Office of Academic Planning and Assessment

A Report of the Course Embedded

PHIL 2306 Contemporary Moral Issues Pre- to Post-Assessment

2016-2017

Description of Contemporary Moral Issues Pre- to Post-Test Assessment

Each fall and spring semester a locally developed pre- to post-test is administered within sections of PHIL 2306: Contemporary Moral Issues. The instrument consists of 25 multiple choice questions and is administered to students enrolled in those courses at the start and end of each semester. As the instrument was developed by Philosophy faculty with expertise in teaching and assessing these concepts, it is assumed that the instrument has content related validity (Banta & Palomba, 2015). Additionally, as this test was embedded within normal sections of PHIL 2306, 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 Objectives of Social Responsibility and Personal Responsibility (THECB, 2017). The THECB (2017) defines these concepts as follows:

- Social Responsibility – intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
- Personal Responsibility – ability to connect choices, actions and consequences to ethical decision-making

These data should therefore be used in conjunction with other data to fully understand student knowledge and ability with regards to these Core Learning Objectives.

Methodology

A total of 751 students took the pre-test and a total 611 students took the post-test for PHIL 2306: Contemporary Moral Issues for the 2016-2017 academic year; 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 534 students provided their SamID's and took both the pre- and post-tests. All statistical analysis was therefore conducted on only those students for whom both pre- and post-test scores could be identified. In order to further disaggregate the results, the data was also analyzed separately for face-to-face and online sections.

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. For the combined face-to-face and online sections, two of the four of the standardized skewness and kurtosis coefficients were within the limits of normality of +/-3 (Onwuegbuzie & Daniel, 2002). Therefore, a parametric dependent samples *t*-test was conducted to analyze student performance data. For the face-to-face population three of the four standardized skewness and kurtosis coefficients were outside the limits of normality of +/-3 (Onwuegbuzie & Daniel, 2002). Therefore, a non-parametric dependent samples *t*-test was conducted to analyze student performance data. For the online population all four of the standardized skewness and kurtosis coefficients were within the limits of normality of +/-3 (Onwuegbuzie & Daniel, 2002). Therefore, a parametric dependent samples *t*-test was conducted to analyze student performance data.

Results

For face-to-face students, a non-parametric dependent samples *t*-test revealed a statistically significant difference between in the pre- to post-scores for the 2016-2017 academic year $z = -14.25$, $p < .001$. This difference represented a large effect size (Cohen's *d*) of 0.95 (Cohen, 1988). The average student score increased from 56.71% to 68.91%, for an increase of approximately 12%. Readers are directed to Table 1 for a breakdown of these results.

For online students, a parametric dependent samples *t*-test revealed a statistically significant difference between in the pre- to post-scores for the 2016-2017 academic year, $t(98) = -9.40$, $p < .001$. This difference represented a large effect size (Cohen's *d*) of 0.95 (Cohen, 1988). The average student score increased from 56.65% to 69.70%, for an increase of approximately 13%. Readers are directed to Table 2 for a breakdown of these results.

A parametric dependent samples *t*-test revealed a statistically significant difference between in the pre- to post-scores for the combined face-to-face and online populations of PHIL 2306: Contemporary Moral Issues for the 2016-2017 academic year, $t(533) = -21.15$, $p < .001$. This difference represented a large effect size (Cohen's *d*) of 0.95 (Cohen, 1988). The average student score increased from 56.70% to 69.06%, for an increase of approximately 13%. Readers are directed to Table 3 for a breakdown of these results.

Table 1

Descriptive Statistics for Student Pre- and Post-Scores on Course-Embedded Test in PHIL 2306: Contemporary Moral Issues for 2016-2017 (Face-to-Face)

Test Version	*M %*	*SD %*
Pre-test Scores	56.71	12.37
Post-test Scores	68.91	13.23

Note. The number of students was 435.

Table 2

Descriptive Statistics for Student Pre- and Post-Scores on Course-Embedded Test in PHIL 2306: Contemporary Moral Issues for 2016-2017 (Online)

Test Version	*M %*	*SD %*
Pre-test Scores	56.65	13.18
Post-test Scores	69.70	14.29

Note. The number of students was 99.

Table 3

Descriptive Statistics for Student Pre- and Post-Scores on Course-Embedded Test in PHIL 2306: Contemporary Moral Issues for 2016-2017 (Combined)

Test Version	*M %*	*SD %*
Pre-test Scores	56.70	12.51
Post-test Scores	69.06	13.42

Note. The number of students was 534.

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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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.

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