

Developmental Achievement & Student Satisfaction Reports

Fall 2019

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Florida SouthWestern State College's assessment measures for the Developmental Accountability plan include a collection of achievement data to determine the efficacy of the developmental options and to inform course and program improvement. Additionally, FSW tracks satisfaction of current developmental courses through a survey administered at the end of each term. The data is in support of assessment measures for the Developmental Accountability plan to determine efficacy of developmental options and to inform course and program improvement. What follows is the assembly of achievement and student satisfaction reports for each of the developmental courses (ENC 0022, ENC 1130, REA 0019, and MAT 0057).

- ❖ Section 1: ENC 0022 & 1130 Common Course Assessment Report (includes ENC 1101 & 1102)
- ❖ Section 2: ENC 0022 Final Exam Assessment Report
- ❖ Section 3: MAT 0057 Final Exam Assessment Report
- ❖ Section 4: MAT 0057 Survey Results Report
- ❖ Section 5: REA 0019 Final Exam Assessment Report
- ❖ Section 6: REA 0019 Survey Results Report

Section 1

English Assessment Report

Fall 2019

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, IR, Assessment & Effectiveness

1 INTRODUCTION

Fall 2019 marked the beginning of a new assessment plan for the English Department of Florida SouthWestern State College (FSW). Four courses will be covered in this assessment plan which marks a transition between ENC 0022 *Writing for College Success* in support of ENC 1101 *Composition I*, to ENC 1130 *Improving College Writing* supporting ENC 1101. The courses are ENC 0022, ENC 1130, ENC 1101, and ENC 1102 (as an indirect measured assessment). Fall 2019 will serve as a pilot for the assessment plan. Fall 2019 is also the pilot for the course itself (ENC 1130) not just the assessment plan. For fall 2019, the assessment plan will include ENC 0022 until it is completely phased out and replaced by ENC 1130.

The standard assessment plan highlighted above is designed to evaluate each course and inform faculty on Student Learning Objectives (SLOs) for future assessment plans. Additionally, the plan provides information on achievement levels of concurrent dual enrollment artifacts compared with traditional, as well as online artifacts compared with traditional artifacts.

For additional detail or further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Asst. VP, IR, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 ENC 0022

2.1 LEARNING OBJECTIVES & DESCRIPTIVE STATISTICS

Using common rubric criterion as an assessment method, the FSW English faculty defined multiple areas of interest for evaluation based on core outcomes for the course. Those outcomes include:

- Plan and write paragraphs and essays reflecting styles and tones appropriate for their audience and use adequate support, coherence, and unity that demonstrate understanding of content for expository and persuasive purposes.
- Establish a substantive claim, link claims to relevant evidence, and acknowledge competing arguments, gather information needed, and accurately incorporate source material into their own writing to avoid plagiarism.
- Identify and correctly use proper conventions for sentence grammar and avoid illogical shifts in pronouns and verbs in their own writing and on tests.
- Identify and use proper conventions for spelling, capitalization, and punctuation in their own writing and on tests.
- Identify and correctly use the conventions of a variety of sentence structures and will be able to avoid sentence fragments, comma splices, and fused sentences in their own writing and on tests.

- Identify and write effective topic sentences and thesis statements that address task and audience and use logical structure, support, and transitional devices for expository and persuasive purposes.

2.1.1 Learning Objectives

ENC 0022 is scored using a rubric with seven dimensions: Introductory Paragraph, Support Paragraphs, Organization, Concluding Paragraph, Grammar, Mechanics, and Research. Each dimension is scored on a scale of 1 to 4 (1-Unacceptable, 2-Needs work, 3-Average, 4-Above average), with 0s if the baseline of 'Unacceptable' is not met. The English department has identified a target statistic for measurement purposes (SLO1) of measuring the percentage of artifacts scoring a 2 or greater.

For the fall 2019 assessment, 47 artifacts were collected for ENC 0022 from 4 of 5 course sections. The lowest scoring rubric dimension for percentage of artifacts scoring a 2 or greater is Concluding Paragraph at 83%. All other dimensions exhibit percentage of 94% or higher (Table 1). For a visual comparison of scores by dimension, see Figure 1.

Rubric Score	Introductory Paragraph	Support Paragraphs	Organization	Concluding Paragraph	Grammar	Mechanics	Research
Developing or higher	96%	98%	96%	83%	94%	98%	94%
4	43%	30%	40%	36%	30%	19%	17%
3	28%	49%	26%	17%	32%	38%	32%
2	26%	19%	30%	30%	32%	40%	45%
1	2%	0%	2%	15%	4%	0%	2%
0	2%	2%	2%	2%	2%	2%	4%

Table 1. Achievement by rubric dimension (includes percentage of students scoring in developmental level or higher as per SLO).

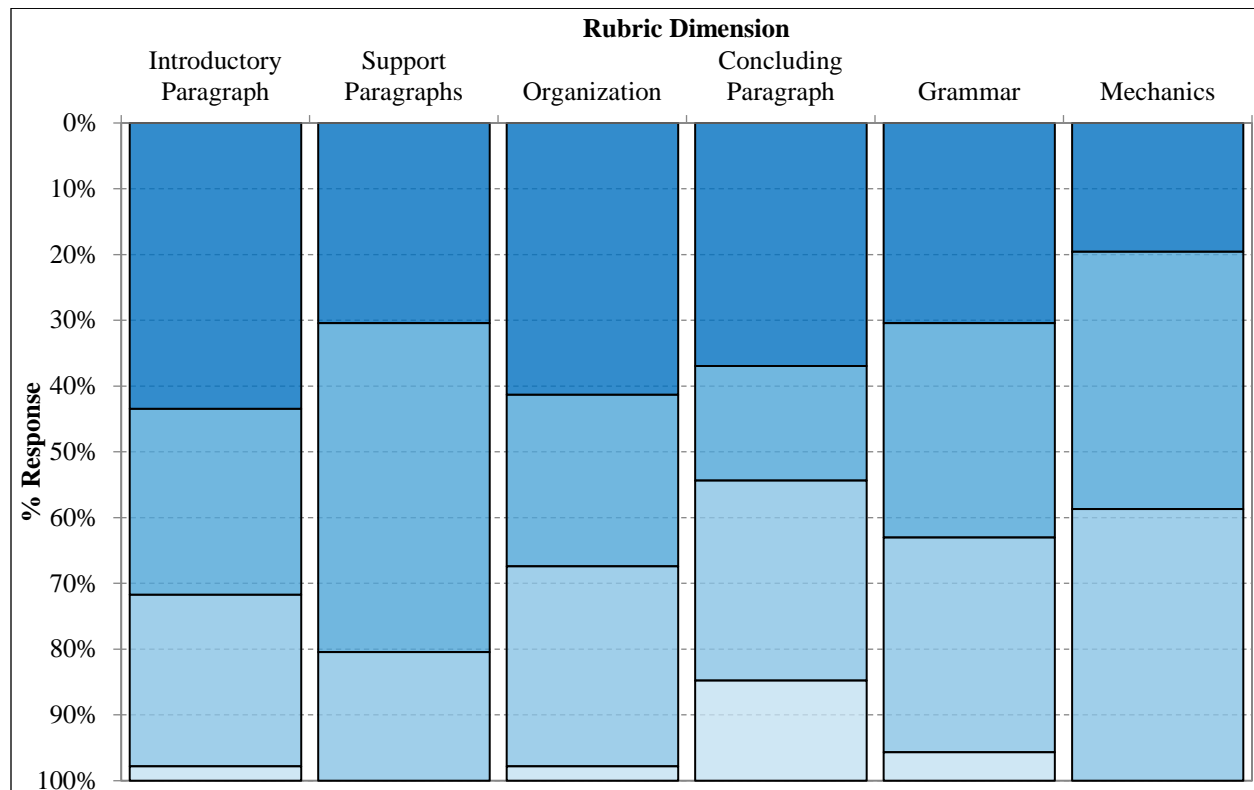


Figure 1. ENC 0022 distribution of rubric scores by dimension.

2.1.2 Descriptive Statistics & Longitudinal Studies

Descriptive statistics for ENC 0022 artifacts can be found in Table 2. A histogram of artifact scores for all 47 artifacts is shown in Figure 2. Distribution of artifact scores are trimodal and centered on 14/28, 19/28, and 20/28, and is moderately negatively skewed, meaning scores are shifted towards the upper range. To describe the behavior of the rubric dimensions based on overall achievement a color map, or binary raster image, is typically created by calculating the mean scores for each dimension as a function of combined score. However, since sample size is limited this term due to the piloting of ENC 1130, no study could be completed.

	Introductory Paragraph	Support Paragraphs	Organization	Concluding Paragraph	Grammar	Mechanics	Research	TOTAL
n	47	47	47	47	47	47	47	47
Max	4	4	4	4	4	4	4	28
Min	0	0	0	0	0	0	0	0
Median	3	3	3	3	3	3	2	19
Mode	4	3	4	4	3	2	2	26
Mean	3.1	3.0	3.0	2.7	2.8	2.7	2.6	19.9
Standard deviation	0.99	0.83	1.00	1.18	0.99	0.85	0.95	5.61
Skewness	-0.84	-1.02	-0.68	-0.30	-0.50	-0.30	-0.40	-0.74
Kurtosis	0.37	2.36	0.01	-1.10	-0.05	0.75	0.68	1.74

Table 2. Descriptive statistics for ENC 0022 common course assessment.

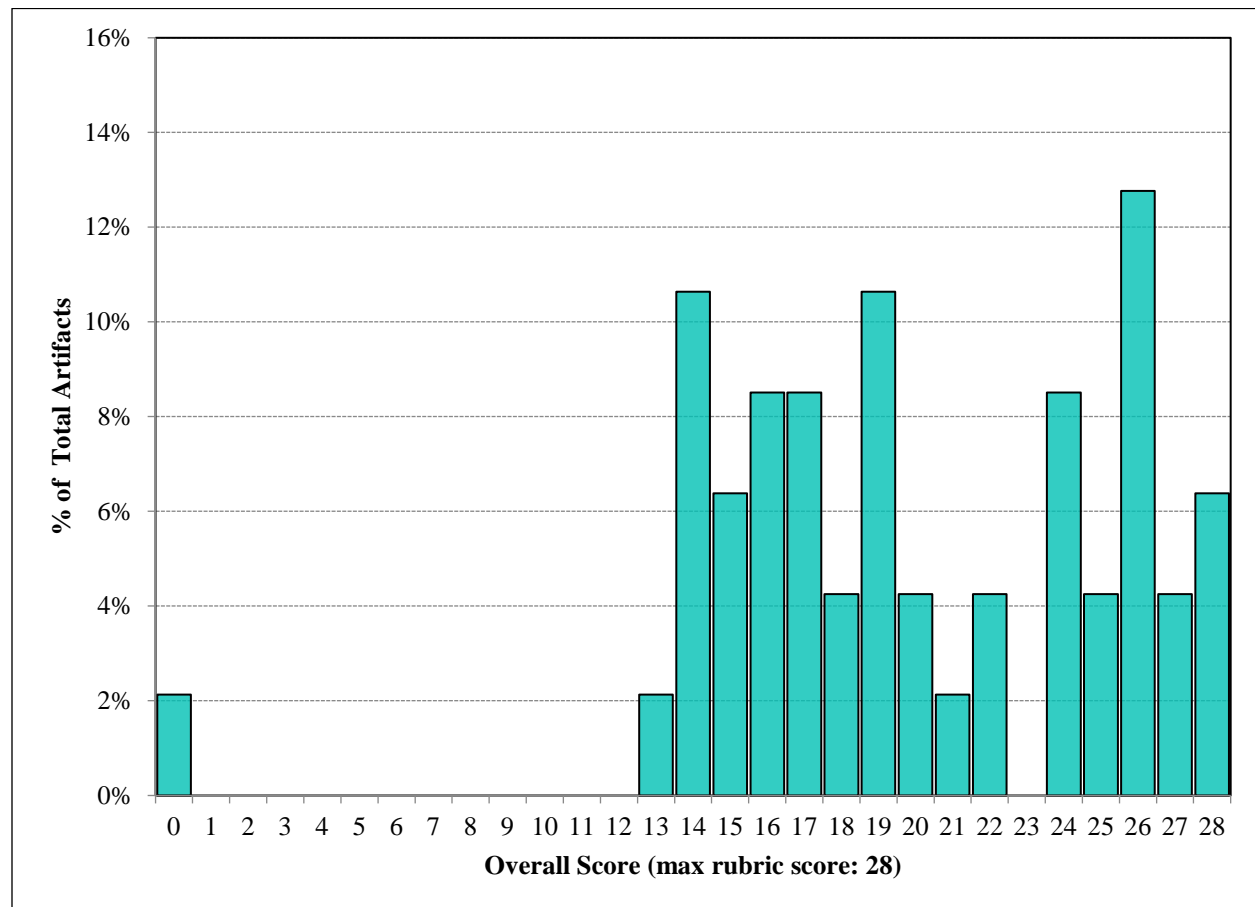


Figure 2. Overall score distribution for ENC 0022 artifacts (fall 2019 term).

A comparison of fall 2019 results with past results is shown in Figure 3 below. Results exhibit several trends. First, all rubric dimensions exhibit a sharp drop in fall 2017 data, likely in response to a truncated term as a result of Hurricane Irma. Second, “Introductory Paragraph,” “Support Paragraphs,” and “Organization” consistently are the highest scoring dimensions over time. These three dimensions represent the top three scores in 8 of 10 terms. Third, the “Research” dimension exhibits the lowest scores in 6 of 10 terms while “Mechanics” exhibits the lowest in 3 of 10 and “Grammar” in 1 of 10. And lastly, the “Research” dimension exhibits abnormally variable data in fall 2016 where no other dimension does. The cause is uncertain.

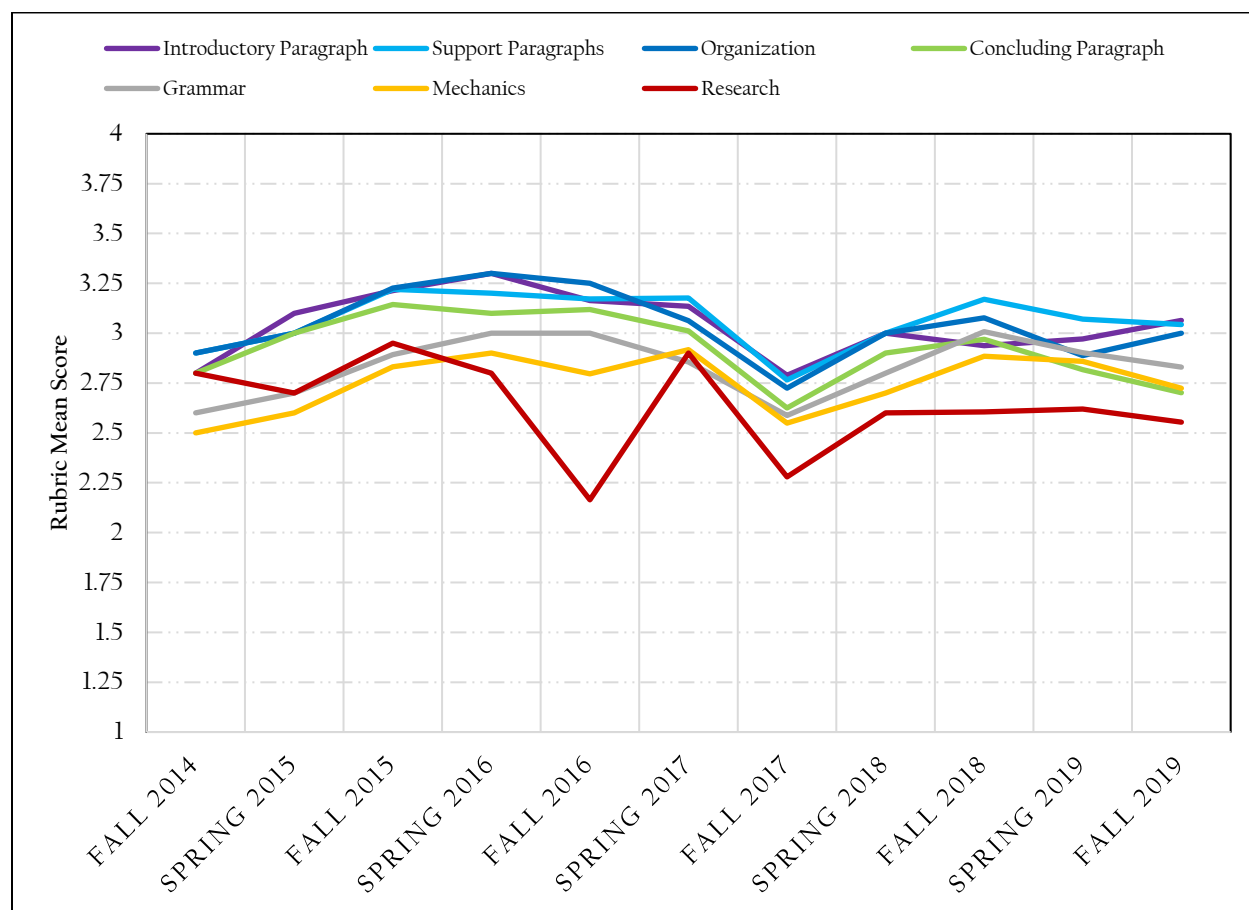


Figure 3. Comparison of mean scores for ENC 0022 through time.

2.2 COMPARISONS BY SITE, FORMAT, AND STUDENT TYPE

2.2.1 Dual Enrollment to non-Dual Enrollment Comparison

ENC 0022 is not offered as a dual enrollment (offsite) course nor is it offered to dual enrollment students onsite and so no comparison study between dual enrollment artifacts and traditional artifacts can be made.

2.2.2 Online to Traditional Comparison

ENC 0022 is not offered as an online course and so no comparison study between online artifacts and traditional artifacts can be made.

2.2.3 Comparison by Site/Campus

Of the 47 artifacts collected from ENC 0022, 17 originated from the Collier campus, 0 from the Hendry Glades Center, and 30 from the Thomas Edison (Lee) campus. Scores by rubric dimension varied greatly across campuses. A comparison of mean scores by rubric dimension is provided in Table 3.

