Graduate Educational Leadership Students' Perceptions of Academic Readiness of Content Knowledge on the *Praxis* Test

Jeff Cornelius and Felecia Harris
University of North Alabama

Abstract

The purpose of this study was to investigate graduate educational leadership students' perceptions of academic readiness of content knowledge on the *Praxis* test. The study also sought to determine if statistically significant correlations existed between the different content area categories of the *Praxis* test. Data were collected through web-based surveys with items asking graduate educational leadership students (current and past) about their experience on the *Praxis* test. The instrument measured six content area categories as assessed on the *Praxis* test as follows: vision and goals, teaching and learning, managing organizational systems and safety, collaborating with key stakeholders, ethics and integrity, and the education system. The quantitative findings revealed strong correlations between specific content area categories as assessed on the *Praxis* test.

Keywords: praxis, academic readiness, content knowledge, content area categories, variables

Graduate leadership programs must effectively prepare educational leaders for their roles. The role includes much more than managing a curricular program (Carver, 2012). So, how can graduate leadership programs effectively prepare educational leaders? To answer this question, it is important for graduate leadership programs to offer a curriculum grounded in the correct content knowledge. Therefore, universities offering graduate leadership programs must make a conscious effort to ensure that program curriculum has been designed to not only enable graduate students to meet standards, but also to ensure the correct standards are being utilized. As a result, it is also important for professors of graduate leadership programs to have an in-depth knowledge of the content areas assessed on the *Praxis* test for Educational Leadership: Administration and Supervision. *Praxis* tests are used in 47 states within the United States to make decisions concerning the licensing of beginning educators (ETS Praxis, 2017). Based on past research, content knowledge plays an important role in the success of a beginning educational leader (Carver, 2012; Stein & Nelson, 2003).

The purpose of this study was to investigate graduate educational leadership students' perceptions of academic readiness of content knowledge on the *Praxis* test. Data were collected through web-based surveys with items asking graduate educational leadership students (current and past) about their experience on the *Praxis* test. The findings addressed how educational leadership programs may be improved by investigating graduate leadership students' perceptions of their own experiences on the *Praxis* test.

Literature Review

Background

The *Praxis* test required for graduate educational leadership students in Alabama is comprised of 110 selected-response questions covering six content areas aligned with the Educational Leadership Policy Standards: ISLLC 2008 (ETS Praxis, 2017). These six content areas are as follows: vision and goals, teaching and learning, managing organizational systems and safety, collaborating with key stakeholders, ethics and integrity, and the education system. In 1996, the Interstate School Leadership Licensure Consortium (ISLLC) developed standards for school leaders to identify a common core of knowledge, dispositions, and performances (Council of Chief State School Officers, 1996). In 2008, the Interstate School Leadership Licensure Consortium (ISLLC) adopted new standards while retaining the structure of the six original ISLLC Standards, but with new purposes and audiences (Council of Chief State School Officers, 2008a). At present time, the *Praxis* test for graduate educational leadership students in Alabama for initial licensure continues to be in alignment with the ISCLLC 2008 Standards (ETS Praxis, 2017). As a result, it is important for graduate educational leadership programs to be well versed in the six content areas and seek ways to ensure students are well prepared within these six content areas. The following discussion will provide pertinent information for each of the six content areas assessed on the *Praxis* test with specific discussion focused on the actual functions of each standard.

Vision and Goals

Educational leaders must be able to promote the success of every student by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders (Council of Chief State School Officers, 2008b). Schools that have closed achievement gaps have a mission and vision clearly focused on the success of every student and every group of students (Johnson & Uline, 2005). Educational leaders need a clear connection between a school's vision and goals (Graczewski, Knudson, & Holtzman, 2009). Connections exist between the coherence of a school's vision and goals and the coherence and relevance of a school's professional development opportunities (Graczewski et al., 2009). Therefore, it is important for educational leaders to construct a vision and goals with clear focus. If these two areas (vision and goals) are not clearly constructed, then professional development may have undermined. It is also important for educational leadership programs to clarify the meaning of the vision, mission, values and goal statements as well as explore the articulation, adoption and alignment that such statements may have on the process of school improvement (Gurley, Peters, Collins, & Fifolt, 2015).

