Addressing Quality of Feedback and Fidelity of Scoring Within edTPA Formative Practice Tasks for COED Candidates

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Abstract

UNC Charlotte is one of several institutions of higher education (IHEs) participating in edTPA, a pre-service teacher performance assessment developed by Stanford University. While North Carolina does not yet dictate the use of scores like those derived from edTPA in licensure decisions, recent legislative efforts are moving in that direction (it is anticipated this will occur in the 2019-2020 academic year). The College of Education has been proactive in how it addresses both formative and summative supports but formative feedback provided to students and scoring of formative products vary by program and instructor. The current project is designed to ensure that students receive both high quality specific feedback as well as accurate representative scoring on formative edTPA practice tasks within coursework. The goals of this project address increasing 1) the quality of feedback provided to candidates (including feedback regarding candidate use of written communication and critical thinking skills) and 2) the fidelity of scoring of formative products during coursework across instructors and programs.

Data analysis in spring 2017 on the current state of predictive validity of edTPA practice tasks to edTPA final scores will inform the development of training (implemented summer 2017) and a quality of feedback measure. Analysis of data collected from candidate formative and summative data in 2017-18 will be compared to data collected in 2016-17 to ascertain the impact of the training. Multiple measures will be considered, including the impact of the training on the quality of feedback candidates receive from faculty who participate.

Budget Request for SOTL Grant Year <u>2016-2017</u>

Joint Proposal?	x Yes No		
Title of Project	Addressing Quality of Feedback and Fidelity of Scoring Within edTPA Formative Practice Tasks for COED Candidates		
Duration of Project	January, 2017- June, 2018		
Primary			
Investigator(s)	Laura Hart and Shawnee Wakeman		
Email Address(es)	Laura.hart@uncc.edu slwakema@uncc.edu		
UNC Charlotte SOTL Grants Previously			
Received (please names of project, PIs, and dates)	Following the Leader: A collaborative training model to develop and sustain best practices for teacher candidates Laura Hart and Scott Kissau- PIs; January, 2014-January, 2015		
Allocate operating budget to Department of Office of Assessment and Accreditation			

		Year One	
Account #	Award	January to June	
Faculty Stipend	Transferred directly from Academic Affairs to Grantee on May 15	\$2000 -	
911250	Graduate Student Salaries		
911300	Special Pay (Faculty on UNCC payroll other than Grantee)	\$6000	
915000	Student Temporary Wages		
915900	Non-student Temporary Wages		
920000	Honorarium (Individual(s) not with UNCC) \$1500		
921150	Participant Stipends		
925000	Travel – Domestic		
926000	Travel – Foreign		
928000	Communication and/or Printing		
930000	Supplies \$100.28		
942000	Computing Equipment		
944000	Educational Equipment		
951000	Other Current Services		
	GRAND TOTAL	\$ - 9600.28	

		Year Two	
Account #	Award	July to June	
Faculty Stipend	Transferred directly from Academic Affairs to Grantee on May 15	\$1500 -	
911250	Graduate Student Salaries		
911300	Special Pay (Faculty on UNCC payroll other than Grantee)	\$8000	
915000	Student Temporary Wages		
915900	Non-student Temporary Wages		
920000	Honorarium (Individual(s) not with UNCC)	\$1500	
921150	Participant Stipends		
925000	Travel – Domestic		
926000	Travel – Foreign		
928000	Communication and/or Printing		
930000	Supplies \$100.28		
942000	Computing Equipment		
944000	Educational Equipment		
951000	Other Current Services		
	GRAND TOTAL	\$ - 11100.28	

Attachments:

1. A	ttach/provi	ide a narrative	that explains	how the fund	ls requested	l will be use	d.
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2.	Has funding for the project been requested from other sources?	Yes	_X	_ No
	If yes, list sources.			

Budget Narrative

Faculty Stipend (\$2000 - Y1; \$1500 - Y2)

For both years of the project, the faculty stipend will be paid to Dr. Shawnee Wakeman. In Year 1, the stipend will be for approximately 4 days of work. This includes conducting the literature review to develop the evaluation measure of quality feedback, implementing this measure after the workshop, co-creating the workshop materials, and co-conducting the workshop. In Year 2, the faculty stipend to Dr. Wakeman will be for approximately 3 days of work. This includes co-conducting the training for the second workshop and implementing the measure of quality feedback assessment again after the second workshop. Dr. Hart is a 12 month employee and therefore ineligible for an extra stipend.