	Introductory Paragraph	Support Paragraphs	Organization	Concluding Paragraph	Grammar	Mechanics	Research
Collier	3.5	3.4	3.2	3.0	3.2	3.1	2.8
Hendry Glades	~	~	~	~	~	~	~
Thomas Edison	2.8	2.8	2.9	2.5	2.6	2.5	2.4

Table 3. Comparison of mean scores by site for ENC 0022. Bold denotes highest mean score in that dimension among all sites.

3 ENC 1101 & ENC 1130

During the 2017-2018 academic year, the English Department formed a committee to design a more efficient pathway for developmental students into ENC 1101 to ensure that students have the necessary writing skills for college success. Subsequently, in AY 2018-2019, that committee met and developed the ENC1130 *Improving College Writing* course. This course serves as an alternative to our current pre-college writing model. This course is supplemental to ENC 1101 for students who need additional preparation. For AY 2019-2020, the department is piloting ENC 1130 with six sections and creating a baseline with three common assessments.

3.1 LEARNING OUTCOMES, OBJECTIVES, & DESCRIPTIVE STATISTICS

3.1.1 Learning Outcomes & Objectives

The assessment plan for the pilot includes three assignments, (1) the Short Response Assignment, (2) the Final Research Essay, and (3) the Library Infographic Assignment. Each assessment will be used to assess student ability to recognize and produce effective writing. The department established the following goals for the assessments:

1. Establish baseline data between 1130 and 1101 on each assignment
 - Establish baseline data by site between 1130 and 1101 on each

The assessment was piloted using six sections. Of those, partial data was able to be collected from each section. No rubric data was available in the Learning Management System (Canvas) from any section for the Final Research Essay that matched the rubric to be utilized in the assessment. Short response rubric data was only available in three sections. The Library Infographic rubric data was only available in three sections. Table 4 below provides the sample metadata for each.

	ENC 1101 only	1101/1130 Paired	Overall
	Sampled / Enrolled / Sample Rate	Sampled / Enrolled / Sample Rate	Sampled / Enrolled / Sample Rate
Short Response Assignment	20 / 50 / 40%	34 / 76 / 45%	54 / 126 / 43%
Final Research Essay	0 / 50 / 0%	0 / 76 / 0%	0 / 126 / 0%
Library Infographic	25 / 50 / 50%	42 / 76 / 55%	67 / 126 / 53%

Table 4. Sample collection information by assessment type for ENC 1101 and ENC 1130. Sample rate is calculated as number of samples divided by total number of enrolled in pilot group (six sections) not enrollment for all sections of the courses.

3.1.2 Descriptive Statistics

3.1.2.1 Short Response Assignment

A review of achievement for the Short Response Assignment is shown in Table 5 and Figures 4 and 5 below. The paired ENC 1101/1130 exhibits higher achievement in 15 of 16 rubric dimensions. Of those, 5 of 15 paired ENC 1101/1130 are statistically significantly higher according to a Fisher's Exact Test (see Table 5 results in red). The one case in which the ENC 1101 only section results are higher than the 1101/1130 paired results is statistically significantly different.

	ENC 1101 only Mean / % Scoring 3 or Higher	1101/1130 Paired Mean / % Scoring 3 or Higher	Overall Mean / % Scoring 3 or Higher
The writer explains the author's ideas, position, and/or point of view using the concepts and methods addressed in Chapters 1-3 of <i>They Say, I Say</i> .	3.0 / 45%	3.1 / 51%	3.1 / 49%
The writer identifies the reasons and/or evidence upon which the author is basing his or her position.	2.7 / 40%	3.2 / 57%	3.0 / 51%
The writer identifies the conclusions drawn by the author.	3.0 / 45%	3.2 / 57%	3.1 / 53%
The writer uses summary, paraphrase, and/or some quotation appropriately in his or her explanation of the text.	3.0 / 40%	3.4 / 66%	3.2 / 56%
The writer responds to the text with his or her position using the concepts and methods addressed in Chapter 4 of <i>They Say, I Say</i> ("Yes/No/Okay, But").	2.6 / 20%	3.2 / 56%	2.9 / 43%
The writer defends and supports his or her position with sound evidence and reasoning.	2.4 / 20%	2.9 / 51%	2.7 / 40%
The writer draws well-supported conclusions about the position taken by the author in the text.	2.4 / 21%	2.8 / 46%	2.7 / 37%
The writer demonstrates reading comprehension, analysis, and critical thinking.	3.2 / 55%	3.2 / 63%	3.2 / 60%
The writer adheres to MLA guidelines for formatting, in-text citations, and the Works Cited page. The essay meets the requirement for length.	2.1 / 25%	3.0 / 54%	2.7 / 44%
Clarity	3.1 / 45%	3.3 / 63%	3.2 / 56%
Accuracy	2.7 / 40%	3.2 / 57%	3.1 / 42%
Precision	3.2 / 55%	3.2 / 63%	2.7 / 38%
Logic	2.4 / 15%	3.0 / 54%	3.2 / 60%
Fairness	2.8 / 40%	3.4 / 71%	3.8 / 89%
Relevance	3.8 / 90%	3.1 / 53%	2.9 / 48%
Significance	2.5 / 35%	3.0 / 49%	2.8 / 44%
TOTAL	44.6	50.2	48.1

Table 5. Short Response Assignment achievement data. Bold/italics indicate the higher between 1101 only and 1101/1130 paired artifacts. Red denotes statistically significantly different according to a Fisher's Exact Test.

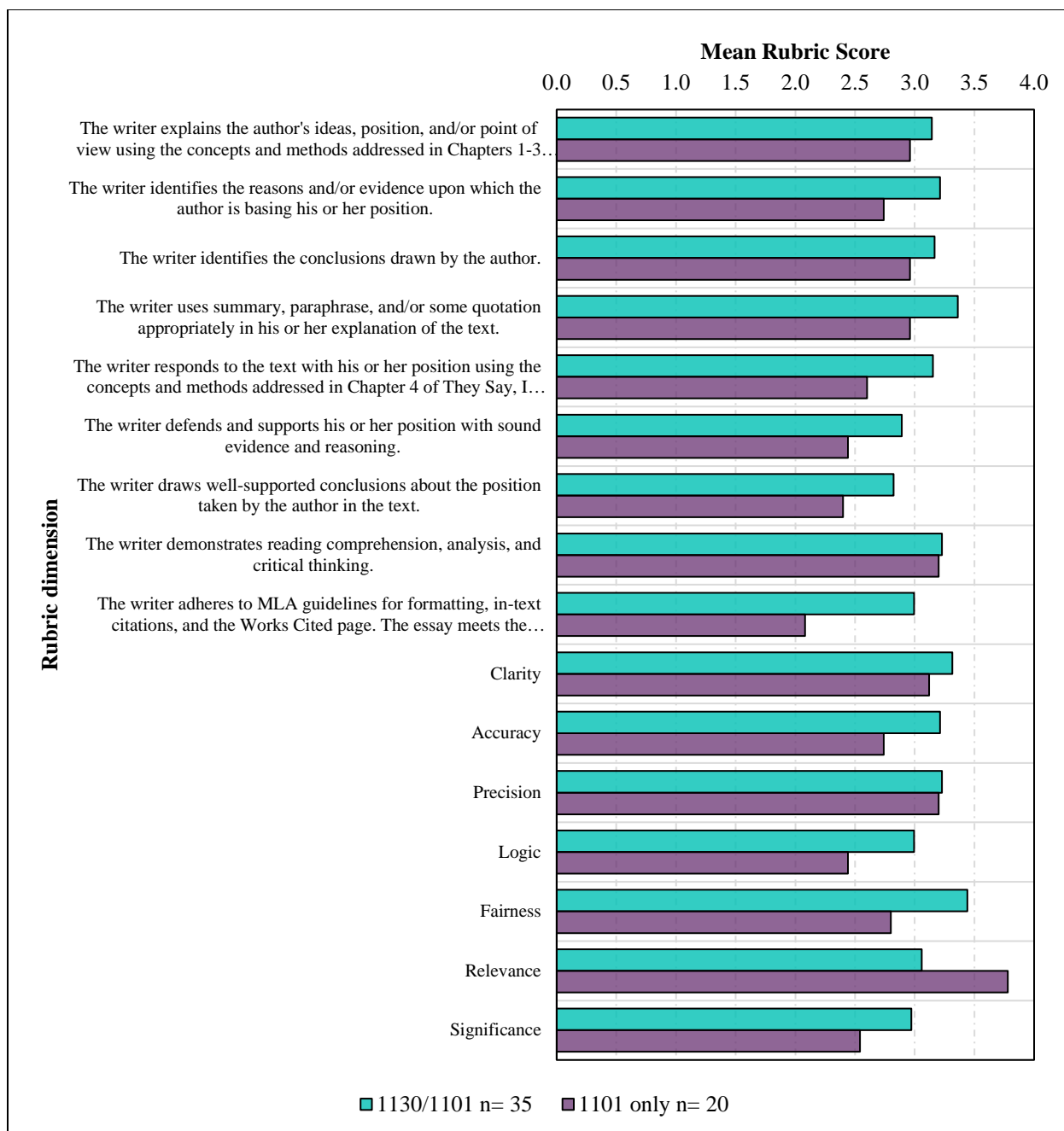


Figure 4. Short Response assessment mean scores by 1101/1130 paired sections and 1101 only sections.

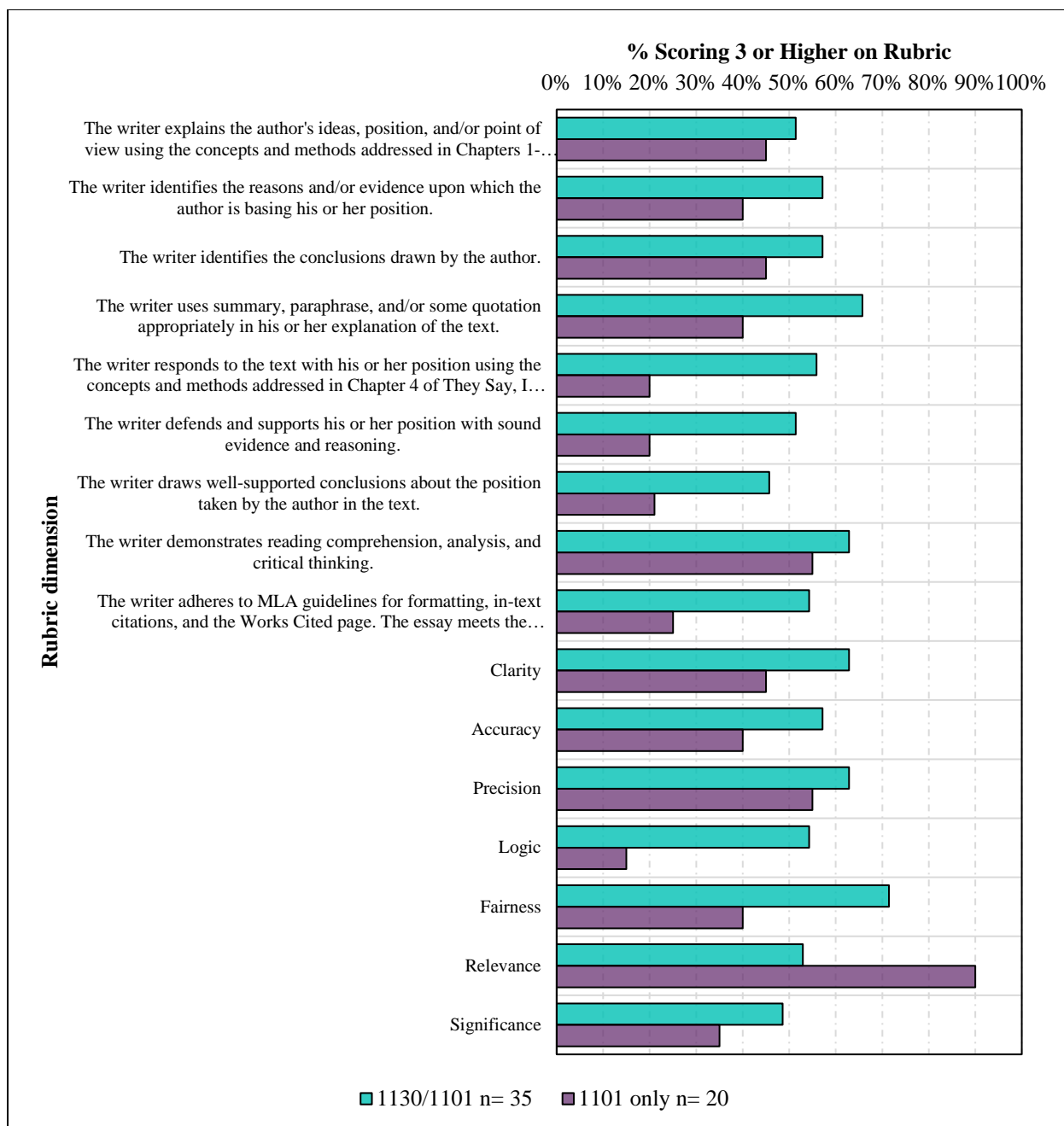


Figure 5. Short Response assessment percentage scoring 3 or higher on the rubric by 1101/1130 paired sections and 1101 only sections.

A review of achievement for the Final Research Essay would normally be conducted here. However, in all cases there was either no rubric data recorded in the Learning Management System (Canvas) or there was rubric data, but it did not match the common rubric as stipulated by the department. As a result, no analysis could be completed.

A review of achievement for the Infographic Library Assignment is shown in Table 6 and Figures 6 and 7 below. The paired ENC 1101/1130 exhibits lower achievement in 6 of 7 rubric dimensions. Of those, 0 of 6 paired ENC 1101/1130 are statistically significantly lower according to a Fisher's Exact Test

(statistically significant results denoted in Table 6 in red). The one case in which the ENC 1101 only section results are lower than the 1101/1130 paired results is also not statistically significantly different.

	ENC 1101 only Mean / % Scoring 3 or Higher	1101/1130 Paired Mean / % Scoring 3 or Higher	Overall Mean / % Scoring 3 or Higher
Citation	1.6 / 36%	1.5 / 24%	1.6 / 28%
Research question or hypothesis identified	2.3 / 48%	1.7 / 24%	1.9 / 33%
Participants or data sources identified	2.6 / 60%	2.3 / 47%	2.4 / 51%
Methods used identified	2.4 / 60%	2.3 / 47%	2.3 / 51%
Key findings	2.5 / 64%	2.3 / 45%	2.4 / 52%
Design	2.8 / 75%	2.8 / 81%	2.8 / 79%
Grammar	2.3 / 44%	2.4 / 42%	2.4 / 43%
TOTAL	16.4	15.4	15.7

Table 6. Library Infographic Assignment achievement data. Bold/italics indicate the higher between 1101 only and 1101/1130 paired artifacts. Red denotes statistically significantly different according to a Fisher's Exact Test.

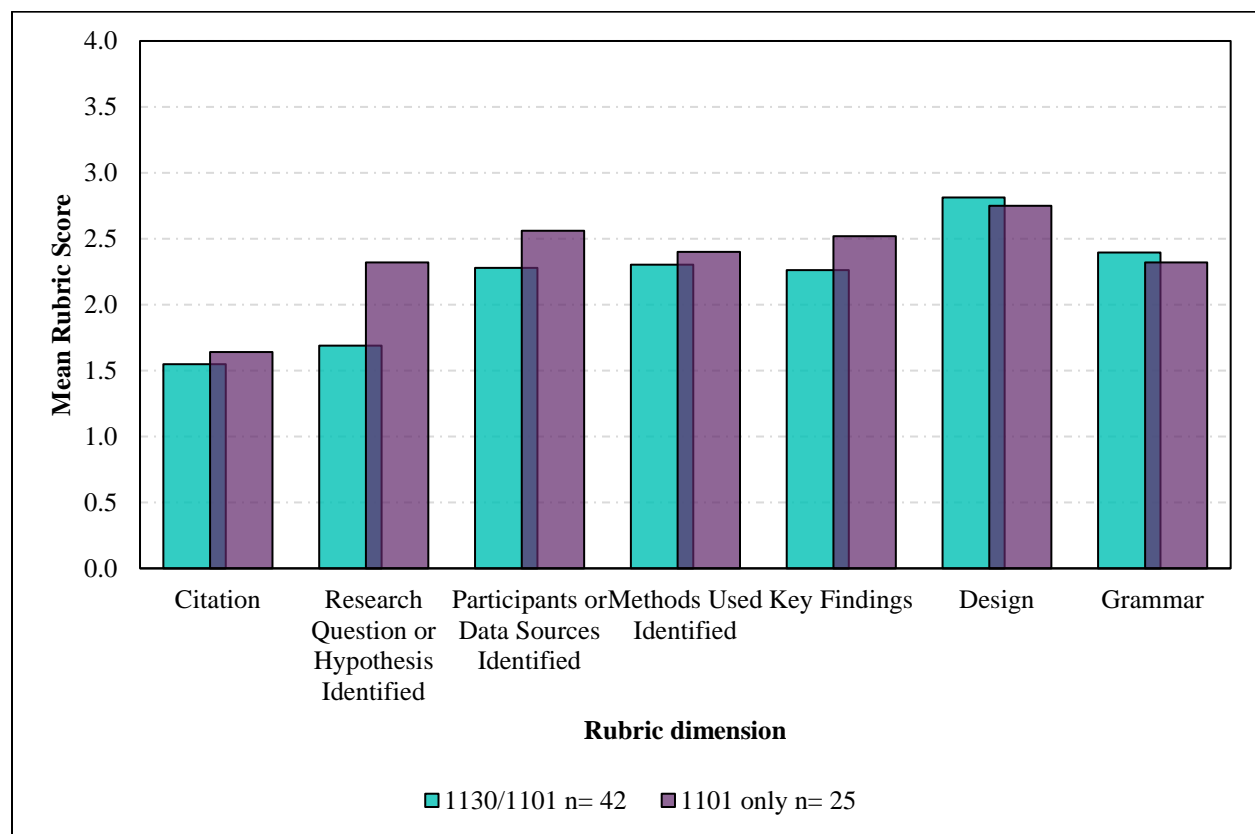


Figure 6. Library Infographic assessment mean scores by 1101/1130 paired sections and 1101 only sections.

