Elementary Education Capstone: Modeling Professional Practice

Guy Trainin
University of Nebraska-Lincoln, gtrainin2@unl.edu

Qizhen Deng
University of Nebraska-Lincoln, qizhen.deng@huskers.unl.edu

Follow this and additional works at: https://digitalcommons.unl.edu/accredqi
Elementary Education Capstone: Modeling Professional Practice
Dr. Guy Trainin, Qizhen Deng
Department of Teaching, Learning and Teacher Education

The Goals of the Capstone Project
1. Demonstrate competency in one aspect of teaching;
2. Demonstrate competency in one theme by using a diverse range of product clusters from the whole program;
3. Reflective product.

TLTE’S Cognitive Map: Themes
TLTE has defined nine themes that reflect its values, mission and goals. These serve as the foundation for all the work done in the department. For example:
• Teaching Subject Matter
• Theories of Learning
• Growing Professional Knowledge

Items in Capstone Rubric
• Statement of competency;
• Diverse products/evidence:
  1) Student teaching; 2) Methods courses; 3) Practicum experiences; 4) Other education courses; 5) Any other courses; 6) Outside experiences
• Synthesis-what are common aspects, what are unique aspects, how does the evidence support my claim;
• Reflection: 1) What did I learn; 2) How do I identify what is still left to learn

Format of Capstone Project
• In person presentation-NOT a paper
• Poster (One piece/Power-point/Tri-fold)
• Computer/Mobile device
• Samples of work and reflections
• Be ready to discuss your work and answer questions from faculty and students

Reflexive Cycle for Faculty

Method of Analysis

• Descriptive Analysis
• Inter-rater agreement
• Factor Analysis
• Internal Consistency

Findings

Table 1: Inter-rater agreement by items

<table>
<thead>
<tr>
<th>Items</th>
<th>Kappa Coefficient</th>
<th>Agreement</th>
<th>N of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Statement</td>
<td>.54*</td>
<td>Moderate</td>
<td>360</td>
</tr>
<tr>
<td>Evidence</td>
<td>.61*</td>
<td>Good</td>
<td>360</td>
</tr>
<tr>
<td>Synthesis &amp; Reasoning</td>
<td>.61*</td>
<td>Good</td>
<td>358</td>
</tr>
<tr>
<td>Reflection</td>
<td>.62*</td>
<td>Good</td>
<td>358</td>
</tr>
<tr>
<td>Organization of Oral Presentation</td>
<td>.54*</td>
<td>Moderate</td>
<td>365</td>
</tr>
<tr>
<td>Visual Aids</td>
<td>.53*</td>
<td>Moderate</td>
<td>364</td>
</tr>
</tbody>
</table>

Table 2: Inter-rater agreement by semester

<table>
<thead>
<tr>
<th>Semester</th>
<th>Kappa Coefficient</th>
<th>Agreement</th>
<th>N of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring11</td>
<td>.13*</td>
<td>Poor</td>
<td>81</td>
</tr>
<tr>
<td>Fall11</td>
<td>.42*</td>
<td>Moderate</td>
<td>75</td>
</tr>
<tr>
<td>Spring12</td>
<td>.21*</td>
<td>Fair</td>
<td>85</td>
</tr>
<tr>
<td>Spring13</td>
<td>.78*</td>
<td>Good</td>
<td>54</td>
</tr>
<tr>
<td>Fall13</td>
<td>.56*</td>
<td>Moderate</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 3: Factor Analysis and Reliabilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence</td>
<td>.983</td>
<td>-.042</td>
<td>.88</td>
</tr>
<tr>
<td>Reflection</td>
<td>.942</td>
<td>.002</td>
<td>.86</td>
</tr>
<tr>
<td>Synthesis &amp; Reasoning</td>
<td>.897</td>
<td>.061</td>
<td>.89</td>
</tr>
<tr>
<td>Organization of Oral Presentation</td>
<td>-.022</td>
<td>.618</td>
<td>.37</td>
</tr>
<tr>
<td>Visual Aids</td>
<td>-.150</td>
<td>.592</td>
<td>.33</td>
</tr>
<tr>
<td>Competency Statement</td>
<td>.100</td>
<td>.384</td>
<td>.17</td>
</tr>
</tbody>
</table>

% of Variance          Total Variance  Factor Internal Consistency (CI)
46.643%                11.422%           .911

Results

- Not all themes show up, evidence that students avoid some difficult themes.
- Better guidance from faculty results in better outcomes
- Reliability and validity are acceptable
- Scores represent two factors: presentation, content
- Faculty engagement is in real time and reduces the need to report and spur discussions about student outcomes
- Faculty has gained a sense of student progress through the program
- Most students report learning and satisfaction from the experience
- Greater faculty engagement with program and not just courses taught

Program Learning
Changes made as a result of Capstone:
- Integrating presentation into existing course assignments
- More attention to foundational thinking throughout coursework
- Increase faculty understanding of capstone and PD in scoring