Special Pay (\$6000 - Y1; \$8000 - Y2)

In Year 1, the investigators will work with the Reading and Elementary Education (REEL) department chair to identify ten (10) Elementary Education (ELED) faculty who are regularly assigned to teach courses with embedded edTPA Practice Tasks as key assessments. ELED, as our biggest teacher education program, will be the focus for Year 1, and then the program will be scaled up to include the other two teacher education departments in Year 2.

These ten ELED faculty will be invited to participate in a 1 ½ day workshop in May 2017. Activities in the workshop include reviewing current available data to identify gaps/needed changes in how we are assessing edTPA practice tasks, creating common understandings about expectations for candidate feedback (including how to provide students effective feedback on writing skills related to edTPA), and practice scoring activities intended to increase fidelity among faculty in how they assess candidate practice tasks (see the Methods section for specific

details). In Year 1, \$5000 dollars will be used for faculty stipends to attend the workshop (10 faculty @ \$500 stipend each). In Year 1, a stipend of \$1000 will also be paid to Dr. Rich Lambert, Professor of Educational Research and Evaluation, to conduct the predicative validity statistical analyses for the ELED programs. This will include the initial analyses from January – May, 2017. This makes the total amount spent on Special Pay in Year 1 \$6000.

In Year 2, the same workshop described above will be replicated for faculty in the Middle, Secondary, and K-12 (MDSK) departments and the Special Education and Child Development (SPCD) departments. The researchers will work with MDSK and SPCD department chairs to identify 14 faculty who teach edTPA Practice Tasks to attend the workshop. \$7000 dollars will be used for faculty stipends to attend the workshop (14 faculty @ \$500 stipend each). In Year 2, \$1000 stipend will also be paid again to Dr. Rich Lambert to extend his analyses to the other programs, and also to conduct the comparison analyses. This makes the total amount spent on Special Pay in Year 2 \$8000.

Honorarium for individuals not at UNC Charlotte (\$1500 – Y1; \$1500 – Y2)

While the investigators will plan and conduct the workshops for faculty, we wish to hire a specialized, trained member(s) of the edTPA National Academy to serve as a codesigner/facilitator for the workshop (one each year). These individuals will be officially trained edTPA scorers who can provide key information for faculty as we engage in their work. One of the current issues is that faculty expectations on how to use the edTPA rubrics formatively are unclear. These experts can assist in bridging this gap. The stipend for these experts will be \$1500 for each year.

Supplies (\$100.28 - Y1; \$100.28 - Y2)

The researchers request \$200.56 total for Year 1 and Year 2 for refreshments for faculty participating in the 1 1/2 day workshops. Chartwells will provide coffee service in the morning of the first day of the workshop, including beverages (coffee, soda, water, hot tea) and breakfast pastries (bagels and muffins).

Letter from Associate Dean



9201 University City Blvd., Charlotte, NC 28223-0001 (704) 687-8722, www.uncc.edu

October 30, 2016

The purpose of this letter is to strongly endorse the proposal created by Dr. Shawnee Wakeman and Dr. Laura Hart for a Scholarship of Teaching and Learning grant titled *Assessing Quality of Feedback and Fidelity with edTPA Formative Practice Tasks for College of Education Candidates*.

Knowing that North Carolina legislators will soon require all applicants for North Carolina teacher licensure to take and pass edTPA (a new instrument designed to ensure that teacher candidates possess the knowledge and skills to be successful teachers), UNC Charlotte is reviewing its practices and procedures to ensure success of its teacher candidates on the edTPA.

Unfortunately, early evidence suggests that the quality of the feedback provided to our teacher candidates by our faculty has been inconsistent. As a result, teacher candidates have been unable to rely upon the formative and summative supports designed to help them perform well on the edTPA. If their performance levels do not improve soon, many of our teacher candidates may fail the edTPA and fail to attain their teaching licenses. Therefore, this project proposed by Dr. Wakeman and Dr. Hart is much-needed in our College. When fully implemented, the project will have identified and worked to resolve the areas of weakness in the feedback and remediation provided by our faculty to our teacher candidates on the edTPA.

Dr. Wakeman and Dr. Hart are extremely qualified to lead the activities of this project. As former teachers and administrators in the public schools of North Carolina, they have served admirably at UNC Charlotte since 2005 and 2006, respectively. They have each served as principal investigators on other funded grants designed to improve the learning environments of teacher education students.

