

FELing It: Developing a Rubric Through an Interdisciplinary Partnership to Support Graduate Students' Writing Skills

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Abstract

Educational leadership demands that school leaders be able to communicate clearly and effectively in writing, both academically and professionally. Leaders of a Master's in Educational Leadership (M.Ed.) program at a university in the southeast of the United States established an interdisciplinary collaboration with the university's Faculty Writing Partners program to develop valid and reliable rubrics to assess graduate students' writing abilities through critical task essays. The critical task essays connect required internship experience in each course with a targeted Florida Principal Leadership Standard (FPLS), coursework, and scholarly research. However, an objective performance measure for the critical task essays was lacking. Accordingly, a criterion-referenced rubric was developed to: 1) specify criteria for writing in relation to grammar, mechanics, and organization, 2) identify quality peer-reviewed research as evidence to support clinical experience, 3) effectively articulate in writing personal strengths, weaknesses, and plans for improvement towards mastery of the FPLS, and 4) provide consistency in expectations and feedback among professors and adjunct instructors. The rubric demonstrated validity and reliability, and likely led to consistently higher scores on both the critical task essays and, most importantly, the Florida Educational Leadership Examination (FELE).

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Résumé

Le leadership en éducation exige que les cadres scolaires sachent communiquer clairement et efficacement sous forme écrite, tant au niveau pédagogique que professionnel. Les responsables de la maîtrise en leadership éducationnel dans une université du sud-est des États-Unis ont établi une collaboration interdisciplinaire avec les responsables du programme « Faculty Writing Partners » à la même université afin de développer des critères valables et fiables pour évaluer, au moyen de textes d'analyse critique, les aptitudes en rédaction de leurs étudiants diplômés. Ces textes ont comme objectif de relier les expériences acquises par ces étudiants lors d'un stage obligatoire dans chaque cours au Florida Principal Leadership Standard (FPLS), au travail qu'ils ont effectué dans le cours, et à leurs recherches universitaires en général. Il manquait cependant une mesure objective pour évaluer les textes d'analyse critique. On a donc conçu un tableau fondée sur des critères précis pour : 1) spécifier nos attentes en ce qui a trait à la grammaire, la syntaxe et l'organisation du texte; 2) reconnaître l'article de recherche de bonne qualité évalué par les pairs comme complément de l'expérience clinique; 3) articuler efficacement sous forme écrite les qualités, faiblesses et objectifs d'amélioration personnels relatifs à la maîtrise du FPLS; et 4) assurer une uniformité parmi les professeurs et les instructeurs associés dans leurs attentes et leurs conseils. Le tableau s'est avéré valable et fiable. D'ailleurs, en toute probabilité, il a mené à de meilleurs résultats pour les textes d'analyse critique et surtout pour le Florida Educational Leadership Examination (FELE).

Keywords / Mots clés : educational leadership, professional writing for school leaders, academic writing for school leaders, improving FELE writing scores / leadership en éducation, rédaction professionnelle pour cadres scolaires, rédaction universitaire pour cadres scolaires, amélioration des résultats en rédaction pour le FELE

Introduction

The importance of educational leaders to understand and be responsive across dynamic contextual demands cannot be understated (Garces & Jayakumar, 2014; Dinham, 2007). Various school contexts (institutional, community, socio-cultural, political, economic, school improvement) that shape leadership practice have been identified (Hallinger, 2018). Several studies (Leithwood, Harris & Hopkins, 2020; Harris & Jones, 2018; Hallinger, 2018) emphasize the importance of educational leader responsiveness to contextual demands. In fact, effectiveness within the context of educational leadership necessitates a comprehensive understanding of issues, adaptive capacity, and ability to communicate effectively to identify and address varying contextual demands.

Increasing expectations for school leaders to become more accountable as community leaders and to increase effectiveness across multiple domains of academic achievement of all P-12 students have reinforced the necessity for school leaders to have excellent communication skills to impart information as necessary to various stakeholders (Hallinger, 2003; Murphy, 2002). This contemporary expansion and understanding of the role of educational leaders has prompted the redesign of educa-

tional leadership preparation programs, including their conceptual frameworks and curricula (Capper, Theoharis, Sebastian, 2006; Furman, 2012; McKenzie, Christman, Hernandez, Fierro, Capper, Dantley, Scheurich, 2008; Miller & Martin, 2015).

