

Student Opinion Survey (SOS)

Fall 2016

Author: Joseph F. van Gaalen, Ph.D., Director, Academic Assessment

1 INTRODUCTION

Florida SouthWestern State College's adoption of the new Student Opinion Survey (SOS) replaces the Student Evaluation of Instruction (SEI) which was administered AY 2015-2016. The SEI itself was a replacement for the Student Instructional Report 2nd Generation (SIR II). Like the SEI, the SOS is accessed online and allows for rapid turnaround of results for faculty.

The SOS online format (administered over a 10-day span) allows for minimized vulnerability to indirect and/or unintentional faculty influence (e.g. assignments given on the same day can influence survey), an increased aptitude towards detailed survey responses, and additional discipline/department specific questions included in the survey (Layne et al., 1999; Simpson and Siguaw, 2000). This report details results of a college-wide evaluation conducted during the Fall 2016 term.

The SOS consists of 17 questions. The first six questions ask students to self-report areas regarding their disposition (see question list in Section 2 below). Questions 7 through 15 ask students to evaluate the course using an ordinal scale. Finally, questions 16 and 17 ask for additional feedback regarding the course in an open-ended format. It should be noted that for overall comparisons, the ordinal scale is assigned a point value as follows: Strongly Agree (4pts), Agree (3), Disagree (2), or Strongly Disagree (1).

Each student is sent a series of email alerts announcing the opening and closing of the course evaluation time period. Students can then access course evaluations via a link in each of those emails for any courses in which they are registered. The student encounters a completion page immediately upon completing an evaluation. If the student attempts to access the evaluation for that particular course again, a notice will alert them that they have no further evaluations to complete.

For additional detail or further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Director of Academic Assessment, Academic Affairs (Joseph.VanGaalens@fsw.edu; x16965).

2 THE SURVEY

- I. **About the student** (for questions 1-4, 6 response options include: Never, Once, Twice, Three times, Four or more times; for question 5, response options include: A, B, C, D, F, Pass, Fail)
 1. I missed class _____.
 2. I completed assignments on time.
 3. I contacted my instructor outside of class time when I needed help.
 4. I spent _____ hours per week studying and/or preparing for this class (not including class time).
 5. I believe I will receive a grade of _____ in this class.
 6. I missed _____ assignments.

- II. **About the instruction** (for questions 7-15, response options include: Strongly Agree, Agree, Disagree, Strongly Disagree; questions 16 and 17 are open-ended)
7. The course helped me to improve my understanding of and/ or skills in the subject.
 8. My professor is helpful when I have questions or need help.
 9. My professor gives feedback/returns assignments (tests, written assignments, quizzes, lab reports, etc.) in time for me to improve for future assignments.
 10. My professor created a positive academic environment where I was comfortable to ask questions.
 11. The tests, written assignments, homework, observations, etc., reflected the course content.
 12. The course materials (textbooks, online websites, lecture notes, handouts, etc.) were helpful.
 13. The course activities (assignments, labs, projects, etc.) helped me learn.
 14. My professor was knowledgeable about the subject matter.
 15. The grading criteria and instructor's policies were provided.
 16. What is educationally the most beneficial about this class?
 17. What additional comments or suggestions would you like to provide?

3 COLLEGE-WIDE RESPONSE RATES

Florida SouthWestern's SOS for fall 2016 was open from November 21-30, 2016 college-wide for the full and B-term courses and Sept. 28-Oct. 7 for the A-term courses. The evaluation incorporated 48,390 potential survey respondents (each student receives one survey for each course enrolled) and 11,006 surveys were completed for a response rate of 22.7%. A time-lapse of survey responses for the Full/B term is shown in Figure 1 to illustrate responses over the course of the evaluation window.

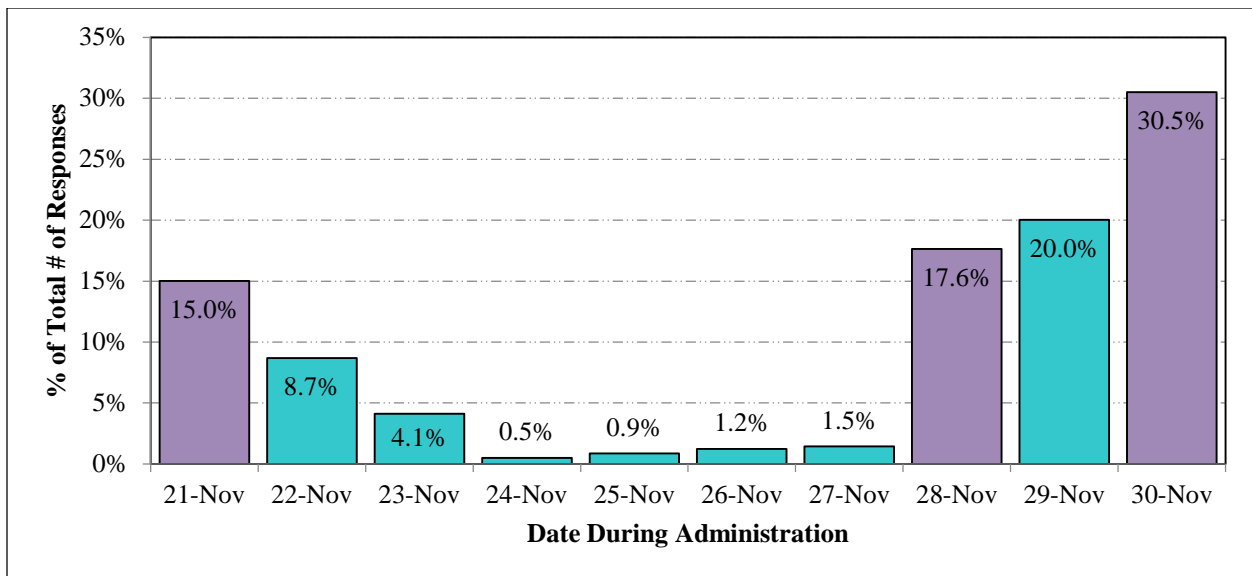


Figure 1. Percentage of total respondents by date over the Full/B SOS evaluation period of Nov. 21-30, 2016. Purple bars denote days in which Office of Academic Assessment issued a reminder email to students to take the evaluation.

Response rates by course modality are shown in Figure 2. Traditional course evaluations, accounting for 75% of all available evaluations for completion, exhibit a 25.1% response rate, a decrease from 32% in 2015. Online course evaluations, accounting for 21% of all available evaluations, exhibit a 16.7% response rate, a decrease from 28% in 2015. And finally, dual enrollment evaluations, accounting for 4% of all available evaluations, exhibit a response rate of 11.1%, up from 6% in 2015.

