Teachers for a New Era Research Proposal: Faculty Grant Competition

Problem Statement

Schools of education across the country are grappling with issues centered on monitoring teacher candidate content area and assessment knowledge, having teacher candidates develop greater self-assessment and reflective skills with respect to analyzing their own performance, analysis of pupil work in relation to the instruction, and strengthening working relationships between schools of education and liberal arts and sciences. This proposal outlines a one year plan with a strategy for developing an assessment system that could work to address the aforementioned issues and to support an assessment strategy that allows faculty to evaluate content area knowledge in an authentic context.

The purpose of this study is to pilot the student teaching assessment designed by the Teacher Candidate Assessment Committee, evaluate the quality of the submissions supported by technology, and to bring together College of Liberal Arts and Sciences faculty with Neag School of Education [NSOE] faculty to assess teacher candidate content knowledge. The rubric will be created by the teacher education faculty and modified at the end of the Spring pilot through collaborative efforts with the College of Liberal Arts & Sciences. The assessment [task, directions, rubric, product] will be analyzed for Reliability, Validity, Practicality, and Standardization as well as alignment with TNE and NSOE objectives. Teacher candidates will be assessed on their task performance and reflective practice by seminar leaders as part of their seminar evaluation; however, data will be used to validate the rubric/assessment and foster dialogue among faculty in NSOE and CLAS. Faculty will be able to inform their own practice from the assessment artifacts and information collected through the teacher candidate pre-post assessment and focus group feedback. From there, members of the Teacher Candidate Assessment Committee and TNE Assessment team can make decisions about next steps. Measures will be taken to make sure this assessment and related tools are replicable with the TCPCG cohort in the Fall 2005. The rest of this document will inform how this project is in line with the assessment mission for the NSOE teacher education program and the TNE design principles.

Connection to Arts & Sciences

- Involvement of faculty across the various disciplines in CLAS
- Measurement/Statistics
- Psychology
- Technology
- Content area knowledge (math, science, social studies, English)

Student teachers will be producing evidence of content knowledge in their assessment submissions. These data will be reviewed by a sample of faculty in the College of Liberal Arts & Sciences to help shape the assessment and foster communication through illustration of practice in specific domains.

Evidence-Based Decision Making

- Teacher candidate use of data and observation to shape instruction and determine pupil learning
- Credibility study of the assessment design and tools to provide TCAC and TNE teams with necessary information on decisions related to content area and professional education knowledge/skill assessments
- Feedback from experts [TE, CLAS, Cooperating Teachers/Administrators] on the extent to which decisions can be made about teacher candidates through this design and vehicle.
- Data collected through the reflection and selection process of editing the student teaching video may lead to another assessment of how our teacher candidates are making decisions about their own teaching and assessment performance in the classroom
- Pre-post inventory that looks at candidate perceptions of technology, assessment, content area knowledge, and professional education skills
Analysis of teacher candidate e-folio, student teaching evaluation items specific to these areas, and pre-post data

**Induction**
- Similar methods used to develop artifacts for in BEST portfolio
- Outcome from this pilot will be used to shape induction discussions
- Students will know how to shoot, edit, and upload artifacts and work with small groups to elicit feedback and exchange ideas; we may look to use a similar model and exchange during the induction years. This pilot could lead to a model for use in full induction implementation.

**Related Work**
At the 2005 AACTE Winter Institute led by David Imig, one of the discussions about critical topics in teacher preparation focused on assessment and what little is shared in the field with respect to how we are preparing future teachers to work with understanding pupil learning through assessment. The concern has been on the extent to which we are preparing new teachers to make sense of data when making a decision about pupil learning and the alignment to content. Additionally, another national trend is how schools of education and liberal arts/sciences communities are working together to prepare future teachers. The words Value Added Assessment spills forth into Colleges of Liberal Arts and Sciences. Many editions of Peer Review, a publication of the Association of American Colleges and Universities, often highlight articles that look at the use of “authentic” assessment in general education. Trudy Banta and Helen Barrett have been writing about assessment in higher education and using electronic portfolios to archive evidence of student work to inform faculty practice since the early 1990s. Still, one of the challenges in reading the literature in assessment is finding work that presents cases where data were actually used to engage schools of education with liberal arts/sciences and to make programmatic decisions about learning outcomes or performance standards for teacher candidates. The proposed work addresses these concerns as well as offers a plan for looking at an assessment measure with rigor and through interdisciplinary lenses while supported by technology. The proposed project is ripe for publication in major teacher education journals. I am new to these assessment area in the publication and presenting world, but here is what I have been doing in 2003-2005:

**Technical Reports**

**Research/Journal Articles in Progress**
Methodology

Questions

✓ Does the use of the assessment design garner the appropriate data for CLAS and NSOE faculty to make decisions about teacher candidate content area preparation?
✓ Is there a difference in rater perceptions of content area preparation between the A/V group and the non-A/V group?
✓ Is there a difference in analysis of pupil work by content area?
✓ Is the rubric a tool that allows for reliable and valid decisions about content area and professional education competency knowledge?
✓ Is there alignment between rater data and scores on student teaching evaluation items specific to content area and assessment knowledge?
✓ Is this study replicable with the TCPCG program candidates?

