## Student Opinion Survey (SOS)

## Fall 2017

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## 1 INTRODUCTION

Florida SouthWestern State College's adopted the Student Opinion Survey (SOS) in AY 2016-2017. The SOS was a replacement for the Student Evaluation of Instruction (SEI) which was administered AY 20152016. The SEI itself was a replacement for the Student Instructional Report $2^{\text {nd }}$ 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 17-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 2017 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.

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## 2 The Survey

I. About the student (for Qs 1-3,5, response options are: Never, Once, Twice, 3 times, 4 or more times; for Q4, options are: 0-3, 4-8, 9-14, and >14; for Q6, options are: A, B, C, D, F, Pass, Fail)

1. I missed class $\qquad$ .
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 missed $\qquad$ assignments.
6. I believe I will receive a grade of $\qquad$ in this class.
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 2017 was open from Nov. 13-30, 2017 college-wide for the full and Bterm courses and Sept. 13-Sep. 22 for the A-term courses. The evaluation incorporated 49,978 potential survey respondents (each student receives one survey for each course enrolled) and 17,166 surveys were completed, a response rate of $34.3 \%$, up from $22.7 \%$ in fall 2016. A time-lapse of survey responses over the course of the evaluation window for the Full/B term is shown in Figure 1.


Figure 1. Percentage of total respondents by date over the Full/B SOS evaluation period of Nov. 13-30, 2017. 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 $73 \%$ of all available evaluations for completion, exhibit a $35.3 \%$ response rate, up from $25.1 \%$ in fall 2016 and $32 \%$ in 2015 . Online course evaluations, accounting for $23 \%$ of all available evaluations, exhibit a $26.4 \%$ response rate, up from $16.7 \%$ in fall 2016 and down from $28 \%$ in 2015. And finally, dual enrollment evaluations, accounting for $4 \%$ of all available evaluations, exhibit a response rate of $26.5 \%$ response rate, up from $11.1 \%$ in fall 2016 and 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 17,166 survey responses received, 336 of those, or $2.0 \%$, elected to ignore these questions. Results for Questions

1 through 3, and 5, 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, the same as fall 2016. Question 2 exhibits $95 \%$ of students reporting completing assignments on time 4 or more times, again the same as fall 2016. 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, again the same as fall 2016. 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 5, 67\% of students responding to the survey reported never missing assignments, down from $70 \%$ in fall 2016. It is important to note, however, that if response options of "Never" and "1 time" are combined, there is little change from year to year. In fall 2017, 84\% of respondents report "Never" or "1 time." By comparison, in fall 2016 those combined responses account for $87 \%$.


Figure 3. SOS results for Questions 1-3, 5 regarding student behavior. Dark red to light red indicate "Never", "1 time", " 2 times", "3 times", and "4 or more."

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, $36 \%$ report studying "0-3 hours" while an additional $46 \%$ report studying " $4-8$ hours." When taken together, this is similar to fall 2016, where $34 \%$ report " $0-3$ hours" and $45 \%$ report " $4-8$ hours" totaling $82 \%$, just under the $85 \%$ in this year.


Figure 4. SOS results for Question 4 regarding student behavior: "I spent $\qquad$ 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, $48 \%$ report expecting an "A", down from $49 \%$ in fall 2016. Another $33 \%$ report expecting a "B", the same as fall 2016. The remaining $19 \%$ 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 $\qquad$ 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 <br> $\boldsymbol{n}=\mathbf{1 2 , 6 3 1}$ | Online <br> $\boldsymbol{n}=3002$ | Dual Enrollment <br> $\boldsymbol{n}=799$ |
| :--- | :---: | :---: | :---: |
| 7. The course helped me to improve my understanding of and/ or skills in <br> the subject. | $92 \%$ | $93 \%$ | $93 \%$ |
| 8. My professor is helpful when I have questions or need help. | $93 \%$ | $93 \%$ | $94 \%$ |
| 9. My professor gives feedback/returns assignments (tests, written <br> assignments, quizzes, lab reports, etc.) in time for me to improve for future <br> assignments. | $91 \%$ | $90 \%$ | $92 \%$ |
| 10. My professor created a positive academic environment where I was <br> comfortable to ask questions. | $94 \%$ | $93 \%$ | $96 \%$ |
| 11. The tests, written assignments, homework, observations, etc., reflected <br> the course content. | $95 \%$ | $96 \%$ | $95 \%$ |
| 12. The course materials (textbooks, online websites, lecture notes, <br> handouts, etc.) were helpful. | $92 \%$ | $93 \%$ | $90 \%$ |
| 13. The course activities (assignments, labs, projects, etc.) helped me learn. | $92 \%$ | $93 \%$ | $92 \%$ |
| 14. My professor was knowledgeable about the subject matter. | $97 \%$ | $96 \%$ | $98 \%$ |
| 15. The grading criteria and instructor's policies were provided. | $96 \%$ | $98 \%$ | $97 \%$ |

Table 1. Fall 2017 SOS evaluation percent positive responses ("Strongly Agree" or "Agree") by modality. 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 $\chi^{2}$ 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 significantly differences with the online course sections. In comparing traditional course sections with dual enrollment course sections, however, question 10 exhibits statistically significantly higher positive responses ("Strongly Agree" or "Agree") for dual enrollment using a $\chi^{2}$ test for independence according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999) ( $\chi^{2}=7.81, \mathrm{p}=0.005$ ).