Responding to the requisite demand for training educational leaders, an interdisciplinary cadre of program leaders of a Master's in Educational Leadership (M.Ed.) program initiated a program evaluation process to assess its effectiveness. Assessing the efficacy of graduate program success in achieving program goals is difficult, beyond pass rates on the Florida Educational Leadership Exam (FELE). Beginning in the 2019–2020 school year, program leaders for the M.Ed. met with regional school district leaders in the southeast to examine the program requirements. A needs assessment revealed overall strengths, weaknesses, opportunities, and challenges within the current competency-based program infrastructure. The analysis provided a platform to develop consensus for established expectations for M.Ed. candidate entry, preparation, and matriculation. Expectations were established for graduate student performance on the FELE and performance on written assignments throughout the program.

Analysis of FELE scores for first-time test takers indicated lower-than-state-average scores on the written performance assessment of the FELE. In addition, regional school district leader feedback indicated concerns about graduates' professional writing abilities. To address these concerns, program leaders reassessed the requirements of the critical task essay assigned in each course and the rubric used to evaluate critical task essays.

Critical task essays are the culminating assignment in each of 10 academic courses in the M.Ed. program. Each critical task essay is based on an assigned clinical experience and connected to a targeted Florida Principal Leadership Standard (FPLS), scholarly research, and coursework. In partnership with regional school district leaders, clinical practice activities were created to provide focused experiences for graduate students that align with the work of school-based administrators and the FPLS, increase readiness for administrative advancement, and improve future school leader writing ability. Clinical practice activities provide real-world, real-time experiences that are meaningful to candidates and improve their ability to write academically and professionally about those experiences. Three hundred hours of targeted clinical practice activities were aligned to FPLS and placed throughout the 10 academic courses in the program so graduate students would have clear direction for writing each critical task essay.

Critical task essays become part of each candidate's final professional portfolio, which graduate students defend prior to graduation. This defense is designed to showcase what students know and can do related to each FPLS, and allows candidates to demonstrate that theory and practice are linked throughout the program and that there is coherence across clinical and academic components of preparation. For graduate students to earn their degree, they must also pass the FELE and meet specific GPA requirements.

Critical task essays are graded as part of each course by various professors and adjunct instructors, so it was extremely important to have a clear, focused rubric for all to follow as graduate students develop their professional portfolios and ensure that

essays are graded with consistency and accuracy across assessors (Pellegrino et. al, 1999 as cited in Reddy, 2011). Program leaders—adhering to the guidelines from the Council for Higher Education Accreditation (CHEA) in the creation of a rubric to assess student learning (CHEA, 2002 as cited in Reddy, 2011)—examined the rubric that was being used to evaluate critical task essays in each course and realized that the rubric could be improved to support graduate students in their academic and professional writing. Additionally, M.Ed. program leaders partnered with the university Faculty Writing Partners program on an interdisciplinary approach to create a rubric that was an “authentic assessment,” an assessment that “includes the holistic performance of meaningful, complex tasks in challenging environments that involve contextualized problems” (Montgomery, 2002, p. 35). Montgomery adds that rubrics offer students and instructors clear criteria that must be met to demonstrate understanding and provide “specific feedback for future success on a similar task” (2002, p. 36). The rubrics for the M.Ed. critical task essays supply students with the framework to understand and reflect on the demonstration of the learning, as well as enhance understanding of specific areas that can be improved on in future essays.

Purpose of the study

The purpose of this article is to describe how the participation of M.Ed. program leaders in the university Faculty Writing Partners program has led to improvement in students’ ability to communicate effectively in writing about their understanding of FPLS as evidenced through their performance on culminating critical task essays in each course and their scores on the writing section of the FELE.

As a university initiative, the Faculty Writing Partners program was established to enhance scholarly innovation and provide an opportunity for interdisciplinary faculty to engage in a collaborative effort to enhance student achievement and expand opportunity for scholarship. The program essentially partners writing faculty with faculty who teach in other disciplines but include writing assignments in their courses. The partners collaborate to develop or enhance a writing assignment in the non-writing faculty member’s course. In this case, the collaborative group sought to respond to the needs assessment via a performance-based platform to increase leadership competency. The group identified the need to develop valid and reliable rubrics that would be used to assess graduate students’ critical task essays. The rubrics needed to measure students’ writing abilities and understanding of coursework, research, and the focus FPLS for the course. Prior to this, the M.Ed. program used an existing rubric for critical essays; however, the rubric had not been used effectively or with fidelity and no longer aligned with the competencies being developed in the candidates. Written instructions for the critical task essays were also developed through this partnership to provide students a clear understanding of each assignment and what would be expected as it related to the rubric.