Teaching and Learning

Educational leaders must be able to promote the success of every student by advocating, nurturing and sustaining school culture and instructional program conducive to student learning and staff professional growth (Council of Chief State School Officers, 2008b). One primary task of educational leaders is the development of a culture of great expectation (Teasley, 2017). The old adage, "inspect what you expect" rings so true. Teachers must feel that their individual and collective success is of utmost importance to their educational leaders (Johnson & Uline, 2005). As discussed previously, a school's vision and goals affect the relevance of the professional development opportunities (Graczewski et al., 2009). In successful schools, professional development is not isolated, but rather a part of the school's culture (Johnson & Uline, 2005). Educational leadership programs should prepare educational leaders to lead instruction with an emphasis on *how* to lead instruction attached with *why* instruction needs to be led (Brazer & Bauer, 2013).

Managing Organizational Systems and Safety

Educational leaders must be able to promote the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient and effective learning environment (Council of Chief State School Officers, 2008b). The day-to-day operations of a school such as student discipline issues, legal issues, employee issues, transportation issues, parent issues, safety concerns, and instructional concerns require time. Furthermore, the time required to complete the issues/concerns often come at the expense of the educational leader. Therefore, educational leaders must seek ways to be efficient during the day, but also to be effective so that the most critical areas may be prioritized. Particularly, educational leaders need to reduce or remove low-leverage/high-time tasks (i.e. teacher supervision and evaluation) and devote more time to working collaboratively with teams in the review of evidence of student learning and approaches to improve results (DuFour & Marzano, 2009). Educational leadership

programs need to provide activities and opportunities for educational leaders to learn and address daily leadership and managements tasks (Tobin, 2014).

Collaborating with Key Stakeholders

Educational leaders must be able to promote the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources (Council of Chief State School Officers, 2008b). The success of every student must not only be a belief of the educational leader, but must drive the actions of the educational leader. Believing is one component, but taking action to ensure that every student succeeds is another. Kladifko (2013) suggested the following:

> "Schools and principals who communicate with their external communities in some organized way enhance their chances of getting better public support, minimizing criticism, learning the values and priorities of a community, and receiving many functional ideas and resources that will help educate students better. (p. 54)

School and home connections can be cultivated when educational leaders convert to transformative professionals who are conscious and passionate about equity and justice for school stakeholders (Robinson, 2017). Furthermore, evidence exists that district leadership is a significant variable for helping schools implement simple structures of partnership programs and enhancing outreach to involve all families in children's education (Epstein, Galindo, & Sheldon, 2011). Finally, educational leadership programs should prepare educational leaders with strategies that support optimal parent and educator interactions (Robinson, 2017).

Ethics and Integrity

Educational leaders must be able to promote the successes of every student by acting with integrity, fairness, and in an ethical manner (Council of Chief State School Officers, 2008b). Leaders of education are under public scrutiny and must practice ethical behavior (Beyer, 2009). If educational leaders desire to make an impact on society, they must be grounded in concepts accentuated by the Court-moreover, educational opportunity, equality, justice, and fundamental value of education (Bon, 2012). Educational leadership programs must prepare all educational leaders "to act in an ethical manner in program planning, resource allocation, curriculum development, human resource management, provide a safe and secure learning environment, and offering the special programs and services that will support the academic and social success of every student" (Beyer, 2009, pp. 9–10).

The Education System

Educational leaders must be able to promote the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context (Council of Chief State School Officers, 2008b). Leaders must have knowledge and understanding of the political, social, economic, legal, and cultural contexts in which they work (Johnson & Uline, 2005). Transforming the education system will not work without the transformation of the leaders within the system, particularly within the schools (Futrell, 2011). School leaders must go outside school walls to create appropriately responsive systems of practice that allow students to succeed (Miller, Pavlakis, Lac, & Hoffman, 2014). Educational leadership programs need to ensure that

educational leaders are equipped with the knowledge, skills, and dispositions that will assist them to lead students to higher achievement (Miller et al., 2014).