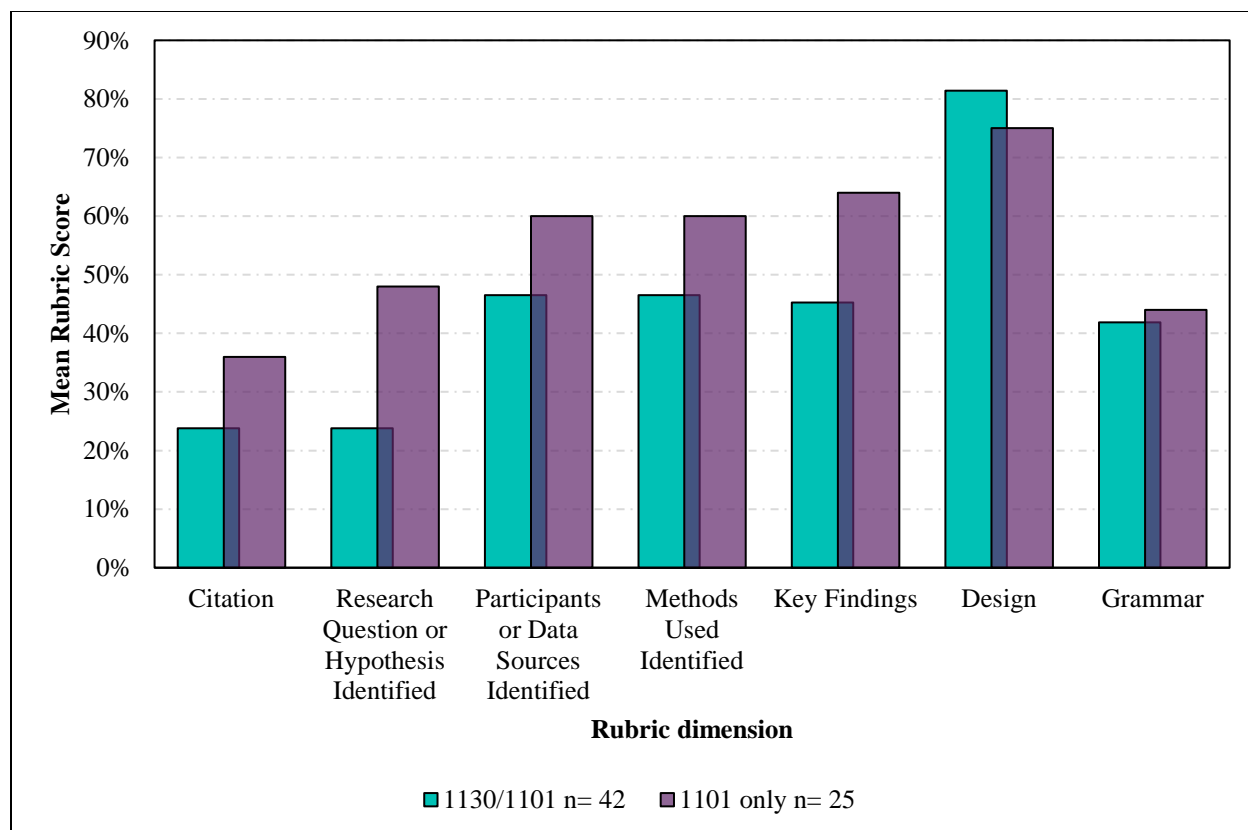


Figure 7. Library Infographic assessment percentage scoring 3 or higher on the rubric by 1101/1130 paired sections and 1101 only sections.

3.2 COMPARISONS BY SITE, FORMAT, AND STUDENT TYPE

3.2.1 Dual Enrollment to non-Dual Enrollment Comparison

Because of the fact that this assessment is in pilot phase, and because of the way the assessment is formatted (combination of ENC 1101 and ENC 1130), no concurrent dual enrollment sections were offered. As a result, no analysis was completed.

3.2.2 Online to Traditional Comparison

Because of the fact that this assessment is in pilot phase, and because of the way the assessment is formatted (combination of ENC 1101 and ENC 1130), no online sections were offered. As a result, no analysis was completed.

3.2.3 Comparison by Site/Campus

Of the sections included in the pilot assessment, all but one were offered on the Thomas Edison (Lee) campus. The remaining section was offered on the Collier campus. No data originated from the one section of the pilot sample which was offered on Collier. As a result, no comparison by site could be completed.

4 ENC 1102

Beginning with the Spring 2019 term, the English Department developed an exit survey to study student perspectives upon completion of the ENC 1102 course. The questions posed in the survey are listed below and results of the survey are shown in Figure 8. Each survey response includes options of “Strongly Agree,” “Agree,” “Neither agree nor disagree,” “Disagree,” and “Strongly disagree.”

- ❖ Q1 - I think my ENC 1101 class (Composition I) prepared me well for ENC 1102.
- ❖ Q2 - I feel prepared to apply my knowledge of writing and research to other academic and non-academic situations in the future.
- ❖ Q3 - What I learned in ENC 1101 and 1102 will help me to write successfully in my major and in my profession.
- ❖ Q4 - I am comfortable conducting and documenting primary and secondary research.
- ❖ Q5 - After taking ENC 1101 and 1102, I am more comfortable with reading, writing, and researching in the media of the 21st century (digital, web-based, etc.).
- ❖ Q6 - I think the feedback I received on my written assignments was comprehensive and constructive. In other words, the feedback enabled me to take my writing skills to the next level.
- ❖ Q7 - I am comfortable reading and writing about, as well as discussing in class, complex and difficult issues, even if I disagree strongly with others.
- ❖ Q8 - I can encounter a view by someone with whom I disagree, but still take seriously and try to understand their perspective.
- ❖ Q9 - I understand how I can apply skills in argumentation and rhetoric to my other academic courses, in the workplace, and in my personal life.
- ❖ Q10 - I feel comfortable defining my position (argument/perspective) and supporting it in writing.
- ❖ Q11 - I understand how research, writing, and argumentation are necessary for problem-solving in college, the workplace, and the world.
- ❖ Q12 - Diversity of values and empathy with others are important for my success as a reader, writer, and researcher.
- ❖ Q13 - I am comfortable acknowledging different approaches or theories, and even changing my own mind when learning new information.
- ❖ Q14 - ENC 1101 and 1102 have expanded what I listen to, watch, and/or read by exposing me to new ideas and texts.
- ❖ Q15 - I am comfortable evaluating and sorting through information, including deciding if something or someone is credible or not.

All questions exhibit positive responses (“Strongly agree” or “Agree”) of 75% or higher. Question 8 and Question 15 exhibit the highest positive response rate at 96%. Question 1, “I think my ENC 1101 class (Composition I) prepared me well for ENC 1102.”, exhibits the lowest positive response rate at 78%.

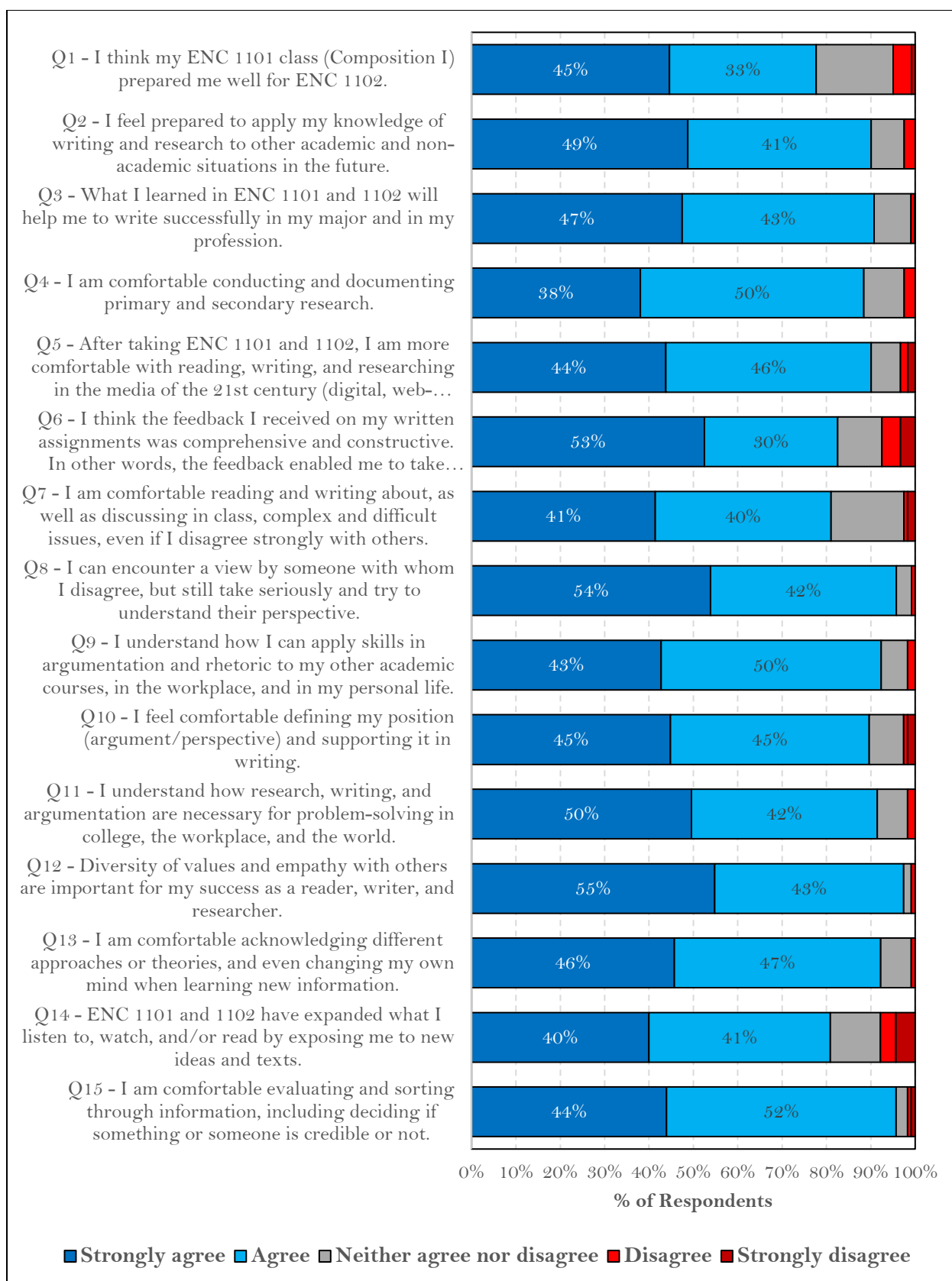


Figure 8. Results of ENC 1102 Exit Survey.

5 CONCLUSIONS

FSW's English Department assessment plan includes four courses: ENC 0022, ENC 1130, ENC 1101, and ENC 1102 (as an indirect measured assessment). Fall 2019 will serve as a pilot for the assessment plan. Fall 2019 is also the pilot for the course itself (ENC 1130) not just the assessment plan. For fall 2019, the assessment plan will include ENC 0022 until it is completely phased out and replaced by ENC 1130.

5.1 ENC 0022

A drilldown of ENC 0022 results are as follows:

1. For the fall 2019 assessment, 47 artifacts were collected for ENC 0022 from 4 of 5 course sections. The lowest scoring rubric dimension for percentage of artifacts scoring a 2 or greater is Concluding Paragraph at 83%. All other dimensions exhibit percentage of 94% or higher.
2. Distribution of artifact scores are trimodal and centered on 14/28, 19/28, and 20/28, and is moderately negatively skewed, meaning scores are shifted towards the upper range.
3. In a longitudinal study, results exhibit several trends. First, all rubric dimensions exhibit a sharp drop in fall 2017 data, likely in response to a truncated term as a result of Hurricane Irma. Second, "Introductory Paragraph," "Support Paragraphs," and "Organization" consistently are the highest scoring dimensions over time. These three dimensions represent the top three scores in 8 of 10 terms. Third, the "Research" dimension exhibits the lowest scores in 6 of 10 terms while "Mechanics" exhibits the lowest in 3 of 10 and "Grammar" in 1 of 10. And lastly, the "Research" dimension exhibits abnormally variable data in fall 2016 where no other dimension does. The cause is uncertain.
4. No comparison of dual enrollment to traditional artifacts was completed because no dual enrollment sections of the course were offered.
5. No comparison of online to traditional artifacts was completed because no online sections of the course were offered.
6. In a cross-campus comparison, scores varied greatly across rubric dimensions.

5.2 ENC 1101 & ENC 1130

A drilldown of ENC 1101 & ENC 1130 results are as follows:

1. The assessment was piloted using six sections. Of those, partial data was able to be collected from each section. No rubric data was available in the Learning Management System (Canvas) from any section for the Final Research Essay that matched the rubric to be utilized in the assessment. Short response rubric data was only available in three sections. The Library Infographic rubric data was only available in three sections. Table 4 below provides the sample metadata for each.
2. In a study of the Short Response Assignment, the paired ENC 1101/1130 exhibits higher achievement in 15 of 16 rubric dimensions. Of those, 5 of 15 paired ENC 1101/1130 are statistically significantly higher according to a Fisher's Exact Test. The one case in which the ENC 1101 only section results are higher than the 1101/1130 paired results is statistically significantly different.
3. A review of achievement for the Final Research Essay would normally be conducted here. However, in all cases there was either no rubric data recorded in the Learning Management

System (Canvas) or there was rubric data, but it did not match the common rubric as stipulated by the department. As a result, no analysis could be completed.

4. In a study of the Infographic Library Assignment, the paired ENC 1101/1130 exhibits lower achievement in 6 of 7 rubric dimensions. Of those, 0 of 6 paired ENC 1101/1130 are statistically significantly lower according to a Fisher's Exact Test. The one case in which the ENC 1101 only section results are lower than the 1101/1130 paired results is also not statistically significantly different.
5. Because of the fact that this assessment is in pilot phase, and because of the way the assessment is formatted (combination of ENC 1101 and ENC 1130), no concurrent dual enrollment sections were offered. As a result, no analysis was completed.
6. Because of the fact that this assessment is in pilot phase, and because of the way the assessment is formatted (combination of ENC 1101 and ENC 1130), no online sections were offered. As a result, no analysis was completed.
7. Of the sections included in the pilot assessment, all but one were offered on the Thomas Edison (Lee) campus. The remaining section was offered on the Collier campus. No data originated from the one section of the pilot sample which was offered on Collier. As a result, no comparison by site could be completed.

5.3 ENC 1102

A drilldown of ENC 1102 results are as follows:

1. Beginning with the Spring 2019 term, the English Department developed an exit survey to study student perspectives upon completion of the ENC 1102 course.
2. All questions exhibit positive responses ("Strongly agree" or "Agree") of 75% or higher. Question 8 and Question 15 exhibit the highest positive response rate at 96%. Question 1, "I think my ENC 1101 class (Composition I) prepared me well for ENC 1102.", exhibits the lowest positive response rate at 78%.

6 REFERENCES

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Section 2

ENC 0022 Final Exam Assessment Report – Fall 2019

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Florida SouthWestern State College's assessment plan includes collection of achievement data to determine the efficacy of the developmental options and to inform course and program improvement. The FSW English Department uses a two-section final exam (written and objective) to test mastery of the subject in ENC 0022 *Writing for College Success*. The following report details the results for the final exam for ENC 0022 for the fall 2019 term.

The written section of the ENC 0022 final exam, worth 50% of the overall exam grade, is comprised of six rubric dimensions. They are Main Idea / Topic Sentence, Organization, Detail Sentences, Grammar, Mechanics / Spelling, and Concluding Sentence. Each is scored on a 4-point rubric (4-Above Average, 3-Average, 2-Needs Work, 1-Unacceptable). Artifacts from 64 students were reported for fall 2019 with 4 of 5 sections reporting written sections and 4 of 5 reporting objective sections. The mean scores and percentage of artifacts scoring a 3 or better for each rubric dimension are shown in Figures 1 and 2.

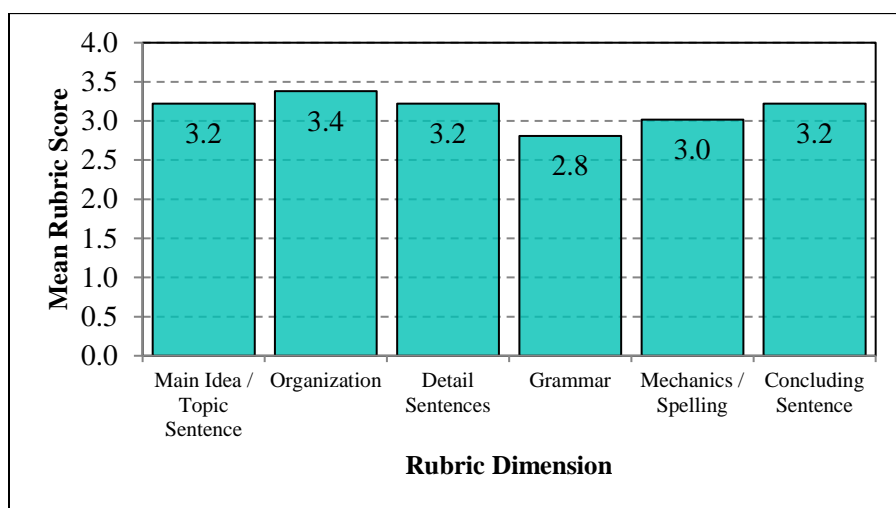


Figure 1. ENC 0022 Final Exam written section mean rubric scores for fall 2019.

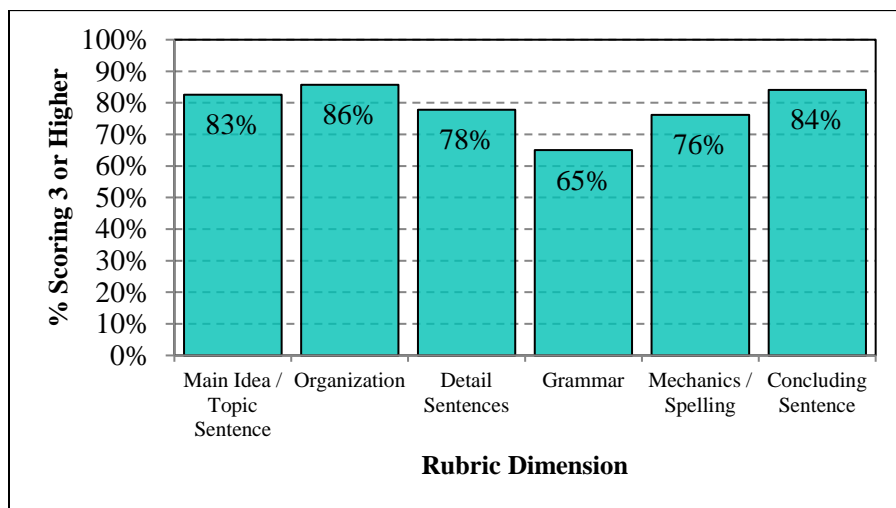


Figure 2. Percentage of fall 2019 artifacts scored 3 or higher on written section of ENC 0022 final exam.