I strongly support the receipt of this Scholarship of Teaching and Learning grant by Dr. Wakeman and Dr. Hart. If you have any questions, feel free to contact me.

Sincerely.

Dawson R. Hancock, Ph.D.

Associate Dean for Research and Graduate Studies

Project Narrative

A. Specific Aims

edTPA, developed by the Stanford Center for Assessment, Learning and Equity (SCALE) at Stanford University, is a research-based pre-service assessment process that includes a review of a teacher candidate's teaching materials and instruction. Currently, 35 states have at least one IHE participating in edTPA in some fashion (http://edtpa.aacte.org/state-policy). North Carolina has mandated edTPA for all teacher education programs in the university system, with the ultimate goal of linking it to licensure (see 2015 Appropriations Act, HB 97, §115C-296.11.(b)(6)). By necessity, the College of Education has adopted edTPA as a key assessment; however, given the extensive and holistic nature of edTPA, it also serves as a way to assess communication and critical thinking skills of our candidates. Possessing both written and oral communication skills are essential elements of edTPA, as is a detailed rationale for each task where candidates must explain their decision-making based on data collected in their classrooms. The more effectively candidates can weave their narratives to synthesize their thought processes, the higher their edTPA scores. It is necessary, then, for faculty to consider how to cultivate students' writing and thinking skills as part of the broader edTPA paradigm when engaging students in this work.

Considering how new edTPA is, there is little research on how to support pre-service teachers in either a formative or summative context. SCALE does provide guidelines for acceptable levels of support during student teaching ("Guidelines for Acceptable Candidate Support," SCALE, 2014), but does not specify what types of experiences are linked to positive outcomes. Despite the scant literature connected to edTPA, there is a wealth of research about

providing effective support to preservice teachers (e.g., Aminy & Karathanos, 2011; Li, Lui, & Steckelberg, 2010; Timmons & Morgan, 2010; Van Zoest & Stockero, 2008). To provide candidates with an opportunity to practice edTPA knowledge and skills incrementally in a safe environment, the faculty identified courses in each program where practice tasks would be embedded. Faculty teaching these courses create assignments that mirror the edTPA task assigned to the course (there are three total edTPA tasks in the final product completed during student teaching). The practice tasks are assessed using the final edTPA product rubrics.

While this has created opportunities for candidates to formatively practice edTPA-like activities, it has produced wide degrees of variability among the kinds of feedback candidates have received. Some faculty have focused heavily on providing candidates extensive feedback; some have relied on the rubrics only. Some faculty have specifically targeted writing improvements with students; others have focused on data review. These inconsistencies are apparent in a quick review of "practice task" data; our candidates overall receive higher ratings on practice tasks from faculty than they do from official scorers on their final products.

This project (aligned with the SoTL foci on improving students' communication, critical thinking skills, and improving learning outcomes) is designed to address these gaps by providing training designed to increase both the fidelity of ratings among faculty scorers and the quality of feedback faculty given to candidates. Using targeted feedback to address common issues (e.g., not clearly addressing prompts, alignment between products) can serve to improve students' communication and critical thinking skills as well as overall edTPA scores.

The project seeks to answer the following questions:

- 1. To what extent does the predictability of candidate edTPA practice task scores increase in relation to candidate summative edTPA scores after faculty training, i.e., did the training affect the alignment of practice scores to final scores?
- 2. To what extent does training affect the quality of feedback provided by College of Education (COED) faculty to candidates on their edTPA practice tasks, particularly related to written communication and critical thinking?
- 3. Are there differences on the quality of feedback provided between trained and untrained faculty?

The project has several objectives:

- To analyze formative (practice task scores) and summative (final edTPA scores) data for predictive and alignment purposes;
- To train faculty to score formative edTPA practice tasks that are representative of the
 expectations of candidate performance on the final product submitted in student
 teaching;
- To provide faculty with guidance in providing useful, actionable feedback on edTPA
 practice tasks to candidates, particularly related to written communication and critical
 thinking;
- 4. To support both faculty and candidate growth regarding edTPA.

The rationale for the project is one that is necessary as the College of Education continues its use of edTPA as a measure of candidate performance. Formative data must represent an accurate picture of student performance if it is used as intended--as a change agent for improvement. In addition, increasing students' written communication and critical thinking

skills have been identified by the university as goals for academic units. For teacher education candidates, edTPA is the mechanism used to measure these goals. It is necessary, then, to determine if the practice tasks are predictive of candidate summative performance and to make improvements if this is not the case. As preliminary data indicate that faculty members are providing varied types, amounts, and quality of feedback to students on practice tasks, this project intends to set an expectation regarding the quality of feedback and train faculty on such expectations.

