General Education Assessment Committee (GEAC)

FALL 2018 REPORT ON GENERAL EDUCATION ASSESSMENT – SLO #7

Submitted to the Office of the Provost and the General Education Committee Spring 2019

General Education Assessment Committee (GEAC)

Committee Members

Georgeos Sirrakos Jr., Committee Chairperson, College of Education Krista Prock, Committee Vice Chairperson, Non-Teaching Faculty

College of Business College of Education

College of Liberal Arts & Sciences College of Visual & Performing Arts

At-large Teaching Faculty At-large Teaching Faculty At-Large Teaching Faculty At-Large Non-Teaching Faculty

Academic Dean Office of Assessment

Student Government Board General Education Committee Administrative / Clerical Support Yongjae Kim

Georgeos Sirrakos Jr. Sudarshan Fernando

Angela Cirucci Robert (Moe) Folk Yun (Amy) Lu Robert Ryan Krista Prock David Beougher

Gil Clary

Patrick Moyer John Stanley Kathleen Malloy

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EXECUTIVE SUMMARY - FALL 2018 ASSESSMENT REPORT (SLO #7)

- The General Education Assessment Committee (GEAC) is charged with directly assessing student learning outcomes (SLOs) for the University's General Education Program. During Fall 2018, the GEAC collected student work products pertaining to SLO #7. This SLO is defined as Students identify best practices for self-development in areas such as finance, wellness, spiritual well-being, academic success, and professional motivation. Life skills and lifelong learning are emphasized. This SLO is associated with the First Year Seminar (FYS).
- Recently, the GEAC changed its reporting schedule to issue an assessment report every semester (instead of the previous annual report). This is the GEAC's first assessment report of the 2018 General Education program. The purpose of this report is to document the GEAC's assessment process and to provide data-informed recommendations regarding the University's General Education program to the General Education Committee, the University Curriculum Committee, and to the Division of Academic Affairs.
- A total of 30 faculty were asked to submit student work products from their FYS course(s). Of the 30 faculty, 26 (or about 87%) complied with the GEAC's request.
- A sample of 345 student work products (about 45%) was selected from the pool of 780 available student work products. From the sample, 85 student work products (about 25%) were randomly selected for double rating, each time by a different volunteer faculty rater.
- Student work products were evaluated using a common rubric that was created during the General Education Redesign process. Several aspects of the rubric were adapted and modified from the VALUE (Valid Assessment of Learning in Undergraduate Education) rubrics created by the Association of American Colleges and Universities.
- Overall, about 82% of student work products that were double rated were rated within one Performance Level of each other. This level of interrater agreement provides confidence that raters are applying the rubric consistently across a range of student work products.
- Data analyses revealed that the mean score of the 288 student work products for SLO #7 was 2.25 with a standard deviation of about 0.8. An examination of cumulative frequency revealed that nearly 72% of the students sampled performed at or above Performance Level 2, which is the level that the GEAC had established as the benchmark.
- Data analyses revealed that there was no statistically significant difference on student performance between students with an incoming high school GPA of 2.00 2.99 and a GPA of 3.00 4.00. Additionally, there was no statistically significant difference on student performance between students from each of the Colleges, including Undeclared students.
- Significance testing revealed that students who are classified as first-generation college students received statistically significant lower ratings on SLO #7 than students who were not first in their families to attend college.
- The GEAC makes several recommendations in this report as a result of its findings. Recommendations are organized under three subheadings: (1) Proposed changes to the General Education Program, (2) Proposed changes to the General Education assessment process, and (3) Allocation of resources for the improvement of General Education.

GLOSSARY OF TERMS

- Assessment: A continuous process that allows the General Education Assessment Committee to (a) determine the extent of students' competence against a particular student learning objective, (b) identify challenges and highlight areas where students can improve, and (c) engage in effective data-driven decision making regarding the University's General Education program.
- *Benchmark*: A point of reference that serves as the expected level of performance along a series of progressive levels in a rubric.
- *First Year Seminar*: A credit-bearing course that prepares students for the kind of academic work expected in college. In a small-class setting, students work closely with their professors and peers to explore a particular topic in depth and develop skills that are essential for success at the university. Students also learn how to use university resources, including student support services, in their academic pursuits. The specific topic of the seminar varies with the academic passion and expertise of the instructor. Topics are accessible to all students with no prerequisites. (KU General Education Website)
- <u>Student Learning Outcome</u>: A statement that clearly identifies the expected knowledge, skills, and dispositions that students are expected to acquire as a result of a program of study or, in this case, the General Education program.
- <u>Student Work Product</u>: An assignment submitted by faculty to the General Education Assessment Committee to demonstrate students' competence against the student learning outcome being assessed.

A 'HOW TO' GUIDE TO USING THIS REPORT

- This report should be used in a manner that is appropriate and consistent with the Association of Pennsylvania State College and University Faculties (APSCUF) Collective Bargaining Agreement. Reports submitted by or to the GEAC, including the constituent data embedded in said reports, shall not be used in any way to evaluate the individual performance of any faculty member, and shall not be included in any way in departmental, college, or university evaluation, tenure, or promotion processes.
- The information within this report should be used to facilitate campus-wide discussions about the data to derive meaning and engage in effective decision making.
- The information within this report should be used to facilitate conversations between academic deans, department chairs, and faculty to ensure alignment between the General Education student learning outcomes and student work products submitted to the GEAC as well as compliance with the GEAC's request for student work products.
- Recommendations within this report should be considered and discussed by the General Education Committee, the University Curriculum Committee, and the Division of Academic Affairs.

I. INTRODUCTION

The General Education Assessment Committee (GEAC) was established in April 2010 by passage of the Final General Education Proposal from the General Education Task Force. Since its inception, the GEAC's purpose has been to (1) identify the means of assessing direct, and where appropriate, indirect, evidence of student learning outcomes for the General Education Program at Kutztown University (KU), (2) use data to make recommendations to the General Education Committee, the University Curriculum Committee, and to the Division of Academic Affairs on ways to improve the structure and content of the General Education program at KU, and (3) identify appropriate methods to collect assessment data to determine students' achievement of the General Education program's Student Learning Outcomes (SLOs).

Much of the 2017-2018 academic year was spent creating a new General Education program. This new program was adopted by the University and came into effect beginning with the Fall 2018 semester. The 2018 General Education program consists of eight SLOs. These are:

- SLO #1: Communicate clearly and effectively orally and in writing.
- SLO #2: Apply scientific and quantitative reasoning to solve problems and increase knowledge.
- SLO #3: Apply skills in critical analysis and reasoning for the interpretation of data.
- SLO #4: Engage critically with creative or artistic works.
- SLO #5: Demonstrate the ability to retrieve, interpret, evaluate, and use information.
- SLO #6: Analyze the role of values, ethics, diversity, and multiple perspectives in local and global society.
- SLO #7: Demonstrate an understanding of various models for the development of the whole person.
- SLO #8: Explore concepts, ideas, and methods from a variety of disciplines.