While 63 artifacts were reported for the written section of the exam, 64 common artifacts were reported for the objective section. The mean scores for each are reported in Figure 3. Differences in the means between written section and the objective section were tested for significance using a Welch's t-test according to standard methods^{1,2,3,4} and were found to be statistically significantly different ($t(131) = -3.52, p = 0.0006$). Therefore, we can reject the null hypothesis that the difference in the means of the written and objective sections of the exam is equal to 0, and we can conclude with 95% confidence that the differences in scores are not solely due to chance.

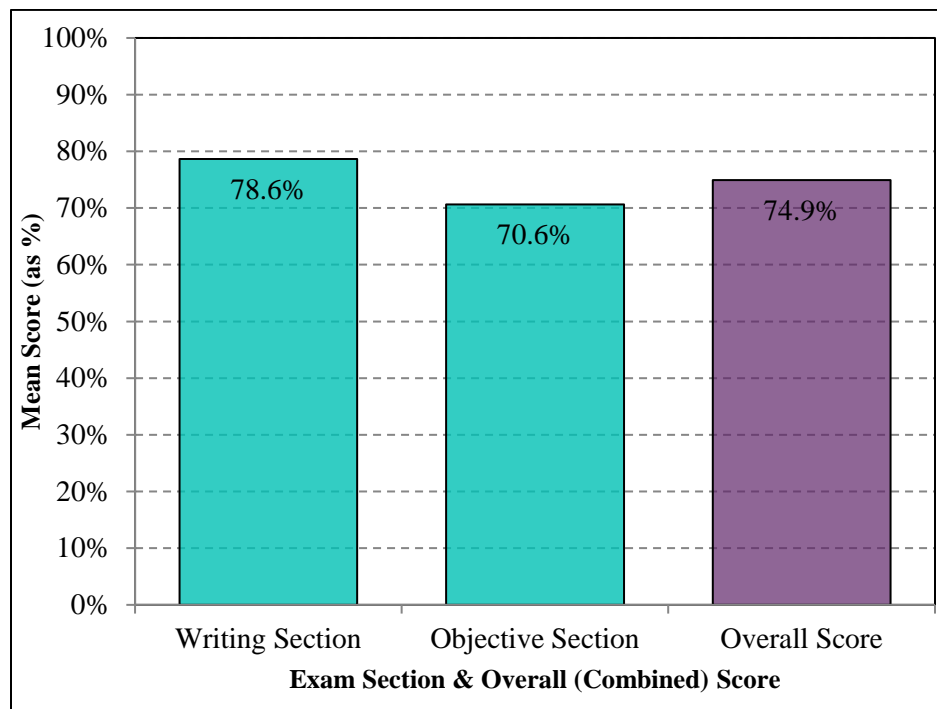


Figure 3. Mean scores by exam section and overall score for the fall 2019 ENC 0022 final exam.

Of the 63 common (objective & written) artifacts collected from the final exam, all originated from the compressed learning strategy version of the course. Normally, a comparison of mean scores by learning strategy is shown. Because no modularized data is available, no comparison is completed.

A longitudinal study exhibits a varied level of achievement overall. Of 11 fall/spring terms tracked, fall 2019 exhibits the lowest overall mean score. Fall 2019 overall achievement is 7%-points lower than the next lowest term, which was fall 2018, at 66%.

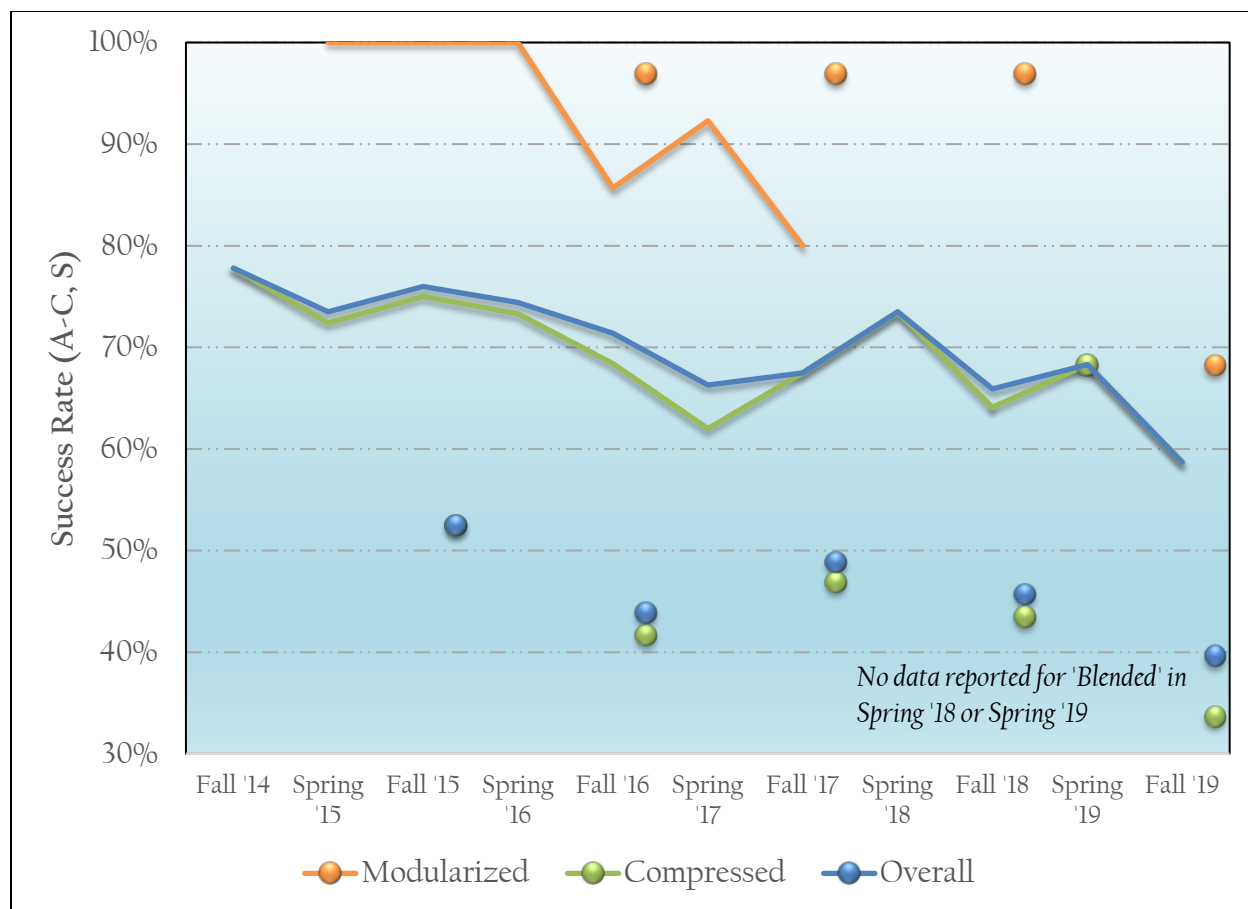


Figure 4. Comparison of ENC 0022 final exam success rates over time. Success rate is achievement at 70% or higher.

¹Davis, J.C. 1973. Statistics and Data Analysis in Geology. John Wiley & Sons, New York, New York, 564 pp.

²McDonald, J.H. 2009. Handbook of Biological Statistics (2nd ed.). Sparky House Publishing, Baltimore, Maryland.

³Siegel, S. 1956. Nonparametric statistics for the behavior sciences. McGraw-Hill, New York, New York, 312 pp.

⁴Wilkinson, L. 1999. APA Task Force on Statistical Inference. Statistical Methods in Psychology Journals: Guidelines and Explanations. American Psychologist 54 (8), 594–604.

Section 3

MAT 0057 Final Exam Assessment Report – Fall 2019

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, Institutional Research, Assessment & Effectiveness

Florida SouthWestern State College's assessment plan includes collection of achievement data to determine the efficacy of the developmental options and to inform course and program improvement. The FSW Math Department uses a 38-question final exam to test mastery of the subject in MAT 0057 *Mathematics for College Success*. This 38-question exam was new for spring 2018 and was revised for fall 2019. Prior to spring 2018, a 45-question exam was used (last used summer 2017 as fall 2017 assessment was cancelled due to Hurricane Irma). Exam questions were updated with no change to the question count for fall 2019. The following report details the results for the final exam for MAT 0057 for the fall 2019 term.

During fall 2019, 26 course sections were run. Of those, 25 sections submitted verified results. In the 25 reporting sections, 357 artifacts from the final exam were collected with all sections originating from the modularized learning strategy version of the course (no compressions sections are offered as a result of determinations made using previous assessment studies). A distribution of the artifact scores can be found in Figure 1. The data exhibit a mode centered on 28/38, mean score of 26.8, compared with 25.5 in spring 2019, 26.8 in fall 2018, and 27.0 in spring 2018.

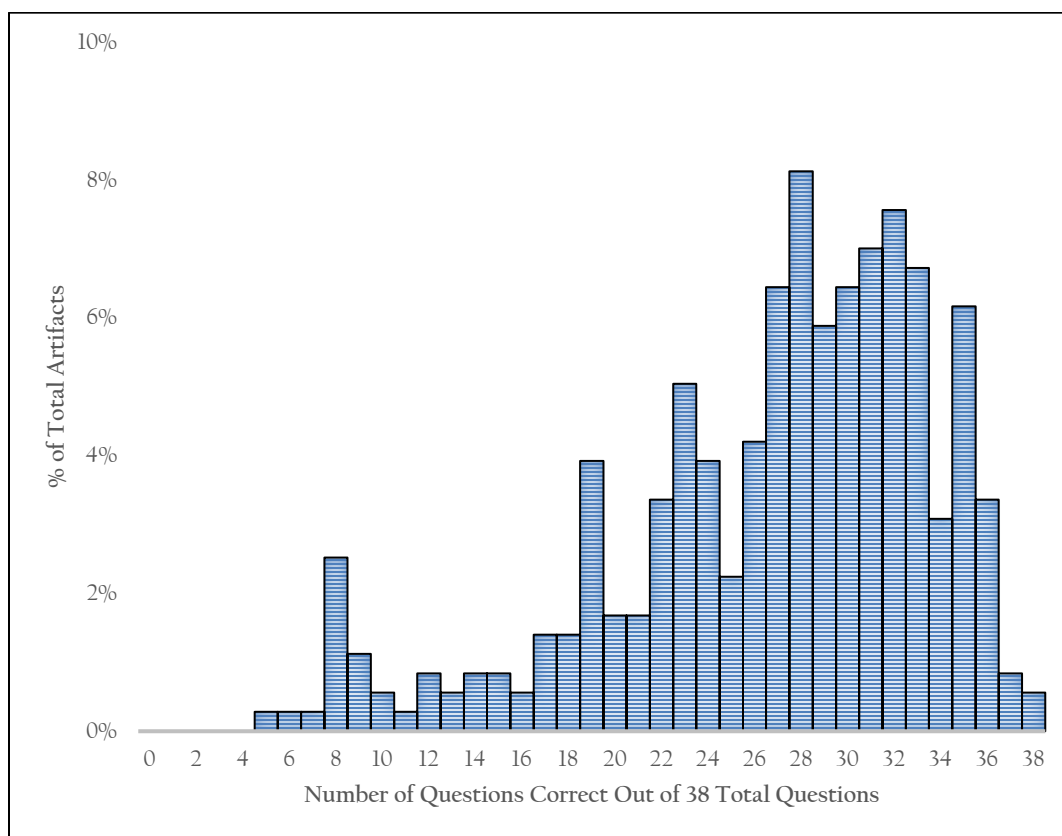


Figure 1. MAT 0057 final exam score distribution for fall 2019 (n=357).

A comparison of mean scores by learning strategy has historically been a part of this report. However, beginning with AY 2017-2018, all MAT 0057 sections are offered in a modularized format. As a result, comparisons by learning strategy are no longer provided here.

Of the 357 artifacts from the final exam, 13 originated from the Charlotte campus, 64 from the Collier campus, 13 from the Hendry-Glades Center, and 267 from the Thomas Edison (Lee) campus. A comparison of mean scores by campus is shown in Figure 2. Differences in the means between sites are tested for significance using an ANOVA according to standard methods^{1,2,3,4}. Results of the ANOVA exhibit a statistically significant difference between sites [$p=0.0005$]. Therefore, we can reject the null hypothesis that the mean combined rubric scores at each site are equal to each other and we can conclude with a 95% confidence that the differences in scores are not solely due to chance.

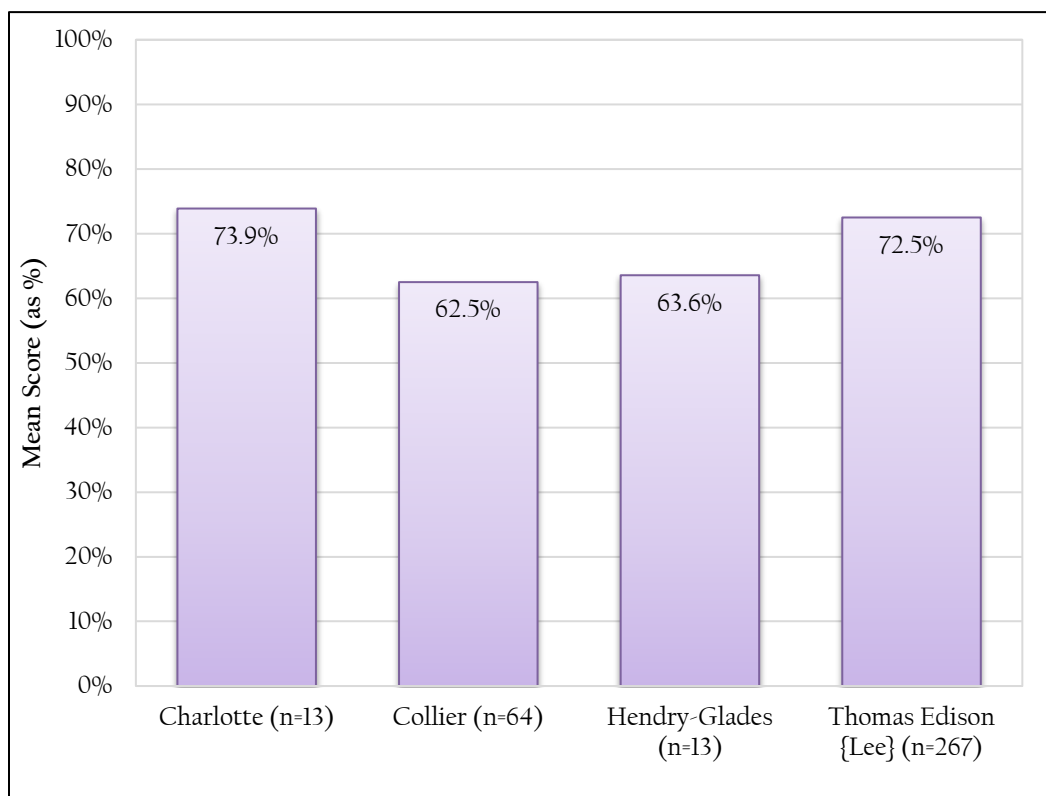


Figure 2. Comparison of MAT 0057 Final exam (mastery exam) scores by site.

A longitudinal study of the common course assessment (final exam) success rates is shown in Figure 3. Results exhibit a steady range of success between 48% and 65%. After the lowest achievement ever was recorded in spring 2019, achievement has rebounded for fall 2019 from 48% back up to 62%. Note that the large spike in success rates for compressed sections is simply a result of a very small sample size for compressed data as the learning strategy was being phased out.

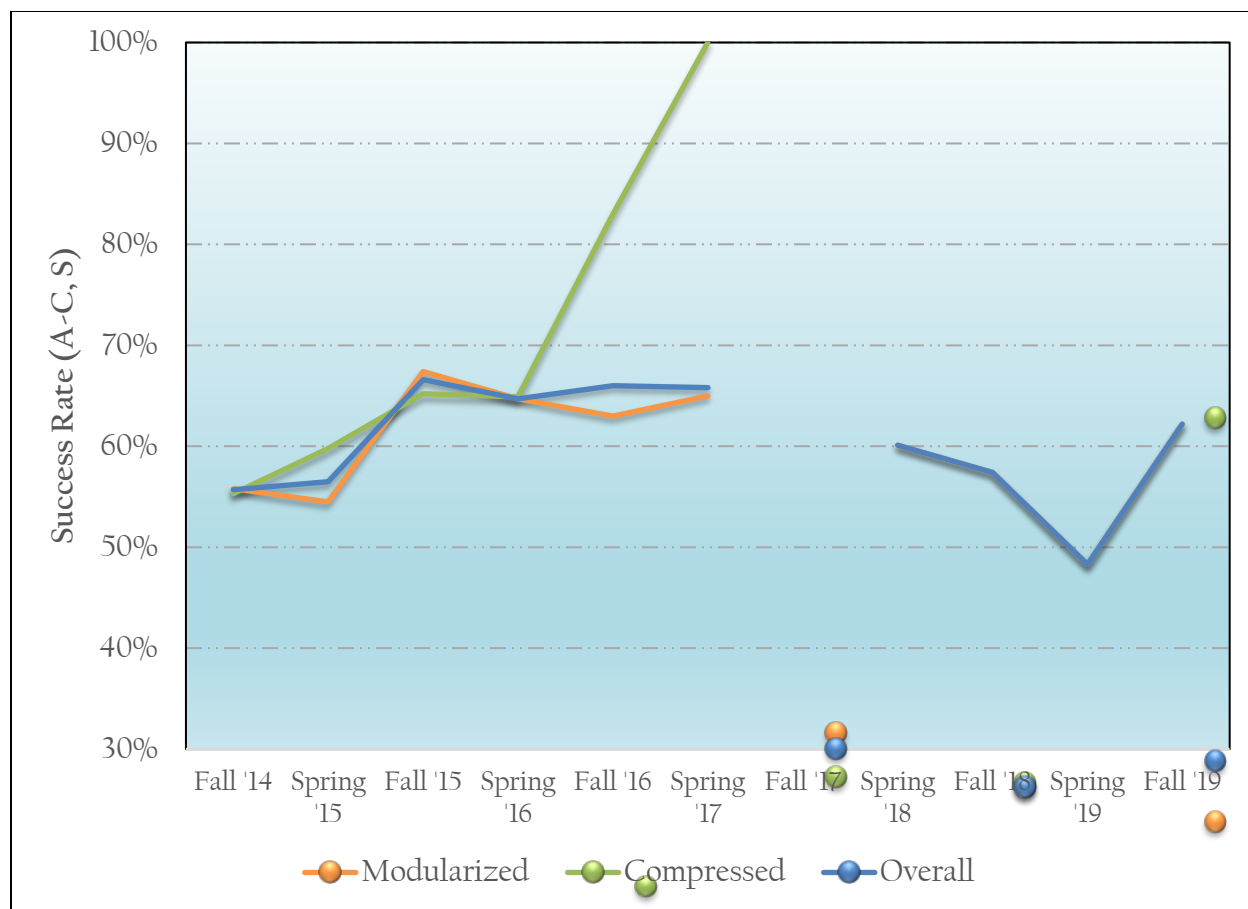


Figure 3. Comparison of MAT 0057 final exam success rates over time. Success rate is achievement at 70% or higher. *All sections are modularized beginning Fall 2017.

