QEP Student Learning Outcomes Report

2015-2016

Office of Institutional Effectiveness

July 25, 2016
Digital Literacy Report
Summary
July 25, 2016

Purpose
This report provides the results on student attainment of the learning outcomes identified in the Quality Enhancement Plan (QEP). They are:

1. Students will be able to find and utilize digital tools.
2. Students will be able to use digital tools to create content.
3. Students will be able to use digital tools to share content.

Data
Data for this report were collected in Spring 2015, Summer 2015, Fall 2015, and Spring 2016. Faculty implemented course material designed to improve digital literacy. The Common Digital Literacy Rubric was used by faculty to evaluate student assignments designed to assess the three QEP learning outcomes.

Key Findings
1. An overwhelming majority of TCC students demonstrated that they have attained the three learning outcomes addressed by the College’s digital literacy QEP.
2. Implementation of the QEP seems to have improved digital literacy scores since Spring 2015.

Points for Consideration
Given the fact that students are scoring so well on the rubric, the QEP Committee may want to consider the following points for consideration:

1. Increase the competency level on the rubric from a 3-Adequate to a 4-Better. Next, work with colleagues to identify how to move students from a 3-Adequate performance level to a 4-Better.
2. Identify how to make the digital literacy assignments more challenging so that students have an opportunity to learn more complex skills in the area of digital literacy.
3. Compare the skills covered by the ETS iSkills assessment instrument with those required by the College’s local assignments/assessment.
This report provides the results for student attainment of the learning outcomes identified in the Quality Enhancement Plan (QEP). They are:

- Students will be able to find and utilize digital tools.
- Students will be able to use digital tools to create content.
- Students will be able to use digital tools to share content.

Data for this report were collected in Spring 2015, Summer 2015, Fall 2015, and Spring 2016. Those faculty who taught courses intended to improve digital literacy assessed their students’ digital literacy assignments, using the Common Digital Literacy Rubric. The rubric, which has a 5-point scale for each learning outcome, is available in Appendix A. The initial target for student achievement was that 70% of students would score a 3 or higher on each outcome.

Sample

In Spring 2015, digital literacy scores were submitted for 268 students enrolled in 12 sections of 8 courses. In Summer 2015, 187 student scores were submitted from 11 sections of 9 courses. In Fall 2015, the sample size grew to 72 sections of 43 courses, comprised of 1,402 students. This trend continued into Spring 2016, wherein scores were submitted for 2,049 students from 84 sections of 40 courses. Table 1 depicts the sample size and number of faculty, courses and sections included from each term.

Table 1. Number of Faculty, Divisions, Courses, Sections, and Students Sampled in Each Term.

<table>
<thead>
<tr>
<th>Term</th>
<th>Number of Faculty</th>
<th>Number of Academic Divisions</th>
<th>Number of Courses</th>
<th>Number of Course Sections</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2015</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>12</td>
<td>268</td>
</tr>
<tr>
<td>Summer 2015</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>187</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>32</td>
<td>6</td>
<td>43</td>
<td>72</td>
<td>1,402</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>40</td>
<td>6</td>
<td>40</td>
<td>84</td>
<td>2,049</td>
</tr>
</tbody>
</table>

Digital Focus Learning Outcome 1: Find and Utilize Digital Tools

The first QEP learning outcome assessed is the ability to find, operate, and utilize digital tools for professional purposes. Figure 1 depicts the distributions of digital literacy in finding, operating, and utilizing digital tools for students in each term. An explanation of the distribution of scores is provided below.

- The initial target for student achievement was that 70% of students would score a 3 or higher in all digital literacy areas. More than 80% of students demonstrated adequate (a score of 3) or higher in finding, operating, and utilizing digital tools during each semester.
• The highest percentage of students did not meet the target score in Spring 2015 (16.8%). Less than 6% did not meet the target score in the remaining semesters.
• The lowest average score was observed in Spring 2015. Average scores for each subsequent semester are in the 4.41 to 4.56 range with the highest average occurring in Summer 2015.
• The percentage of students with scores of 0 has increased since Spring 2015 when 0.1% of students were given a score of 0 to Spring 2016 when 3.5% were given a score of 0. It is unclear whether zeros were assigned to students because they did not demonstrate competency, or because they did not submit the assignment.
Digital Focus Learning Outcome 2: Use Digital Tools to Create Content

The second QEP learning outcome assessed is the ability to use digital tools to create content. Figure 2 depicts the distributions of students’ digital literacy in using digital tools to create content in each term. An explanation of the distribution of scores is provided as well.

- The initial target for student achievement was that 70% of students would score a 3 or higher in all digital literacy areas. More than 80% of students demonstrated literacy this area for each semester.
- The highest percentage of students did not meet the target score (3 or above) in Spring 2015 (15.5%). In Summer 2015, 11.1% of students did not meet the target score. Less than 7% did not meet the target score in Fall 2015 and Spring 2016.