The use of rubrics to assess student performance has been seen as essential for the last two decades (Panadero & Jonsson, 2020; Cockett & Jackson, 2018). In recent years, classroom teachers use rubrics more often to assess everything from students’ writing to their ability to follow given directions. Even though rubrics have been characterized by the number of criteria and number of levels (Brookhart, 2018),

validity and reliability are two essential components that need to be satisfied (Cockett & Jackson, 2018; Koklu, 2012; Schneider, Maier, Lovrekovic, Retzbach, 2015). Therefore, this article intends to investigate the validity and reliability of a scoring rubric as an assessment tool used to evaluate the critical task essay in each course in the M.Ed. program.

The purpose of the rubric and written instruction development was: 1) to specify criteria for writing in relation to grammar, mechanics, and organization, 2) to identify quality peer-reviewed research as evidence to support clinical experience, 3) to effectively articulate in writing personal strengths, weaknesses, and plans for improvement towards mastery of the FPLS, and 4) to provide consistency in expectations and feedback among professors and adjunct instructors. Additional student support was provided to students through required tutoring sessions with the Center for Academic Achievement's Writing Lab to review students' critical task essay to improve the quality of their writing prior to submission for evaluation in each course.

Method

To increase student achievement through improved writing, the authors redeveloped the critical task essay rubrics and assessed their validity. Subsequently, training was conducted for all educational leadership professors and instructors on the use of the rubric. Data was collected on student writing performance using the critical task essay rubrics in each course. This data was analysed and correlated to FELE performance, career goal achievement for students, and continuous program improvement. Data was also used to conduct reliability analysis.

Validity analysis

The professors met with their assigned Faculty Writing Partner during the Spring 2021 semester to develop the critical task essay rubric. The Data and Assessment Coordinator for the College of Education conducted validity and reliability assessments for the newly developed rubric through the following process:

1. Content validity was assessed by eight content jurors (faculty and principals) identified as content area experts who each had multiple years of teaching, leadership, and management experience in educational leadership. A data collection protocol was created and sent to jurors with the rubric (Figure 1).
2. Content jurors reviewed each component in the rubric and then used a three-point Likert-type scale to judge the construct relevancy (See Figure 2).
3. Jurors were then asked to rate the relevancy of each component as "high," "moderate," or "low" (Figure 2).
4. Jurors evaluated the format of levels (Accomplished, Proficient, Emerging, and Unsatisfactory) and commented on this theme (Figure 2).
5. After gathering each juror's ratings and comments, the content validity ratio (CVR) was calculated for each item based on the following formula:

$$CVR = \frac{n_h - \left\lceil \frac{N}{2} \right\rceil}{\left\lceil \frac{N}{2} \right\rceil}$$

In the formula, “*nh*” refers to the number of jurors indicating “high,” and “*N*” refers to the total number of jurors. Calculated CVRs were then compared with the levels required for statistical significance (Lawsche, 1975). A minimum CVR value of 0.75 was necessary for statistical significance at $p < 0.05$ based on eight content reviewers.

Figure 1: Data collection protocol for jurors’ evaluation

Dear Juror,

Following rubric was created for the Critical Task Essay based on the targeted FPLS (The Florida Principal Leadership Standards) Standard for the course and supported by scholarly research, coursework, and the Internship Activity (M.Ed.) or Case Study (M.A.) in the Educational Leadership program.

The objective of this study is the validation of a rubric. We need your judgement on levels of following rubric in order to ensure content validity. Content validity is focused on the extent to which a measurement reflects the specific intended domain of content. Specifically, it refers to an evaluation whether components and the scoring levels of the rubric are relevant to the content being measured. Please review each component and the scoring levels (Accomplished, Proficient, Emerging and Unsatisfactory) and use a 3-point Likert type scale to judge the construct relevancy of those components and scoring levels.

Specifically, please rate the relevancy of each component and the scoring levels (Accomplished, Proficient, Emerging and Unsatisfactory) as “High (H)”, “Moderate (M)” or “Low (L)” by circling your choice.

Please provide following demographic information.

Name : _____

Current Title : _____

Years of Experience in the field of Educational Leadership: _____

Thank you for your participation.