¹Davis, J.C. 1973. Statistics and Data Analysis in Geology. John Wiley & Sons, New York, New York, 564 pp.

²McDonald, J.H. 2009. Handbook of Biological Statistics (2nd ed.). Sparky House Publishing, Baltimore, Maryland.

³Siegel, S. 1956. Nonparametric statistics for the behavior sciences. McGraw-Hill, New York, New York, 312 pp.

⁴Wilkinson, L. 1999. APA Task Force on Statistical Inference. Statistical Methods in Psychology Journals: Guidelines and Explanations. American Psychologist 54 (8), 594–604.

Section 4

MAT 0057 Survey Report – Fall 2019

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, IR, Assessment & Effectiveness

Florida SouthWestern State College tracks satisfaction of current developmental courses through a survey administered at the end of each term. The data is in support of assessment measures for the developmental accountability plan to determine efficacy of developmental options and to inform course and program improvement. The following are the results for the fall 2019 term for MAT 0057 *Mathematics for College Success* which utilized a re-developed survey based on prior results and new developments within the program which merit satisfaction tracking.

Of the 605 students enrolled and with active emails available, in MAT 0057 during fall 2019, 77 responded to the survey for a response rate of 13%. This is the lowest response rate since the survey tool began in Fall 2014 (note that the survey was not run in Fall 2018 while it was being updated). A review of response rates over the last three academic years is shown below:

- 13%: Fall 2019
- 21%: Spring 2019
- 16%: Spring 2018
- 17%: Fall 2017
- 18%: Spring 2017
- 15%: Fall 2016

Of the 77 respondents, 77% reported being enrolled in sections that met twice per week while 23% reported once per week. Additionally, 71% reported being female, 38% reported being between the age of 18 and 21, and 69% reported AY 2019-20 as their first year in college.

Questions 6 through 9 are Likert scale questions describing student perception of learning and achievement in various areas. The below are the prompts for Question #6 followed by the results in Figure 1.

Q6: Indicate your level of agreement in the following areas since taking this Math class.

- 1. I am better at Math*
- 2. Math is less scary*
- 3. Math makes more sense to me*
- 4. Math is easier for me*
- 5. I have learned how to manage time appropriately to succeed in math*
- 6. I will be more successful in future math courses*

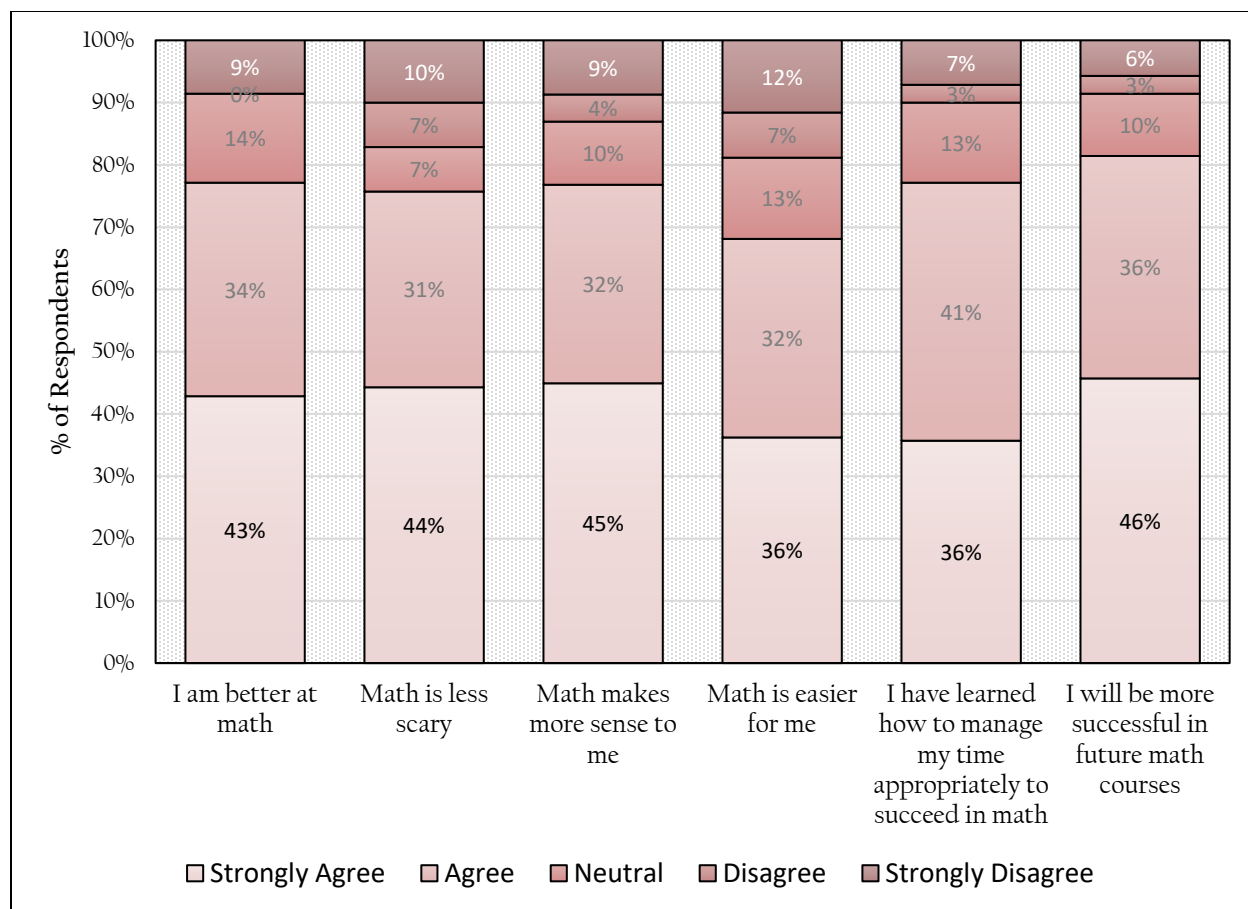


Figure 1. Responses to Question #8 "I believe I have improved in the following areas since taking this Math class." n=77.

All seven areas exhibit positive responses (Agree or Strongly Agree) of 65% or higher. The statement "I will be more successful in future math courses" exhibits the highest positive response at 81%. The statement "Math is easier for me" exhibits the lowest positive response rate at 68%.

The below are prompts for Question #7 followed by the results in Figure 2.

Q7: I benefited from the following aspects of the Math Center/Math Lab this semester.

1. The resources available in the Math Center
2. The instructional assistants
3. The access to computers
4. The programs on the computers
5. The hours the Math Center was open and available to me

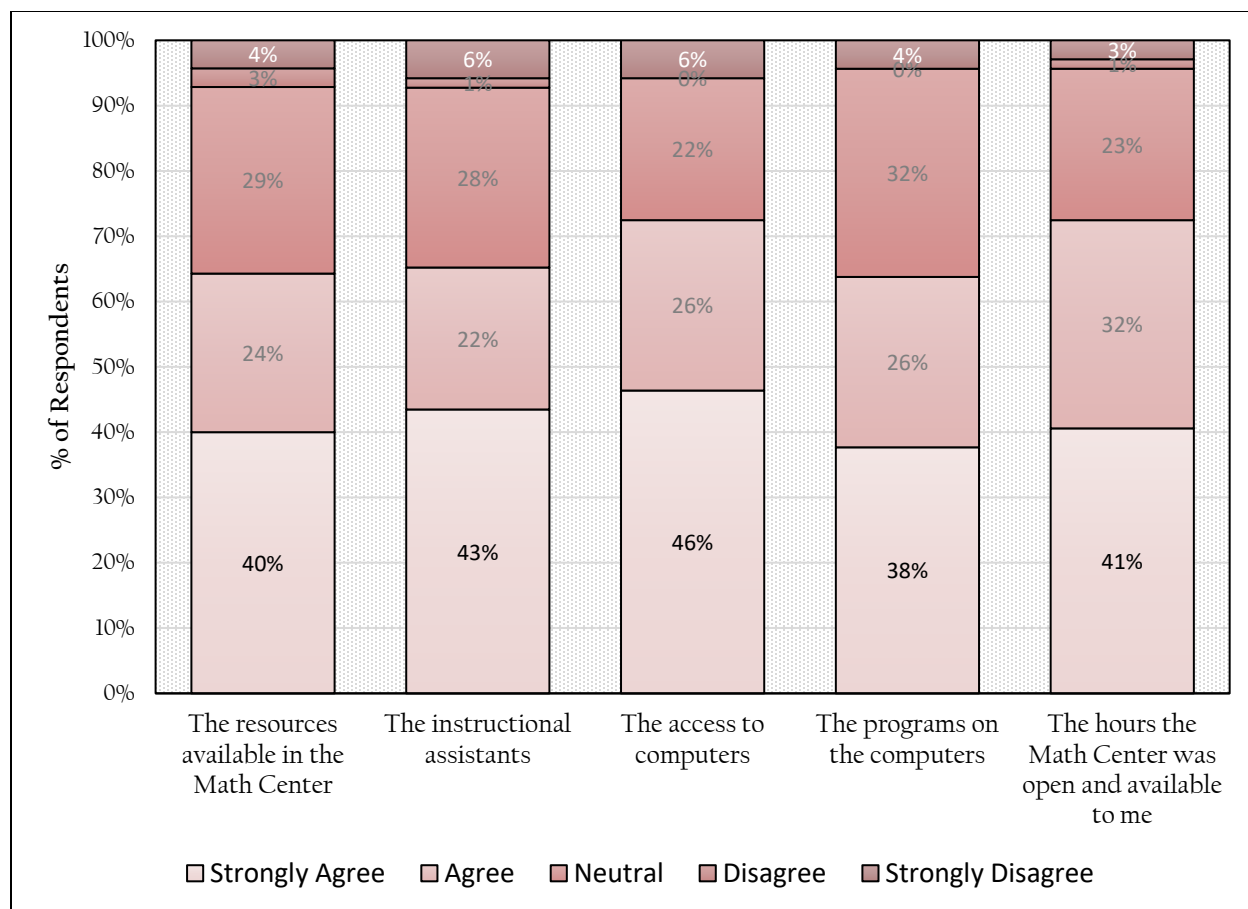


Figure 2. Responses to Question #7 "I benefited from the following aspects of the Math Center / Math Lab this semester." n=77.

All five areas exhibit positive responses (Agree or Strongly Agree) of 60% or better. The statement "The access to computers" exhibits the highest positive response at 72%. The statement "The resources available in the math center" exhibits the lowest positive response rate at 64%.

The below are the prompts for Question #8 followed by the results in Figure 3.

Q8: I was satisfied with the following aspects of my Math class this semester.

1. The information on the course syllabus
2. The online homework with MyMathLabs Plus
3. The amount of homework assigned
4. The clarity of the explanations within the MyLabsPlus site
5. The number of tests
6. The length of time in class
7. The frequency of class meetings
8. The pace of the course

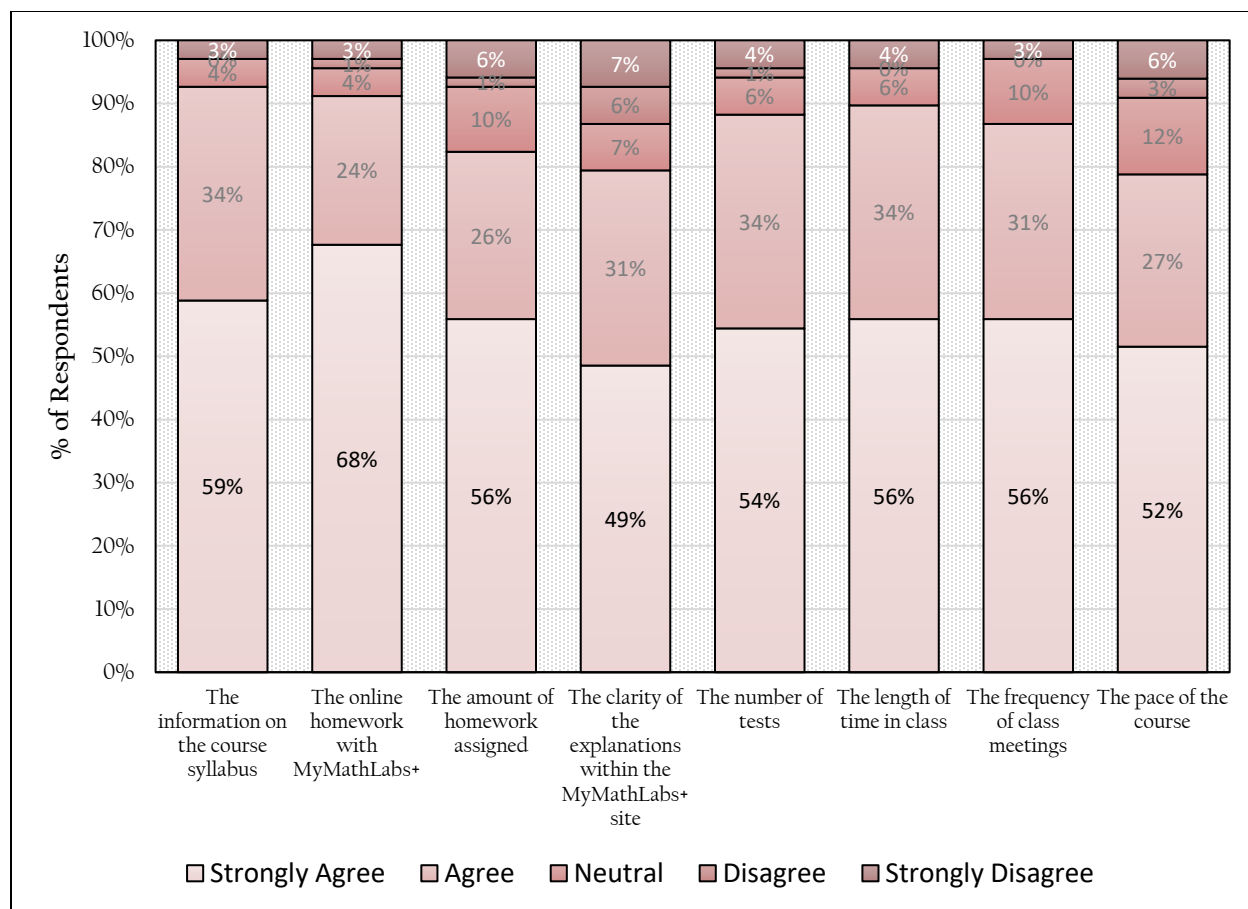


Figure 3. Responses to Question #8 "I was satisfied with the following aspects of my Math class this semester." n=77.

All areas exhibit positive responses (Agree or Strongly Agree) of 65% or better. The statement "The information on the course syllabus" exhibits the highest positive response at 93%. The statement "The clarity of the explanations within the MyMathLabs Plus site" exhibits the lowest positive response rate at 79%.

The below are the prompts for Question #9 followed by the results in Figure 4.

