators.

Technology Leadership

The principal is the school's instructional leader and is responsible for assisting teachers in becoming technologically literate (Dawson & Rakes, 2003). Key technology leadership areas such as leadership and vision; learning and teaching; and support, management, and operations are crucial for successful technology use in a school (Anderson & Dexter, 2005). Miranda and Russell (2011) identified leadership as an important driver of educational technology. Organizational leaders must understand which factors contribute to increased use of educational technology (Miranda & Russell, 2011). School leaders are expected to be knowledgeable of current technologies and model the use of such technologies. This research study examined if school leaders are succeeding in the area of technology leadership.

School administrators are increasingly required to assume leadership responsibilities in areas with which they are unfamiliar and have not received enough training (Flanagan & Jacobsen, 2003). Technology is one such area. Many school leaders now come from a generation of educators who were never exposed to the importance to computers and other forms of instructional technology in their work when they were originally trained as an educator (Daresh, 2006). Flanagan and Jacobsen (2003) argued technology leadership is more than simply resource acquisition and management. This research study identified obstacles preventing the use of technology that school leaders must combat.

Knowing how well school leaders are meeting the challenges of technology leadership and the hurdles that must be overcome, the implications of this study will further contribute to the field of technology leadership by school administrators. A survey was developed to determine the perceptions of school administrators and teachers for administrator use of technology to meet the Alabama Instructional Standard for technology and to identify   barriers to the use of technology.

Purpose of the Study

This study was designed to determine the degree to which school administrators are meeting the Alabama Instructional Standard for technology according to school administrators and teachers. Another purpose of this study was to identify barriers preventing educators from using technology. This study will be valuable to school administrators and colleges of education.

Statement of the Problem

The research problem of this study was to ascertain perceptions of school administrators and teachers for using technology to meet the Alabama Instructional Standard for technology and to identify barriers to the use of technology.

Research Questions

The following research questions guided this study:

1. To what extent are Alabama school administrators meeting the technology standard for Alabama instructional leaders?
2. To what extent are there differences between administrators and teachers in their perceptions of school administrators' meeting the technology standard for Alabama Instructional Leaders?
3. To what extent are barriers (budget constraints, lack of time, lack of knowledge and skills, lack of administrative support, lack of personal interest, lack of professional development and training, and interactive technology limitations) to using Web 2.0 applications independent of type of school system (city or county)?

Null Hypotheses

Null hypotheses were formulated to respond to the research questions. These hypotheses were stated as follows:

1. H_{01}: There is no statistically significant difference between the mean scores on the Technology Standard for Alabama Instructional Leaders inventory and the test score, which was set at 30.
2. H_{02}: There is no statistically significant difference in the mean scores on the Technology Standard for Alabama Instructional Leaders inventory between administrators and teachers.
3. H_{03}: Barriers to using Web 2.0 are independent of type of school system.

Review of Literature

Technology Standards

The Interstate School Leadership Licensure Consortium (ISLLC) includes standards advising administrators that they must have specific knowledge and understanding of current

technologies. The standards were approved by the National Policy for Educational Administration. Board-specific standards include the knowledge and understanding of current technologies which support management functions and promote student learning (Daresh, 2006).

The Alabama State Department of Education recently developed a list of standards for its instructional leaders. One of the standards specifically addresses the need for effective leadership for technology in Alabama schools. The standard was shaped by consulting the International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) for Administrators (Alabama State Department of Education, 2010). The sixth Alabama Instructional Leadership and Administration standard asserts leaders will plan, implement, and evaluate the effective integration of current technologies and electronic tools in teaching, management, research, and communication (Alabama State Department of Education, 2005). The standard is accompanied by nine key indicators including the ability to support teachers to increase the use of technology already in the school/classrooms (Alabama State Department of Education, 2005). In the same way, ISTE's NETS for Administrators embraces key indicators for school administrators and leaders to support and implement technology (International Society for Technology in Education, 2009).

