Office of Academic Planning and Assessment

A Report of the Course-Embedded Texas Government Assessment

POLS 2306

Spring 2021

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 consists of 10 multiple-choice questions and is administered at the beginning and at the end of each 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 well as for Core Learning 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). However, as the instrument is not for a grade within the course, it represents a low-stakes assessment of student learning.

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, 2021). The THECB (2021) defines Social Responsibility as "intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities." Data from this assessment align with the "knowledge of civic responsibility" element of the broader concept of Social Responsibility.

Methodology

Faculty teaching POLS 2306: Texas Government administer the Course-Embedded Texas Government Assessment to students in a pretest-to-posttest fashion each spring semester. Paired samples *t*-tests were used for analysis to determine whether student performance increased from pretest-to-posttest. Student identification numbers were collected along with the student scores to allow for the matching of students' pre- and post-test scores. Statistical

analysis was conducted on only those students for whom both pre- and post-test scores could be identified. The total number of student scores examined for spring 2021 was 18.

Results

Prior to conducting inferential statistics to determine whether differences were present between the students' pre to posttest scores, checks were conducted to determine the extent to which these data were normally distributed. The standardized skewness and kurtosis coefficients (i.e., the skewness and kurtosis values divided by their standard error) were within the range of normality of +/-3 (Onwuegbuzie & Daniel, 2002). Readers are directed to Table 1 for these results and to Table 2 for aggregated pretest-to-posttest descriptive statistics.

Table 1

Standardized Skewness and Kurtosis Values for Student Pre-and Post-test Scores - Spring2021

Student Population	Standardized Skewness Coefficient	Standardized Kurtosis Coefficient
Pre-Test	0.67	-0.98
Post-Test	1.48	-0.36

Note. n = 18

Table 2

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

Test Version	*n*	*M*	*SD*	*M %*	*SD %*
Pre-test Scores	18	5.28	1.60	52.78	16.02
Post-test Scores	18	5.39	1.82	53.89	18.20

A parametric paired samples *t*-test revealed no statistically significant difference at the $p < .05$ level between students' pre to posttest scores, , $t(17) = -.201$, $p = 0.843$. Additional information regarding student performance can also be gained through a disaggregated or item analysis of student performance on individual test questions. This item analysis revealed no statistically significant difference at the $p < .05$ level for each of the ten test questions. The results for a breakdown of item analysis data are presented in Table 3.

Table 3
Percentage of Students Correctly Answering Pre- and Post-Test Questions for Spring 2021

	Pre-Test	Post-Test	Mean Difference	p
Question 1	77.78%	66.67%	-11.11%	.430
Question 2	5.56%	11.11%	5.55%	.331
Question 3	16.67%	5.56%	-11.11%	.331
Question 4	55.56%	72.22%	16.66%	.269
Question 5	22.22%	50.00%	27.78%	.056
Question 6	83.33%	77.78%	-5.55%	.331
Question 7	66.67%	50.00%	16.67%	.269
Question 8	**	**	**	**
Question 9	55.56%	50.00%	-5.56%	.749
Question 10	44.44%	55.56%	11.12%	.495

Note. $n = 18$. **The correlation and t statistic could not be computed because the standard error of the difference between pretest and posttest scores is 0.

Discussion

It should be noted that this assessment was given to all students enrolled in all sections of POLS 2306, regardless of teaching and learning modality. A total of 1,033 students (499 face-to-face/hybrid and 534 fully online), received an invitation via Qualtrics to complete the pre-test during the first week of class, and 1,037 students (486 face-to-face/hybrid and 551 fully online) received an invitation to complete the post-test near the end of the semester prior to finals. Out of the 18 students who completed both the pre- and post-test, 11 of them were fully online students. Since most students were learning in a hybrid environment during 2020-2021, the decision was made to aggregate the results rather than to disaggregate to show any differences between online and face-to-face students.

Prior to spring 2020 the pre- and post-tests were given in class using a paper test and scantrons, but this meant that only the face-to-face students could take the test, leaving out the entire online student population. To capture this missing data, OAPA started a partnership with

SHSU Online at the beginning of spring 2020 to move these types of assessments into Qualtrics, which prepared OAPA for the complete shift to online learning due to the COVID-19 pandemic.

After administering several pre- and post-tests through Qualtrics, the low participation rates were apparent across all course sections. Rather than re-implement paper tests and scantrons in 2021-2022, the plan is to be more targeted in how students are asked to take the tests. During 2020-2021 professors were asked to announce the test dates and to encourage students to participate, but class time in which to take the tests was not requested due to the hybrid learning environment. For 2021-2022 OAPA is requesting additional reminders from the chair to professors to pass along to their students, and for professors to allow time in face-to-face classes on specific days at the beginning and end of the semesters for their students to complete the tests in Qualtrics using their personal devices. It is expected that these measures, along with returning to traditional face-to-face learning, will positively affect participation rates.

References

Banta, T. W., & Palomba, C. A. (2015). *Assessment essentials: Planning, implementing, and improving assessment in higher education* (2nd ed.). San Francisco, CA: Jossey-Bass.

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