Q9: This Math course prepared me for:

1. The next Math classes I will take
2. The time management I must have in college
3. The skills I need to take tests in college

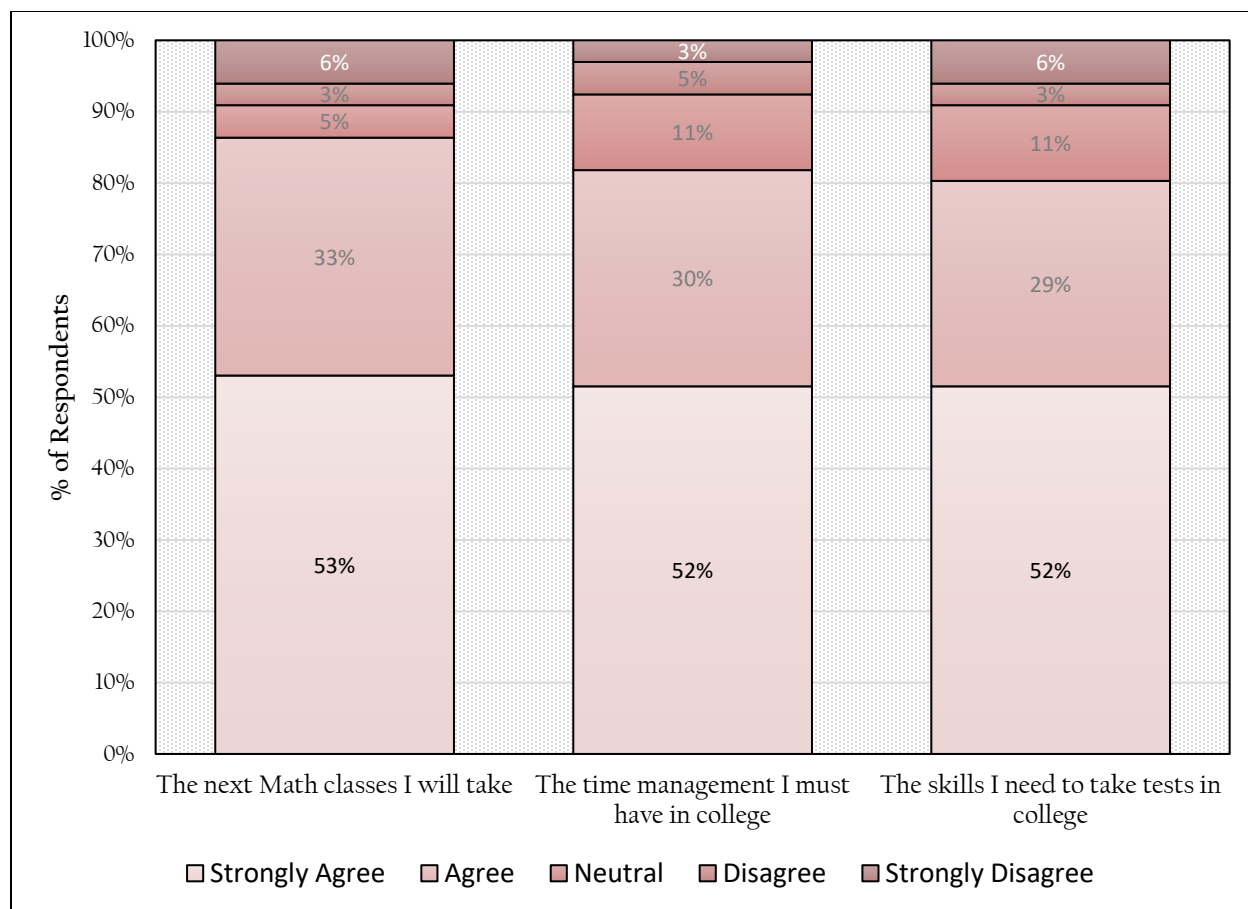


Figure 4. Responses to Question #9 "This Math course prepared me for:" n=77.

All three areas exhibit positive responses (Agree or Strongly Agree) of 80% or better. The statement "The next Math classes I will take" exhibits the highest positive response at 86%. The statement "The skills I need to take tests in college" exhibits the lowest positive response rate at 80%.

A comparison of positive response to survey prompts in questions 6 through 9 in show below in Figures 5 through 8. Note that comparison from fall-to-spring is less useful as assessment reports across multiple course level and program level assessments at FSW typically exhibit substantial differences from fall to spring term and are better interpreted from fall-to-fall and spring-to-spring (see <http://www.fsw.edu/facultystaff/assessment/history> for further details). Of the 22 statement prompts to respondents, 10 of them exhibit the highest positive response percentage since the study began in fall 2014.

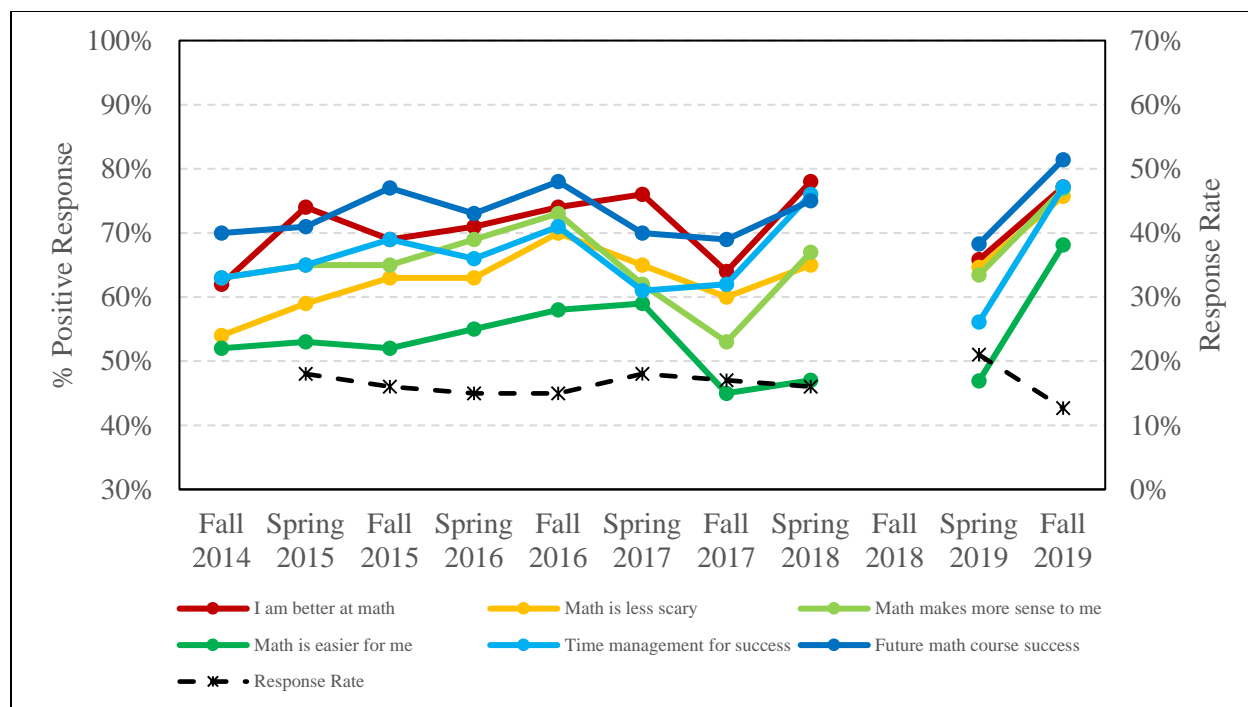


Figure 5. Question 6 positive response and response rate over time.

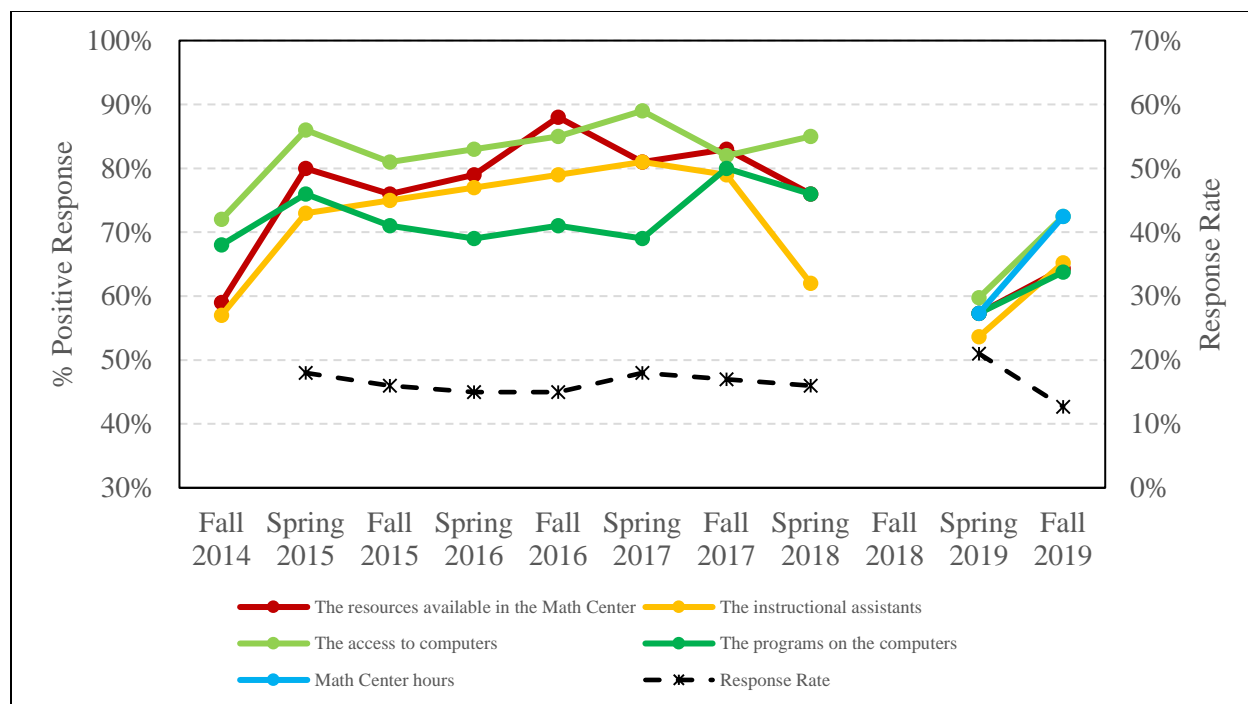


Figure 6. Question 7 positive response and response rate over time.

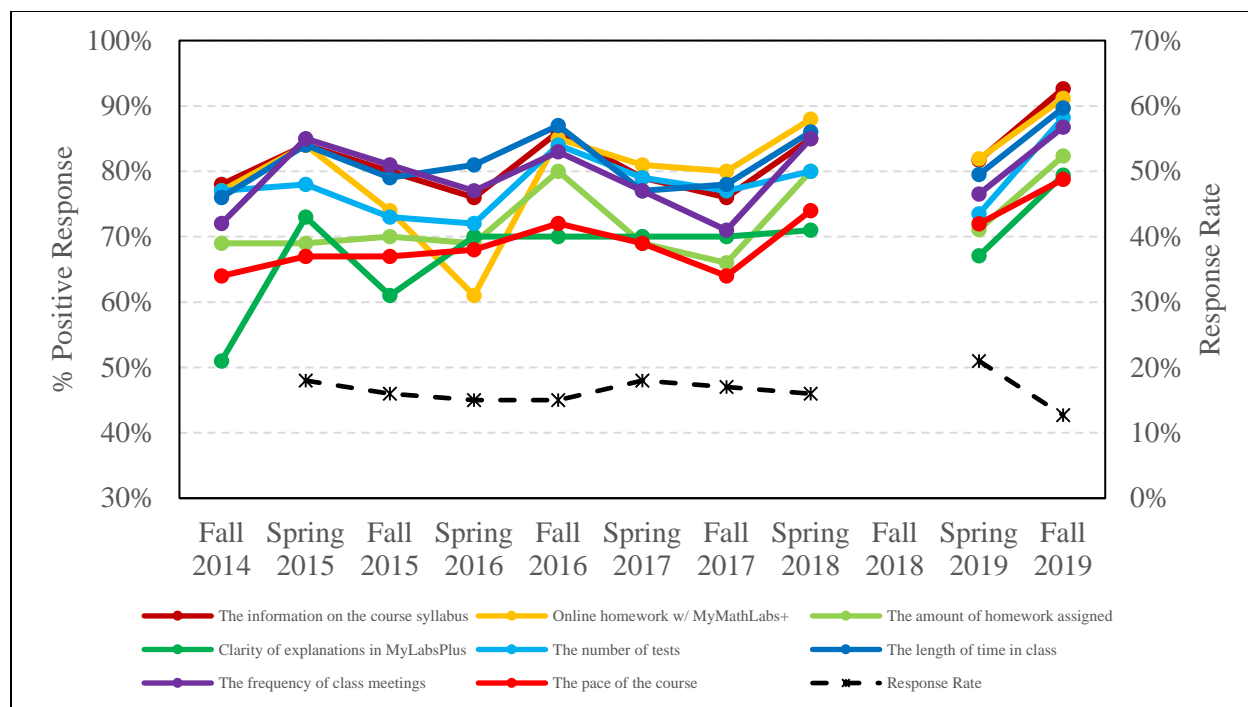


Figure 7. Question 8 positive response and response rate over time.

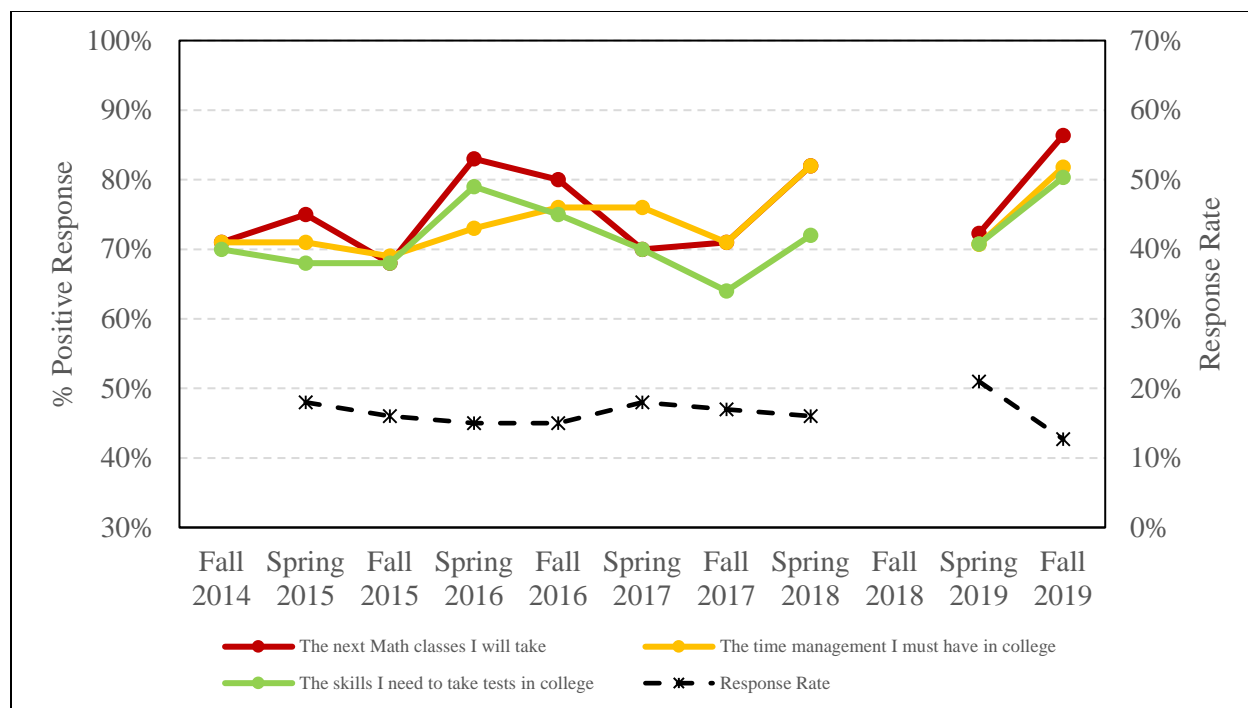


Figure 8. Question 9 positive response and response rate over time.

The newly revised survey also asked a series of open-ended questions regarding the importance and satisfaction of the things learned by students in the course. The first of these asked students about importance using the prompt “What was the most important thing you learned this semester?”. Students

were also asked about the value of topics using the prompt “Please indicate what you liked best about your math class this semester at FSW.” Students were then asked using the prompt “Please tell us what you liked least about your math class this semester.” And finally, students were asked about improvement using the prompt “If you could change something to make this course better, what would it be?”. The top three responses along with the percent of respondents reporting that topic are shown below:

What was the most important thing you learned this semester?

1. Time management (22%)
2. Fractions (6%)
3. Formulas & expressions (6%)

Please indicate what you liked best about your math class this semester at FSW.

1. The professor (46%)
2. Self-paced style of the course (10%)
3. MyLabsPlus (8%)

Please tell us what you liked least about your math class this semester.

1. Self-paced style of the course (7%)
2. Not enough time in class (4%)
3. Getting used to MyLabsPlus (4%)

If you could change something to make this course better, what would it be?

1. Slower pace (11%)
2. Shorter class duration (5%)
3. Shorter assignments (5%)

Section 5

REA 0019 Mastery Exam Assessment Report – Fall 2019

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, Institutional Research, Assessment & Effectiveness

Florida SouthWestern State College's assessment plan includes collection of achievement data to determine the efficacy of the developmental options and to inform course and program improvement. The learning outcome: *Students will read at a post-secondary level that correlates with college success by the completion of the Developmental Reading sequence*, is measured through the comparison of pre- and post-tests conducted using the Townsend Press College Reading Test as an assessment within REA 0019 *Reading for College Success*. The following report details the results for Townsend Press College Reading Test for the fall 2019 term.

In a comparison of pre-test to post-test results, the mean scores increased across all rubric criterion as well as the overall score (Figure 1). The difference in the means of the overall score from pre-to-post test scores was tested for significance using a paired means t-test according to standard methods^{1,2,3,4}. The paired means t-test results indicate a statistically significant improvement from 25.7 to 28.4 ($t(149)=4.72$, $p=5.39 \times 10^{-6}$). Therefore, we can reject the null hypothesis that the difference in the means of the overall scores of the pre- and post-test scores is equal to 0, and we can conclude this with a 95% confidence that the differences in scores are not solely due to chance. A distribution of overall scores from pre-to-post test can be found in Figure 2.