The impact of the project is potentially far-reaching. Faculty are directly responsible for the feedback students receive on practice tasks. This project can serve to substantively increase the quality and consistency of feedback provided by faculty on student performance. This work can also directly address student learning outcomes (SLOs) for candidates related to written communication.

B. Literature Review

Overall, edTPA assesses five dimensions of teaching (i.e., planning, instruction, assessment, analysis of teaching, academic language). Extensive research (https://scale.stanford.edu/sites/default/files/edTPA%20Literature%20Review%20Version2%20 FINAL.pdf) serves as the foundation for the structure of edTPA. The College of Education (COED) has dedicated significant effort to create a culture of opportunity and success for candidates prior to a summative edTPA experience. Such a high stakes assessment directly impacts candidates, faculty, and school partners. For candidates, edTPA requires demonstration of the use of assessment data for progress monitoring skills, a clear connection between theory/research and instructional strategies used, a focus on the ability to differentiate to meet

the needs of diverse learners, and three written reflections which justify decision-making.

Effective writing skills are necessary for this process. However, early research indicates that candidates may not feel prepared for the writing demands inherent in edTPA (Polly, 2015; Meuwissen, Choppin, Shang-Butler & Cloonan, 2015).

SCALE has provided specific guidelines about the kind of formative feedback faculty may provide to candidates prior to the student teaching semester when they are practicing skills and knowledge aligned with edTPA (SCALE, 2014). Feedback in formative courses prior to student teaching may be extensive and detailed. Research has shown that appropriate and targeted feedback can serve to affect positive improvements in a wide variety of settings (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005). Developing common understandings among faculty as to the expectations in providing feedback should help. This project proposes to begin an analytic process within the COED to fortify the predictive ability of the formative practice task scores to the summative edTPA scores, and to strengthen this process to ensure each candidate receives actionable and specific feedback on how to improve.

C. Methods

The investigators will secure first IRB approval and conduct a literature search related to the delivery and measures of quality feedback (see Timeline for specific semesters). A feedback measure will be designed by Drs. Hart and Wakeman for use during faculty training on graded formative edTPA practice tasks. Additionally, the investigators will work with Dr. Lambert to analyze the predictive outcomes between the formative scores of the practice for Tasks 1-3 and the official summative scores for elementary candidates. The research literature findings and the predictive validity data will then be used to design a 1 ½ day training regarding the

delivery/consistency of quality feedback and fidelity of scoring. A trained edTPA scorer in Elementary Education will be hired to work with Drs. Hart and Wakeman to assist in designing and delivering the training, to ensure scoring practices and targeted feedback in regards to the edTPA written prompts are adequately addressed.

Ten elementary education faculty that teach and assess practice tasks will be invited to participate. During the workshop, the faculty will review the predictive validity data available to determine common points of agreement and areas for further exploration within each task, with the ultimate goal of increasing the fidelity of scoring, i.e., the practice task ratings given by faculty in coursework should accurately reflect "official" final scores. The training will also include establishing common expectations for qualitative feedback provided to students as part of the practice tasks, i.e., are all students receiving actionable feedback from faculty that can help them make substantive improvements. Next, faculty will be grouped according to which edTPA practice task they most commonly teach (2-3 faculty per group). Within the small groups, faculty will practice assessing tasks to establish fidelity among scoring, with the ultimate goal of creating universal understandings among faculty on 1) scoring expectations on rubrics for edTPA practice tasks; and 2) qualitative feedback given to candidates, particularly related to writing and critical thinking.

After the training for Elementary Education faculty, the investigators and Dr. Lambert will analyze the predictive outcomes between the formative scores of the practice for Tasks 1-3 (completed in fall 2017) and the summative scores for elementary candidates from the 2018 spring semester. The goal of this analysis will be to ascertain the impact of the training on the alignment between practice tasks and official edTPA scores. In addition, a random sample of

elementary practice tasks and practice tasks from other COED teacher education programs will be scored by investigators using the quality of feedback measure. Potential analysis of the data includes an examination of differences from the elementary faculty feedback (who participated in the training) and the other program faculty feedback (who did not participate in the training).

