

Developing a Survey to Determine Student Perceptions of Readiness at the Beginning of an Educational Leadership Program

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.



Michael D. Kelly
Virginia Tech

John Gratto
Virginia Tech

In this study, researchers developed a survey to determine student perceptions of readiness prior to entering an educational leadership program. The researchers analyzed and established the reliability and validity of the survey created to understand student readiness as they enter the program. The information garnered from this survey will help faculty in the program make instructional decisions based on the student feedback and will be used to provide suggestions to the faculty for program improvement. The results will also be used to contribute to program accreditation through the Council for Accreditation of Educator Preparation (CAEP).

This study identified how trustworthy and dependable the instrument is in determining student perceptions of readiness for educational leadership based on present knowledge levels. A panel of experts from areas outside of the research population was used to establish content and face validity of the instrument. Internal consistency and reliability was measured using Cronbach's alpha. Fifty-one survey scores were used from students enrolled in the educational leadership program across the Commonwealth of Virginia. The survey was given in July of this year.

Keywords: Assessment Reliability, Program Accreditation, CAEP, Program Improvement, School Leadership Preparation.

The role of a school principal has drastically changed over the past 15 years. As educational leadership preparation programs work to provide the timeliest and most relevant information to their students, it is important for faculty to understand how well prepared our students are as they enter the program. In order to best meet our students' needs, faculty must understand the students' levels of competency in a variety of areas related to the area of educational leadership. Knowing students' needs at the beginning of their Educational Leadership Program will allow professors in those programs to tailor instruction accordingly so that students exit programs with full mastery of state and national standards in the area of educational leadership. To this end, one of the most effective ways to gain this information is through the use of a valid and reliable survey.

In addition, having baseline data of students' perceptions of knowledge will allow faculty in the program to track and measure student growth as they exit the program. Pre and post-assessment of student perceptions is critical when working to improve program content and offerings in the future.

The process the researchers underwent in this study will be useful to both professors and students in other programs of educational leadership as it will provide a concrete example of how to tailor course curriculum to the expressed needs of the students, much like doctors diagnose maladies and provide treatments specific to patients' needs. The information gained from the study will also help the program meet the continuous improvement expectations of the Council for Accreditation of Educator Preparation (CAEP), as explained below.

Literature Review

Definition of terms

Reliability

Reliability refers to the consistency of a measure or instrument. If we attain the same result repeatedly the measure is considered reliable. For example, "if an assessment is designed to measure a trait (such as introversion), then each time the assessment is administered to a subject, the results should be approximately the same" (Cherry, 2013, p. 1).

Face Validity

Anastasi (1988) defines face validity "... pertains to whether the test "looks valid" to the examinees who take it, the administrative personnel who decide on its use, and other technically untrained observers (p.144)."

Content Validity

Clause (2015) defines content validity as "...how accurately an assessment or measurement tool taps into the various aspects of the specific construct in question. In other words, do the questions really assess the construct in question, or are the responses by the person answering the questions influenced by other factors?"

Cronbach's Alpha

"Cronbach's alpha is a model of internal consistency reliability based on the average inter-item correlation of an instrument" (Rovai, Baker, and Ponton, 2014, p. 545).

Current Literature

One of the primary purposes for starting this study was to find ways to demonstrate the educational leadership program is meeting the needs of the students as evidenced through student

perceptions and demonstrated growth. This information is not only useful to the faculty as a whole, but is also a requirement of national accrediting agencies such as the Council for Accreditation of Educator Preparation (CAEP). One of the primary focuses of CAEP is demonstrated student growth; CAEP wants to ensure programs it accredits "... advance excellence in educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning." (CAEP, 2015).