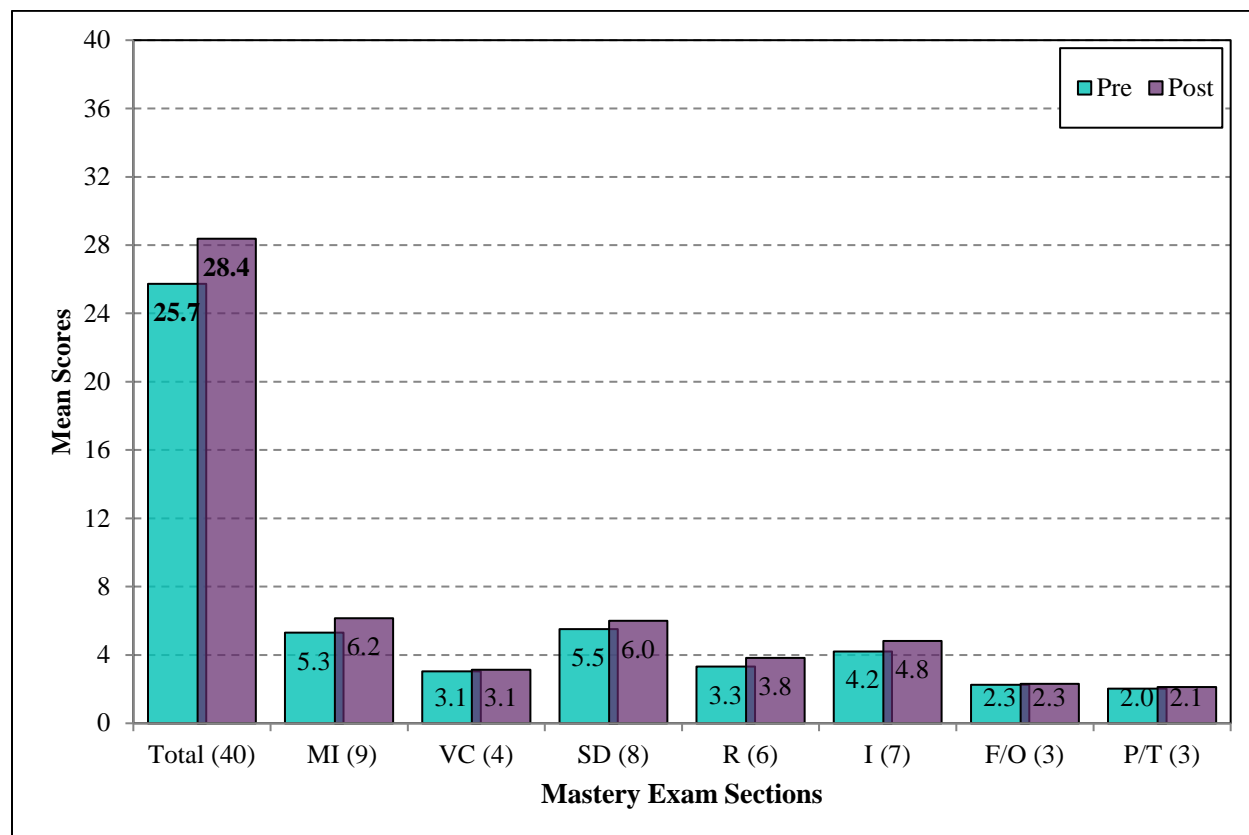


Figure 1. Comparison of pre- (aqua) and post-test (purple) achievement for the Townsend Press College Reading Test (serving as the course mastery exam) conducted during the fall 2019 semester in REA 0019 courses. MI: Main Idea (9 points), VC: Vocabulary (4 points), SD: Supporting Details (8 points), R: Relationships (6 points), I: Inferences (7 points), F/O: Fact/Opinion (3 points), and P/T: Purpose/Tone (3 points) for a total of 40 possible points.

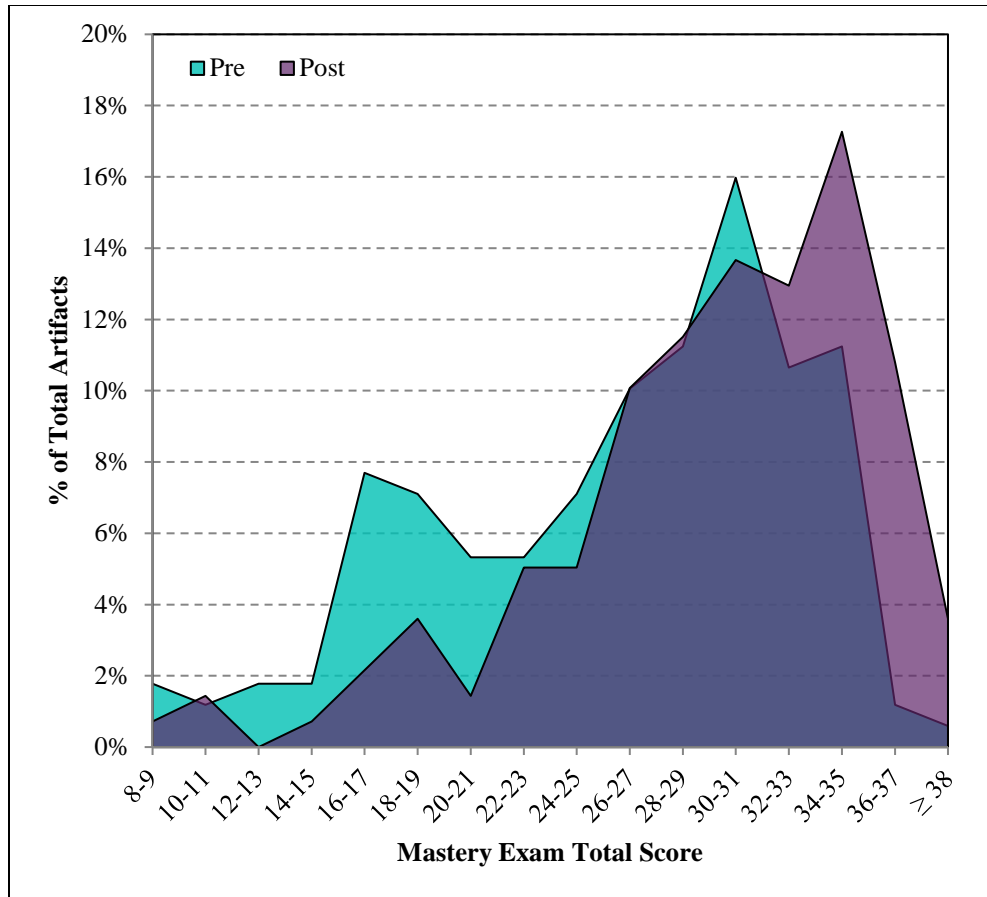


Figure 2. Distribution of pre- (aqua) and post-test (purple) scores for the Townsend Press College Reading Test (serving as the course mastery exam) conducted during the fall 2019 semester in REA 0019 courses.

A comparison of pre-test to post-test results as a function of learning strategy (modularized, compressed, and contextualized) is shown in Figure 3. The mean scores of all learning strategies increased from pre-to-post tests ranging from +0.4/40 points in compressed sections to +3.8/40 points in contextualized sections. These improvements are an increase of 0.1-10 percentage points. Each comparison study was tested for significance using a paired means t-test according to standard methods^{1,2,3,4}. The paired means t-test results indicate a statistically significant improvement for the modularized learning strategy.

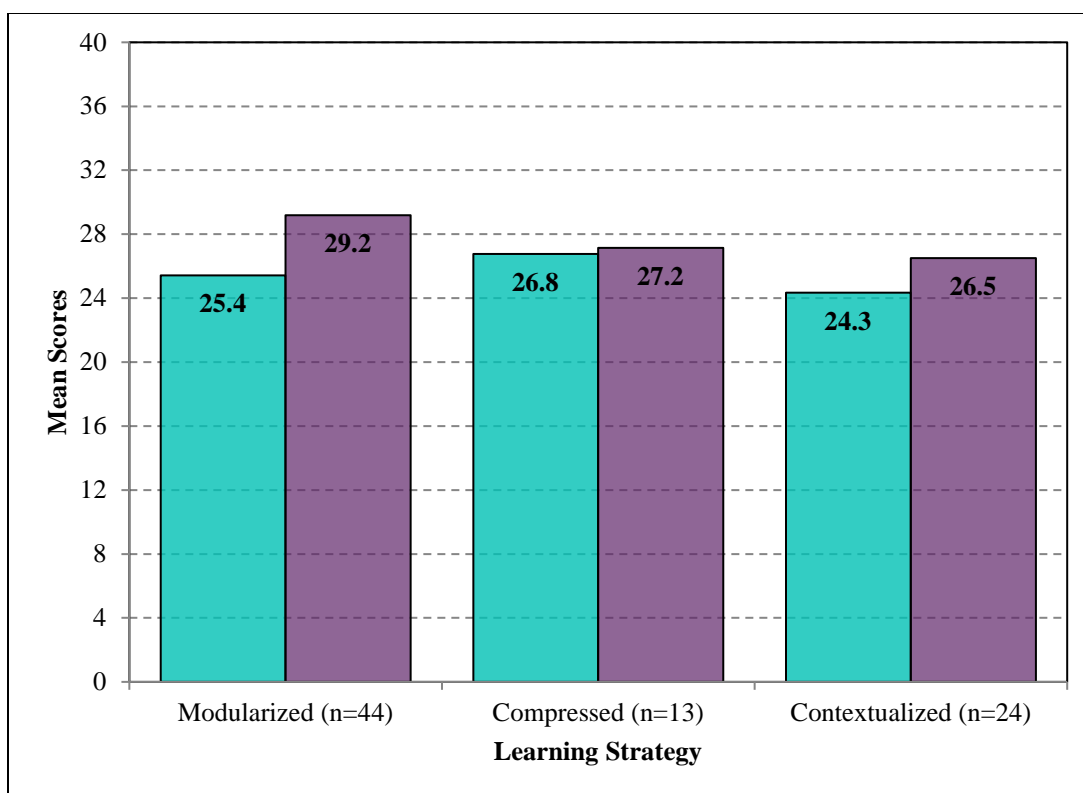


Figure 3. Comparison of pre- (aqua) and post-test (purple) achievement conducted during the fall 2019 semester in REA 0019 courses based on enrollment in a modularized, compressed, or contextualized course.

A comparison of exam success rates for pre-test and post-test according to learning strategy exhibits substantial improvement across all strategies. Based on results of a Fisher's Exact Test for independence, both compressed and modularized strategies have statistically significantly higher rates of passing scores in the post-test than in the pre-test. Results of the Fisher's Exact Test for each learning strategy as well as success rates are shown in Table 1.

	Modularized	Compressed	Contextualized	Overall
Pre-Test	36.1%	49.5%	48.1%	49.2%
Post-Test	66.7%	67.1%	55.6%	64.9%
<i>P</i>	0.002	0.022	0.786	0.005

Table 1. Pre-test/Post-test success rates (achievement at 70% or higher) by learning strategy for fall 2019.

A longitudinal study of success rates on this assessment is provided in Table 2. A graphic display of these data are shown in Figure 4. Overall success rates range from 57% to 79%. The lowest success rates of each academic year consistently occur during the spring term in every academic year except the most recent completed year, AY 2018-19.

	Modularized	Compressed	Contextualized	Overall
Spring 2015	57%	79%	*	73%
Summer 2015	67%	*	*	68%
Fall 2015	72%	66%	65%	69%
Spring 2016	59%	54%	57%	57%
Summer 2016	*	62%	*	62%
Fall 2016	83%	72%	78%	76%
Spring 2017	*	71%	83%	72%
Summer 2017	*	81%	*	81%
Fall 2017	81%	81%	75%	79%
Spring 2018	*	71%	58%	68%
Summer 2018	*	83%	*	83%
Fall 2018	75%	65%	76%	72%
Spring 2019	90%	69%	85%	74%
Summer 2019	*	58%	*	58%
Fall 2019	67%	67%	56%	65%

Table 2. Longitudinal study of post-test success rates (achievement at 70% or higher) using the present assessment (Townshend Press College Reading Test). *Denotes no sections of the strategy offered.

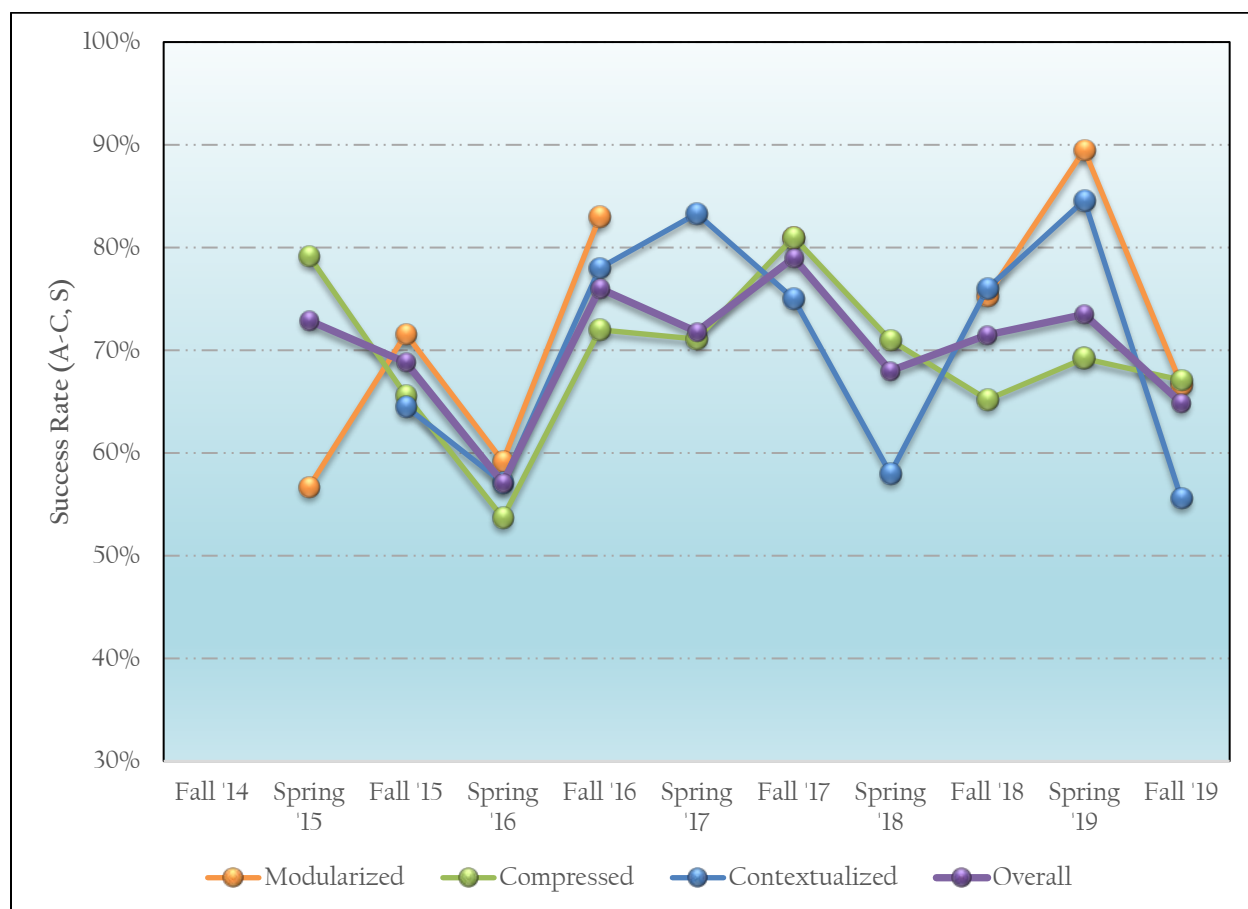


Figure 4. REA 0019 Common course assessment success rates over time by learning strategy. Fall '14 utilized a different common course assessment which did not map well with course outcomes and so results are not valid and are excluded here.

A paired comparison was also completed to gauge improvement in a case-by-case basis. In that study, 80% of students exhibit at least some improvement from pre-to-post test (Figure 3). Of those, 40% of students exhibit improvement of greater than or equal to 10% (4 point or more increase on the 40-point test).

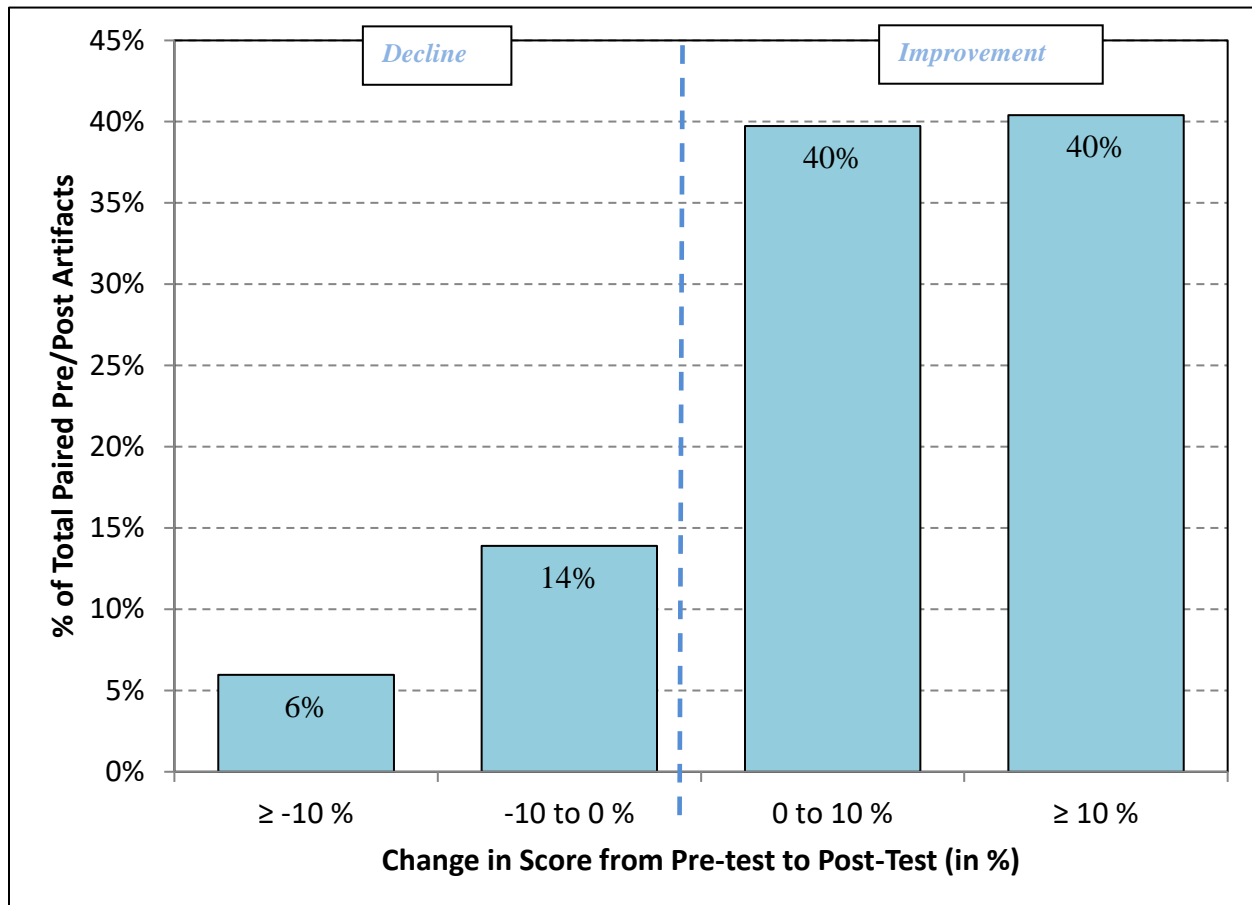


Figure 5. Comparison of the change in individual students' paired tests from pre-test to their post-test counterpart for fall 2019.

