# Student Opinion Survey (SOS) Spring 2017 <br> 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 $2^{\text {nd }}$ 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 12-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 select evaluation conducted during the spring 2017 term encompassing all School of Health Professions courses in addition to all SLS 1515 Cornerstone Experience courses. Current FSW procedure provides for a college-wide survey completed in the fall term and a limited survey during spring and summer terms.

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 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 $\qquad$ .
2. I completed assignments on time.
3. I contacted my instructor outside of class time when I needed help.
4. I spent $\qquad$ hours per week studying and/or preparing for this class (not including class time).
5. I believe I will receive a grade of $\qquad$ in this class.
6. I missed $\qquad$ 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 spring 2017 was open for all School of Health Professions courses in addition to all SLS 1515 Cornerstone Experience courses from April 10-21, 2017 for full and B-term courses and Feb. 13-21, 2017 for the A-term courses. The evaluation incorporated 5,075 potential survey respondents (each student receives one survey for each surveyed course enrolled) and 2,065 surveys were completed for a response rate of $40.7 \%$. 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 April 10-21, 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 exhibit a 40.2\% response rate. Online course evaluations exhibit a $22.3 \%$ response rate. Dual enrollment evaluations (only includes one course section in spring 2017 course-specific evaluations) exhibit a response rate of $36.4 \%$. And finally, hybrid course evaluations exhibit a $33.6 \%$ response rate.


Figure 2. Response rates for SOS evaluation by course modality. *Dual Enrollment for spring 2017 evaluated courses only includes one course section.

## 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, 3Agree, 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). 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 60\% 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 $3,26 \%$ of students responding to the survey report having never contacted the instructor outside of class time for help. This is slightly higher 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, 39\% 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, $72 \%$ report studying $0-3$ hours while an additional $13 \%$ report studying 4-8 hours.


Figure 4. SOS results for Question 5 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, $49 \%$ report expecting an " $A$ ", while another $32 \%$ report expecting a "B." 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> $\boldsymbol{n = 1 7 7 0}$ | Online <br> $\boldsymbol{n}=\mathbf{1 4 8}$ | Dual <br> Enrollment <br> $\boldsymbol{n}=\mathbf{4}$ | Hybrid <br> $\boldsymbol{n}=\mathbf{1 4 3}$ |
| :--- | :---: | :---: | :---: | :---: |
| 7. The course helped me to improve my understanding of and/ or <br> skills in the subject. | $90 \%$ | $94 \%$ | $100 \%$ | $80 \%$ |
| 8. My professor is helpful when I have questions or need help. | $90 \%$ | $95 \%$ | $100 \%$ | $88 \%$ |
| 9. My professor gives feedback/returns assignments (tests, written <br> assignments, quizzes, lab reports, etc.) in time for me to improve <br> for future assignments. | $89 \%$ | $93 \%$ | $100 \%$ | $81 \%$ |
| 10. My professor created a positive academic environment where I <br> was comfortable to ask questions. | $90 \%$ | $96 \%$ | $100 \%$ | $89 \%$ |
| 11. The tests, written assignments, homework, observations, etc., <br> reflected the course content. | $90 \%$ | $100 \%$ | $100 \%$ | $92 \%$ |
| 12. The course materials (textbooks, online websites, lecture <br> notes, handouts, etc.) were helpful. | $88 \%$ | $96 \%$ | $100 \%$ | $90 \%$ |
| 13. The course activities (assignments, labs, projects, etc.) helped <br> me learn. | $89 \%$ | $96 \%$ | $75 \%$ | $85 \%$ |
| 14. My professor was knowledgeable about the subject matter. | $91 \%$ | $99 \%$ | $100 \%$ | $96 \%$ |
| 15. The grading criteria and instructor's policies were provided. | $91 \%$ | $98 \%$ | $100 \%$ | $96 \%$ |

Table 1. Spring 2017 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, and light yellow shaded cells indicate statistically significantly different results from traditional to hybrid (according to $\chi^{2}$ test). *No significance testing was completed on dual enrollment due to small sample size.


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.

In comparing traditional course sections with online sections, questions 8, and 10-15 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for traditional than for online. No comparison was done for traditional and dual enrollment due to low sample size. In comparing traditional course sections with hybrid course sections, questions 7 and 9 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for hybrid. All significance testing was done using a $\chi^{2}$ test for independence according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999) (Table 2). Question11 exhibits the largest difference between traditional and online. In this case, online positive responses are $100 \%$ whereas traditional are $90 \%$. Recall that these comparisons may differ from fall 2016 results as they represent only a selection of courses from the college (School of Health Professions and SLS 1515) as opposed to college-wide results.