Technology Leadership

Although most schools are equipped with the latest instructional technologies, most teachers only use them for administrative functions while only half of their students report using technology more than once a week (Mundy, Kupczynski, & Kee, 2012). Many faculty members lack the technology proficiency needed to take advantage of new technologies, making them unable to bring these technologies into to the classroom and leading to many standing unused in the classroom (Mundy, Kupczynski, & Kee, 2012). Principals must find ways to implement and sustain technological innovations in classrooms (Flanagan & Jacobsen, 2003).

Anderson and Dexter (2005) confirmed technology leadership plays a very central role in technology-related outcomes. Technology infrastructure is important; however, for educational technology to become an integral part of a school, technology leadership is even more necessary (Anderson & Dexter, 2005). Successful technology leadership practices involve the following key elements: (a) student engagement, (b) shared vision, (c) equity of access, (d) professional development, and (e) ubiquitous networks (Flanagan & Jacobsen, 2003). Lecklider, Britten, and Clausen (2009) declared effective school administrators provide leadership, resources, and professional development for teachers, setting the stage for technology use supporting instructional change and student learning.

Challenges

A major challenge for technology leaders is to support teachers as they seek innovative ways to integrate technology in meaningful, challenging, and genuine ways across

the curriculum (Flanagan & Jacobsen, 2003). Flanagan and Jacobsen (2003) identified providing responsible and flexible professional development opportunities focusing on technology integration and design, not just computer applications alone. School leaders must overcome this challenge of technology integration.

The traditional classroom format for instructional delivery is not the stand alone model in twenty-first century schools. Online courses are an additional technological challenge for school leadership. School leaders may not be aware the pedagogy and skills of a successful online instructor are vastly different from those of their best on-ground teachers (Rose & Plants, 2010).

School administrators are faced with making decisions about an educational innovation with which they have had little experience (Rose & Plants, 2010). Flanagan and Jacobsen (2003) organized barriers to technology into four themes. These four themes were (a) pedagogical issues, (b) concerns about equity, (c) inadequate professional development, and (d) lack of informed leadership. Lack of technological experience can present a huge task for administrators as they attempt to overcome these stumbling blocks. School districts and universities should increase the amount of technology training specifically designed for school administrators to focus on infusing technology into the curriculum (Dawson & Rakes, 2003). The technological abilities of students also present a challenge. Lecklider, Britten, and Clausen (2009) reported student technology skills, use and access far exceed those of the teacher or administrator.

Implications

According to Anderson and Dexter (2005), a school's technology efforts are seriously threatened unless key administrators become active technology leaders in a school. Active technology leaders must be actively involved with technology – crafting policies, using e-mail, and generally spending time on it (Anderson & Dexter, 2005). School administrators are to plan meaningful technology professional development opportunities for their staff and personally use technology.

Professional development for existing teachers or hiring teachers who already possess the skill for online instruction and technologies are two required practices for school leaders (Rose & Plants, 2010). A key aspect of technology leadership is providing effective professional development. Flanagan and Jacobsen (2003) stated effective professional development includes coaching, on-site in-services, and individualized instruction. Prior use of technology should be a factor considered when hiring principals (Miranda & Russell, 2011). Furthermore, it is suggested principals be allowed to have discretion over their schools' technology expenditures (Miranda & Russell, 2011).

School-level factors related to instructional technology use include principal leadership, availability of professional development for principals, and perceived pressure to use technology (Miranda & Russell, 2011). According to Kara-Soteriou (2009), school principals are more likely to integrate technology in the curriculum if they are offered sustained training with a focus on how to integrate technology in the school's curricula and

with consideration of the principals' technology and school needs. Miranda and Russell (2001) acknowledged principal's reported use of technology appears to have the strongest effect on teachers' reported use of technology.