The 2018 General Education Program consists of 42 – 45 credits, which facilitate students' competence toward the eight SLOs. The structural components of the program include:

- First Year Seminar: Discovering College
 - o 3 credits earned in a First Year Seminar (FYS) course
 - Transfer students who are transferring 30 credits or more and not transferring an FYS course may select any approved General Education course
 - The FYS course aligns with SLO #5 and SLO #7
- Category A: Communicating With and About the World
 - o 12 credits distributed among four courses
 - Courses in this category align with SLO #1 and SLO #5
- Category B: Understanding Self and Others
 - o 9 credits distributed among three courses
 - Courses in this category align with SLO #3 and SLO #6

- Category C: Understanding Science and Technology
 - o 9 12 credits distributed among three courses
 - Courses in this category align with SLO #2 and SLO #3
- Category D: Understanding and Creating Ideas
 - o 9 credits distributed among three courses
 - Courses in this category align with SLO #4 and SLO #6

Beginning with Fall 2018, the GEAC plans to assess all of the SLOs in a three-year assessment cycle, with at least one SLO assessed per semester. The GEAC's schedule for assessment is located in Appendix A. During Fall 2018, the GEAC collected data to assess SLO #7, which is associated with FYS courses. SLO #7 is defined as *Students identify best practices for self-development in areas such as finance, wellness, spiritual well-being, academic success, and professional motivation. Life skills and life-long learning are emphasized.*

Over the past several years, it has been the GEAC's practice to submit an annual assessment report with an extended report issued every three years. As of Fall 2018, the GEAC changed its reporting schedule to issue an assessment report every semester. This is the GEAC's first assessment report of the 2018 General Education program. The purpose of the Fall 2018 assessment report is to document the GEAC's assessment process and to provide data-informed recommendations regarding the University's General Education program to the General Education Committee, the University Curriculum Committee, and to the Division of Academic Affairs. The report will also be shared with faculty and made publicly available on the Office of Assessment's website. The Fall 2018 assessment report includes (1) the GEAC's methodology for collecting data to assess student's competence toward SLO #7, (2) findings from the data analyses, and (3) conclusions and recommendations derived from the data analyses.

II. METHODOLOGY

During Fall 2018, the General Education Assessment Committee (GEAC) collected data to assess students' competence toward Student Learning Outcome (SLO) #7. This particular SLO is connected to the University's First Year Seminar (FYS) courses. A variety of FYS courses were offered for the first time during the Fall 2018 semester as part of the 2018 General Education program. The GEAC requested data from all students (freshmen and transfers) who were enrolled in a FYS course during Fall 2018. Faculty teaching a FYS course were asked to submit a student work product for each student enrolled in the course. This section of the assessment report provides an overview of the data sources, a description of how the sample was selected, and an explanation of how data were derived from students work products.

Data Sources and Submission of Student Work Product

All students who entered the University during Fall 2018 were required to take a FYS course, with two exceptions. First, since there were not a sufficient number of FYS course sections to accommodate all students, some students had to defer their course enrollment until the Spring 2019 semester. Second, transfer students who entered the University with 30 or more credits were not required to complete a FYS course.

Near the start of the Fall 2018 semester, the GEAC sent an email message to all faculty teaching a section of FYS. The message outlined the GEAC's data collection and assessment processes and requested the submission of student work products that most closely aligned with SLO #7 and its associated rubric. A copy of the email message is located in Appendix B. Additionally, to assist faculty in determining the suitability of a course assignment for General Education assessment purposes, the GEAC provided a description of SLO #7 and a copy of the associated rubric. This document is located in Appendix C.

During the Fall 2018 semester, there were 40 course sections of FYS from which the GEAC could collect data. The GEAC, in collaboration with Institutional Research (IR), identified all students who were enrolled in a FYS course. The 40 course sections were taught by 30 different faculty and accounted for 1145 possible student work products. Of the 30 faculty, 26 (about 87%) complied with the GEAC's request to submit student work products. The compliant faculty were responsible for 35 of the 40 course sections of FYS. Non-compliance accounted for a decrease of 136 student work products out of the possible 1145. A student not submitting his/her work to faculty was another factor that decreased the overall number of available student work products. Student non-submission accounted for a decrease of 229 student work products out of the possible 1145, or an average of 6 non-submissions in each of the 35 reporting FYS course sections. As a result of these two factors, the pool of 1145 possible student work products shrunk to 780 available student work products. Faculty were asked to submit hard copies (except where a digital submission was more appropriate) of student work

products along with a copy of the course assignment to the Office of Assessment by the conclusion of the Fall 2018 semester.

Selection of the Sample

A sample of 345 student work products (about 45%) was selected from the pool of 780 available student work products. A random number generator was used to select the sample. From the sample of 345 student work products, 85 (about 25%) were randomly selected for double rating, each time by a different volunteer faculty rater.

Rating Student Work Products

Near the middle of the Fall 2018 semester, the GEAC sent a call to faculty to request volunteers to assist with the rating of student work products collected as part of the General Education assessment process. Fifteen faculty from across the University volunteered to participate. Volunteer faculty raters were responsible for attending one of four training sessions. During each session, members of the GEAC explained the assessment process and guided the volunteer faculty raters through a series of exercises where they could apply the assessment rubric to a variety of student work products. Further, the volunteer faculty raters engaged in a group discussion about what constituted each performance level to ensure that the rubric was being applied consistently.

The assessment rubric for SLO #7 is comprised of four performance levels. Each performance level consists of several statements that can be used to describe the student output and the quality of the student work product. These statements more accurately describe student competence rather than knowledge demonstration. A Performance Level 4 is thought of as the level that a student who is completing a capstone course should be able to achieve. In contrast, a Performance Level 1 is thought of as a benchmark, or the level of a student who is only beginning their journey in higher education. Further, it should be noted that there is no connection between a grade in a course or an assignment and performance on the rubric. For example, receiving an A on the assignment does not automatically ensure that the student work product would be rated at a Performance Level 4.

Each volunteer faculty rater was randomly assigned 28 – 30 student work products. Student work products were sometimes swapped out to ensure that a volunteer faculty rater was not given a student work product that s/he had submitted for assessment. Volunteer faculty raters were asked to rate the student work product against the rubric and to determine a single holistic performance level. The GEAC advised volunteer faculty raters that they could also rate a student work product using a (+) or (-) designation. For example, a volunteer faculty rater might score a student work product as a 3-. Volunteer faculty raters also had the option of rating a student work product as X or 0. An X was used to indicate that there was insufficient information provided either within the task or the student work product to make a proper

determination of score. A 0 was used to indicate that the student work product was not appropriate for the SLO, most often the case when the assignment was not aligned to the SLO or the rubric. To assist with data analyses and prevent the inadvertent skewing of results, ratings of X or 0 were not included in the analyses presented in the next section. Table 1 below provides a translation of how the (+), (-), X, and 0 designations were turned into the numerical values used for data analyses.