Methodology

A quantitative research approach was used in this study. Quantitative research was defined by (Leedy & Ormrod, 2001) as an approach to "answer questions about relationships among variables with the purpose of explaining, predicting, and controlling phenomena" (p. 101). The variables under investigation were vision and goals, teaching and learning, managing organizational systems and safety, collaborating with key stakeholders, ethics and integrity, and the education system. The design used in the study was a correlational design. The approach met the needs for this study.

Population

Thirty graduate leadership educational leadership students (both current students and recent graduates) were selected for this study. Data were analyzed for students who successfully passed the *Praxis* test for Educational Leadership: Administration and Supervision. Of the initial 30 students who were surveyed, 14 students had taken and successfully passed the *Praxis* test. Data from each student of the 14 students were analyzed to assist instructional leadership professors in pinpointing content areas that may need to be further addressed.

Instrumentation

The researchers developed the survey instrument utilized in this study, the *Graduate Educational Leadership Students' Perception Survey*. A pilot survey was conducted to determine the clarity and level of difficulty that existed in the survey items. The items in the pilot survey were specific to graduate educational leadership students' perceptions of academic readiness of content knowledge in six areas (vision and goals, teaching and learning, managing organizational systems and safety, collaborating with key stakeholders, ethics and integrity, and the education system) on the *Praxis* test and used a 5-point Likert-scale (strongly disagree to strongly agree). Three graduate leadership students participated in the pilot study whom were not part of the final study. Participants completed the pilot survey via Qualtrics Survey Software™.

Pilot survey items were analyzed for reliability and Cronbach's alpha reliability coefficients were calculated for each of the survey's six content areas. The pilot survey consisted of 39 items. Items that weakened the reliability coefficients were extracted from the survey. A total of five items were extracted from the pilot survey. The extraction of these items resulted in a stronger reliability coefficient for the items measured in the survey. The final survey resulted in a total of 34 items. Reliability coefficients ranged from 0.750 to 0.968. The item numbers and item descriptions with reliability coefficients for the final survey are displayed in Table 1.

Experts in the field of education validated the survey. Both professors of education and school-based administrators assisted in the validation of the survey. It was important to receive input from these experts so that the survey could be validated before collecting data. The final survey measured the six same six content area categories (vision and goals, teaching and learning, managing organizational systems and safety, collaborating with key stakeholders, ethics and

integrity, and the education system) as the pilot survey. Demographic items such as gender and years of experience were also included in the survey.

Table 1
Description of Survey Items

Item Numbers	Description of Items	Reliability Coefficients
1-9	Demographics	
15,21,25,28	Vision and Goals	0.921
10,16,22,26,29,32,33,34	Teaching and Learning	0.926
11,17,23,30	Managing Organizational Systems and Safety	0.868
12,18	Collaborating with Key Stakeholders	0.750
13,19,24,27,31	Ethics and Integrity	0.968
14,20	The Education System	0.824

Findings

Analyses

A statistical analysis was completed on the data collected from the *Graduate Educational Leadership Students' Perception Survey*. Analysis of the data using descriptive statistics revealed that the mean of graduate educational leadership students' perceptions of collaborating with key stakeholders appeared greater in comparison to other variables. Furthermore, descriptive statistics revealed that the mean of graduate educational leadership students' perceptions of the education system appeared lower in comparison to other variables. The statistical means of each variable and standard deviations are presented in Table 2.

Table 2
Variable Means and Standard Deviations

Variables	*n*	*M*	*SD*
Vision and Goals	14	4.45	0.39
Teaching and Learning	14	4.31	0.29
Managing Organizational Systems and Safety	14	4.36	0.38
Collaborating with Key Stakeholders	14	4.54	0.49
Ethics and Integrity	14	4.46	0.35
The Education System	14	4.18	0.42