Method

Participants

Participants included certified school personnel (administrators, teachers, counselors, and media specialists) at 34 different schools for a total population of 842 (N= 842). The 34 schools represent seven different school districts. Participants work at either a city (32.7%) or a county (67.3%) public school system. Of the certified school personnel who completed the survey, 20.0% were male and 80.0% were female. Thirty-nine percent of participants work at a Title I School while 61% of the participants work at a non-Title I School.

Instrument

A quantitative survey instrument, Interactive Technology Applications Survey, was developed to gather demographic information and data from certified education professionals in regards to their perceptions of school administrators and teachers for administrator use of technology to meet the Alabama Instructional Standard for technology and to identify barriers to the use of technology. The survey was a three section instrument.

The first section collected demographic data. Demographic information included current position, level of school, type of school, Title I or non-Title I school, gender, years in education, and age. The second section contained ten items regarding the perceptions of administrators and teachers about the use of technology by school administrators. These items were ascertained from the Instructional Leadership Standards adopted by the Alabama State Department of Education. A four-point Likert-type scale was employed with the following scale: (4) Strongly Agree, (3) Agree, (2) Disagree, and (4) Strongly Disagree. Total scores were used for analyses. Participants were instructed to select all applicable barriers in the third section of the survey instrument. The resultant barriers were based on a review of literature and the educational experiences of the researchers. To ensure the validity of the scores and the usability of the survey instrument, a panel of expert university faculty members was asked to evaluate the content. Panel comments, input, and recommendations were considered and incorporated into the final instrument. Cronbach's alpha was calculated to measure the homogeneity of items in section two. For the second section of the instrument, the coefficient alpha of .96 indicated very high instrument reliability.

Procedures

Superintendents and/or school principals from various school systems across East Central Alabama were contacted to obtain permission to survey participants during faculty/in-service meetings at the beginning of the school year. Upon granted permission, a survey administrator attended in-service sessions at designated school systems. A brief introduction/overview of the research was provided to participants. By completing the survey

and returning it to the researcher, respondents were granting their consent. Eight hundred forty-two (842) surveys were returned to the researchers and entered for data analysis.

Data Analysis, Findings, and Results

This section reports the results of the data analysis for each of the null hypotheses. The first null hypothesis tested the difference between the mean scores on the Technology Standards for Alabama Instructional Leaders inventory and the pre-set test score. A one-sample *t* test was conducted to test the extent to which 32 school administrators representing seven different school districts in Alabama were meeting the technology standard for instructional leaders. Only 29 administrators answered the survey questions concerning the technology standard. The test evaluated whether the mean scores for administrators was significantly different from 30, the accepted mean score on the inventory for responses of Agree to Strongly Agree. Results of the test, t(28) = 2.79, p < .01, indicated administrator scores were significantly different from the test value (30). The 95% confidence interval for the scores on the Technology Standards for Alabama Instructional Leaders inventory ranged from .80 to 5.20, representing a wide confidence interval. The effect size of .52 indicates a medium effect size. The results support the conclusion that administrators are meeting the technology standards for Alabama instructional leaders. As a result, there is a statistically significant difference in the mean scores of administrators and the test value. The difference between the mean value on the inventory and the test value is 3.0. This difference indicated school administrators in the sample, on average, were meeting the technology standards for Alabama instructional leaders.

The second null hypothesis tested for differences between administrators and teachers in their perceived administrator use of technology. An independent samples *t* test was conducted to evaluate the second null hypothesis. Results of the test were not statistically significant, t(770) = 1.249, p < .001. The mean score for administrators was 33, with a standard deviation of 5.79; and the mean score for teachers was 31.82, with a standard deviation of 4.96. The 95% confidence interval for the difference in means ranged from -3.036 to .675. The eta square index was .002, which was a negligible effect size.