![Distribution of Digital Literacy Scores](image)

**Fall 2015**
- Met target: 90.7%
- Did not meet target: 6.6%
- Unknown: 2.7%
- Average: 4.36

**Spring 2015**
- Met target: 84.1%
- Did not meet target: 15.5%
- Unknown: 0.4%
- Average: 3.94

**Summer 2015**
- Met target: 93.2%
- Did not meet target: 11.1%
- Unknown: 1.1%
- Average: 4.44

**Spring 2016**
- Met target: 90.4%
- Did not meet target: 5.8%
- Unknown: 3.8%
- Average: 4.37
The lowest score average score was observed in Spring 2015, while the average scores for subsequent semesters ranged from 4.36 to 4.44.

The percentage of students with scores of 0 has increased since Spring 2015 when only 0.4% of students had a 0 score to Spring 2016 when 3.8% were given a 0 score by their professor. It is unclear whether zeros were assigned to students because they did not demonstrate competency, or because they did not submit the assignment.

**Digital Focus Learning Outcome 3: Use Digital Tools to Share Content**

The third QEP learning outcome assessed through the rubric is the ability use digital tools to share content effectively. *Figure 3* depicts the distributions of students’ digital literacy in using digital tools to share content effectively in each term.
• The initial target for student achievement was that 70% of students would score a 3 or higher in all digital literacy areas. More than 80% of students demonstrated literacy this area in each semester.
• The highest percentage of students did not demonstrate digital literacy in this area (scores below 3) in Spring 2015 (16.3%). In Summer 2015, 9.5% of students did not meet the target score. Less than 6% of students in Fall 2015 and Spring 2016 did not meet the target score.
• The lowest mean score was in Spring 2015. Averages for the remaining semesters range from 4.39 to 4.56.
• As was the case with the first two learning outcomes, the percentage of students who were given a score of 0 increased from 1.1% in Spring 2015 to 4.0% in Spring 2016. It is unclear whether zeros were assigned to students because they did not demonstrate competency, or because they did not submit the assignment.

Conclusion and Points for Consideration

In each area of digital literacy, the lowest average scores were reported in Spring 2015. Average scores since this term have been consistent with one another. While no great improvement is observed since Summer 2015, the overwhelming majority of students have demonstrated attainment of the QEP’s three learning outcomes as defined by a score of 3 or higher on the digital literacy rubric.

Given the fact that the College has exceeded its achievement target on all three learning outcomes, the QEP Committee should consider the following points:

1. Increase the competency level on the rubric from a 3-Adequate to a 4-Better. Next, work with colleagues to identify how to move students from a 3-Adequate performance level to a 4-Better.

2. Compare the skills covered by the ETS iSkills assessment instrument with those required by the College’s local assignments/assessment to ensure that students have an opportunity to attain skills that will facilitate their performance on iSkills tasks.

3. Identify how to make the digital literacy assignments more challenging so that students have an opportunity to learn more complex skills in the area of digital literacy.

4. Finally, a review of the distribution of scores indicates that anywhere from 0.4% to 4.4% of students earned scores of 0 on the learning outcomes assessed by the rubric. It is not clear what guidelines were followed by faculty members who assigned these scores.
APPENDICES

APPENDIX A: DIGITAL LITERACY RUBRIC

A digital literacy rubric was developed by the QEP Assessment Subcommittee to be used as a common assessment tool for faculty to use across the academic curriculum. This rubric was designed to tease out the fundamental student learning outcomes common to robust use of digital technology across disciplines and modalities. The rubric can be used to measure student achievement in the three identified learning outcomes of digital literacy.

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Focus 1: Students find, operate and utilize digital tool(s) for academic and Professional Purposes</th>
<th>Focus 2: Students use digital tool(s) to create content</th>
<th>Focus 3: Students use digital tool(s) to share content effectively</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent: 5</td>
<td>Uses the most relevant digital tool(s) expertly</td>
<td>Uses digital tool(s) expertly to create, modify, and manage content</td>
<td>Uses digital tool(s) expertly to share and communicate content effectively</td>
</tr>
<tr>
<td>Good: 4</td>
<td>Uses relevant digital tool(s) effectively</td>
<td>Uses digital tool(s) effectively to create, modify, and manage content</td>
<td>Uses digital tool(s) to share and communicate content effectively</td>
</tr>
<tr>
<td>Adequate: 3</td>
<td>Uses relevant digital tool(s) adequately with few mistakes or inconsistencies</td>
<td>Uses digital tool(s) adequately to create, modify, and manage content</td>
<td>Uses digital tool(s) adequately to share and communicate content</td>
</tr>
<tr>
<td>Weak: 2</td>
<td>Uses irrelevant digital tool(s) or uses relevant digital tool(s) ineffectively</td>
<td>Uses digital tool(s) ineffectively to create, modify, and manage content</td>
<td>Uses digital tool(s) ineffectively to share and communicate content</td>
</tr>
<tr>
<td>Poor: 1</td>
<td>Cannot determine or does not find, operate, or utilize digital tool(s)</td>
<td>Cannot determine or does not use digital tool(s) to create, modify, and manage content</td>
<td>Cannot determine or does not use digital tool(s) to share and communicate content</td>
</tr>
</tbody>
</table>