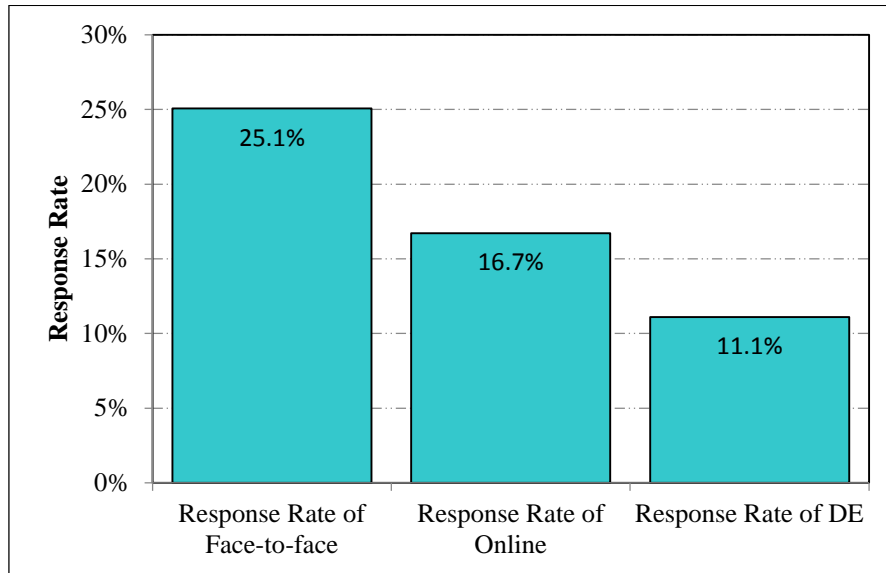


Figure 2. Response rates for SOS evaluation by course modality.

4 EVALUATION RESULTS

While the data are interval-level measurements (i.e. Likert-type ratings) and are therefore categorical and ordinal in nature (Sullivan, 2014), typically a review of the median or mode is more satisfactory for interpreting the most common feeling in survey response as opposed to a standard parametric approach (Jamieson, 2004). However, a review of the means yields information relating to the standard deviation, and indirectly, the skewness and kurtosis of the data (Siegel, 1956). Therefore, a study of means is valuable as the goal is to study distribution patterns among the cohort as opposed to reviewing the most common feeling among respondents. Moreover, the results are not intended to be interpreted using the Likert-type rating definitions (e.g. very effective, effective, etc.), but instead are designed to evaluate shifts in the collective survey responses. For conversion to a parametric analysis, the Likert-type ratings were interpolated to integer form as defined by the SOS tool (4-Strongly Agree, 3-Agree, 2-Disagree, and 1-Strongly Disagree).

4.1 SELF-REPORT ITEMS (QUESTIONS 1-6)

The first six questions of the SOS are of a self-report nature asking students to reflect on areas of their behavior and expected grade in the course (see Section 2 above for question specifics). Of the 11,006 survey responses received, 387 of those, or 3.5%, elected to ignore these questions. Results for Questions 1 through 4, in which responses are “Never”, “1 time”, “2 times”, “3 times”, and “4 or more” are shown in Figure 3.

Question 1 exhibits 52% of students surveyed report never having missed class. Question 2 exhibits 95% of students reporting completing assignments on time 4 or more times. However, a statistic of this nature may be misleading as the number of assignments in each class may vary and thus skew results. In question 3, 34% of students responding to the survey report having never contacted the instructor outside of class time for help. This is slightly lower than responses in the 2016 CCSSE survey of gateway course students were asked "...how often do you discuss ideas from readings or classes with instructors outside of class." In that case, 46% of students reported "Never" (CCSSE, 2016). In question 4, 70% of students responding to the survey reported never missing assignments.

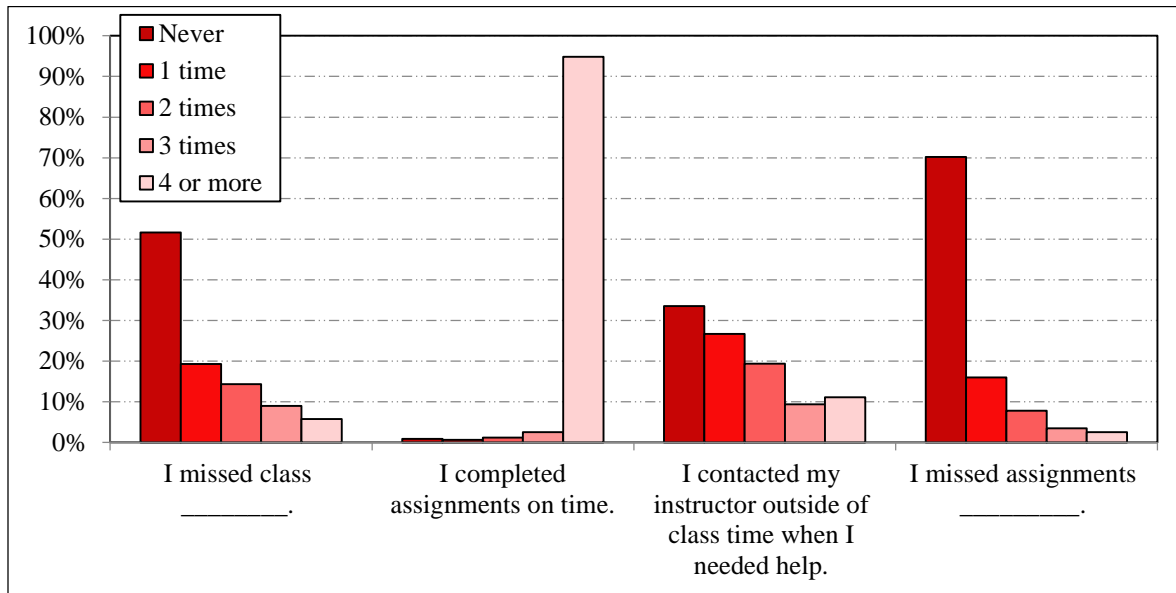


Figure 3. SOS results for Questions 1-4 regarding student behavior.

Figure 4 depicts results of question 5 asking students how many hours they spent studying and/or preparing for the class. Of students responding to the survey, 34% report studying 0-3 hours while an additional 45% report studying 4-8 hours.

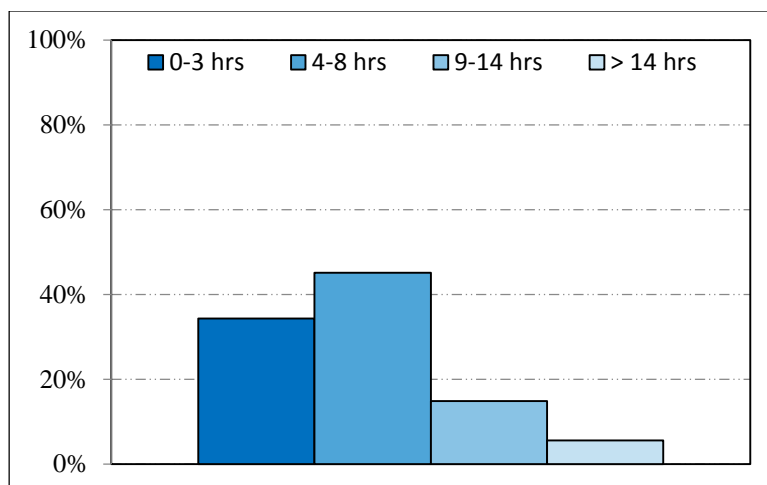


Figure 4. SOS results for Question 5 regarding student behavior: "I spent ___ hours per week studying and/or preparing for this class (not including class time)."