¹Davis, J.C. 1973. Statistics and Data Analysis in Geology. John Wiley & Sons, New York, New York, 564 pp.

²McDonald, J.H. 2009. Handbook of Biological Statistics (2nd ed.). Sparky House Publishing, Baltimore, Maryland.

³Siegel, S. 1956. Nonparametric statistics for the behavior sciences. McGraw-Hill, New York, New York, 312 pp.

⁴Wilkinson, L. 1999. APA Task Force on Statistical Inference. Statistical Methods in Psychology Journals: Guidelines and Explanations. American Psychologist 54 (8), 594–604.

Section 6

REA 0019 Satisfaction Survey

Fall 2019 Results

April 7, 2020

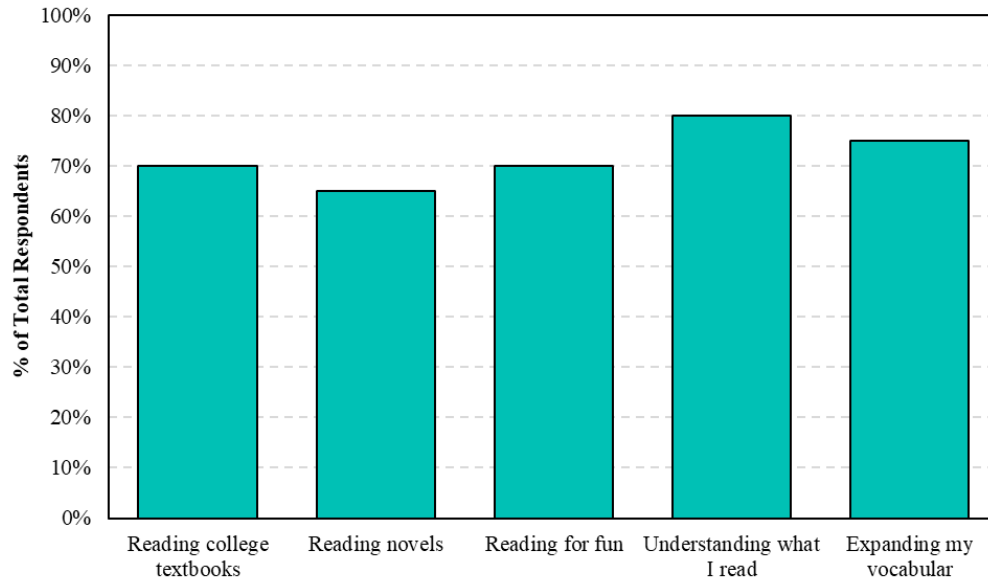
Dr. Joseph F. van Gaalen, Asst. VP, IR, Assessment, & Effectiveness
Team AASPIRE

Assessment – Accountability – Sponsored Programs – Institutional Research - Effectiveness

Total Count
20

Q4 - Was this your first year in college?	Compressed	Modularized	Contextualized
Yes	7	6	3
No	3	1	0

Q5: Responses to prompt: "I believe I have improved in the following areas since taking this Reading class."

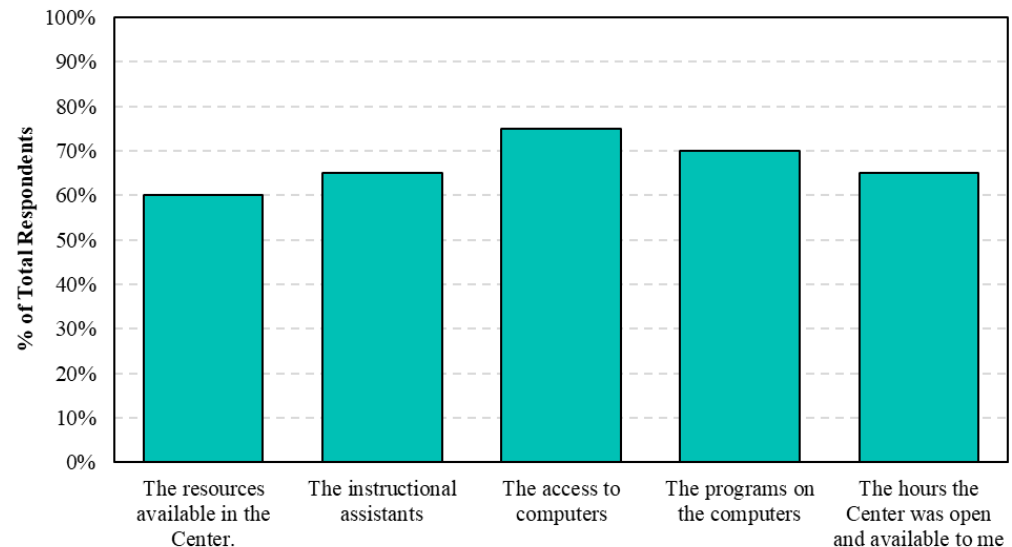


Q5 - I believe I have improved in the following areas since taking this Reading class.

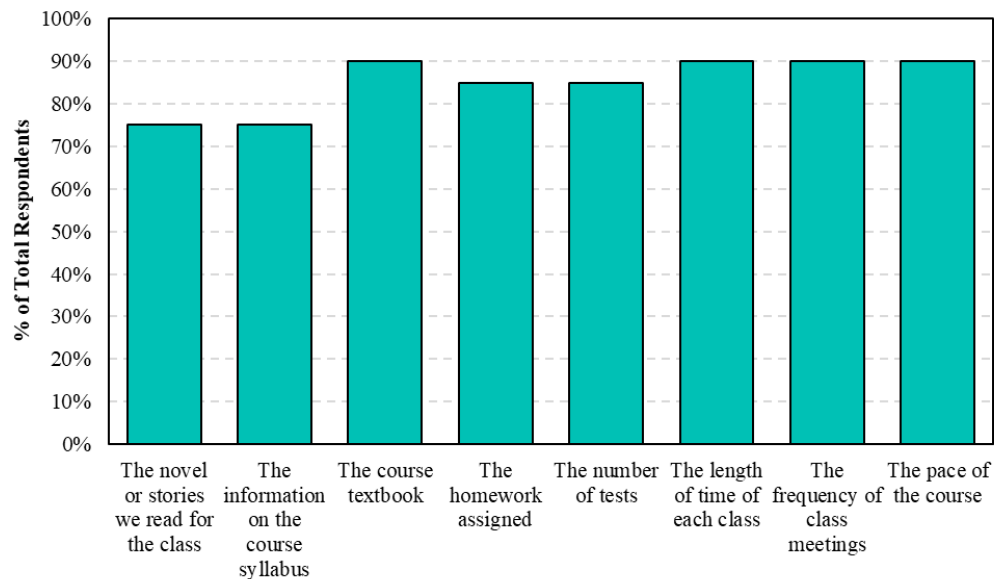
	Compressed	Modularized	Contextualized
Reading college textbooks	80%	71%	33%
Reading novels	70%	67%	33%
Reading for fun	78%	83%	33%
Understanding what I read	80%	100%	33%
Expanding my vocabulary	80%	86%	33%

Q6 - I benefitted from the following aspects of the Academic Support Center for Reading this semester.			
	Compressed	Modularized	Contextualized
The resources available in the Center.	50%	71%	67%
The instructional assistants	60%	67%	67%
The access to computers	70%	86%	67%
The programs on the computers	70%	71%	67%
The hours the Center was open and available to me	60%	71%	67%

Q6: Responses to prompt: "I benefitted from the following aspects of the Academic Support Center for Reading this semester."



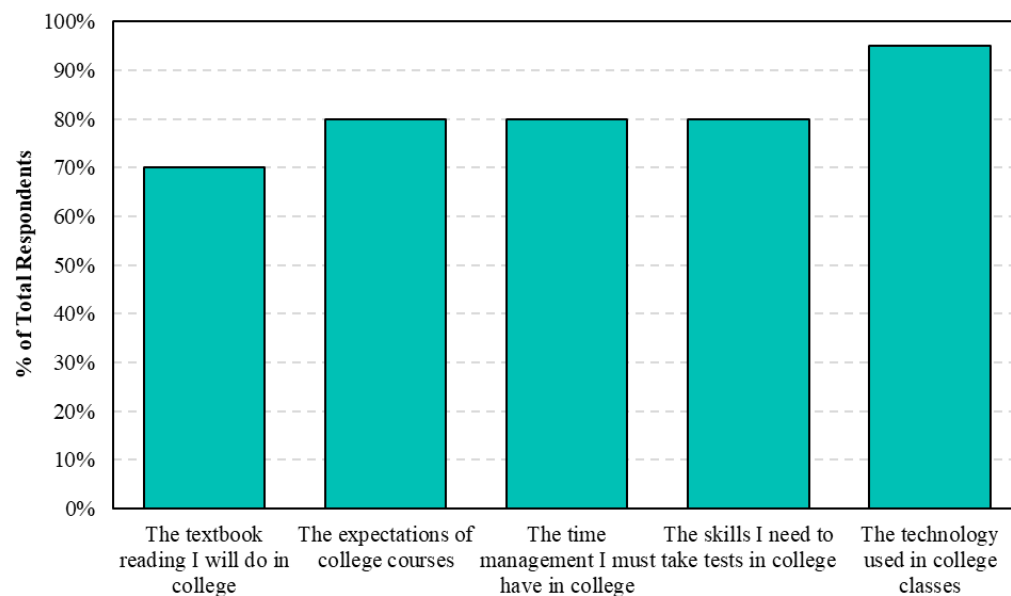
Q7: Responses to prompt: "I was satisfied with the following aspects of my Reading class this semester."



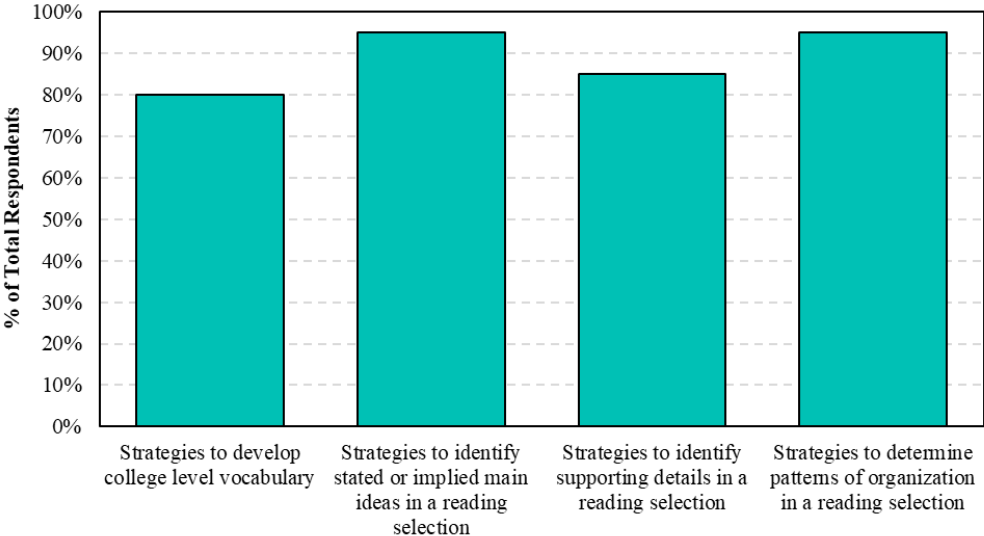
Q7 - I was satisfied with the following aspects of my Reading class this semester.	Compressed	Modularized	Contextualized
The novel or stories we read for the class	70%	83%	67%
The information on the course syllabus	70%	86%	67%
The course textbook	90%	100%	67%
The homework assigned	80%	100%	67%
The number of tests	80%	100%	67%
The length of time of each class	90%	100%	67%
The frequency of class meetings	90%	100%	67%
The pace of the course	100%	86%	67%

Q8 - This reading course prepared me for:	Compressed	Modularized	Contextualized
The textbook reading I will do in college	70%	83%	33%
The expectations of college courses	80%	83%	67%
The time management I must have in college	90%	83%	33%
The skills I need to take tests in college	90%	83%	33%
The technology used in college classes	100%	100%	67%

Q8: Responses to prompt: "This reading course prepared me for:"



Q9: Responses to prompt: "Of the following Reading Strategies which do you feel have helped to improve your reading comprehension?"

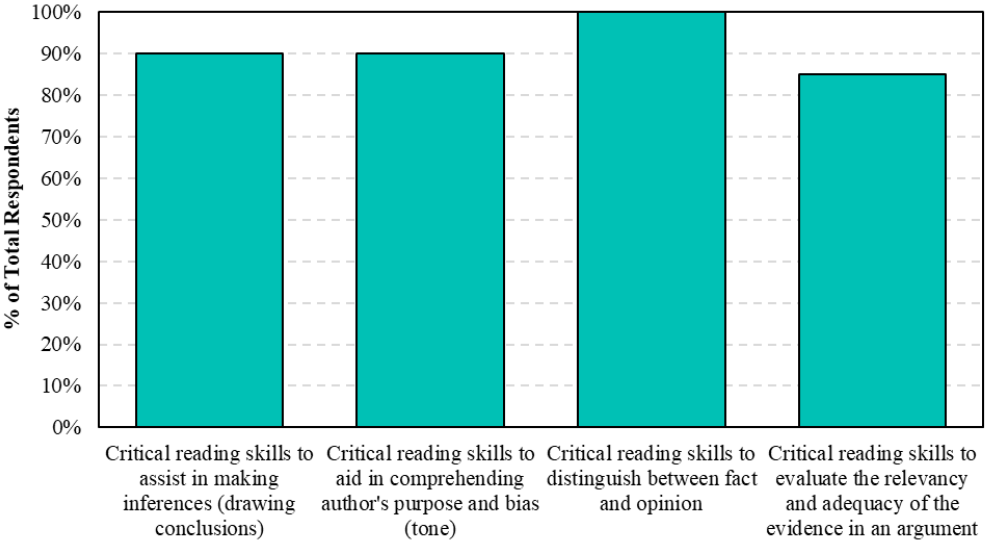


Q9 - Of the following Reading Strategies which do you feel have helped to improve your reading comprehension?	Compressed	Modularized	Contextualized
Strategies to develop college level vocabulary	80%	86%	67%
Strategies to identify stated or implied main ideas in a reading selection	90%	100%	100%
Strategies to identify supporting details in a reading selection	80%	100%	67%
Strategies to determine patterns of organization in a reading selection	90%	100%	100%

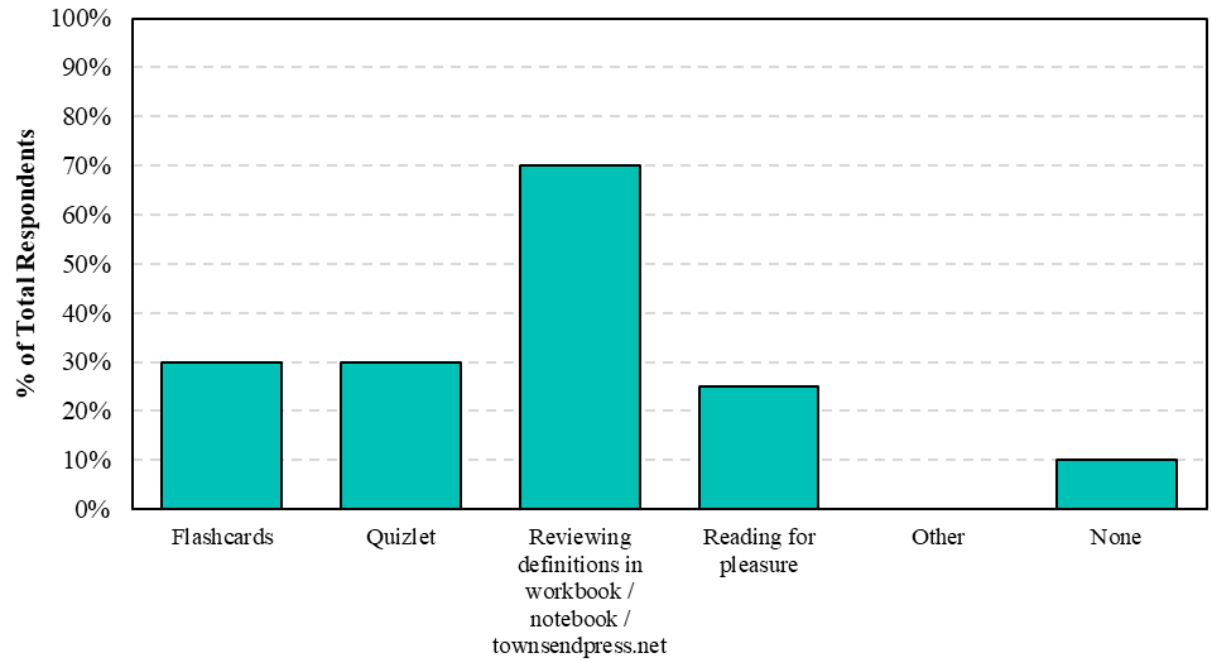
Q10 - Of the following Critical Reading Skills which do you feel have helped to improve your reading comprehension?

	Compressed	Modularized	Contextualized
Critical reading skills to assist in making inferences (drawing conclusions)	90%	100%	67%
Critical reading skills to aid in comprehending author's purpose and bias (tone)	80%	100%	100%
Critical reading skills to distinguish between fact and opinion	100%	100%	100%
Critical reading skills to evaluate the relevancy and adequacy of the evidence in an argument	90%	86%	67%

Q10: Responses to prompt: "Of the following Critical Reading Skills which do you feel have helped to improve your reading comprehension?"



Q11: Responses to prompt: "What resources / strategies did you use outside of class time to increase your vocabulary knowledge? Select all that apply."



Q11 - What resources/strategies did you use outside of class time to increase your vocabulary knowledge? Please select all that apply.			
	Compressed	Modularized	Contextualized
Flashcards	40%	0%	67%
Quizlet	20%	38%	67%
Reviewing definitions in wor	80%	63%	67%
Reading for pleasure	30%	38%	0%
Other	0%	0%	0%
None	10%	0%	33%