Figure 2: Jurors’ scoring matrix used for validation of various levels of the rubric

Components	Relevancy of Component			Levels	Relevancy of Levels		
	High	Moderate	Low		High	Moderate	Low
Discussion and Application of Artifacts				Accomplished			
				Proficient			
				Emerging			
				Unsatisfactory			
Organization: Cohesiveness of Ideas, Concepts, and Arguments				Accomplished			
				Proficient			
				Emerging			
				Unsatisfactory			
Grammar and Mechanics				Accomplished			
				Proficient			
				Emerging			
				Unsatisfactory			
Reflective Conclusion: Personal and Professional Readiness and Strengths and Areas for Improvement				Accomplished			
				Proficient			
				Emerging			
				Unsatisfactory			
References and Correct Citations				Accomplished			
				Proficient			
				Emerging			
				Unsatisfactory			

Reliability analysis

Upon validation of the rubric, reliability analysis was conducted by using correlation analysis with the data collected from 54 graduate students who were currently enrolled in the M.Ed. program at the university. Correlation analysis tested the internal consistency of the rubric. Correlation between each component of the rubric with the whole rubric was determined by computing correlation coefficients between each of those components and the whole rubric. The correlation coefficient’s magni-

tude differed slightly between sources; however, the following ranges are accepted generally (Schober, Boer, & Schwarte, 2018; Ratner, 2009; Asuero, Sayago, & González, 2006; Masson, McNeill, Tomany, Simpson, Peace, Wei, Grubb, & Bolton-Smith, 2003).

Correlation coefficients whose magnitude are between:

- 0.9 and 1.0 indicate *very high* correlation.
- 0.7 and 0.9 indicate *high* correlation.
- 0.5 and 0.7 indicate *moderate* correlation.
- 0.3 and 0.5 indicate *low* correlation.

In this research, correlation coefficients were interpreted based on the ranges shown above.

Findings and discussion

Based on the data collected from content expert reviewers, CVRs were computed. As seen in Table 1 and Table 2 below, no CVR was found to be lower than the minimum CVR value of 0.75. More specifically, Table 1 shows the validity results by components in the Rubric while Table 2 demonstrates the validity results by FPLS standards. As a result, all levels of these components in the rubric were found to be valid.

Table 1: Validity results for critical task essay rubric by component

	Number jurors			CVR (Content Validity Ratio) values
	HIGH	MODERATE	LOW	
Component-1	8	0	0	1.00
Component-2	8	0	0	1.00
Component-3	8	0	0	1.00
Component-4	8	0	0	1.00
Component-5	7	1	0	0.75

Table 2: Validity results for critical task essay rubric by FPLS

	Number jurors			CVR (Content Validity Ratio) values
	HIGH	MODERATE	LOW	
Standard-1	7	1	0	0.75
Standard-2	7	1	0	0.75
Standard-3	7	1	0	0.75
Standard-4	7	1	0	0.75
Standard-5	7	1	0	0.75
Standard-6	7	1	0	0.75
Standard-7	7	1	0	0.75
Standard-8	7	1	0	0.75
Standard-9	7	1	0	0.75
Standard-10	7	1	0	0.75

Based on the 54 students' scores on the critical task essay, reliability analysis was conducted. Table 3 shows the reliability measures of the whole rubric and each component. According to the results and considering the correlation coefficient magni-

tude interpretation information given in the method section, each component of the rubric and the whole rubric have moderate and strong reliability measures ranging from .605 to .796. That means each component of the rubric is reliable for grading the critical task essays.

Professional development in educational leadership has evolved to necessitate a multidisciplinary approach for engaging M.Ed. graduate students through creating teams, providing mentorship, giving real-world, real-time feedback, employing ex-

Table 3: Reliability analysis of the rubric

		Discussion	Grammar	Organization	References	Reflective	FPLS	Total Score
Total Score	Pearson Correlation	.605**	.713**	.623**	.703**	.796**	.638**	1
	Sig. (2-tailed)	0	0	0	0	0	0	
	Sum of Squares and Cross-products	222.13	143.852	165.852	201.259	520.87	90.407	1632.704
	Covariance	4.191	2.714	3.129	3.797	9.828	1.706	30.806
	N	54	54	54	54	54	54	54

