A Report of the Course-Embedded American Government Assessment

POLS 2305

Fall 2025

Description of the Course-Embedded American Government Assessment

In fall 2025 a locally developed pretest to posttest was administered within sections of POLS 2305: American Government. The instrument consisted of 10 multiple-choice questions and was administered at the beginning and at the end of the semester. The instrument was developed by the faculty of the Department of Political Science for use as part of their ongoing 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 the instrument has content-related validity (Banta & Palomba, 2015). Additionally, as this test was embedded within the POLS 2305: American 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 reflect student performance regarding the Texas Higher Education Coordinating Board's Core Learning Objective of Social Responsibility (THECB, 2025). The THECB (2025) 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

A total of 274 students took the pretest, and a total of 119 students took the posttest for all sections of POLS 2305: American Government for the fall 2025 semester; however, not all student test scores were used for analysis. To determine whether student performance increased from pretest to posttest, a dependent samples *t*-test was used for analysis. Student identification numbers were collected along with student scores to identify each student's score on both the pretest and posttest. A total of 53 students could be identified as taking both the pre- and posttests, and only seven of these students were in online sections of POLS 2305. All statistical analysis was conducted on only those students for whom both pre- and posttest scores could be identified. Because the number of online participants was so low, the decision was made to analyze the combined population without disaggregating face-to-face and online 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. All four of 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). Therefore, a parametric dependent samples *t*-test was used to analyze the student performance data. A complete breakdown of the standardized skewness and kurtosis coefficients is in Table 1.

Table 1

Standardized Skewness and Kurtosis Values for Student Pre- and Posttest Scores for fall 2025

Student Population	Standardized Skewness Coefficient	Standardized Kurtosis Coefficient
Pretest	0.02	1.57
Posttest	2.50	1.51

Results

A parametric dependent samples *t*-test revealed a statistically significant difference at $p < .001$ between students' pre- to posttest scores for students enrolled in sections of POLS 2305: American Government for the fall 2025 semester, $t(52) = -4.12$, $p < .001$. This difference represented a moderate effect size (Cohen's *d*) of 0.57 (Cohen, 1988). The average student score increased from 48.25% to 63.51%, for an increase of 15.26%. This equated with an average increase of 1.53 questions answered correctly from pre- to posttest. Readers are directed to Table 2 for the descriptive statistics for student pre- and posttest scores.

Table 2

Descriptive Statistics for Student Pre- and Posttest Scores on Course-Embedded Test in POLS 2305: American Government for fall 2025

Test Version	*n*	*M*	*SD*	*M %*	*SD %*
Pretest Scores	53	4.82	2.01	48.25	20.10
Posttest Scores	53	6.35	1.84	63.51	18.37

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 that students scored statistically significantly higher on Question 1, Question 2, Question 3, and Question 7 from pre- to posttest. The effect size was small for all four questions (Cohen, 1988). Statistical significance was not present for the remaining questions. The results for a complete breakdown of item analysis data are presented in Table 3.

Table 3

Percentage of Students Correctly Answering Pre- and Posttest Questions for fall 2025

	Pretest %	Posttest %	Mean Difference	*p*	Cohen's *d*
Question 1	60	81	21	.004**	0.42
Question 2	60	77	17	.011*	0.36
Question 3	25	36	11	.033*	0.30
Question 4	79	85	6		
Question 5	77	85	8		
Question 6	32	45	13		
Question 7	51	72	21	.010*	0.37
Question 8	43	57	14		
Question 9	55	58	3		
Question 10	87	89	2		

Note. $n = 53$. * Significant at $p < .05$; ** significant at $p < .01$; *** significant at $p < .001$. Cohen's *d* from 0.2–0.49 indicates a small effect size, 0.50–0.79 indicates a moderate effect size, and 0.80 and higher indicates a large effect size (Cohen, 1988).

References

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