### 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
$\qquad$ ." 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. Question 13, "The course activities helped me learn" 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 $82 \%$ of those who report missing class " 4 or more times" answered similarly.


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

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 "Never" in response to the prompt "I completed my assignments on time." appears to be inflated.


Figure 8. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 2: "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 3: "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 does not appear to be any strong correlation between the number of self-report hours of study outside the classrooms and whether they answer positively in course evaluations. There does tend to be a drop off in positive response based on missed assignments (Figure 11). 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 $30 \%$ to $50 \%$.


Figure 10. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 4: "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 11. Percent of survey respondents responding "Strongly Agree" or "Agree" based on their response to Question 5: "I missed assignments _." 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 6: "I believe I will receive a grade of $\qquad$ in this class." for questions 7 through 15 (left-to-right on $x$-axis).

### 4.4 By Course (AS defined by AY 2017-2018 Focus Course List)

Results for the SOS course evaluations of courses listed in the AY 2017-2018 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. BSC 1011 exhibits the highest mean of traditional course sections (3.9/4), although sample size was low. CGS 1000 exhibits the lowest mean score (2.8/4). For online sections, ACG 1001 exhibits the highest mean score (4.0). ECO 2013 exhibits the lowest mean score (2.8). For dual enrollment sections, POS 2041 exhibits the highest mean score (3.9). GEB 1011 exhibits the lowest mean score (3.3).


Figure 13. Comparison of SOS evaluation results for AY 2017-2018 focus courses by modality (traditional in black, online in purple, and dual enrollment in aqua).

## 5 CONCLUSIONS

Florida SouthWestern State College's adoption of the new Student Opinion Survey (SOS) was a replacement for the Student Evaluation of Instruction (SEI) which was administered AY 2015-2016. The SEI itself was a replacement for the Student Instructional Report $2^{\text {nd }}$ 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 2017 term.

A drill-down of results are as follows:

1. In a study of response rates, overall response rate for the college is $35.3 \%$, up from $22.7 \%$ in fall 2016. Response rate for traditional courses is $34.7 \%$ response rate, up from $25.1 \%$ in fall 2016 and $32 \%$ in 2015 . Online course evaluations, accounting for $23 \%$ of all available evaluations, exhibit a $26.4 \%$ response rate, up from $16.7 \%$ in fall 2016 and down from $28 \%$ in 2015 . And finally, dual enrollment evaluations, accounting for $4 \%$ of all available evaluations, exhibit a response rate of $26.5 \%$ response rate, up from $11.1 \%$ in fall 2016 and 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, the same as fall 2016. Question 2 exhibits $95 \%$ of students reporting completing assignments on time 4 or more times, again the same as fall 2016. 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 5, 67\% of students responding to the survey reported never missing assignments, down from 70\% in fall 2016.
3. In a study of course evaluation questions (questions 7-15), there are no cases in which the traditional course sections exhibit statistically significantly differences with the online course sections. In comparing traditional course sections with dual enrollment course sections, however, question 10 exhibits a statistically significantly higher positive response ("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." By comparison, only $82 \%$ of those who report missing class " 4 or more times" answered similarly.
b. There does not appear to be any discernible trend, although, in many cases, positive responses associated with "Never" in response to the prompt "I completed my assignments on time." appears to be inflated.
c. There does not appear to be any correlation with the number of times a student selfreports 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."
d. There does not appear to be any strong correlation between the number of self-report hours of study outside the classrooms and whether they answer positively in course evaluations. There does tend to be a drop off in positive response based on missed assignments.
e. 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 $30 \%$ to $50 \%$.
5. In a study comparing question mean scores for AY 2017-2018 focus courses, BSC 1011 exhibits the highest mean of traditional course sections (3.9/4), although sample size was low. CGS 1000 exhibits the lowest mean score (2.8/4). For online sections, ACG 1001 exhibits the highest mean score (4.0). ECO 2013 exhibits the lowest mean score (2.8). For dual enrollment sections, POS 2041 exhibits the highest mean score (3.9). GEB 1011 exhibits the lowest mean score (3.3).

## 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.