Finally, training for program faculty in the other two teacher education departments who score formative edTPA practice tasks will be conducted by Drs. Hart and Wakeman. The training will mirror the previous training with necessary updates as determined by the evaluation data, candidate formative and summative scores from 2017-18, and the results of the analysis of the measure of quality feedback.

D. Evaluation

To investigate how the training impacted the predictability of edTPA practice task scores on edTPA final scores (research question 1), we will quantitatively compare elementary candidate performance data prior to the training (2016-2017) to candidate performance data after the training (2017-2018). For each academic year, a predictive validity correlation will be established. These psychometrics will be compared to see if the training had an impact on the strength of the relationship between edTPA practice tasks ratings and edTPA final scores.

Two data sources will be used to measure the extent to which the training impacts the quality of feedback (research question 2). Open ended and forced choice questions will be included on the evaluation tool that participants will complete at the end of the training regarding if/how they will change their practices regarding feedback (type, amount, quality). Responses will be categorized and reported descriptively and qualitatively in all dissemination efforts. Additionally, the researchers will develop a new measure of candidate feedback. This

measure will be based on current research-based practices regarding what kinds of feedback provide actionable improvements to candidates, particularly related to portfolio based assessments like edTPA. Once the measure is in place and after the training for elementary faculty has occurred, the researchers will randomly select 18 practice tasks from the College of Education data set. Nine of these samples will be submitted in 2017-18 and nine of these samples will be from the same faculty (anonymously coded) in order to compare the "pre/post" training effect. Quantitative data will be used to look for differences, allowing the researchers to determine the extent of the training's impact on the quality of feedback provided to candidates.

To address research question 3, in spring 2018 nine additional samples (three from each practice task) will be selected from other teacher preparation departments (five samples from MDSK, four samples from SPCD). These practice tasks will be analyzed using the measure of candidate feedback and compared to the selected nine elementary samples. The researchers will then determine if any differences exist on the quality of candidate feedback between trained and untrained faculty instructors.

E. Knowledge Dissemination

The investigators will present project results to the College of Education via regular data reviews and share with the larger campus community at the SoTL Showcase. The results will be included as documentation of continuous improvement efforts in the College of Education CAEP and SLO reports. Additionally, the researchers will submit a proposal to share findings at the annual conference of the North Carolina Association of Colleges and Teacher Educators (NC-ACTE) and the national conference of the American Association of Colleges and Teacher

Educators (AACTE). If outcomes are applicable and appropriate, the investigators will write and submit a manuscript to the *Journal of Teacher Education*.

F. Human Subjects

The IRB protocol to conduct the research will be submitted in January, 2017 contingent upon funding. The protocol will include a draft of the literature review protocol and a draft of the quality of feedback measure. The IRB will include the intent to analyze the predictive validity of formative and summative scores of candidates in years one and two and the differences between groups (trained and untrained) for the quality of feedback in year 2 of the project.

G. Extramural Funding

No extramural funding sources are being considered at this time.

H. Timeline

Table 1 provides a timeline for tasks, responsibilities, and outcomes or products within the proposed project.

Table 1. Timeline, Tasks, Responsibilities and Outcomes/Products

Timeline	Task	Responsibility	Outcomes/Products
Spring 2017	IRB submission	Investigators	1. Approved IRB for study
Spring 2017	Literature review on quality	Investigators	Literature search results (potential publication)
	feedback and measure		2. Quality of feedback measure
	design		
Spring/Summer	Data analyses and review of	Dr. Lambert	Analysis of feedback provided to candidates on formative
2017	edTPA summative data	Investigators	tasks
	from candidates in spring		2. Predictive analysis of formative and summative scores.
	2017 and related formative		
	data		
Summer 2017	Develop and Implement	Investigators	1. Training materials
	feedback and scoring	Elementary	2. Training evaluation data
	fidelity training with	edTPA scorer	
	elementary group		

Fall 2017-	Data analyses and review of	Dr. Lambert	1. Analysis of feedback provided to candidates on formative
Spring 2018	edTPA summative data	Investigators	tasks
	from candidates in spring		2. Predictive analysis of formative and summative scores
	2018 and related formative		
	data (research question 1)		
Fall 2017-	Review of random sample	Investigators	Completed measures of feedback
Spring 2018	of practice task feedback		2. Analysis of trained versus untrained faculty
	from all departments in the		
	COED (research questions 2		
	and 3)		
Summer 2018	Implement feedback and	Investigators	1. Training materials
	scoring fidelity training to	edTPA scorer	2. Training evaluation data
	scale with other initial		
	licensure programs in COED		

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