Figure 5 depicts results of question 6 asking students what grade they expect to earn. Of students responding to the survey, 49% report expecting an “A”, while another 33% report expecting a “B.” The remaining 18% report “C”, “D”, “F”, or in some cases reported a “Pass” or “Fail.”

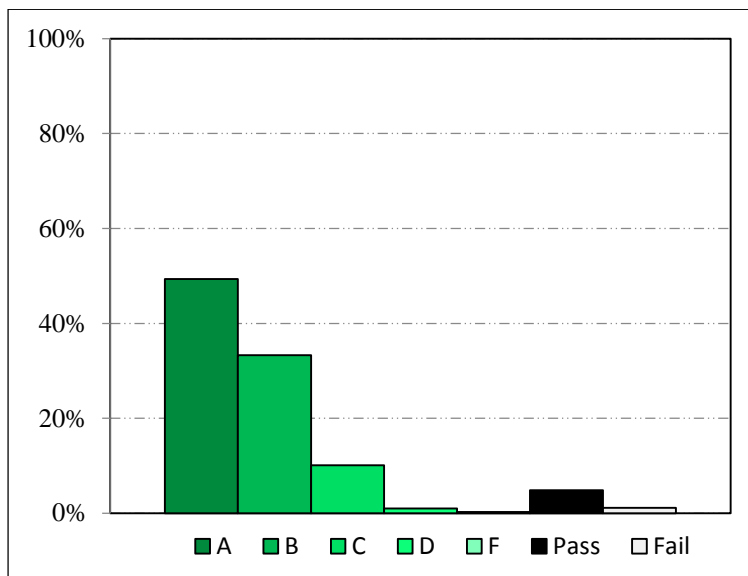


Figure 5. SOS results for Question 5 regarding student grade expectation: “I believe I will receive a grade of _____ in this class.”

4.2 COURSE EVALUATION ORDINAL SCALE ITEMS (QUESTIONS 7-15)

Questions 7 through 15 of the SOS ask students to evaluate the course using an ordinal scale (Strongly Agree, Agree, Disagree, Strongly Disagree). Results by question for traditional, online, and dual enrollment course sections are shown in Table 1. A graphical representation is shown in Figure 6.

	Traditional <i>n = 9065</i>	Online <i>n = 1732</i>	Dual Enrollment <i>n = 209</i>
7. The course helped me to improve my understanding of and/ or skills in the subject.	94%	94%	91%
8. My professor is helpful when I have questions or need help.	96%	93%	91%
9. My professor gives feedback/returns assignments (tests, written assignments, quizzes, lab reports, etc.) in time for me to improve for future assignments.	94%	91%	84%
10. My professor created a positive academic environment where I was comfortable to ask questions.	96%	93%	90%
11. The tests, written assignments, homework, observations, etc., reflected the course content.	97%	95%	95%
12. The course materials (textbooks, online websites, lecture notes, handouts, etc.) were helpful.	93%	94%	88%
13. The course activities (assignments, labs, projects, etc.) helped me learn.	93%	93%	90%
14. My professor was knowledgeable about the subject matter.	99%	97%	97%
15. The grading criteria and instructor’s policies were provided.	99%	98%	96%

Table 1. Fall 2016 SOS evaluation percent positive responses (“Strongly Agree” or “Agree”) by modality (online uses a slightly different set of questions). Light blue shaded cells indicate statistically significantly different results from traditional to online, light red shaded cells indicate statistically significantly different results from traditional to dual enrollment (according to χ^2 test).

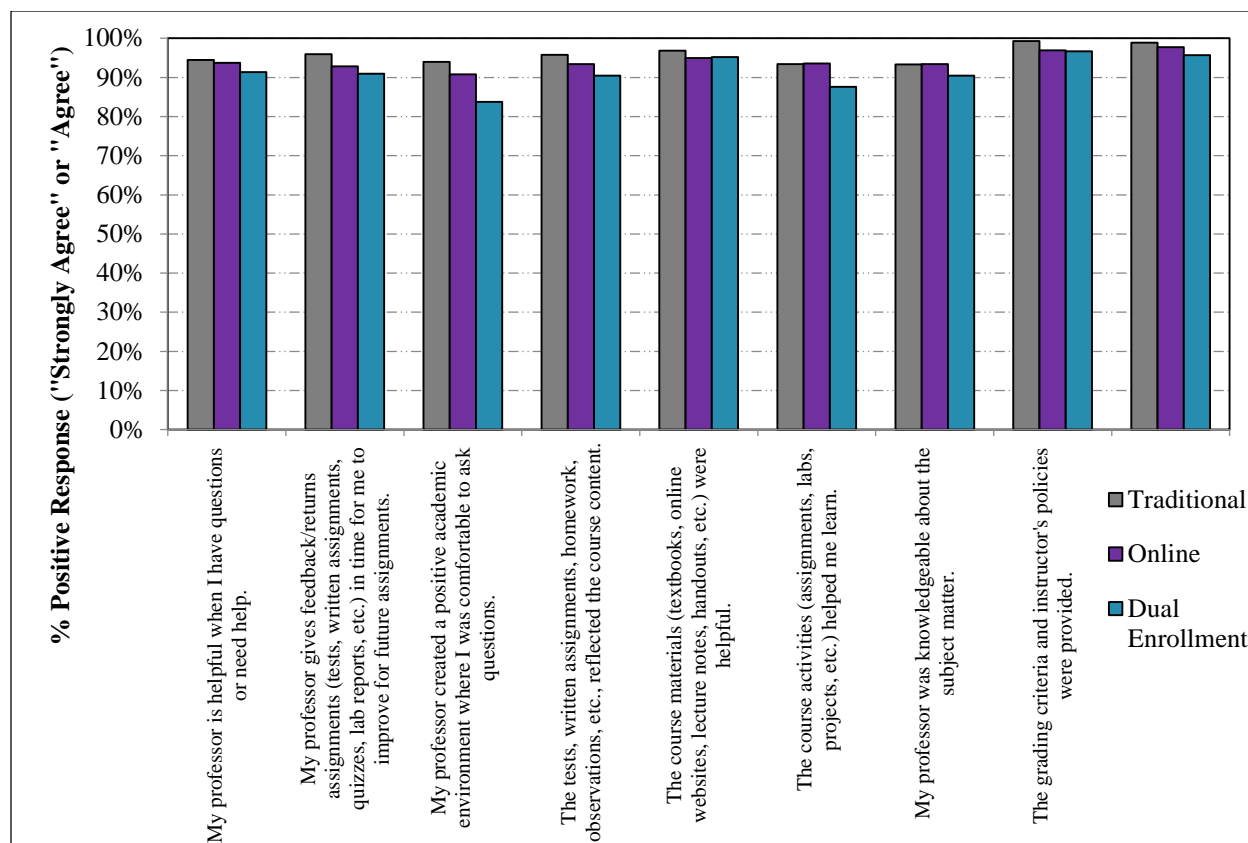


Figure 6. Comparison of positive responses ("Strongly Agree" and "Agree") for questions 7-15 of the SOS by modality. Gray denotes traditional, purple denotes online, and aqua denotes dual enrollment.

