Students’ Engagement in Online Classes: How Are They Different?
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INTRODUCTION

Student engagement has been measured and tracked through Community College Survey of Student Engagement (CCSSE) at Kapi’olani Community College (KCC) since 2002. However, CCSSE does not provide a complete picture of student engagement because it only samples students who attend brick-and-mortar classes. The engagement of the students who attend online or hybrid classes is unknown and need to be investigated as the college rapidly expanding its offering of online and hybrid classes. The first author Sunahara led the investigation and adapted the Classroom Level CCSSE, an instrument developed by the second author Hill at the Office for Institutional Effectiveness (OFIE) based on CCSSE. Yamashiro, the third author, administered the survey in October 2011. The administered survey is called: CCSSE Distance Ed Survey at Kapi’olani Community College (CDES).

SAMPLING

A total of 205 students who took online classes attempted the survey. As shown in Table 1, 63% of the survey respondents (labeled as Survey Sample) had less than 30 credits, a slight under-representation of all the students who took distance education classes (71%) and of all the students in the college (72%). In comparison, students with 30 credits or over were slightly over represented in the survey. There were 37% of students with 30 credits or over among the Survey Sample, 29% among all the students taking distance classes, and 28% of all college students enrolled in fall 2011.

There were proportionally far more full-time students among the survey respondents (60%) than in the college distance education student population (29%) and the college student population in general (33%). The survey responses, therefore, severely over-represent the full-time online students and under-represent the part-time students who took online classes.
Table 1. Student Credit and Full-Time/Part-Time Status Comparison between the Survey Sample and the College Student Population

<table>
<thead>
<tr>
<th></th>
<th>College All</th>
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<th>College DE</th>
<th></th>
<th>Survey Sample</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num</td>
<td>%</td>
<td>Num</td>
<td>%</td>
<td>Num</td>
<td>%</td>
</tr>
<tr>
<td>0 - 29 credits</td>
<td>6494</td>
<td>72%</td>
<td>2298</td>
<td>71%</td>
<td>128</td>
<td>63%</td>
</tr>
<tr>
<td>30 credits or over</td>
<td>2529</td>
<td>28%</td>
<td>939</td>
<td>29%</td>
<td>75</td>
<td>37%</td>
</tr>
<tr>
<td>Full-Time</td>
<td>2953</td>
<td>33%</td>
<td>945</td>
<td>29%</td>
<td>122</td>
<td>60%</td>
</tr>
<tr>
<td>Part-Time</td>
<td>6070</td>
<td>67%</td>
<td>2292</td>
<td>71%</td>
<td>82</td>
<td>40%</td>
</tr>
</tbody>
</table>

**CCSSE ITEMS COMPARISON**

There are 15 items directly adapted from the original CCSSE survey on the CDES. The adapted version and their original version are listed in Appendix 1.

We conducted both descriptive and inferential statistics and present the result in Table 3. To be specific, we examined the mean ratings and standard deviations of the ratings of the items on CDES and compared them to those from the CCSSE 2010 administration at the college. We conducted two-sample t-tests to test whether the differences between the mean ratings from the two cohorts were statistically significantly different. We followed the tradition at CCSSE and set the significance level at alpha = .05. We also calculated Cohen’s d for each pair of the comparison as an index for practical significance. If a pair of mean ratings are practically significantly different from each other, that means the difference not only is above the chance level, but it is also practically meaningful in the real world. The following criteria were adapted to determine practical significance using Cohen’s d index:

- 0.2 or below – negligible
- 0.2 - .49 – small difference
- 0.5 - 0.79 – medium difference
- 0.8 and above – large difference

These practical difference categories are represented by smiley faces in Table 2. Happy faces means that the respondents taking online classes had higher means than those taking traditional classes. Unhappy faces indicate that the respondents had lower means than the traditional students. One face represents a small difference, two faces a medium difference, and
three faces a large difference. “-- ” means the difference is negligible or not statistically significant.

Eleven out of 15 pairs of comparisons were significantly different. This means that the engagement of the CDES respondents is by and large different from the students taking the brick-and-mortar classes. The CDES respondents had higher ratings on 12 items, 8 of them being statistically significantly higher. They had statistically significantly lower ratings on 3 items. It can be concluded that the CDES respondents are more engaged than the traditional students in general. Among the items that the CDES respondents had higher ratings, most of them belong to the benchmarks: Student Effort (3 out of 3 items) and Academic Challenge (3 out of 4 items). Out of the three items where the CDES respondents had lower ratings, two of them are related to collaborative learning (I2.3 and I2.4). It can be concluded that the CDES respondents worked harder and were more academically challenged but less engaged in collaborative learning.