### 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. Questions 7-11, and 13-15 exhibit less than 5\% difference in percent positive response for those answering "Never" to those answering " 4 or more times." Question 12, "The course materials were helpful." exhibits the greatest difference between those who report missing class often and those who report never missing class. In this case, $96 \%$ of students who report "Never" missing class answered "Strongly Agree" or "Agree." By comparison, only $88 \%$ 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. However, in many cases, such as questions 10, 11, and 12, positive responses vary based on completion of assignment by as much as $15 \%$.


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 appears to be no correlation between the number of times a student self-reports having missed assignments and whether they answer positively in course evaluations. No questions exhibit differences in positive response of greater than $5 \%$ based on missing class assignments.


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

In Figure 11, there exhibits no discernable trend in those reporting hours of study outside the classroom with positive response in course evaluations. For all questions, positive response across hours of study varies less than 4\%.


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).

In Figure 12, a clear correlation is exhibited between expected grade and positive response in course evaluation questions although in many cases this is only noticeable in pass/fail descriptors. Questions 714 exhibit a large difference in positive response for those who responded 'pass' with those who responded 'fail' in the self-report item. Question 10 exhibits the largest difference. In this question, $98 \%$ of those reporting passing report a positive academic experience compared with just $62 \%$ for those reporting a failing grade. Question 12 exhibits a steady decline in positive responses with lower grade, are not as pronounced with $96 \%$ of those reporting ' $A$ ' responding positively compared to just $83 \%$ for those reporting ' $F$ '.


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 $\qquad$ in this class." for questions 7 through 15 (left-to-right on x-axis).

## 5 ReSULTS by Selection

Florida SouthWestern's SOS for spring 2017 was open for all School of Health Professions courses in addition to all SLS 1515 Cornerstone Experience courses. Results of the SOS by selected area are shown in Figure 13. Results for SLS 1515 by modality are shown in Figure 14. There is no statistically significant difference between modalities using a $\chi^{2}$ test for independence according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999). Results for the School of Health Professions by modality are shown in Figure 15. All differences between traditional and online for the School of Health Professions are statistically significantly different. Additionally, differences between traditional and hybrid for questions 7 and 9 are statistically significantly different using a $\chi^{2}$ test for independence.


Figure 13. Percent responding "Strongly Agree" or "Agree" by selected area of evaluation where School of Health Professions is shown in purple and SLS 1515 Cornerstone Experience is shown in aqua.


Figure 14. Percent responding "Strongly Agree" or "Agree" for SLS 1515 by modality comparing traditional (black), online (red), dual enrollment (blue), and hybrid (green).


Figure 15. Percent responding "Strongly Agree" or "Agree" for School of Health Professions courses by modality comparing traditional (black), online (red), and hybrid (green).

## 6 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 $2^{\text {nd }}$ 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 select evaluation conducted during the Spring 2017 term encompassing all School of Health Professions courses in addition to all SLS 1515 Cornerstone Experience courses.

A drill-down of results are as follows:

1. In a study of response rates, overall response rate for the college is $40.7 \%$ (including both Aterm, B-term, and Full-term). Response rate for traditional courses is $40.2 \%$. Response rate for online courses is $22.3 \%$. Response rate for dual enrollment courses is $36.4 \%$ (sample size limited). Response rate for hybrid courses is $33.6 \%$.
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 $60 \%$ 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 $3,26 \%$ of students responding to the survey report having never contacted the instructor outside of class time for help. In question 4, 39\% 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, $72 \%$ report studying $0-3$ hours while an additional $13 \%$ report studying $4-8$ hours. For question 6, asking students what grade they expect to earn, $49 \%$ report expecting an " $A$ ", while another $32 \%$ report expecting a "B."
3. In a study of course evaluation questions (questions 7-15), comparing traditional course sections with online sections, questions 8, and 10-15 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for traditional than for online. No comparison was done for traditional and dual enrollment due to low sample size. In comparing traditional course sections with hybrid course sections, questions 7 and 9 exhibit statistically significantly lower positive responses ("Strongly Agree" or "Agree") for hybrid.
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 , 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.
b. There does not appear to be any discernible trend between the number of times a student self-reports having completed assignments on time.
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.
d. There appears to be no correlation between the number of times a student self-reports having missed assignments and whether they answer positively in course evaluations.
5. In a study of results by selection (School of Health Professions and SLS 1515) there is no statistically significant difference between modalities of SLS 1515 using a $\chi^{2}$ test for independence. All differences between traditional and online for the School of Health Professions are statistically significantly different. Additionally, differences between traditional and hybrid for questions 7 and 9 are statistically significantly different using a $\chi^{2}$ test for independence.

## 7 References

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