There are no cases in which the traditional course sections exhibit statistically significant differences with the online course sections. In comparing traditional course sections with dual enrollment course sections, however, questions 8-10, and 12 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for dual enrollment using a χ^2 test for independence according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999) (Table 2). Question 9 exhibits the largest difference between traditional and dual enrollment. In this case, dual enrollment positive responses are 84% whereas traditional are 94%. Results of a χ^2 test for independence for the statistically significant results are listed below:

- ❖ Question 8: $\chi^2 = 13.201$, $p=0.0003$
- ❖ Question 9: $\chi^2 = 36.847$, $p=1.29 \times 10^{-9}$
- ❖ Question 10: $\chi^2 = 14.314$, $p=0.0002$
- ❖ Question 12: $\chi^2 = 11.233$, $p=0.0008$

4.3 RESULTS BASED ON STUDENT SELF-REPORT ITEMS

Because the SOS explores the disposition of the student through a series of self-report items at the beginning of the course evaluation, assessment can include an evaluation of course items as they relate to student items. For example, how does the student missing class often affect their response to questions like "The tests, assignments...reflected the course content?" These types of correlations can be explored through a paired study. Figure 7 exhibits the percentage of positive responses ("Strongly

Agree” or “Agree”) to questions 6-15 based on how the student responded to SOS question 1 “I missed class ____.” Figures 8 through 12 reflect the same relationships with questions 2 through 6.

In Figure 7, it is clear that in many cases the number of times a student self-reports having missed class has little correlation with how they evaluate the course. Questions 8, 11, 14, and 15 exhibit less than 5% difference in percent positive response for those answering “Never” to those answering “4 or more times.” Question 6, “The course helped me improve my understanding...” exhibits the greatest difference between those who report missing class often and those who report never missing class. In this case, 94% of students who report “Never” missing class answered “Strongly Agree” or “Agree.” By comparison, only 83% of those who report missing class “4 or more times” answered similarly. What is also notable is that Question 6 is one of just two questions in which a consistent trend exists from those answering “Never” to “4 or more times.” Only question 15 exhibits a similar trend.

In Figure 8, self-report comparisons with Question 7 exhibit mixed results. There does not appear to be any discernible trend, although, in many cases, positive responses associated with “2 times” in response to the prompt “I completed my assignments on time.” appears to be deflated (see yellow bar for questions 7, 9, 12, and 13).

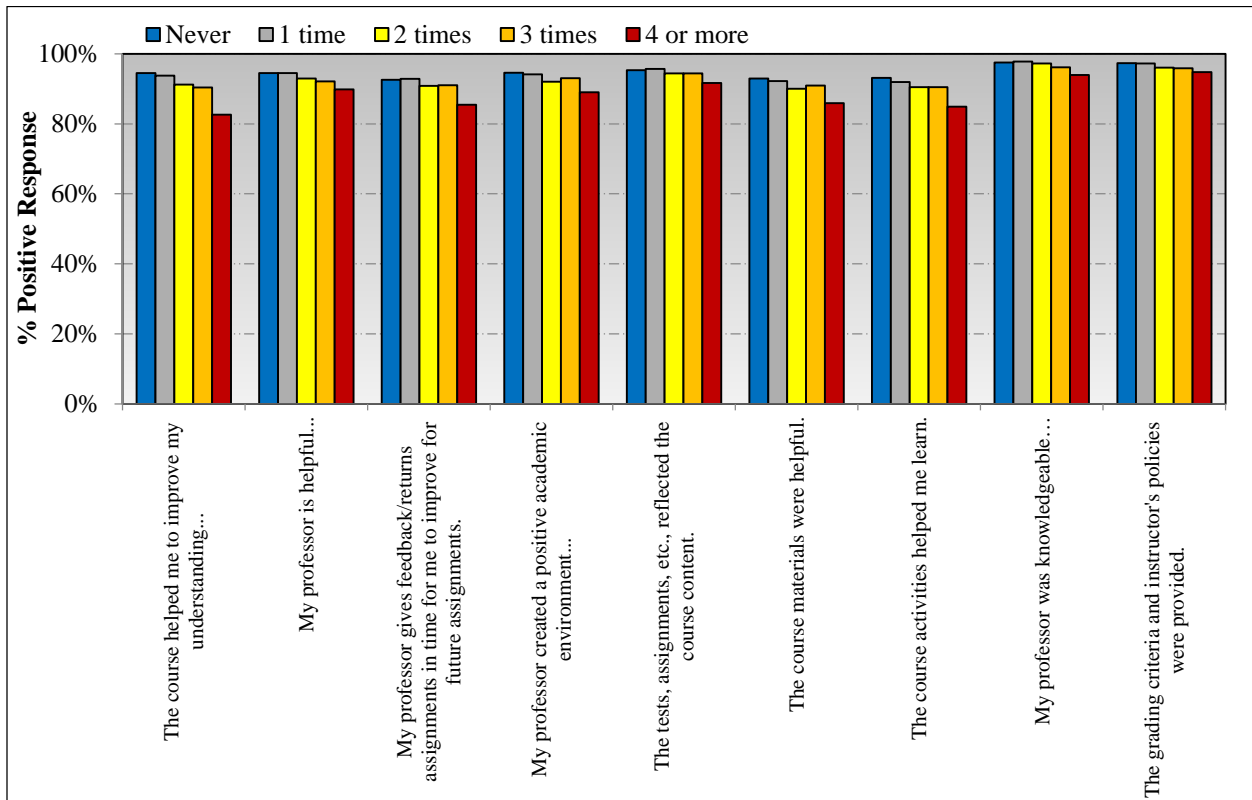


Figure 7. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I missed class ____." for questions 7 through 15 (left-to-right on x-axis).