Table 1: Translation of Scoring Designations

| Faculty Rating | Numerical Score Used for Data Analyses |
|----------------|--|
| 4 - | 3.7 |
| 3+ | 3.3 |
| 3 - | 2.7 |
| 2+ | 2.3 |
| 2 - | 1.7 |
| 1+ | 1.3 |
| 1- | 0.7 |
| X | Insufficient Information (not included in data analyses) |
| 0 | Inappropriate assignment (not included in data analyses) |

III. DATA ANALYSES & FINDINGS

The General Education Assessment Committee (GEAC), with a great deal of assistance from Institutional Research (IR), undertook several levels of data analyses, both descriptive and inferential. The GEAC's findings from the data analyses are presented in this section. All of the tables and charts that were created as part of the data analyses are located in Appendix D.

Determination of Interrater Agreement

As mentioned in Section II, a subsample of 85 student works products was randomly selected from the sample of 345 student work products. These 85 student work products were rated twice, each time by a different volunteer faculty rater. The purpose of having a portion of student work products rated twice was to determine the degree of interrater agreement, or the consistency between raters in applying the assessment rubric in rating student work products. Table 2 summarizes the results. Overall, about 82% of student work products that were double rated were rated within one Performance Level of each other. A little more than half of the student work products were within 0.5 of a Performance Level and nearly 30% of student work products were given the same rating by the volunteer faculty raters.

Table 2: Assessment of Interrater Agreement

| Level of Interrater | Frequency | Percentage (%) | Cumulative Percentage (%) |
|----------------------------|-----------|----------------|---------------------------|
| Agreement | (n = 85) | | |
| No Difference Between | 25 | 29.4% | 29.4% |
| Ratings | | | |
| Ratings within 0.5 of each | 20 | 23.5% | 52.9% |
| other | | | |
| Ratings between 0.6 and 1 | 25 | 29.4% | 82.3% |
| of each other | | | |
| Ratings differed by more | 15 | 17.7% | 100% |
| than 1 | | | |

Student Performance on Student Learning Outcome (SLO) #7

Data presented in this section are based on the rating of 288 student work products. This represents the number of student work products remaining after the ones rated as X (insufficient information) or 0 (inappropriate assignment) were removed. There were a total of 57 student work products that were categorized as either X or 0. Data analyses revealed that the mean score of all student work products (not rated as either X or 0) for SLO #7 was 2.25 with a standard deviation of about 0.8. This indicates that student competence on SLO #7 was slightly above a benchmark (or introductory) level, which is typically associated with Performance Level 1. Table 3 provides a cumulative frequency and cumulative percentage of student scores. Based on the data presented in Table 3, about 28.4% of students scored below

a Performance Level 2, which is the level that the GEAC expected most students to achieve. This means that 71.6% of the students sampled performed at or above GEAC's expected level.

Table 3: Cumulative Frequency and Cumulative Percentage of Student Scores on SLO #7

| Rating of Student | Frequency | Percentage | Cumulative | Cumulative |
|-------------------|-----------|------------|------------|------------|
| Work Product | | | Frequency | Percentage |
| 0.7 | 2 | 0.7 | 2 | 0.7 |
| 1.0 | 31 | 10.7 | 33 | 11.4 |
| 1.3 | 13 | 4.5 | 46 | 15.9 |
| 1.5 | 19 | 6.6 | 65 | 22.5 |
| 1.7 | 17 | 5.9 | 82 | 28.4 |
| 2.0 | 74 | 25.7 | 156 | 54.1 |
| 2.3 | 21 | 7.3 | 177 | 61.4 |
| 2.5 | 11 | 3.8 | 188 | 65.2 |
| 2.7 | 21 | 7.3 | 209 | 72.5 |
| 3.0 | 42 | 14.6 | 251 | 87.1 |
| 3.3 | 7 | 2.4 | 258 | 89.5 |
| 3.5 | 13 | 4.6 | 271 | 94.1 |
| 3.7 | 7 | 2.4 | 278 | 96.5 |
| 4.0 | 10 | 3.5 | 288 | 100.0 |
| Total | 288 | 100.0 | 288 | 100.0 |

Student performance on SLO #7 can be further understood by examining the mean student work product score of students by College. Table 4 summarizes the mean score of students by college and is inclusive of students who identified as being undeclared. Additionally, the sample's mean GPA at the conclusion of the first semester at the University is comparable to the overall GPA of students within that college, thus providing confidence in the selection of the sample.

An acknowledgement and discussion of the standard deviation of the sample will help contextualize the mean scores of student performance on SLO #7. Generally, standard deviation is understood to be a measure of the amount of variation of the data from the mean. Data analyses revealed a standard deviation of 0.8 for the entire sample, which indicates that, within the collected data there is quite a bit of variation from the mean. Plainly, the data has a large spread. Frequency histograms that further illustrate, via skewness and kurtosis, the variability within the data for each College are located in Appendix D.

Table 4: Student Performance on SLO #7 by College

| College Affiliation | n | Mean Score | Standard Deviation | Mean GPA of first semester at KU |
|--|-----|------------|--------------------|-------------------------------------|
| Undeclared | 58 | 2.19 | 0.67 | 2.79 |
| College of Business | 39 | 2.16 | 0.74 | 2.56 |
| College of Education | 50 | 2.33 | 0.83 | 3.41 |
| College of Liberal Arts and Sciences | 94 | 2.32 | 0.86 | 3.04 |
| College of Visual and Performing Arts | 47 | 2.15 | 0.86 | 3.24 |
| Total | 288 | 2.25 | 0.80 | |

Exploring Differences Between Groups

In addition to calculating the mean score of student work products, the GEAC explored the existence of differences between certain groups. First, the GEAC conducted significant difference testing of students by their incoming high school GPA. Specifically, the GEAC explored whether students with an incoming high school GPA of 2.00-2.99 performed differently on SLO #7 than students with an incoming high school GPA of 3.00-4.00. Table 5 provides an overview of the mean score and standard deviation of each group of students.

Table 5: Student Performance on SLO #7 by High School GPA

| High School GPA | n | Mean Score | Standard Deviation |
|-----------------|-----|------------|--------------------|
| 2.0 - 2.99 | 78 | 2.11 | 0.74 |
| 3.0 - 4.0 | 202 | 2.29 | 0.82 |

After calculating the mean score of each group, an independent 2-tailed t-test revealed no statistical significant difference within a 95% confidence interval between students with a high school GPA of 2.00 - 2.99 and a GPA of 3.00 - 4.00. A separate correlation test was also run to determine the existence of a correlation between a student's high school GPA and his/her performance on SLO #7. The test failed to show the existence of any such correlation. The existence of significant differences was also explored for students in each of the Colleges, including Undeclared students. Data analyses revealed that there was no statistical significant difference within a 95% confidence interval on students' performance on SLO #7. Essentially, this means that students who are Undeclared did not perform any differently than students in the College of Education, or that students in the College of Liberal Arts and Sciences did not perform any differently that students in the College of Business. Finally, after performing a one tailed t-test, it was found that students who are classified as first-generation college students received statistically significant lower ratings than students who were not first in their families to attend college ($t_{(182)}=2.17$, p=.02).