Further inferential data analysis conducted through a correlation matrix including all six variables were calculated. The six content area variables revealed statistically significant correlations (r ranging from .597 to .894 and p ranging from < .03 to < .001). Teaching and learning (TL) content area was strongly correlated with managing organizational systems and safety (MO) content area (r = .894 and p < .01). Teaching and learning (TL) content area was strongly correlated with ethics and integrity (EI) content area (r = .777 and p < .01). Teaching and learning (TL) content area was strongly correlated with vision and goals (VG) content area (r = .884 and p < .01). Teaching and learning (TL) content area was strongly correlated with vision and

goals (VG) content area (r = .884 and p < .01). MO content area was strongly correlated with TL content area (*r* = .894 and *p* < .01). MO content area was strongly correlated with collaborating with key stakeholders (C) content area (*r* = .747 and *p* < .01). MO content area was strongly correlated with EI content area (*r* = .758 and *p* < .01). MO content area was strongly correlated with VG content area (*r* = .884 and *p* < .01). C content area was strongly correlated with MO content area (*r* = .747 and *p* < .01). C content area was strongly correlated with EI content area (*r* = .771 and *p* < .01). EI content area was strongly correlated with TL content area (*r* = .777 and *p* < .01). EI content area was strongly correlated with MO content area (*r* = .758 and *p* < .01). EI content area was strongly correlated with C content area (*r* = .771 and *p* < .01). EI content area was strongly correlated with VG content area (*r* = .766 and *p* < .01). VG content area was strongly correlated with TL content area (*r* = .884 and *p* < .01). VG content area was strongly correlated with MO content area (*r* = .884 and *p* < .01). VG content area was strongly correlated with EI content area (r = .776 and p < .01). The correlation matrix is displayed in Table 3.

Table 3
Correlation Matrix

	TL	MO	C	EI	ES	VG
TL	1	.894**	.674**	.777**	.643*	.884**
MO	.894**	1	.747**	.758**	.599*	.884**
C	.674**	.747**	1	.771**	.609*	.597*
EI	.777**	.758**	.771**	1	.699**	.766**
ES	.643*	.599*	.609*	.699**	1	.641*
VG	.884**	.884**	.597*	.766**	.641*	1

Note. TL = teaching and learning; MO = managing organizational systems; C = collaborating with key stakeholders; EI = ethics and integrity;
ES = the education system; VG = vision and goals
*p<.05. *p<.01.

Conclusions

These findings suggest that graduate educational leadership students perceive a strong relationship between most content area categories of the *Praxis* test. For example, teaching and learning was strongly correlated was strongly correlated to managing organizational systems/safety content area (*r* = .894 and *p* < .01) and vision/goals (*r* = .894 and *p* < .01). As a result, it is important for educational leadership programs to embed content that crosscuts multiple content categories compared with teaching individual courses that focus on isolating single content categories into one single course. For example, a course that focuses on teaching and learning may crosscut content categories of managing organizational systems/safety and vision/goals. If graduate educational leadership programs crosscut content area categories across courses, learning targets may become more efficient and more effective. The results of this study align with a previous study that suggests educational leadership programs need to ensure that educational leaders are equipped with the knowledge, skills, and dispositions that will assist them to lead students to higher achievement (Miller et al., 2014). An intentional effort that focuses on mastery of knowledge, skills, and dispositions that crosscuts across graduate educational leadership courses is noteworthy.

Another finding of this study is that graduate students rated the education system the lowest (*M* = 4.18) compared with the other five content area categories. An implication of this finding

indicates that graduate educational leadership programs may want to allocate extra time to delve deeper in the content area of the ISLLC standard that focuses on the education system. The highest rated content area category was collaborating with key stakeholders (M = 4.54). Based on student perceptions in this study, it appears that graduate leadership programs believe they are strongly prepared to collaborate with key stakeholders. As a result, educational leadership programs should continue to prepare educational leaders with strategies that support optimal parent and educator interactions (Robinson, 2017).

Based on the inferential statistics of this study, graduate leadership programs need to exam their programs for alignment based on the six content area categories. For example, a particular course could be heavy in teaching and learning with limited focus on vision and goals. As a result, a course that only contains teaching and learning standards could also embed standards that focus on vision and goals, and thus crosscut two content area categories into one course. This has the potential to make the course more effective and more efficient.

In conclusion, the findings of the current study indicate strong relationships between many content area categories. Future professors and instructors may desire to analyze their own graduate leadership standards against the standards for two reasons: 1) to ensure that content area categories crosscut multiple courses to improve the efficiency and effectiveness of the graduate leadership program 2) to ensure students are successful on the *Praxis* for educational leadership: administration and supervision.

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