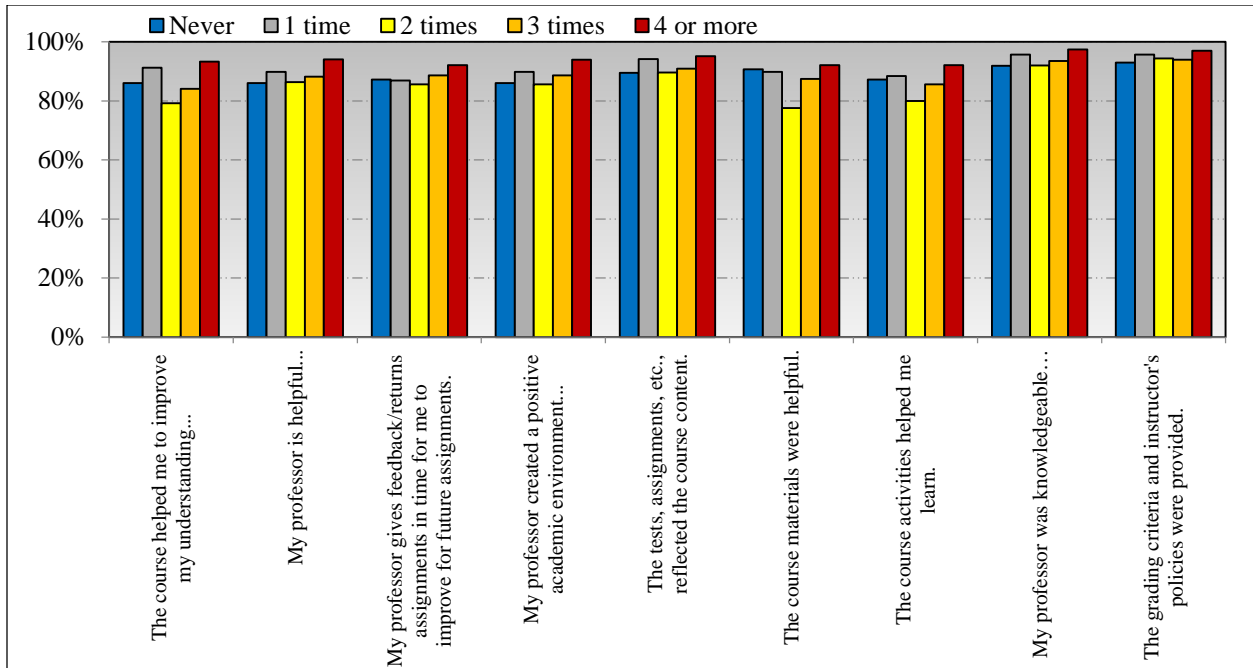


Figure 8. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I completed my assignments on time." for questions 7 through 15 (left-to-right on x-axis).

In Figure 9, there does not appear to be any correlation with the number of times a student self-reports having contacted the instructor outside of class hours and whether they answer positively in course evaluations. No question exhibits greater than 5% difference in percent positive response for those answering "Never" to those answering "4 or more times."

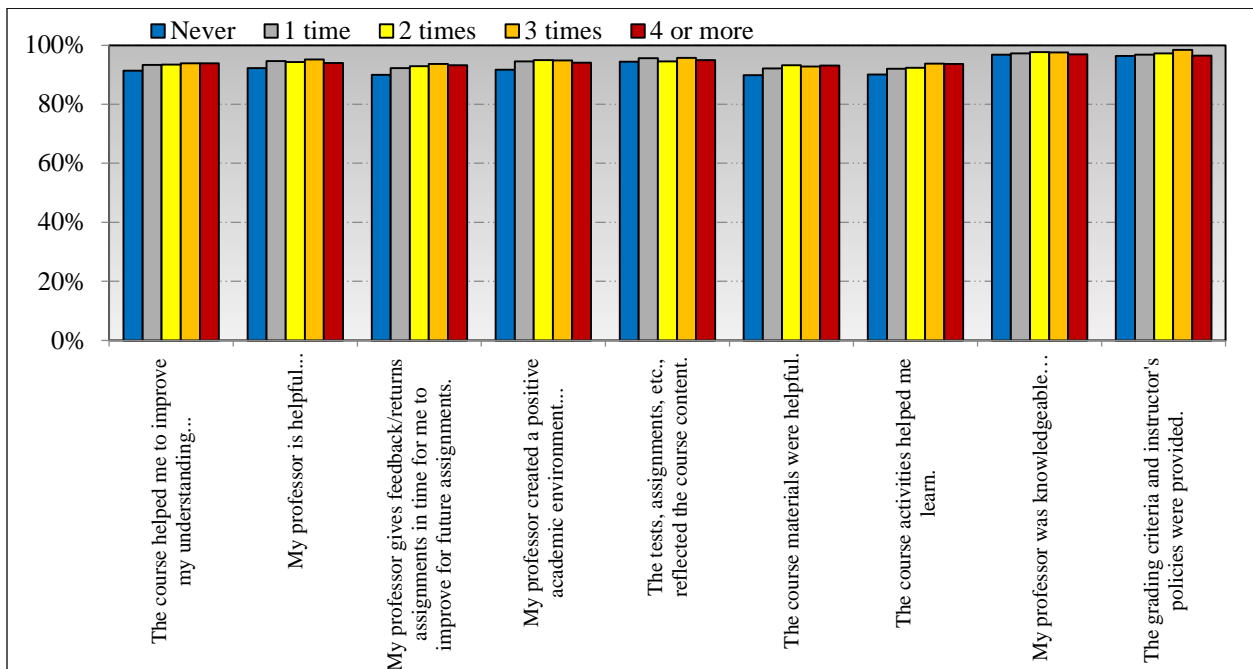


Figure 9. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I contacted my instructor outside of class time when I needed help." for questions 7 through 15 (left-to-right on x-axis).

In Figure 10, there is a modest to strong correlation between the number of times a student self-reports having missed assignments and whether they answer positively in course evaluations. Questions 7, 8, 10, 12, and 13 exhibit greater than 10% difference in percent positive response for those answering “Never” to those answering “4 or more times.” The largest of these examples is question 7, in which 94% of students who report “Never” missing assignments answered “Strongly Agree” or “Agree.” whereas only 79% of students who report “4 or more times.” answered similarly.

In Figure 11, there exhibits a trend in those reporting 4-8 hours of study outside the classroom with positive response in course evaluations. For all questions, those reporting 4-8 hours of study outside the classroom also exhibit the highest positive response. This is most pronounced for Questions 7 and 11. However, in all cases, the range between highest positive response and lowest is 5% or less.

In Figure 12, a clear correlation is exhibited between expected grade and positive response in course evaluation questions. Questions 7-13 exhibit a steadily declining positive response with lower grade ranging from 55% with question 7 to 30% with question 11. Questions 14 and 15, while also exhibiting a steady decline in positive responses with lower grade, are not as pronounced. Question 14 exhibits a difference of 27% while question 15 is 17%. However, in all cases, these results are significant.