IV. CONCLUSIONS & RECOMMENDATIONS

The 2018 General Education Program was created to be simpler and, consequently, easier to assess. During Fall 2018, the General Education Assessment Committee (GEAC) collected data in the form of student work products from First Year Seminar (FYS) courses to assess students' competence on Student Learning Outcome (SLO) #7. This SLO states that students will be able to 'demonstrate an understanding of various models for the development of the whole person.' In this section of the assessment report, the GEAC highlights key findings and identifies recommendations based on those findings. Recommendations are organized under three subheadings: (1) Proposed changes to the General Education Program, (2) Proposed changes to the General Education assessment process, and (3) Allocation of resources for the improvement of General Education.

Key Findings

- In previous General Education assessment efforts, faculty compliance in submitting student work products was a concern. For example, during the 2017-2018 General Education assessment process, only 48% of faculty who were asked to submit student work products complied with the request. To increase faculty compliance, the GEAC recommended to the General Education Committee (GEC) that academic departments and faculty submitting courses for approval in the General Education program must also agree to comply with assessment efforts as a stipulation. As a result of this change, faculty compliance increased to 87% during the Fall 2018 General Education assessment process.
- In 2016, the GEAC identified consistency in the application of the grading rubric as a concern. As a result, the GEAC instituted a process of using two volunteer faculty raters to assess a subsample of student work products. Using that data, the GEAC was able to make better informed assertions regarding the consistency in which the rubric was being applied to evaluate student work products. To facilitate this process, the GEAC conducts a rubric norming training session that is required of all volunteer faculty raters. Since the shift to double rating, faculty interrater agreement has continued to rise year after year. During Fall 2018, an analysis of interrater agreement revealed that about 82% of volunteer faculty raters rated student work products within 1 Performance Level on the rubric. This finding provides the GEAC with greater confidence as to its assessment results.
- Data analyses revealed that the mean score of the 288 student work products for SLO #7 was 2.25 with a standard deviation of about 0.8. An examination of cumulative frequency revealed that nearly 72% of the students sampled performed at or above Performance Level 2, which is the level that the GEAC had established as the benchmark.
- Significance testing revealed that students who are classified as first-generation college students received statistically significant lower ratings on SLO #7than students who were not first in their families to attend college.

Proposed Changes to the General Education Program

- A considerable number of student work products were identified as not being useable
 because they lacked clear alignment to the SLO and/or the grading rubric. Thus, the GEAC
 recommends that the General Education Committee require the inclusion of a sample
 assessment as part of the materials submitted when determining whether a course be
 included in the General Education program. The sample assessment could be used to
 collect General Education assessment data and offers some assurance that the submitting
 faculty / department fully understand the SLO. If implemented, this will likely decrease the
 number of unusable samples submitted.
- The GEAC identified common elements among assessments where students demonstrated the greatest success and scored highly on the grading rubric. These assessments contained multiple parts that allowed students to set initial goals, engage in ample opportunities for reflection, and evaluate their progress toward meeting their goals. In contrast, assessments that asked students to solely do research on a topic did not provide students with appropriate opportunities to demonstrate their competence on SLO #7. The GEAC will provide this feedback to faculty who are scheduled to teach a First Year Seminar course in the future.

Proposed Changes to the General Education Assessment Process

- During our data analyses, we noticed that the sample of students was not evenly divided among the various colleges. To strengthen the validity of future data analyses, the sample selected should be consistently distributed between the different colleges.
- While interrater agreement has steadily improved, the GEAC recognizes that it can improve
 its training to provide more robust and more sustained norming experiences for volunteer
 faculty raters. This has the potential to decrease the variability among volunteer faculty
 raters.
- With the creation of a new General Education program and a new assessment plan, the GEAC is exploring the establishment of performance level benchmarks for the other SLOs. Further, defining criteria for success may allow for better program monitoring and development.

Allocation of Resources for the Improvement of General Education

- To increase transparency of the General Education assessment process, the GEAC plans to offer several faculty information sessions during the Spring 2019 semester. These information sessions will be open to all faculty but will be primarily geared for faculty who are teaching a course associated with the SLO being assessed during Spring 2019. These sessions will be facilitated by the GEAC chair who receives an alternate work assignment course release.
- Opportunities for debriefing and education of faculty and administration about the General Education assessment process and the resulting questions should be supported.

- Specifically, the General Education and the GEAC committees, the volunteer faculty raters, and the faculty who submitted student work products should be encouraged to participate in discussions that help understand the results and implement improvements.
- In previous iterations of General Education assessment, the GEAC often received student work products that did not yield useful / meaningful data (i.e. exam scores, affective survey results, research papers not aligned to the SLO being assessed). As the GEAC continues its current assessment cycle, it will learn more about the types of assessments that fully capture the essence of each SLO and collect these assessments as samples. The GEAC plans to create and moderate a digital repository of sample assessments to share with faculty in the future.
- Data analyses identified first-generation college students as performing lower on SLO #7 compared to their non-first-generation counterparts. The GEAC will continue to monitor differences between these two groups of students in future assessment of SLOs and will report findings in future assessment reports. As the GEAC learns more and collects additional data, it will be better positioned to request the allocation of additional resources to better support first-generation college students. In the meantime, the GEAC will begin collaborating with existing bodies on campus (e.g. TRIO Student Support Services) to identify ways that the General Education program can better support first-generation college students.

APPENDICES

Appendix A

SLOs #1 through 7 are assessed in a three-year rotation using the schedule below. SLO #8 is evaluated every spring semester beginning 2021 through 2024 with the completion of a transcript audit to determine the breadth of courses taken by students.

| YEAR | Academic Year | General Education Category | Student Learning Outcome |
|-------|----------------------------|----------------------------------|--|
| | Fall 2018 Fall 2021 | FYS | #7 – Demonstrate an understanding of various models for the development of the whole person. |
| One | Spring 2019 Spring 2022 | C.1 & C.2 | #2 – Apply scientific and quantitative reasoning to solve problems and increase knowledge. |
| | Fall 2019 Fall 2022 | A.1-4 | #1 – Communicate clearly and effectively orally and in writing. |
| Two | Spring 2020 Spring 2023 | B & D | #6 – Analyze the role of values, ethics, diversity, and multiple perspectives in local and global society. |
| | Fall 2020 Fall 2023 | FYS & A.1-4 | #5 – Demonstrate the ability to retrieve, interpret, and evaluate information. |
| Three | Spring 2021 Spring 2024 | D | #4 – Engage critically with creative or artistic works. |
| | Spring 2021 Spring 2024 | B & C.1 & C.2 | #3 – Apply skills in critical analysis and reasoning for the interpretation of data. |

Appendix B

Copy of email communication sent to all faculty teaching a section of FYS during Fall 2018.

