Findings from the
Multi-State Collaborative to Advance Student Learning
Salem State University

During AY2015-16 and AY2016-17\(^1\), Salem State University participated in the Multi-State Collaborative to Advance Student Learning. This pilot project was sponsored by the MA Department of Higher Education and the State Higher Education Executive Officers (SHEEO) and was designed to assess the feasibility of collecting and scoring student work using the AAC&U LEAP VALUE\(^2\) Rubrics to assess learning in three areas: critical thinking, quantitative reasoning, and written communication. For Salem State the project provided a means to develop a method to collect direct evidence of student learning, a requirement of NECHE\(^3\) (formerly NEASC) accreditation.

The public higher education systems in 13 states (Connecticut, Hawaii, Indiana, Kentucky, Maine, Massachusetts, Minnesota, Missouri, Oregon, Rhode Island, Texas, Utah, and Virginia) participated in the project. In Massachusetts the following institutions were involved:

- Bristol Community College
- Massasoit Community College
- Mount Wachusett Community College
- Northern Essex Community College
- Fitchburg State University
- Salem State University
- UMass Amherst
- UMass Lowell
- Westfield State University
- Worcester State University

At 2-year institutions the sample included work from students who completed 45 or more credits, and at 4-year institutions work from students who completed 90 or more credits. IRB approval was received at each participating institution. The methodology of the project identified faculty with eligible students in their classes. Faculty volunteers were asked if they had an assignment that was appropriate to use in assessing one of the three outcomes using the VALUE rubrics. If so, they were asked to submit de-identified assignments (artifacts) from the students. Participating faculty were also able to highlight dimensions of the rubric that the assignment did not address. Those dimensions were not rated. The students whose work was eligible for inclusion were also asked if they wished to have their work be part of the project.

\(^1\) AY 2015-16 was referred to as the Demonstration Year and AY 2016-17 as the Refinement Year.
\(^2\) Valid Assessment of Learning in Undergraduate Education (VALUE). VALUE is a campus based, faculty developed assessment approach organized and lead by the Association of American Colleges & Universities (AAC&U) as part of its Liberal Education and America’s Promise (LEAP) initiative (http://www.aacu.org/value-faqs).
\(^3\) New England Commission of Higher Education
Over the two years of the project, 53 Salem State faculty participated, and 670 student artifacts were collected. The artifacts submitted accounted for 39% of all artifacts submitted by Massachusetts 4-year institutions. Table 1 shows the distribution of artifacts by academic department and learning outcome. An analysis of student demographic characteristics (all participating institutions) revealed the sample to be representative of graduating students in terms of gender, age (at 4-year institutions), race/ethnicity, and Pell status.

The pilot project was designed to test the feasibility of the use of rubrics, the methods of data collection and scoring. Overall findings indicated that the VALUE rubrics and the methods used were appropriate. The major limitation noted by faculty scorers and project staff was that assignment prompts were sometimes not clearly linked to the rubric selected, resulting in misleading findings. For example, an assignment that was designed to assess critical thinking may not have specifically asked the students to discuss the “influence of context and assumptions”. Based on this finding, it was strongly recommended that campuses using the rubrics also offer assignment design workshops to assure better alignment between the assignments and the rubrics.

Based on the limitation noted above, the findings concerning student learning should be viewed cautiously. In addition, the number of artifacts available for quantitative literacy was quite small (25 in AY 15-16 and 38 in AY 16-17). That said, Salem State’s results were similar to those of our state and national peers. For all three learning outcomes, ratings tended to cluster toward the middle of each dimension, i.e., students achieving Milestone 2 and 3. Given that these artifacts are from students who are close to graduation, one must wonder if students should have scored higher or if that level of achievement is appropriate.

