Office of Academic Planning and Assessment

A Report of the Course-Embedded American Government Assessment

and the

Course-Embedded Texas Government Assessment

2015-2016

Description of the Course Embedded American and Texas Government Assessments

Each fall and spring semester, locally developed pre- to post-tests are administered within sections of POLS 2305: American Government and POLS 2306: Texas Government. The instrument used in POLS 2305 consisted of 12 multiple choice questions, whereas the instrument used in POLS 2306 consisted of 10 multiple choice questions. Each instrument was administered to students enrolled in those courses at the start and end of each 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 these tests were embedded within the POLS 2305 and POLS 2306 courses, the student scores represent authentic student work (Banta & Palomba, 2015; Kuh et al. 2015).

The student data presented within this report reflect student performance regarding the Texas Higher Education Coordinating Board's Core Learning Objective of Social Responsibility (THECB, 2016). The THECB (2016) defines Social Responsibility as "intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities." Data from these assessments 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 768 students took the pre-test and a total of 615 students took the post-test for POLS 2305: American Government in Fall 2015. For POLS 2306: Texas Government, a total of 961 students took the pre-test and a total of 654 took the post-test in Spring 2016. 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 361 students provided their SamID's and took both the pre- and post-test for POLS 2305: American Government, with a total of 564 students doing so 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 outside the limits of normality of +/-3 (Onwuegbuzie & Daniel, 2002) for the POLS 2305: American Government data; therefore, a non-parametric Wilcoxon's dependent samples *t*-test (Huck, 2007) was conducted to analyze student performance on this assessment from pre-to-post for that course. All four of the standardized skewness and kurtosis coefficients 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 data for that course.

Results

   A non-parametric Wilcoxon's dependent sample *t*-test revealed a statistically significant difference in the pre- to post-scores for students enrolled in POLS 2305: American Government for Fall 2015, $z = -6.98$, $p < .001$. This difference represented a small effect size (Cohen's *d*) of 0.40 (Cohen, 1988). The average student score increased from 77.45% on the pre-test to 82.87% on the post-test, for an increase of approximately 6%.

   A parametric dependent samples *t*-test revealed a statistically significant difference between in the pre- to post-scores for students enrolled in POLS 2306: Texas Government for Spring 2016, $t(563) = -14.63$, $p < .001$. This difference represented a moderate effect size (Cohen's *d*) of 0.78 (Cohen, 1988). The average student score increased from 43.48% to 55.85%, for an increase of approximately 12%. Readers are directed to Table 1 for a breakdown of these results.

Table1

Descriptive Statistics for Student Pre- and Post-Scores on Course-Embedded Assessments in POLS 2305: American Government and POLS 2306: Texas Government for 2015-2016

Course	*n*	*M %*	*SD %*
POLS 2305: American Government			
Pre-test Scores	361	77.45%	14.52%
Post-test Scores	361	82.87%	12.84%
POLS 2306: Texas Government			
Pre-test Scores	564	43.48%	14.74%
Post-test Scores	564	55.85%	17.05%

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.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.)*.* Hillsdale, NJ: Lawrence Erlbaum.

Huck, S. W. (2007). *Reading statistics and research* (5th ed.). New York, NY: Addison Wesley.

Kuh, G. D., Ikenberry, S. O., Jankowski, N. A., Cain, T. R., Ewell, P. T., Hutchings, P., Kinzie, J. (2015). *Using evidence of student learning to improve higher education*. San Francisco, CA: Jossey-Bass.

Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1)*,* 73-90.

Texas Higher Education Coordinating Board. (2016). Elements of the Texas Core Curriculum. Retrieved from: http://www.thecb.state.tx.us/index.cfm?objectid=427FDE26-AF5D-F1A1-E6FDB62091E2A507