CAEP (2015) has advanced standards for Educational Leadership preparation programs. Three CAEP standards buttress the importance of this study. Pertinent CAEP "Advanced Program Components" are as follows:

- **Satisfaction of Completers 4.4:** The provider demonstrates, using measures that result in valid and reliable data, that advanced program completers perceive their preparation as relevant to the responsibilities they confront on the job, and that the preparation was effective.
- **Quality and Strategic Evaluation 5.1:** The provider's quality assurance system is comprised of multiple measures that can monitor advanced program candidate progress, advanced completer achievements, and provider operational effectiveness. Evidence demonstrates that the provider satisfies all CAEP standards.
- **Continuous Improvement 5.3:** The provider regularly and systematically assesses performance against its goals and relevant standards, tracks results over time, tests innovations and the effects of selection criteria on subsequent progress and completion, and uses results to improve program elements and processes (CAEP, 2015).

In order to measure the satisfaction of those who complete an educational leadership program, it is helpful to know students' perceptions of readiness at the beginning of the program. But few studies have been done to measure the satisfaction of completers of educational leadership programs. Orr & Orphanos (2011) found that little is known about the impact of innovative programs and their components on principal behavior, and most important, on how those behaviors influence teaching and learning. Moreover, for the research that does exist, "evidence" is commonly based upon the self-reported perceptions of principals or the perceptions of various school stakeholders rather than measurable data of school and student outcomes (Darling-Hammond et al., 2007).

A study completed by the Stanford Educational Leadership Institute examined several kinds of evidence about program outcomes: candidates' and graduates' perceptions about their preparedness for various aspects of the principalship, self-reports of practices in key areas known to be related to effectiveness, and entry and plans to remain in the principalship, compared to a national sample; perceptions of employers about graduates' capacities; observations of graduates' practices on the job; and data about student achievement trajectories in graduates' schools, but did not study students' satisfaction with the educational leadership program preparedness. (Davis & Darling-Hammond, 2012). In "Student Satisfaction of Online Courses for Educational Leadership" authors Pauline Sampson, John Leonard, Julia Ballenger, and Craig Coleman (2009) examined students' satisfaction of online courses in a principal and superintendent certification program in the online Educational Leadership program at Stephen F. Austin University. The study "explored the students' satisfaction of course components: instruction, communication, assessment, leadership, teamwork, professionalism, and respect/diversity. The most recent group of students (2009) with a totally online delivery format

completed the survey and showed an overall positive satisfaction with overall means between 3.77 and 4.30 on a five point Likert-scale with a 5 meaning strong agreement with satisfaction.”

In March of 2008, Douglas Summer, a doctoral student at Baker University completed his dissertation entitled “A Measurement Of Student Satisfaction Levels As A Means Of Program Evaluation: An Examination Of Baker University’s Educational Leadership Doctoral Program,” concluding, “there was general satisfaction expressed by the participants in the study across all of the program design but... a need for improved efforts in the area of student advising.”

More has been written about the quality and strategic evaluation of educational leadership programs but not necessarily as those program evaluations pertain to the satisfaction of program completers. Most notably the UCEA Center for the Evaluation of Educational Leadership Preparation and Practice (CELP, 2015) “...makes available valid and reliable evaluation research tools, methods and training materials and strategies for leadership preparation programs. Through this center, UCEA (2015) fosters:

1. The collection and analysis of survey evaluation research data for program benchmarking and in-depth multi-program analysis of program features and graduate career and leadership practices outcomes.
2. The creation of a systematic process for collecting and analyzing state data on degrees and certification by institution, and career advancement and school progress by graduates and institutions.
3. The provision of evaluation training provides technical assistance and support for leadership preparation programs and establishes regional train-the-trainer opportunities to increase evaluation technical assistance capacity locally.
4. The creation of a sustainable system for on-going evaluation research to support the on-going evaluation and improvement of leadership preparation programs.”

Similarly, many educational leadership programs strive for continuous improvement but there is little or no literature to verify that such improvement has been based upon student perceptions of readiness at the beginning of a program. Rather, improvements have been founded on principles set by national and state standards. In 1996 the Council of Chief State School Officers promulgated the Interstate School Leaders Licensure Consortium (ISLLC standards); these standards have been updated several times over the past nineteen years, the latest update is currently in progress. Those six standards specify attributes and qualities school leaders throughout the nation must possess and therefore, form the basis for most educational leadership preparation programs in general. It is significant to note that Chief State School Officers established these standards as desirable attributes of school administrators throughout the nation-not in response to students’ perceptions.