Dear FYS Instructor,

The General Education Assessment Committee (GEAC) is collecting data to evaluate Institutional Student Learning Outcome (SLO) #7 as part of First Year Seminar (FYS) courses. You are receiving this message because you are currently teaching an FYS course within the General Education program. According to the 2018 General Education program, SLO #7 states that students will be able to "demonstrate an understanding of various models for the development of the whole self.' Specifically, this SLO is defined as: "Students identify best practices for self-development in areas such as finance, wellness, spiritual well-being, academic success, and professional motivation. Life skills and life-long learning are emphasized."

The good news is that you do not need to do any additional assessment as part of this process. Rather, the GEAC would like you to collect a student work product for an existing course assignment from each of the students enrolled in your FYS course. The course assignment should address all or most of SLO #7. For guidance, the assessment rubric that will be used to evaluate all collected student work products for SLO #7 can be found at the bottom of the General Education Assessment website. Ideally, the student work product would be in the form of a written assignment. It would also be helpful to the GEAC if you submitted a copy of the assignment that corresponds to the student work product. A group of faculty reviewers will be trained in using the General Education Assessment rubric and will evaluate the student work product against the criteria found within the rubric. Student work products will be coded for course level, course prefix, college, credits earned, and degree sought. As a reminder, GEAC does not share assessment information of specific course instructors and data collected will not be used for the purpose of making tenure or promotion decisions.

Please send the student work products to: Secondary Education Office, Beekey 226, through campus mail. We would appreciate all work products be submitted by December 17, 2018. Please keep in mind that participating in the assessment process is one of the provisions in being able to offer a General Education course, such as FYS. Therefore, the GEAC expects faculty to comply with the request for the timely submission of student work products. Finally, the GEAC wants to acknowledge that this call for student work products is indeed coming late in the semester. There are several reasons for this, but ultimately we wish to apologize for this late notice. Future requests for student work products will be made prior to the start of a semester.

If you have any questions, please email George Sirrakos at <u>sirrakos@kutztown.edu</u> or call 610-683-4279. Thank you for your assistance in our efforts to assess our students' knowledge and skills in SLO #7.

Appendix C

Description of SLO #7 and the rubric for SLO #7

Student Learning Outcome (SLO) #7: Demonstrate an understanding of various models for the development of the whole self.

Definition: Students identify best practices for self-development in areas such as finance, wellness, spiritual well-being, academic success, and professional motivation. Life skills and life-long learning are emphasized.

This SLO is met in General Education Category: First year Seminar Course - Discovering College

| | | Performa | nce Levels | |
|--|--|--|--|---|
| | 4 | 3 | 2 | 1 |
| Student output and quality of work | Identifies complex models to assist in self-development in a variety of areas Accurately translates a model's process and procedure to their own situation Effectively applies model to current situation Accurately evaluates the current and displays consideration of future success of the model after implementation Adjusts model to reflect self-awareness of success and failures. | Identifies basic models to assist in self-development in a variety of areas Translate most of the a model's process and procedure to their own situation Applies model to current situation Adequately evaluates the success of the model after implementation Makes some adjustments to the model to reflect some self-awareness of success and failures. | Recognizes models to assist in self-development in some areas when model is provided Transfers a model's process and procedure to a hypothetical situation Applies model to parts of their current situation Reviews the success of the model after implementation Needs some direction to adjust model to reflect self-awareness of success and failures. | Unable to identify appropriate models to assist in self-development in a variety of areas Cannot transfer a model's process and procedure to a situation Does not make the connection between model and their own situation Unable to evaluate the success of the model after implementation Unable to adjust model to reflect awareness of success and failures. |

Appendix D

Descriptives

Descriptive Statistics (Overall)

| | | _ | | | (| | | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | | | | | | | Std. | |
| | N | Range | Minimum | Maximum | Me | ean | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 288 | 3.500000000 | .5000000000 | 4.000000000 | 2.247743056 | .0473837689 | .8041292240 | .647 |
| | | 000000 | 00000 | 000000 | 000000 | 00000 | 00000 | |

Rated = Rated, COLLEGE = ACA (UNDECLARED)

Descriptive Statistics

| | | | | | | | Std. | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | Ν | Range | Minimum | Maximum | Mean | | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 58 | 3.000000000 | 1.000000000 | 4.000000000 | 2.195689655 | .0878964055 | .6693990810 | .448 |
| | | 000000 | 000000 | 000000 | 000000 | 00000 | 00000 | |
| Fall 18 EOT | 58 | 2.93 | 1.07 | 4.00 | 2.7888 | .10167 | .77427 | .599 |
| GPA | | | | | | | | |

Rated = Rated, COLLEGE = COB

Descriptive Statistics

| | | | | | | | Std. | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | N | Range | Minimum | Maximum | Mean | | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 39 | 2.500000000 | 1.000000000 | 3.500000000 | 2.158974359 | .1182684310 | .7385861130 | .546 |
| | | 000000 | 000000 | 000000 | 000000 | 00000 | 00000 | |
| Fall 18 EOT | 39 | 3.67 | .33 | 4.00 | 2.5597 | .14422 | .90067 | .811 |
| GPA | | | | | | | | |

Rated = Rated, COLLEGE = COE

Descriptive Statistics

| | | | | | | | Std. | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | N | Range | Minimum | Maximum | Mean | | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 50 | 3.000000000 | 1.000000000 | 4.000000000 | 2.329000000 | .1177951350 | .8329373890 | .694 |
| | | 000000 | 000000 | 000000 | 000000 | 00000 | 00000 | |
| Fall 18 EOT | 50 | 3.25 | .75 | 4.00 | 3.4112 | .08872 | .62735 | .394 |
| GPA | | | | | | | | |

Rated = Rated, COLLEGE = LAS

Descriptive Statistics

| | | | | | | | Std. | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | N | Range | Minimum | Maximum | Me | an | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 94 | 3.500000000 | .5000000000 | 4.000000000 | 2.321276596 | .0891361776 | .8642073050 | .747 |
| | | 000000 | 00000 | 000000 | 000000 | 00000 | 00000 | |
| Fall 18 EOT | 94 | 9.79 | .20 | 4.00 | 3.0353 | .13625 | 1.32096 | 1.745 |
| GPA | | | | | | | | |

Rated = Rated, COLLEGE = VPA

Descriptive Statistics

| | | | | | | | Std. | |
|----------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| | N | Range | Minimum | Maximum | Me | an | Deviation | Variance |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic |
| Average Rating | 47 | 3.000000000 | 1.000000000 | 4.000000000 | 2.152127660 | .1256339840 | .8613031990 | .742 |
| | | 000000 | 000000 | 000000 | 000000 | 00000 | 00000 | |
| Fall 18 EOT | 47 | 2.75 | 1.25 | 4.00 | 3.2360 | .10692 | .73303 | .537 |
| GPA | | | | | | | | |

