Description of the Course Embedded Texas Government Assessment

Each spring, a locally developed pre- to post-test is administered within sections of POLS 2306: Texas Government. The instrument used in POLS 2306: Texas Government consisted of 10 multiple-choice questions and was administered to all students enrolled in those courses at the start and end of the spring semester. The instrument was developed by the faculty of the Department of Political Science for use as part of their on-going programmatic assessment. As the instrument was locally developed by faculty from the Department of Political Science, it is assumed that instrument has content-related validity (Banta & Palomba, 2015). Additionally, as this test was embedded within the POLS 2306: Texas Government courses, the student scores represent authentic student work (Banta & Palomba, 2015; Kuh et al. 2015).

The student data presented within this report reflects student performance regarding the Texas Higher Education Coordinating Board’s Core Learning Objective of Social Responsibility (THECB, 2018). The THECB (2018) defines Social Responsibility as “intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities” (p. 4). Data from this assessment may therefore be used to address one element of the broader concept of Social Responsibility, the element of “knowledge of civic responsibility.” These data should therefore be used in conjunction with other data to fully understand student knowledge and ability with regards to this Core Learning Objective.

Methodology

A total of 653 students took the pre-test and a total of 132 students took the post-test for POLS 2306: Texas Government in spring 2018. However, not all student test scores were used for analysis. In order to determine whether student performance increased from pre-to-post, a dependent samples $t$-test was used for analysis. Student SamID’s were collected along with student scores in order to identify each student’s score on both the pre- and post-test. A total of 124 students provided their SamID’s and took both the pre- and post-tests for POLS 2306: Texas Government. All statistical analysis was therefore conducted on only those students for whom both pre- and post-test scores could be identified.

Prior to conducting inferential statistics to determine whether differences were present between the students’ pre- to post-test scores, checks were conducted to determine the extent to which these data were normally distributed. All four of the standardized skewness and kurtosis coefficients, (i.e., the skewness and kurtosis values divided by their standard error) were within the limits of normality of +/-3 (Onwuegbuzie & Daniel, 2002) for the POLS 2306: Texas Government data. Therefore, a parametric dependent samples $t$-test was conducted to analyze student performance on this assessment, from pre-to-post.

Results

A parametric dependent sample $t$-test revealed a statistically significant difference in the pre- to post-scores for students enrolled in POLS 2306: Texas Government for spring 2018, $t(123) = -7.29, p < .001$. This difference represented a moderate effect size (Cohen’s $d$) of 0.84 (Cohen, 1988). The average student score increased from 44.03 % on the pre-test to 55.56% on the post-test, for an increase of 11.53% points. This equated to an average increase of 1.16 questions answered correctly from pre-to-post. Readers are directed to Table 1 for the descriptive statistics for student pre- and post-test scores.
Table 1

Descriptive Statistics for Student Pre- and Post-Scores on Course-Embedded Assessments in POLS 2306: Texas Government for spring 2018

<table>
<thead>
<tr>
<th>Test Version</th>
<th>M</th>
<th>SD</th>
<th>M %</th>
<th>SD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Scores</td>
<td>4.40</td>
<td>1.23</td>
<td>44.03</td>
<td>12.29</td>
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<tr>
<td>Post-test Scores</td>
<td>5.56</td>
<td>1.49</td>
<td>55.56</td>
<td>14.89</td>
</tr>
</tbody>
</table>

*Note.* The number of students in the sample was 124.
References