Based on the success of the methods used in the first two years, Salem State will participate in the AY 2018-19 phase of the project to continue its assessment of student learning. The project is now called the VALUE Institute. The focus will remain on three general education outcomes: critical thinking, quantitative literacy, and written communication. In order to address the major limitation of earlier years, i.e., lack of clarity in assignment instructions and congruence of assignment with rubrics, faculty volunteers will participate in an assignment design workshop offered by the Center for Teaching Innovation and have their proposed assignment approved for inclusion in the project.
<table>
<thead>
<tr>
<th>Department (# Faculty)</th>
<th>Critical Thinking</th>
<th>Quantitative Literacy</th>
<th>Written Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art + Design (1)</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology (5)</td>
<td>12</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>Chemistry &amp; Physics (2)</td>
<td>18</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Criminal Justice (7)</td>
<td>47</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>Communications (4)</td>
<td>12</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Economics (2)</td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>English (3)</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography (2)</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>History (3)</td>
<td>20</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>IDS (1)</td>
<td>13</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Management (4)</td>
<td>68</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Marketing Decision Science (2)</td>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics (1)</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Philosophy (2)</td>
<td>3</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Political Science (1)</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Psychology (4)</td>
<td>30</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>Secondary Higher Ed (1)</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Work (4)</td>
<td>13</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Sociology (1)</td>
<td>12</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Sport &amp; Movement Sci (3)</td>
<td>3</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td><strong>Total (53)</strong></td>
<td><strong>287</strong></td>
<td><strong>77</strong></td>
<td><strong>306</strong></td>
</tr>
</tbody>
</table>
Multi-State Collaborative Results
SSU Demonstration Year AY2015-16 and Refinement Year AY2016-17 Combined

Written Communication

Context/Purpose
- Capstone 4: 8%
- Milestone 3: 33%
- Milestone 2: 31%
- Benchmark 1: 27%
- Zero: 0%

Content Development
- Capstone 4: 7%
- Milestone 3: 32%
- Milestone 2: 35%
- Benchmark 1: 26%
- Zero: 0%

Genre/Conventions
- Capstone 4: 7%
- Milestone 3: 17%
- Milestone 2: 29%
- Benchmark 1: 4%
- Zero: 0%

Sources/Evidence
- Capstone 4: 8%
- Milestone 3: 28%
- Milestone 2: 44%
- Benchmark 1: 16%
- Zero: 0%

Syntax/Mechanics
- Capstone 4: 6%
- Milestone 3: 31%
- Milestone 2: 51%
- Benchmark 1: 11%
- Zero: 0%

Critical Thinking

Explanation of Issues
- Capstone 4: 8%
- Milestone 3: 22%
- Milestone 2: 38%
- Benchmark 1: 26%
- Zero: 6%

Evidence
- Capstone 4: 3%
- Milestone 3: 18%
- Milestone 2: 48%
- Benchmark 1: 25%
- Zero: 6%

Context/Assumptions
- Capstone 4: 4%
- Milestone 3: 16%
- Milestone 2: 33%
- Benchmark 1: 8%
- Zero: 0%

Student's Position
- Capstone 4: 2%
- Milestone 3: 18%
- Milestone 2: 32%
- Benchmark 1: 16%
- Zero: 4%

Conclusions/Outcomes
- Capstone 4: 3%
- Milestone 3: 14%
- Milestone 2: 45%
- Benchmark 1: 30%
- Zero: 7%
Multi-State Collaborative Results
SSU Demonstration Year AY2015-16 and Refinement Year AY2016-17 Combined

Quantitative Literacy

Interpretation

- Capstone 4: 6%
- Milestone 3: 22%
- Milestone 2: 35%
- Benchmark 1: 11%
- Zero: 25%

Representation

- Capstone 4: 5%
- Milestone 3: 29%
- Milestone 2: 31%
- Benchmark 1: 15%
- Zero: 20%

Calculation

- Capstone 4: 4%
- Milestone 3: 24%
- Milestone 2: 12%
- Benchmark 1: 12%
- Zero: 12%

Application/Analysis

- Capstone 4: 0%
- Milestone 3: 17%
- Milestone 2: 47%
- Benchmark 1: 27%
- Zero: 10%

Assumptions

- Capstone 4: 2%
- Milestone 3: 5%
- Milestone 2: 19%
- Benchmark 1: 23%
- Zero: 51%

Communication

- Capstone 4: 0%
- Milestone 3: 32%
- Milestone 2: 22%
- Benchmark 1: 27%
- Zero: 19%

N= 63
N= 55
N= 25
N= 60
N= 43
N= 37