Procedures and Analyses

Spring 2005: As a part of the EGEN 297 seminar, all teacher candidates will submit a performance-based assessment to their electronic portfolio that reflects a modified BEST experience. All student teachers will be required to submit the following artifacts into their developmental Taskstream portfolios and will be evaluated by their seminar leaders. This assessment artifact was approved last year by the Teacher Candidate Assessment Committee and Director of Teacher Education –

- Unit plan with lessons (sample will include audio-visual of one lesson)
- Assessment practices
- Evidence of student work (two pupils)
- Analysis of pupil work
- Reflection on how they are using this assessment information and other data points to make decisions about pupil performance and how they are using this information to guide their instruction and determine effectiveness of instruction.

Sample A/V participants. There will be a pilot group within this subset that will produce audiovisual documentation of student teaching. It is likely to be Mansfield due to proximity to the Neag School of Education, expertise of media specialists in the area [edtech & Taskstream], and K-8 placement within the seminar configuration. Approximately 15 teacher candidates working with 15 cooperating teachers will be involved.

Teacher candidates will take a pre-post assessment that measures their self-efficacy for assessing pupil learning and making decisions based on data. At the end of the semester, a focus group with teacher candidates using the audiovisual component and those not using this feature will be conducted. There will be a survey administered to cooperating teachers and EGEN 297 leaders.

The purpose of this assessment is not only to have a measure to assess candidate content area and professional education knowledge and skills through their planning and implementation, but also the purpose is to develop a culture of evidence to share with College of Liberal Arts and Science to move the collaboration with CLAS further. Having artifacts that include the written and audiovisual data to help both NSOE and CLAS work together to understand what content is being delivered and the extent to which it is effective, will strengthen communication and allow for more sound decisions based on these types of data.

Summer 2005: The following bullets highlight some of the activities that will be conducted in response to the research questions.

- Inter-rater reliability study with faculty and staff – use of student teaching videos and artifact assessments to establish credibility of the rubric and alignment of assessment to BEST.
- Analysis of spring semester focus group and pre-post assessment data.
- Preparation of TCPCG students in Taskstream and the same assessment design as IB/M students
- Rubric development for the other teacher education assessment artifacts
• Creation of the TCPCG and IB/M DRF for teacher education and suggested reflection training modules for seminar leaders to help facilitate students’ alignment of artifacts to standards.
• Analysis of Reliability, Validity, Practicality, and Standardization of the Assessment course artifacts and alignment with TNE objectives
• Exemplars of work reflecting different levels of proficiency will be created
• Development of instructional materials
• Design for TCPCG Fall 2005 Teacher Candidate Pilot

Fall 2006
• Training with TCPCG cooperating teachers, seminar leaders, and teacher candidates
• Replicate IB/M study and prepare for Summer 2005 activities to occur over Intersession

Collaboration

Collaboration includes work in assessing teacher candidate performance and establishing credibility for assessment tools by bringing together cooperating teachers, teacher education faculty, and the College of Liberal Arts & Sciences representatives. This assessment data will be shared with the Teacher Candidate Assessment Committee, which has K-12 representation. I would like to bring in K-12 faculty to participate in the credibility study of this assessment and bring together NSOE, CLAS, and PDS professionals to shape the assessment and validate the tool/procedure.

Expected End Products

1. Teacher candidate assessment artifacts that will reflect evidence of content area knowledge and ability to make decisions based on evidence.
2. Assessment that has been evaluated for reliability, validity, practicality, and standardization.
3. Rigorous assessment opportunity for teacher candidates to be accepted as part of the NSOE assessment plan for students in teacher education.
4. Instructional materials for future implementation of assessment
5. Publications documenting study and findings
6. Formal plan of alignment to induction experience presented to TNE induction team.
7. Presentation of model at NSOE faculty meeting and General Education Assessment Committee meeting
8. Engagement/collaboration of CLAS, NSOE, and PDS professionals and work plan for annual portfolio assessment review.

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