Frequencies

Rated = Rated, COLLEGE = ACA (UNDECLARED)

Statistics

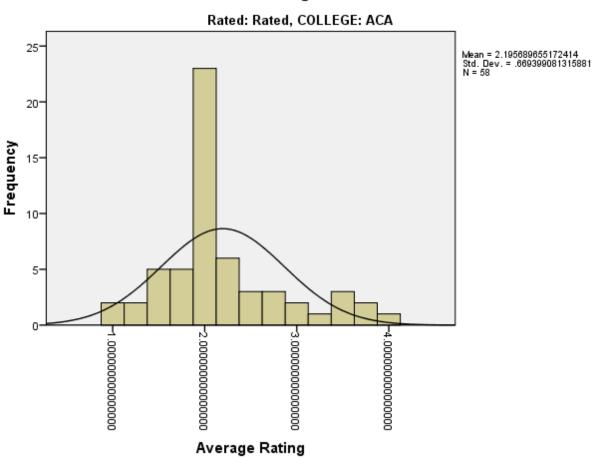
Average Rating

| N | Valid | 58 |
|------------------------|----------|----------------|
| | Missing | 0 |
| Mean | | 2.195689655000 |
| | | 000 |
| Std. Deviatio | n | .6693990810000 |
| | | 00 |
| Skewness | | .923 |
| Std. Error of | Skewness | .314 |
| Kurtosis | | .682 |
| Std. Error of Kurtosis | | .618 |

Average Rating

| | | 21101090 | · tutilig | | |
|-------|-------------------|-----------|-----------|---------------|------------|
| | | | | | Cumulative |
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | 1.000000000000000 | 2 | 3.4 | 3.4 | 3.4 |
| | 1.300000000000000 | 2 | 3.4 | 3.4 | 6.9 |
| | 1.500000000000000 | 5 | 8.6 | 8.6 | 15.5 |
| | 1.650000000000000 | 1 | 1.7 | 1.7 | 17.2 |
| | 1.700000000000000 | 3 | 5.2 | 5.2 | 22.4 |
| | 1.850000000000000 | 1 | 1.7 | 1.7 | 24.1 |
| | 2.000000000000000 | 23 | 39.7 | 39.7 | 63.8 |
| | 2.300000000000000 | 5 | 8.6 | 8.6 | 72.4 |
| | 2.350000000000000 | 1 | 1.7 | 1.7 | 74.1 |
| | 2.500000000000000 | 3 | 5.2 | 5.2 | 79.3 |
| | 2.650000000000000 | 1 | 1.7 | 1.7 | 81.0 |
| | 2.700000000000000 | 2 | 3.4 | 3.4 | 84.5 |
| | 3.000000000000000 | 2 | 3.4 | 3.4 | 87.9 |
| | 3.30000000000000 | 1 | 1.7 | 1.7 | 89.7 |
| | 3.500000000000000 | 3 | 5.2 | 5.2 | 94.8 |
| | 3.700000000000000 | 1 | 1.7 | 1.7 | 96.6 |
| | 3.750000000000000 | 1 | 1.7 | 1.7 | 98.3 |
| | 4.000000000000000 | 1 | 1.7 | 1.7 | 100.0 |
| | Total | 58 | 100.0 | 100.0 | |

Histogram



Rated = Rated, COLLEGE = COB

Statistics

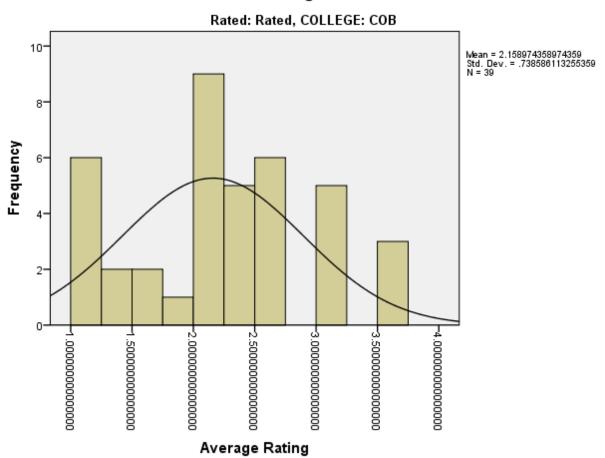
Average Rating

| N | Valid | 39 |
|---------------|----------|----------------|
| | Missing | 0 |
| Mean | | 2.158974359000 |
| | | 000 |
| Std. Deviatio | n | .7385861130000 |
| | | 00 |
| Skewness | | 021 |
| Std. Error of | Skewness | .378 |
| Kurtosis | | 699 |
| Std. Error of | Kurtosis | .741 |

Average Rating

| | | J | J | | |
|-------|-------------------|-----------|---------|---------------|------------|
| | | | | | Cumulative |
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | 1.000000000000000 | 6 | 15.4 | 15.4 | 15.4 |
| | 1.300000000000000 | 2 | 5.1 | 5.1 | 20.5 |
| | 1.500000000000000 | 1 | 2.6 | 2.6 | 23.1 |
| | 1.650000000000000 | 1 | 2.6 | 2.6 | 25.6 |
| | 1.900000000000000 | 1 | 2.6 | 2.6 | 28.2 |
| | 2.000000000000000 | 9 | 23.1 | 23.1 | 51.3 |
| | 2.300000000000000 | 5 | 12.8 | 12.8 | 64.1 |
| | 2.500000000000000 | 3 | 7.7 | 7.7 | 71.8 |
| | 2.650000000000000 | 1 | 2.6 | 2.6 | 74.4 |
| | 2.700000000000000 | 2 | 5.1 | 5.1 | 79.5 |
| | 3.000000000000000 | 5 | 12.8 | 12.8 | 92.3 |
| | 3.500000000000000 | 3 | 7.7 | 7.7 | 100.0 |
| | Total | 39 | 100.0 | 100.0 | |

Histogram



Rated = Rated, COLLEGE = COE

Statistics

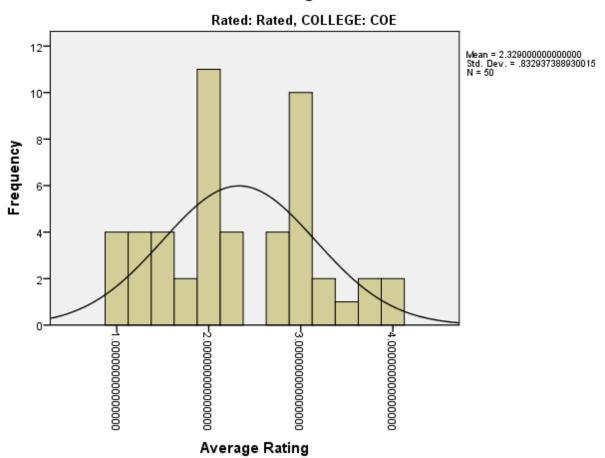
Average Rating

| N | Valid | 50 |
|------------------------|---------|----------------|
| | Missing | 0 |
| Mean | | 2.329000000000 |
| | | 000 |
| Std. Deviatio | n | .8329373890000 |
| | | 00 |
| Skewness | | .196 |
| Std. Error of Skewness | | .337 |
| Kurtosis | | 823 |
| Std. Error of Kurtosis | | .662 |