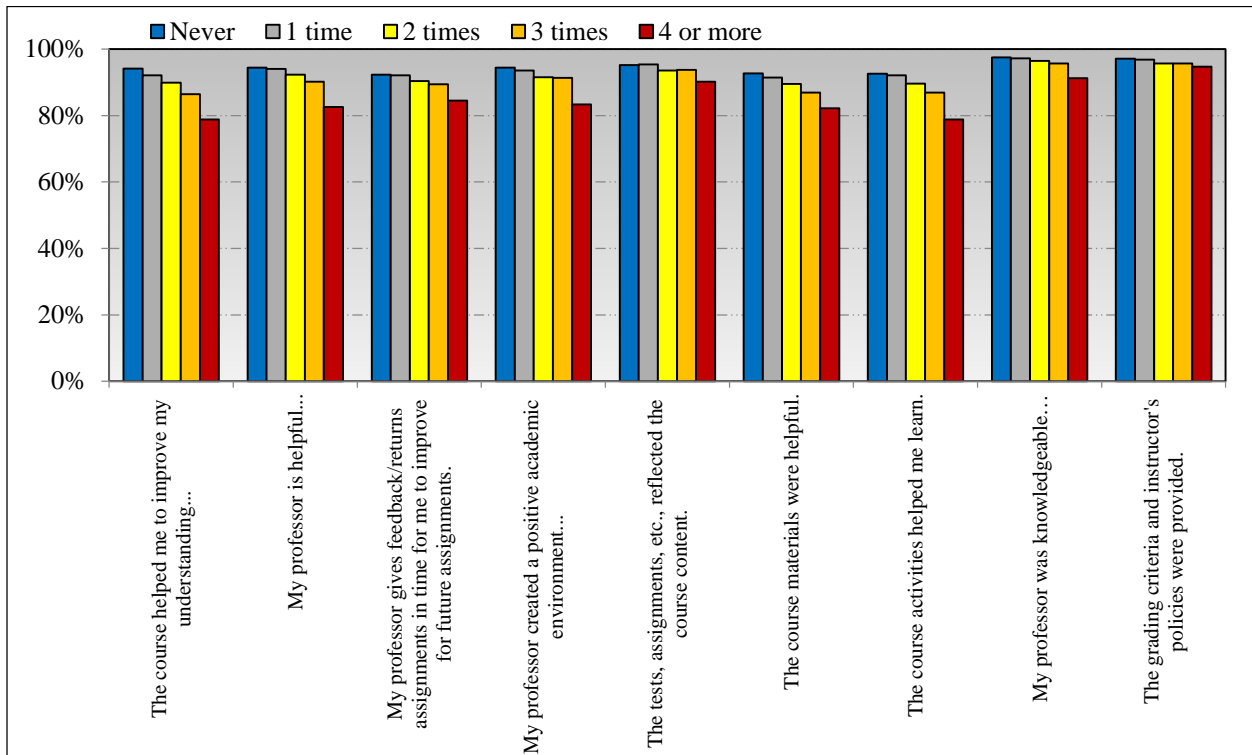


Figure 10. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I missed assignments ____." for questions 7 through 15 (left-to-right on x-axis).

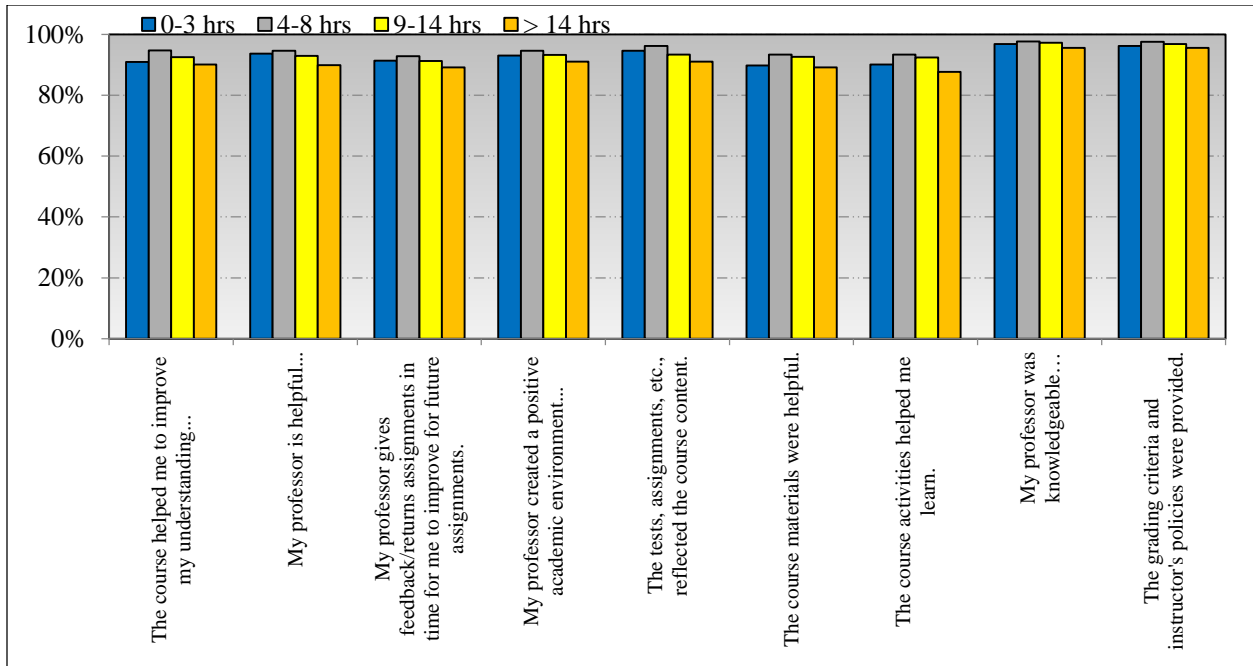


Figure 11. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I spent ___ hrs per week studying/preparing for class (not inc. class time)." for questions 7 through 15 (left-to-right on x-axis).