The ISLLC standards were followed by the Educational Leadership Consortium Council Standards (ELCC) in 2011. These standards specify attributes for “institutions undergoing NCATE Accreditation and ELCC Program Review for Advanced Programs at the Master, Specialist, or Doctoral level that prepare Assistant Principals, Principals, Curriculum Directors, Supervisors, and other educational leaders in a school building environment.” Accordingly, educational leadership programs follow those seven standards to produce graduates whose skills are in compliance with those national standards and the National Council for Accreditation of Teacher Education, but not in response to students’ perceptions of educational leadership preparation programs.

Another example of a national organization setting standards that educational leadership programs throughout the nation pay heed to is the *Quality Principles for Educational Leadership Programs* specified by the Teacher Education Accreditation Council (TEAC, 2014). “TEAC’s principles and standards are compatible with the standards promulgated by many states and professional educational organizations, for example, the six standards of the Interstate School Leaders Licensure Consortium (ISLLC) and the seven standards of the National Policy Board for Educational Administration (NPBEA, 2015).”

Some states have personalized those national standards to their states such as: “*The William Cecil Golden School Leadership Development Program* was established by the 2006 Florida Legislature to provide a high quality, competency-based, customized, comprehensive and coordinated statewide professional development system for current and emerging school leaders. The program is aligned with and supports Florida's *Principal Leadership Standards*, the standards of the National Staff Development Council, the Florida Professional Development Protocol Standards and NCLB requirements for high quality professional development (Florida Department of Education, 2015).”

California has also established the California Professional Standards for Educational Leaders. “These standards were adapted from the Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders (1996). Washington, DC: Council of Chief State School Officers. Adaptations were made for the California Professional Standards for Educational Leaders (2001) by representatives from the California School Leadership Academy, as well as the Association of California School Administrators, California Commission on Teacher Credentialing, California Department of Education, and California colleges and universities. (California Department of Education, 2015).” Connecticut developed its own *School Leadership Standards*, which serve “...as the foundation for a variety of state functions, including leadership preparation program accreditation, licensure assessment, school administrator evaluation and professional development from induction through the professional certificate...by adapting the national Interstate School Leadership Licensure Consortium (ISLLC) Standards for use in Connecticut (Connecticut Department of Education, 2012).”

Thus, the paucity of literature related to the perception of students’ impact upon educational leadership programs substantiates the importance of this study. Furthermore the CAEP requirements to “regularly and systematically assess performance against its goals and relevant standards, track results over time, test innovations and the effects ... on subsequent progress and completion, and use results to improve program elements and processes” further demonstrates the significance of this study.

Methodology

This research study was conducted in July of 2015. The survey was administered to new students who will begin their educational leadership program this fall in one educational leadership program in the Commonwealth of Virginia. The analysis of the responses was conducted in late July 2015 in time for reporting during the NCPEA conference.

Instrument

The survey instrument being used in this study was created based on the 38 internship objectives developed by members of the faculty in the Educational Leadership Program at Virginia Tech.

The objectives were formulated through a review of the most recent ISLLC standards, as well as the standards outlined by the Virginia Department of Education (VDOE). Each of the internship objectives is aligned directly to one of the seven current ELCC standards as well as standards for the VDOE.

The instrument has been divided into six distinct sections, with each section containing four statements for the students to respond to. The six broad sections are:

1. Knowledge of leadership and change functions
2. Knowledge of student services
3. Knowledge of school operations
4. Knowledge of school board policies
5. Knowledge of human resource functions
6. Knowledge of curriculum and instructional supervision

Not all of the 38 internship objectives were included in the survey. Some were omitted as the objective was based on an activity rather than garnering specific knowledge. In total, 24 of the 38 objectives were converted into survey items for this study. There is also a final section of the survey that allows students to make general comments regarding their knowledge levels, as well as any other area of interest or concern.