Average Rating

| | | _ | _ | | Cumulative |
|-------|-------------------|-----------|---------|---------------|------------|
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | 1.000000000000000 | 4 | 8.0 | 8.0 | 8.0 |
| | 1.300000000000000 | 4 | 8.0 | 8.0 | 16.0 |
| | 1.500000000000000 | 4 | 8.0 | 8.0 | 24.0 |
| | 1.700000000000000 | 1 | 2.0 | 2.0 | 26.0 |
| | 1.850000000000000 | 1 | 2.0 | 2.0 | 28.0 |
| | 2.000000000000000 | 11 | 22.0 | 22.0 | 50.0 |
| | 2.300000000000000 | 4 | 8.0 | 8.0 | 58.0 |
| | 2.700000000000000 | 3 | 6.0 | 6.0 | 64.0 |
| | 2.750000000000000 | 1 | 2.0 | 2.0 | 66.0 |
| | 3.000000000000000 | 10 | 20.0 | 20.0 | 86.0 |
| | 3.300000000000000 | 2 | 4.0 | 4.0 | 90.0 |
| | 3.500000000000000 | 1 | 2.0 | 2.0 | 92.0 |
| | 3.700000000000000 | 1 | 2.0 | 2.0 | 94.0 |
| | 3.850000000000000 | 1 | 2.0 | 2.0 | 96.0 |
| | 4.000000000000000 | 2 | 4.0 | 4.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

Histogram



Rated = Rated, COLLEGE = LAS

Statistics

Average Rating

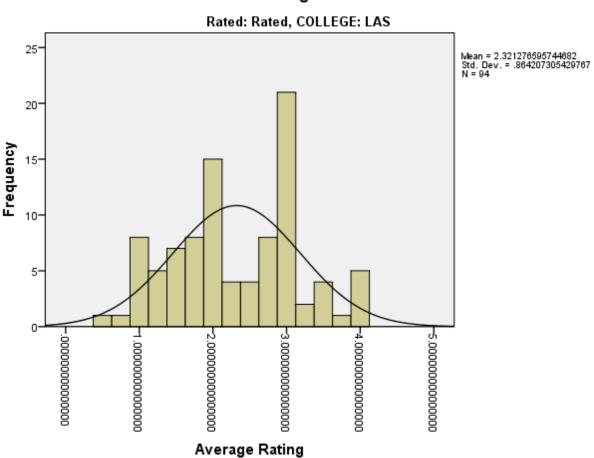
| N | Valid | 94 |
|---------------|----------|----------------|
| | Missing | 0 |
| Mean | | 2.321276596000 |
| | | 000 |
| Std. Deviatio | n | .8642073050000 |
| | | 00 |
| Skewness | | .032 |
| Std. Error of | Skewness | .249 |
| Kurtosis | | 858 |
| Std. Error of | Kurtosis | .493 |

Average Rating^a

| | | Avelage | | | |
|-------|-------------------|-----------|---------|---------------|------------|
| | | | | | Cumulative |
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | .500000000000000 | 1 | 1.1 | 1.1 | 1.1 |
| | .85000000000000 | 1 | 1.1 | 1.1 | 2.1 |
| | 1.000000000000000 | 8 | 8.5 | 8.5 | 10.6 |
| | 1.150000000000000 | 1 | 1.1 | 1.1 | 11.7 |
| | 1.250000000000000 | 1 | 1.1 | 1.1 | 12.8 |
| | 1.300000000000000 | 3 | 3.2 | 3.2 | 16.0 |
| | 1.400000000000000 | 1 | 1.1 | 1.1 | 17.0 |
| | 1.500000000000000 | 6 | 6.4 | 6.4 | 23.4 |
| | 1.650000000000000 | 1 | 1.1 | 1.1 | 24.5 |
| | 1.700000000000000 | 5 | 5.3 | 5.3 | 29.8 |
| | 1.750000000000000 | 2 | 2.1 | 2.1 | 31.9 |
| | 2.000000000000000 | 15 | 16.0 | 16.0 | 47.9 |
| | 2.250000000000000 | 2 | 2.1 | 2.1 | 50.0 |
| | 2.300000000000000 | 2 | 2.1 | 2.1 | 52.1 |
| | 2.500000000000000 | 4 | 4.3 | 4.3 | 56.4 |
| | 2.650000000000000 | 1 | 1.1 | 1.1 | 57.4 |
| | 2.700000000000000 | 3 | 3.2 | 3.2 | 60.6 |
| | 2.800000000000000 | 1 | 1.1 | 1.1 | 61.7 |
| | 2.850000000000000 | 3 | 3.2 | 3.2 | 64.9 |
| | 3.000000000000000 | 21 | 22.3 | 22.3 | 87.2 |

| 3.30000000000000 | 2 | 2.1 | 2.1 | 89.4 |
|-------------------|----|-------|-------|-------|
| 3.500000000000000 | 4 | 4.3 | 4.3 | 93.6 |
| 3.700000000000000 | 1 | 1.1 | 1.1 | 94.7 |
| 4.000000000000000 | 5 | 5.3 | 5.3 | 100.0 |
| Total | 94 | 100.0 | 100.0 | |

Histogram



Rated = Rated, COLLEGE = VPA

Statistics

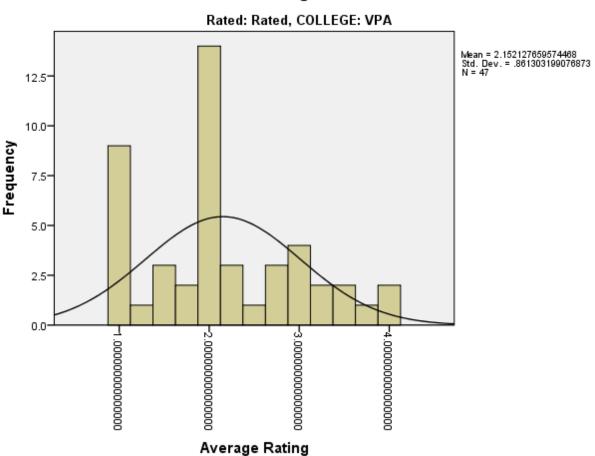
Average Rating

| N | Valid | 47 |
|----------------|----------|----------------|
| | Missing | 0 |
| Mean | | 2.152127660000 |
| | | 000 |
| Std. Deviation | | .8613031990000 |
| | | 00 |
| Skewness | | .424 |
| Std. Error of | Skewness | .347 |
| Kurtosis | | 571 |
| Std. Error of | Kurtosis | .681 |