The third null hypothesis tested for independence of responses of educators in city and county schools on barriers to using Web 2.0 applications. Results of the Pearson chi-square tests indicated responses on four of the seven barriers were dependent on whether or not an educator was in a city or county school system. Specifically for budget constraints, χ^2 = 6.13, p = .01, results indicated budget constraints were dependent upon whether or not an educator was in a city or county school system. Of the 275 educators in the city school systems, 62 (22.5%) reported budget constraints were a barrier to using Web 2.0 applications, while 173 (30.7%) of the 563 educators in county school systems reported budget constraints were a barrier. The chi-square value (χ^2 = 4.56, p = .03) indicated that lack of time was dependent upon whether or not an educator was in a city or county school system. One hundred and eighty-six (186; 67.6%) of the educators in city school systems and 338 (60%) of the educators in the county school systems reported lack of time as a

barrier to using Web 2.0 applications. Only one of the educators in the city school systems (.4%) indicated lack of administrative support as a barrier to using Web 2.0 applications, compared to 15 (2.7%) of the educators in the county school systems. The chi-square value ($\chi^2 = 5.22$, p = .02) was statistically significant, demonstrating responses for lack of administrative support were dependent upon whether or not an educator was in a city or a county school system. Finally, the chi-square value ($\chi^2 = 7.21$, p < .01) revealed responses for interactive technology limitations were dependent upon whether or not an educator was in a city or a county school system. Information technology limitations were reported as a barrier by 42 (15.3%) of the educators in the city school systems and 131 (23.3%) of the educators in the county school systems.

Responses on the following barriers were reported as independent of type of school system: lack of necessary knowledge and skills ($\chi^2 = .11$, p = .75) with 119 (43.3%) of educators in the city school systems and 237 (42.1%) of educators in the county school systems reporting. The barrier of lack of personal interest was also independent of type of school systems ($\chi^2 = 1.46$, p = .23). Fifty-two (52; 18.9%) educators in the city school systems and 127 (22.6%) in the county school systems indicated lack of personal interest was a barrier. Lack of professional development and training was reported as a barrier by 63 (22.9%) of the educators in the city school systems and 160 (28.4%) of the educators in the county school systems. The chi-square value ($\chi^2 = 2.87$, p .09) supported the hypothesis that the barrier of lack of professional development and training was independent for educators in the city and county school systems.

Conclusions

In reference to the first research question, the results of the study support the conclusion that Alabama school administrators are meeting the technology standards for Alabama instructional leaders. This conclusion is encouraging. "As principals become more adept at guiding technology integration, more efficient and effective technology use should become prevalent in schools" (Dawson & Rakes, 2003). For the second research question, results indicate there is not a significant difference between administrators and teachers in their perceptions of school administrators' meeting the technology standard for Alabama Instructional Leaders. Hence, school administrators should continue to take a leadership role in the use of technology.

Overall, lack of time and lack of necessary knowledge and skills were identified as the two most significant barriers preventing the use of Web 2.0 technology applications. School administrators must make a concerted effort to combat barriers impeding the use of technology. Providing meaningful professional development is one such method. Lack of necessary knowledge and skills, lack of personal interest, and information technology limitations are barriers independent of school system type. Instructional leaders must be ready to prevail over these barriers independent of school system type.

Recommendations

It is recommended that leadership preparation programs infuse technology training as an integral part of program requirements. Furthermore, continuous technology training for practicing instructional leaders is suggested. As reported by Dawson and Rakes (2003), the amount of technology training received in the preceding 12 months significantly influences the level of technology integration. Researching the amount of technology training principals receive in their leadership preparation program and as a practicing instructional leader are areas for added study. Moreover, additional research is needed to decipher the differences between city and county school systems concerning the presence of technology barriers. It is further recommended the study be repeated across a larger geographical area.

Author Note

Dr. Christopher G. Pritchett is an Assistant Professor of Instructional Leadership and Administration, Troy University, Phenix City, AL 36869; 334-448-5145 (office).

Dr. Marie Kraska is a Mildred Cheshire Fraley Distinguished Professor in Research and Statistics, Department of Educational Foundations, Leadership, and Technology, Auburn University, Auburn, AL 36849–5221; 334-844-2075 (office).

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