Population

Fifty-one students from five different Virginia Tech satellite sites across the Commonwealth were surveyed for this study. This represents approximately 92% of the total population. These sites include: Hampton Roads, Richmond, Northern Virginia, Abingdon, and Roanoke. Each student is about to begin his/her first term as a graduate student in the Principal Preparation Program within the Educational Leadership Program at Virginia Tech beginning in the fall of 2015. All students are current practicing teachers, or central office personnel. Data from each site was analyzed independently, as well as collectively to provide information to individual faculty members, as well as the faculty as a whole.

Data Collection and Statistical Analysis

Data collection. Data was collected through the students' completion of the *Students' Perceptions of Knowledge Related to School Leadership* survey via Qualtrics Survey Software™. A welcome email was sent to all participants during the second week of July informing them of the reason for the survey, as well as providing students a link to access the instrument. Students were asked to complete the survey as part of the program. The final date for collection of data was July 25, 2015. Data was then organized into an Excel spreadsheet entered into the *Statistical Package for the Social Sciences* (SPSS) for analysis.

Validity. After the initial development of the survey in the spring of 2015, the assessment was then pilot-tested with several faculty members to help establish content and face validity. The feedback from the faculty was reviewed, and adjustments to the instrument were made as needed.

The items and the instrument were next reviewed for content and face validity via an online focus group of current school and central office administrators in the Hampton Roads area during the month of May of 2015. Educational focus groups that provide feedback on an instrument help confirm its content validity since participants were practicing experts in the field

(Cannizzaro, 2007). Clause (2015) noted “content validity is most often measured by relying on the knowledge of people who are familiar with the construct being measured. These subject-matter experts are usually provided with access to the measurement tool and are asked to provide feedback on how well each question measures the construct in question.” As such, feedback from this group provided an effective method to establish both face and content validity, and resulted in additional adjustments to the instrument. One adjustment was to reorder several of the categories to improve the flow of the survey. Other adjustments were minor in nature, including words, punctuation and typos.

Reliability. Rovai, et. al. (2012) recommends measuring internal consistency and reliability using Cronbach’s alpha. After the data collection has been completed, each of the six distinct categories based on the internship objectives was individually tested for reliability based on the responses to the four sub-questions under each category. As a final measure, the entire response set was tested to determine overall reliability. Reliability tests resulting in an alpha of .7 are generally accepted as having high reliability (Rovai, Baker & Ponton, 2012, p. 385). Cronbach’s alpha reliability coefficient generally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach’s alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. George and Mallery (2003) provide the following rules of thumb: “_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable” (p. 231).

Findings

Knowledge of Leadership and Change Functions

For responses to the intern’s performance related to *Knowledge of leadership and change functions*, 48 cases of the possible 51 were included in the analysis (Table 1). Students who did not have a complete data set were excluded. Cronbach’s alpha for the 48 of 51 items was .632 (Table 2), which represents a questionable correlation between items. The instrument for *Knowledge of leadership and change functions* can be deemed somewhat reliable.

Table 1
Knowledge of leadership and change functions case summary

Cases	N	%
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 2
Knowledge of leadership and change functions

Reliability statistics		
Cronbach’s Alpha	α	N
Group 1	.632	4

Knowledge of Student Services

For responses to the intern's performance related to *Knowledge of student services*, 48 cases of the possible 51 were included in the analysis (Table 3). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .804 (Table 4), which represents a good correlation between items. The instrument for *Knowledge of student services* can be deemed reliable.

Table 3
Knowledge of student services case summary

Cases	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 4
Knowledge of student services

Reliability statistics		
<u>Cronbach's Alpha</u>	<u>α</u>	<u>N</u>
Group 1	.804	4

Knowledge of School Operations

For responses to the intern's performance related to *Knowledge of school operations*, 48 cases of the possible 51 were included in the analysis (Table 5). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .850 (Table 6), which represents a good correlation between items. The instrument for *Knowledge of school operations* can be deemed reliable.