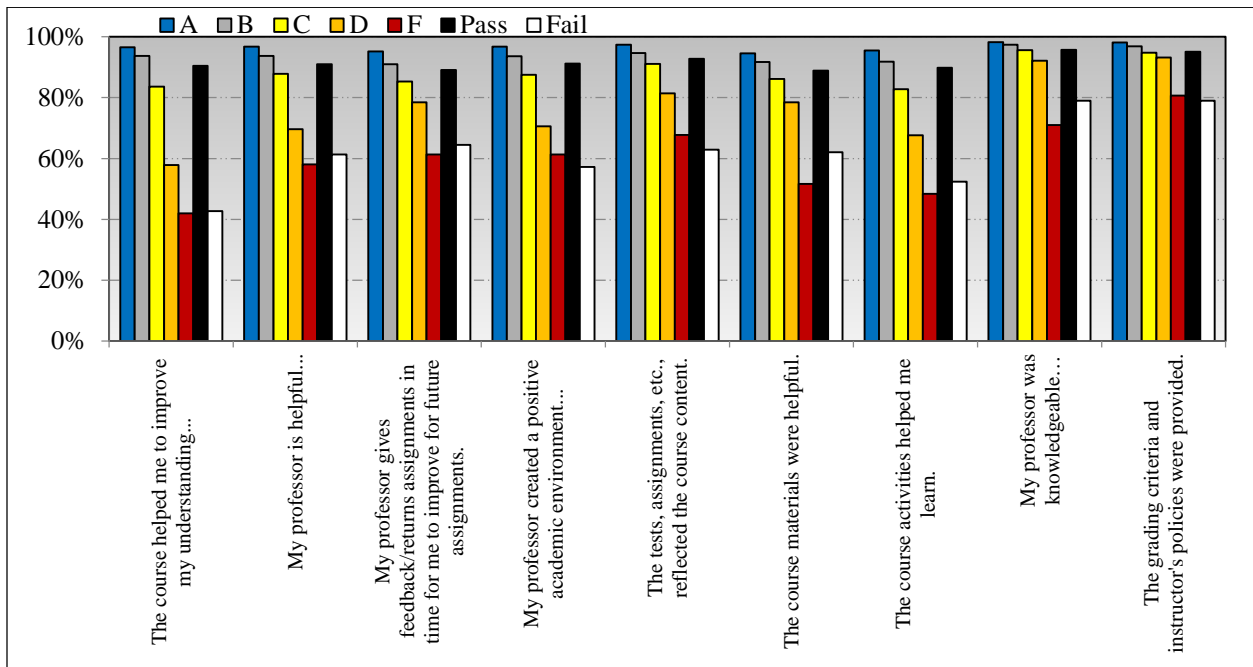


Figure 12. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 1: "I believe I will receive a grade of ___ in this class." for questions 7 through 15 (left-to-right on x-axis).

4.4 BY COURSE (AS DEFINED BY AY 2016-2017 FOCUS COURSE LIST)

Results for the SOS course evaluations of courses listed in the AY 2016-2017 Focus Course List are shown in Figure 13. The black line depicts mean scores (average of questions 7-15) from traditional sections.

The purple shade depicts mean scores from online sections. And the aqua shade depicts mean scores from dual enrollment sections. SPN 1121 exhibits the highest mean of traditional course sections (3.9/4), although sample size was low (n=12). FRE 1121 exhibits the lowest mean score (3.2/4), although sample size was extremely limited, n=4. For online sections, EDF 2005 exhibits the highest mean score (3.9), n=15. ECO 2023 exhibits the lowest mean score (3.0), although again, sample size was extremely low at n=6. For dual enrollment sections, BSC 1010L exhibits the highest mean score (3.6), n=10. ENC 1102 exhibits the lowest mean score (3.2), although only n=2. ENC 1101 is also low (3.3) with a larger sample size (n=88).

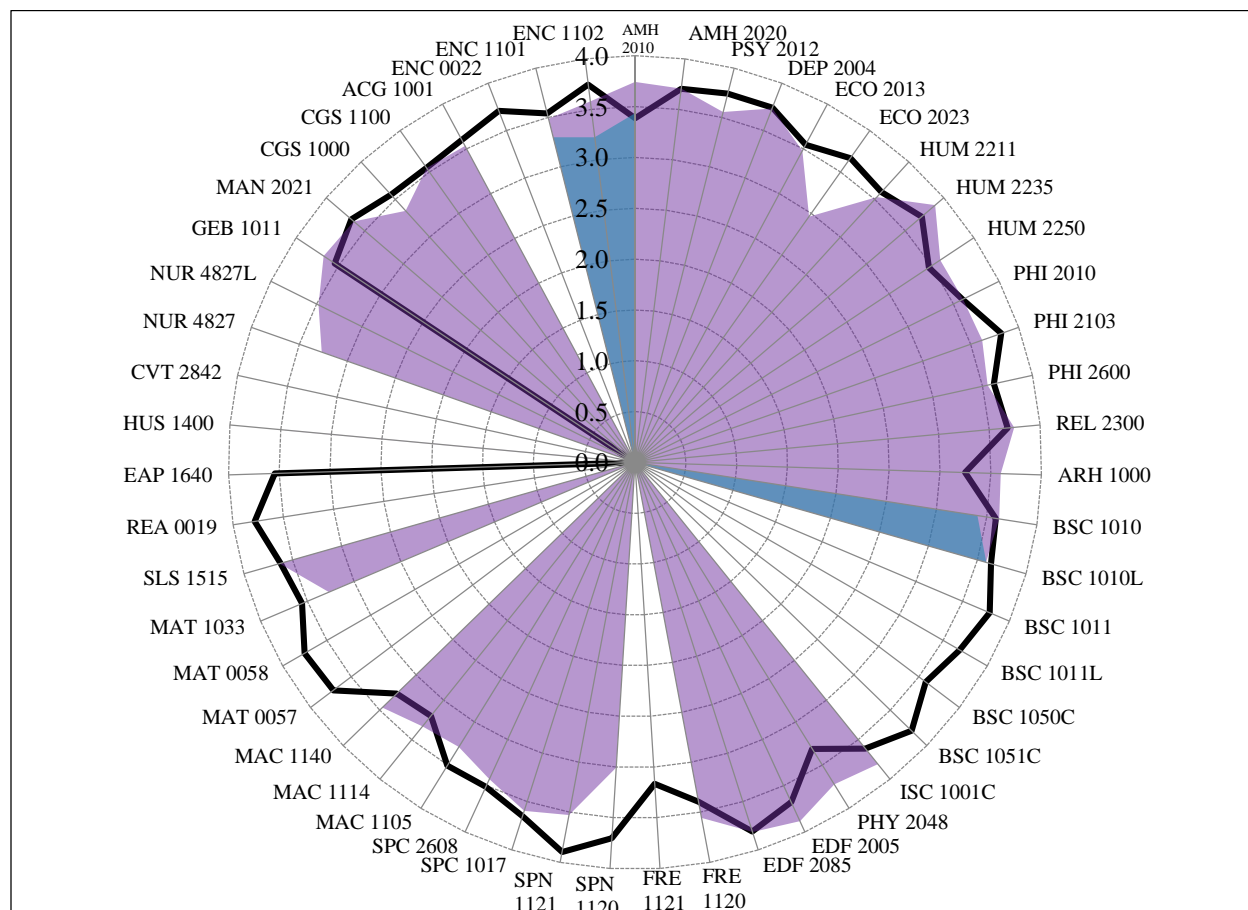


Figure 13. Comparison of SOS evaluation results for AY 2016-2017 focus courses by modality (traditional in black, online in purple, and dual enrollment in aqua).

4.5 DEVELOPMENTAL COURSES

Results for SOS course evaluations of developmental courses are shown in Figure 14 delineated by learning strategy (modularized, compressed, or contextualized). Note that no developmental courses are offered as online or dual enrollment sections. MAT 0057 exhibits a statistically significant differences in SOS mean scores across learning strategies (p=0.012). Table 3 depicts these results along with total number of respondents for clarity.