Notes: *Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed)

periential learning, employing educational technology to support learning, and building longitudinal relationships. Responding to the need to enhance competencies in understanding of content, grammar, mechanics, and organization in writing, clear writing instructions and rubrics were developed for critical task essays. Validity and reliability assessments were completed to ensure the use of a quality rubric focusing on the important characteristics of writing. In most universities, students have limited opportunities to engage in refereed writing activities outside scientific writing. A review of the literature did not uncover evidence-based writing professional development activities, except in healthcare fields. While writing skills development and career readiness in science are beginning to become integrated into curricula, there is a dearth of information in education. Among healthcare professionals, professional development opportunities are highly regarded as essential to enhance knowledge generation and promote the delivery of high-quality training through evidence-based practices (Ratnapalan & Ghavam-Rassoul, 2020). Ensuring competencies in educational leadership has generally been suboptimal, with district leaders reporting a need for training in writing. Analogous to healthcare professional development, suboptimal competency may be a lack of clarity in writing questions, inadequate methodology to assess study questions, inadequate feedback, and lack of experiential learning opportunities (Gottlieb, Dehon, Jordan, Bentley, Ranney, Lee, Khandelwal, & Santen, 2018). To address this, we intentionally created a rubric to foster educational scholarship skills. Similarly, in a clinical teaching fellowship program, highlighting the benefit of knowledge and skills development through integrating informal learning opportunities that take place in authentic environments is beneficial (Burgess, Matar, Neuen, & Fox, 2019).

Reorganizing the content of the M.Ed. while still focusing on curriculum development, instructional methods (teaching), learning, assessment strategies, and program evaluation and design also affords opportunities for leadership and management feedback. Thus, a significant challenge for educational leadership grad-

uate programs is to design evidence-based tools that translate empirical knowledge of what successful leaders do into application, assessment, and communication (Leithwood & Sun, 2018). Notwithstanding, establishing more complex, sophisticated criteria and mechanisms that are multi-method and potentially interdisciplinary in nature for the evaluation and exploration of effectiveness by establishing a valid and reliable rubric was essential.

Indeed, this master's level leadership program is designed to engage students in leadership processes through skill acquisition, establishing more constructive thinking patterns, and enhancing utility of skills and abilities via affective- and cognitive-based learning outcomes. A recent meta-analysis encompassing over 300 leadership training evaluations observed significant increases in learning, leadership behaviours performed on the job, overall job performance, subordinate outcomes, and organizational outcomes. The authors conclude that delivery methods are integrated in practice (rather than in preparation). In fact, "moderator analyses support the use of needs analysis, feedback, and multiple delivery methods (especially practice)" (Lacerenza, Reyes, Marlow, Joseph, & Salas, 2017). Although state standardized exams reflect the skills district leaders desire for emerging administrators, the translation into practice has not traditionally corresponded. Thus, program effectiveness extends beyond uniform programming towards quality indicators that demonstrate high quality graduate programming (Mullen & Eadens, 2018).

According to the Experienced-based Learning Model for education, organizational support, pedagogical support, and effective support are critical to ensure the alignment of content and experiences with program outcomes through opportunities for active participation (Dornan, Tan, Boshuizen, Gick, Isba, Mann, Scherpbier, Spencer, & Timmins, 2014) and then written descriptions of those activities. The development of a valid rubric for the evaluation of critical task essays embedded in each course in the M.Ed. program provides professors with a framework to measure depth of knowledge and writing abilities related to coursework and FPLS within the program. The rubric allows faculty to engage M.Ed. graduate students in the preparation, practice, and improvement of writing critical tasks essays. It is expected that through provision of opportunities in writing development activities, practice in writing with supportive feedback, and, by consequence, enhanced writing competency, a sustainable pipeline of high-quality writers in the field of educational leadership can be built. In the field of educational leadership, others could replicate this work by creating and using a valid and reliable rubric throughout their programs of study to measure student success on internship experiences and writing as it relates to state and national standards.

Conclusion

This partnership between the M.Ed. program leaders and the university Faculty Writing Partners program aims to move beyond improving teaching skills by providing a foundation for enhancing writing skills within the context of educational leadership and scholarship. The partnership resembles the concerted efforts within the healthcare professions emphasizing evidence-based application of mentored support and feedback and experiential opportunities for establishing and maintaining leadership competencies. Implications of the results for educational leaders are as follows:

1. Using a valid and reliable rubric that includes standards allows programs to gather and analyze data for continuous quality improvement.
2. Spreading clinical practice experiences throughout the program of study allows graduate students to focus on real-time, real-world experiences and targeted standards, thus making their writing more meaningful to them.
3. Enhancing quality leadership matters, with program effectiveness an essential goal to ensure best practices are the core of the preparation of school leaders.

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