Table 5
Knowledge of school operations case summary

Cases	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 6
Knowledge of school operations

Reliability statistics		
<u>Cronbach's Alpha</u>	<u>α</u>	<u>N</u>
Group 1	.850	4

Knowledge of School Board Policies

For responses to the intern's performance related to *Knowledge of school board policies*, 48 cases of the possible 51 were included in the analysis (Table 7). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .896 (Table 8), which represents an excellent correlation between items. The instrument for *Knowledge of school board policies* can be deemed highly reliable.

Table 7
Knowledge of school board policies case summary

<u>Cases</u>	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 8
Knowledge of school board policies

Reliability statistics		
<u>Cronbach's Alpha</u>	<u>α</u>	<u>N</u>
Group 1	.896	4

Knowledge of Human Resource Functions

Knowledge of human resource functions, 48 cases of the possible 51 were included in the analysis (Table 9). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .627 (Table 10), which represents a questionable correlation between items. The instrument for *Knowledge of human resource functions* can be deemed somewhat reliable.

Table 9
Knowledge of human resource functions case summary

<u>Cases</u>	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 10
Knowledge of human resource functions

Reliability statistics		
<u>Cronbach's Alpha</u>	<u>α</u>	<u>N</u>
Group 1	.627	4

Knowledge of Curriculum and Instructional Supervision

For responses to the intern's performance related to *Knowledge of curriculum and instructional supervision*, 48 cases of the possible 51 were included in the analysis (Table 11). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .872 (Table 12), which represents an good correlation between items. The instrument for *Knowledge of curriculum and instructional supervision* can be deemed highly reliable.

Table 11

Knowledge of curriculum and instructional supervision case summary

Cases	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 12

Knowledge of curriculum and instructional supervision

Reliability statistics

Cronbach's Alpha	<u>α</u>	<u>N</u>
Group 1	.872	4

Reliability of Complete Survey

For the final analysis conducted, the researchers tested all survey items combined to determine the overall reliability of the instrument. 48 cases of the possible 51 were included in the analysis (Table 13). Students who did not have a complete data set were excluded. Cronbach's alpha for the 48 of 51 items was .927 (Table 14), which represents an excellent correlation between items. The instrument overall can be deemed highly reliable.

Table 13

Overall instrument case summary

Cases	<u>N</u>	<u>%</u>
Valid	48	94.1
Excluded ^a	3	5.9
Total	51	100.0

a. Listwise deletion based on all variables in the procedure.

Table 14

Overall instrument reliability

Reliability statistics		
Cronbach's Alpha	α	N
Group 1	.927	24

Conclusions and Future Study

This research study has helped to determine that the instrument created for the purpose of determining student perceptions of readiness at the beginning of the educational leadership program is both valid and reliable. Multiple measures were used to determine both face validity as well as content validity, including using a panel of experts in the field. The reliability of the instrument appears to be good overall. When the six independent groups were evaluated, Alpha ratings ranged from .627 (questionable) to .896 (excellent), but when the instrument was evaluated in totality it yielded an Alpha rating of .927 (excellent). For these reasons the researchers deem the instrument reliable.

Recommendations for future study

The researchers are aware that the n value used in this study is low, though it does represent the entire population of the study group at this time. It is recommended that this study be conducted again when the next cohort begins, and combine the two groups to increase the n value, thus improving the reliability.

It is also recommended that the data collected through this research be used by the educational leadership faculty to make changes to their course content. A qualitative study could be conducted to determine the level of changes made by the faculty to determine if the research is contributing to overall program improvement.

Finally, it is recommended that the study population be given the survey again upon completion of the educational leadership program. This will allow the faculty to determine the level of growth attained by students in the program in the areas of focus. Further changes to program content could be determined after this additional study.

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