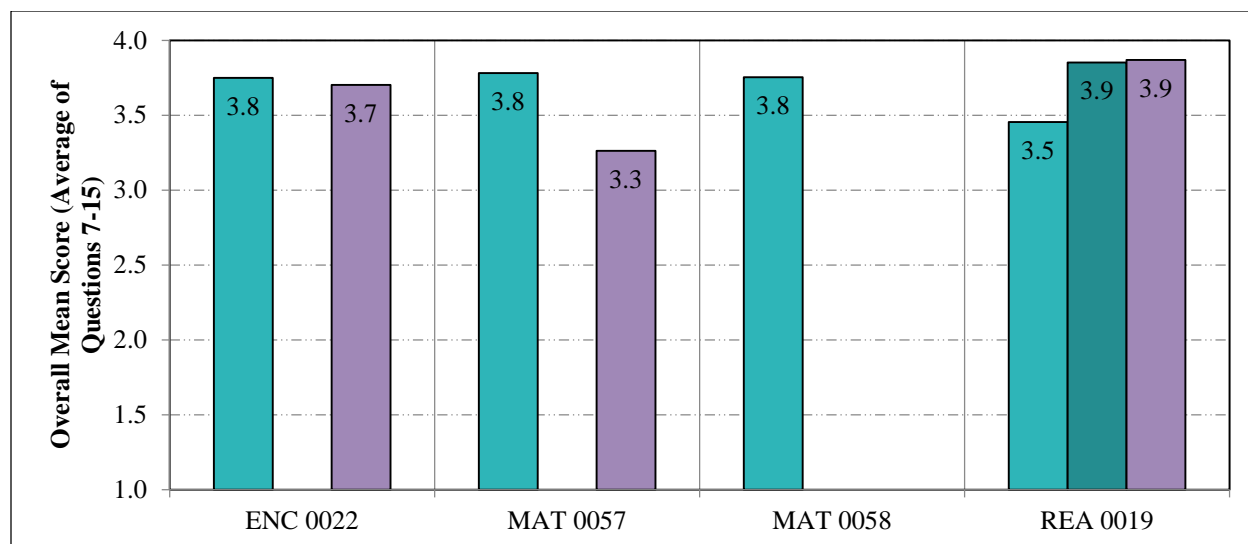


Figure 14. Comparison of SOS mean scores by learning strategy for developmental courses for fall 2016 (modularized – light aqua, compressed – dark aqua, contextualized – purple).

	Means			N		
	Modularized	Contextualized	Compressed	Modularized	Contextualized	Compressed
ENC 0022	3.8		3.7	4		32
MAT 0057	3.8		3.3	139		19
MAT 0058	3.8			9		0
REA 0019	3.5	3.9	3.9	12	3	45

Table 2. List of SOS course evaluation mean scores for developmental courses along with number of respondents (N).

5 CONCLUSIONS

Florida SouthWestern State College’s adoption of the new Student Opinion Survey (SOS) replaces the Student Evaluation of Instruction (SEI) which was administered AY 2015-2016. The SEI itself was a replacement for the Student Instructional Report 2nd Generation (SIR II). Like the SEI, the SOS is accessed online and allows for rapid turnaround of results for faculty. This report details results of a college-wide evaluation conducted during the Fall 2016 term.

A drill-down of results are as follows:

1. In a study of response rates, overall response rate for the college is 22.7% (including both A-term, B-term, and Full-term), down from 31% in fall 2015. Response rate for traditional courses is 25.1% response rate, a decrease from 32% in 2015. Response rate for online courses is 16.7% response rate, a decrease from 28% in 2015. Response rate for dual enrollment courses is 11.1%, up from 6% in 2015.
2. In a study of self-report items, the first six questions of the SOS asking students to reflect on areas of their behavior and expected grade in the course, question 1 exhibits 52% of students surveyed report never having missed class. Question 2 exhibits 95% of students reporting completing assignments on time 4 or more times. However, a statistic of this nature may be misleading as the number of assignments in each class may vary and thus skew results. In

question 3, 34% of students responding to the survey report having never contacted the instructor outside of class time for help. In question 4, 70% of students responding to the survey reported never missing assignments. For question 5, asking students how many hours they spent studying and/or preparing for the class, 34% report studying 0-3 hours while an additional 45% report studying 4-8 hours. For question 6, asking students what grade they expect to earn, 49% report expecting an "A", while another 33% report expecting a "B."

3. In a study of course evaluation questions (questions 7-15), there are no cases in which the traditional course sections exhibit statistically significant differences with the online course sections. In comparing traditional course sections with dual enrollment course sections, however, questions 8-10, and 12 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for dual enrollment.
4. In a study comparing how students evaluate the course based on self-report items regarding their disposition (questions 1-6), the following results are reported:
 - a. For question 6, 94% of students who report "Never" missing class answered "Strongly Agree" or "Agree." Only 83% of those who report missing class "4 or more times" answered similarly.
 - b. There is a modest to strong correlation between the number of times a student self-reports having missed assignments and whether they answer positively in course evaluations. Questions 7, 8, 10, 12, and 13 exhibit greater than 10% difference in percent positive response for those answering "Never" to those answering "4 or more times." Question 7 exhibits the largest difference, where 94% of students who report "Never" missing assignments answered "Strongly Agree" or "Agree." whereas only 79% of students who report "4 or more times." answered similarly.
 - c. There exhibits a trend in those reporting 4-8 hours of study outside the classroom with positive response in course evaluations. For all questions, those reporting 4-8 hours of study outside the classroom also exhibit the highest positive response, however, the range between highest positive response and lowest is 5% or less.
 - d. A clear correlation is exhibited between expected grade and positive response in course evaluation questions. Questions 7-13 exhibit a steadily declining positive response with lower grade ranging from 55% with question 7 to 30% with question 11.
5. In a study comparing question mean scores for AY 2016-2017 focus courses, SPN 1121 exhibits the highest mean of traditional course sections (3.9/4), although sample size was low (n=12). FRE 1121 exhibits the lowest mean score (3.2/4), although sample size was extremely limited, n=4. For online sections, EDF 2005 exhibits the highest mean score (3.9), n=15. ECO 2023 exhibits the lowest mean score (3.0), although again, sample size was extremely low at n=6. For dual enrollment sections, BSC 1010L exhibits the highest mean score (3.6), n=10. ENC 1102 exhibits the lowest mean score (3.2), although only n=2. ENC 1101 is also low (3.3) with a larger sample size (n=88).
6. In a study comparing question mean scores for developmental course sections by learning strategy (modularized, compressed, or contextualized), MAT 0057 exhibits a statistically significant differences in SOS mean scores across learning strategies ($p=0.012$).

6 REFERENCES

- Davis, J.C. 1973. *Statistics and Data Analysis in Geology*. John Wiley & Sons, New York, New York, 564 pp.
- Layne, B.H., DiCristoforo, J.R., and McGinty, D. 1999. Electronic vs. traditional student ratings of instruction, *Research in Higher Education*, 40(2), 221-232.
- McDonald, J.H. 2009. *Handbook of Biological Statistics (2nd ed.)*. Sparky House Publishing, Baltimore, Maryland.
- Simpson, P.M., and Siguaw, J. 2000. Student evaluations on teaching: an exploratory study of the faculty response. *Journal of Marketing Education*, 22(3), 1999-213.
- Wilkinson, L. 1999. APA Task Force on Statistical Inference. *Statistical Methods in Psychology Journals: Guidelines and Explanations*. *American Psychologist* 54 (8), 594–604.