Average Rating^a

| | | / troi ago | | | |
|-------|-------------------|------------|---------|---------------|------------|
| | | | | | Cumulative |
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | 1.000000000000000 | 9 | 19.1 | 19.1 | 19.1 |
| | 1.300000000000000 | 1 | 2.1 | 2.1 | 21.3 |
| | 1.500000000000000 | 3 | 6.4 | 6.4 | 27.7 |
| | 1.750000000000000 | 2 | 4.3 | 4.3 | 31.9 |
| | 2.000000000000000 | 13 | 27.7 | 27.7 | 59.6 |
| | 2.100000000000000 | 1 | 2.1 | 2.1 | 61.7 |
| | 2.150000000000000 | 1 | 2.1 | 2.1 | 63.8 |
| | 2.300000000000000 | 2 | 4.3 | 4.3 | 68.1 |
| | 2.500000000000000 | 1 | 2.1 | 2.1 | 70.2 |
| | 2.700000000000000 | 1 | 2.1 | 2.1 | 72.3 |
| | 2.750000000000000 | 2 | 4.3 | 4.3 | 76.6 |
| | 3.000000000000000 | 4 | 8.5 | 8.5 | 85.1 |
| | 3.300000000000000 | 2 | 4.3 | 4.3 | 89.4 |
| | 3.500000000000000 | 2 | 4.3 | 4.3 | 93.6 |
| | 3.700000000000000 | 1 | 2.1 | 2.1 | 95.7 |
| | 4.000000000000000 | 2 | 4.3 | 4.3 | 100.0 |
| | Total | 47 | 100.0 | 100.0 | |

Histogram



Descriptives

Rated = Rated, HSGPA Range = 2.0-2.99

| Descriptive Statistics | | | | | | | | | | | | |
|------------------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-------|-----------|-------|
| | | | | | | | Std. | Varianc | | | | |
| | N | Range | Minimum | Maximum | Mean | | Deviation | е | Skewness | | Kurtosis | |
| | | | | | | | | | | Std. | | Std. |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic | Statistic | Error | Statistic | Error |
| Average Rating | 78 | 3.50000000 | .500000000 | 4.00000000 | 2.10833333 | .084206629 | .743692816 | .553 | .234 | .272 | 463 | .538 |
| | | 0000000 | 000000 | 0000000 | 3000000 | 600000 | 000000 | | | | | |

a. Rated = Rated, HSGPA Range = 2.0-2.99

Rated = Rated, HSGPA Range = 3.0-4.00

| Descriptive Statistics | | | | | | | | | | | | |
|------------------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-------|-----------|-------|
| | | | | | | | Std. | Varianc | | | | |
| | N | Range | Minimum | Maximum | Mean | | Deviation | е | Skewness | | Kurtosis | |
| | | | | | | | | | | Std. | | Std. |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Statistic | Statistic | Error | Statistic | Error |
| Average Rating | 202 | 3.15000000 | .850000000 | 4.00000000 | 2.28613861 | .057808820 | .821617711 | .675 | .258 | .171 | 665 | .341 |
| | | 0000000 | 000000 | 0000000 | 4000000 | 400000 | 000000 | | | | | |

a. Rated = Rated, HSGPA Range = 3.0-4.00

T-Test

Rated = Rated

Group Statistics

| | HSGPA_groups | N | Mean | Std. Deviation | Std. Error Mean |
|----------------|--------------|-----|---------------|----------------|-----------------|
| Average Rating | 2.00 | 78 | 2.10833333300 | .743692816000 | .084206629600 |
| | | | 0000 | 000 | 000 |
| | 3.00 | 202 | 2.28613861400 | .821617711000 | .057808820400 |
| | | | 0000 | 000 | 000 |

| Independent Samples Test | | | | | | | | | | | | |
|--------------------------|-------------------------------|-------|------|------------------------------|---------|----------|-------------|-------------|----------------|-----------------|--|--|
| | Levene's Test for Equality of | | | | | | | | | | | |
| | Variances | | | t-test for Equality of Means | | | | | | | | |
| | | | | | | | | | 95% Confider | nce Interval of | | |
| | | | | | | Sig. (2- | Mean | Std. Error | the Difference | | | |
| | | F | Sig. | t | df | tailed) | Difference | Difference | Lower | Upper | | |
| Average | Equal variances | 1.549 | .214 | -1.666 | 278 | .097 | - | .1067521790 | - | .0323400108 | | |
| Rating | assumed | | | | | | .1778052810 | 00000 | .3879505720 | 00000 | | |
| | | | | | | | 00000 | | 00000 | | | |
| | Equal variances not | | | -1.741 | 153.612 | .084 | - | .1021401790 | - | .0239754576 | | |
| | assumed | | | | | | .1778052810 | 00000 | .3795860190 | 00000 | | |
| | | | | | | | 00000 | | 00000 | | | |

Oneway

Rated = Rated

Descriptives

| Average Rating | | | | | | | | | | |
|----------------|-----|-------------|----------------|-------------|-----------------------------|-------------|-------------|-------------|--|--|
| | | | | | 95% Confidence Interval for | | | | | |
| | | | | | Me | an | | | | |
| | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum | | |
| UND | 58 | 2.195689655 | .6693990810 | .0878964055 | 2.019680139 | 2.371699171 | 1.000000000 | 4.000000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 000000 | 000000 | | |
| СОВ | 39 | 2.158974359 | .7385861130 | .1182684310 | 1.919552438 | 2.398396280 | 1.000000000 | 3.500000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 000000 | 000000 | | |
| COE | 50 | 2.329000000 | .8329373890 | .1177951350 | 2.092281813 | 2.565718187 | 1.000000000 | 4.000000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 000000 | 000000 | | |
| CLAS | 94 | 2.321276596 | .8642073050 | .0891361776 | 2.144269813 | 2.498283379 | .5000000000 | 4.000000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 00000 | 000000 | | |
| CVPA | 47 | 2.152127660 | .8613031990 | .1256339840 | 1.899239566 | 2.405015753 | 1.000000000 | 4.000000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 000000 | 000000 | | |
| Total | 288 | 2.247743056 | .8041292240 | .0473837689 | 2.154479284 | 2.341006827 | .5000000000 | 4.000000000 | | |
| | | 000000 | 00000 | 00000 | 000000 | 000000 | 00000 | 000000 | | |

a. Rated = Rated

ANOVA

Average Rating

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | 1.733 | 4 | .433 | .667 | .616 |
| Within Groups | 183.848 | 283 | .650 | | |
| Total | 185.581 | 287 | | | |

a. Rated = Rated