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.
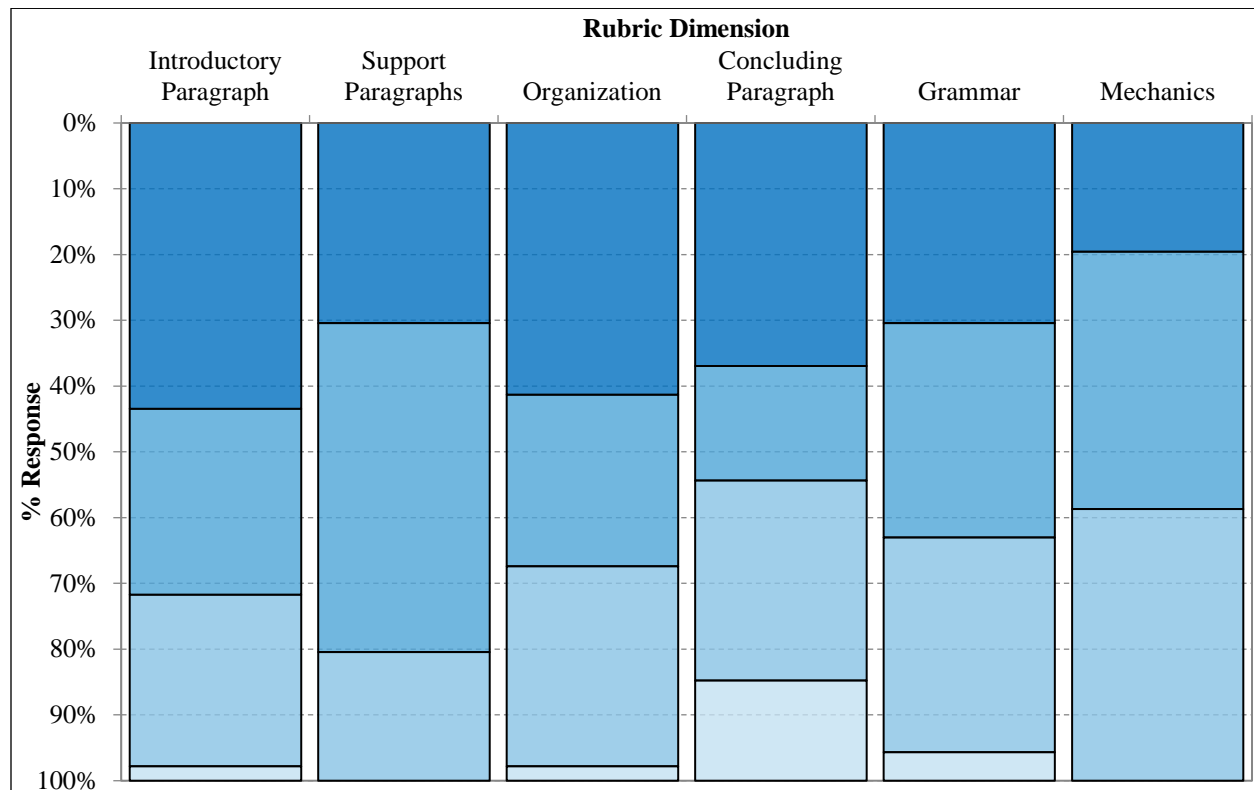

Figure 1. ENC 0022 distribution of rubric scores by dimension.

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

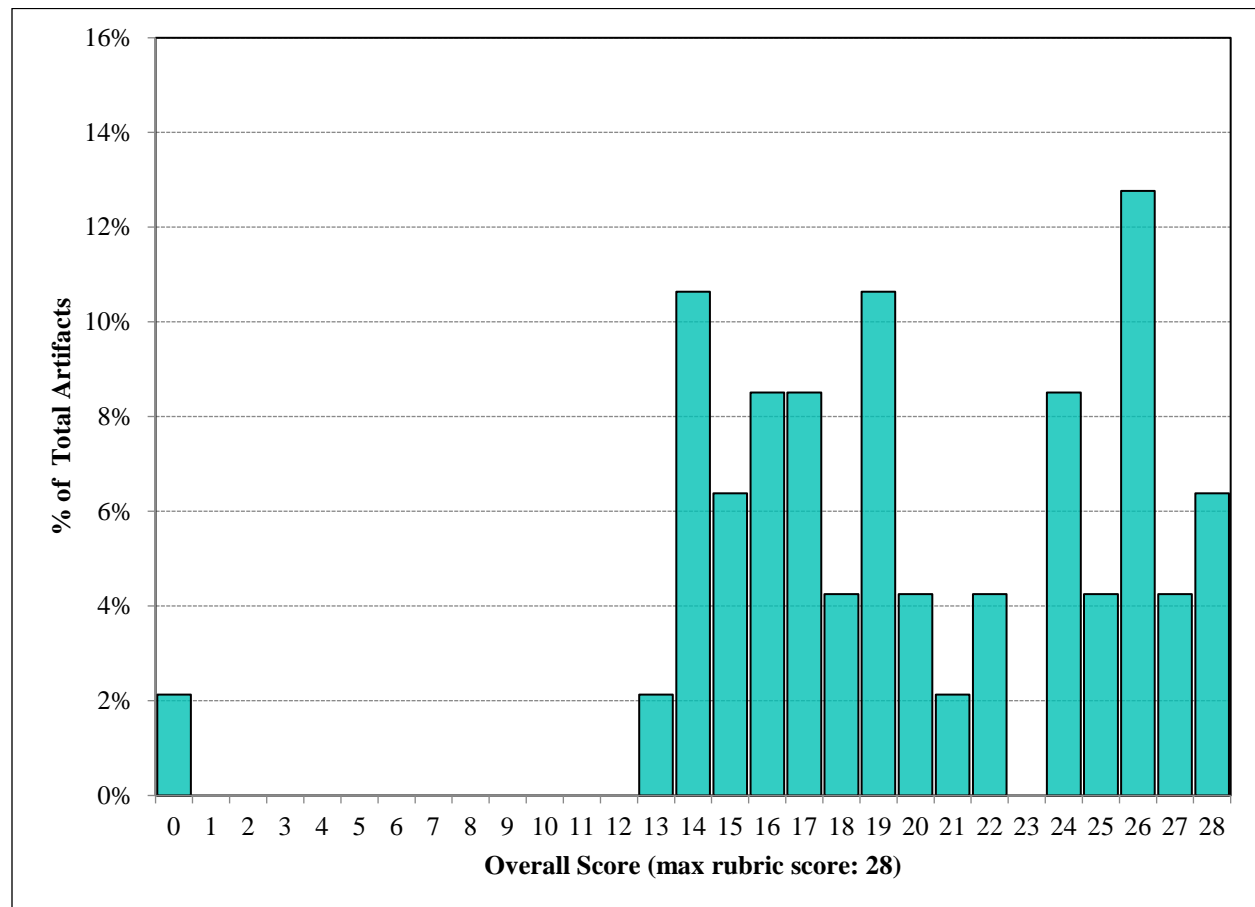*Table 2. Descriptive statistics for ENC 0022 common course assessment.*

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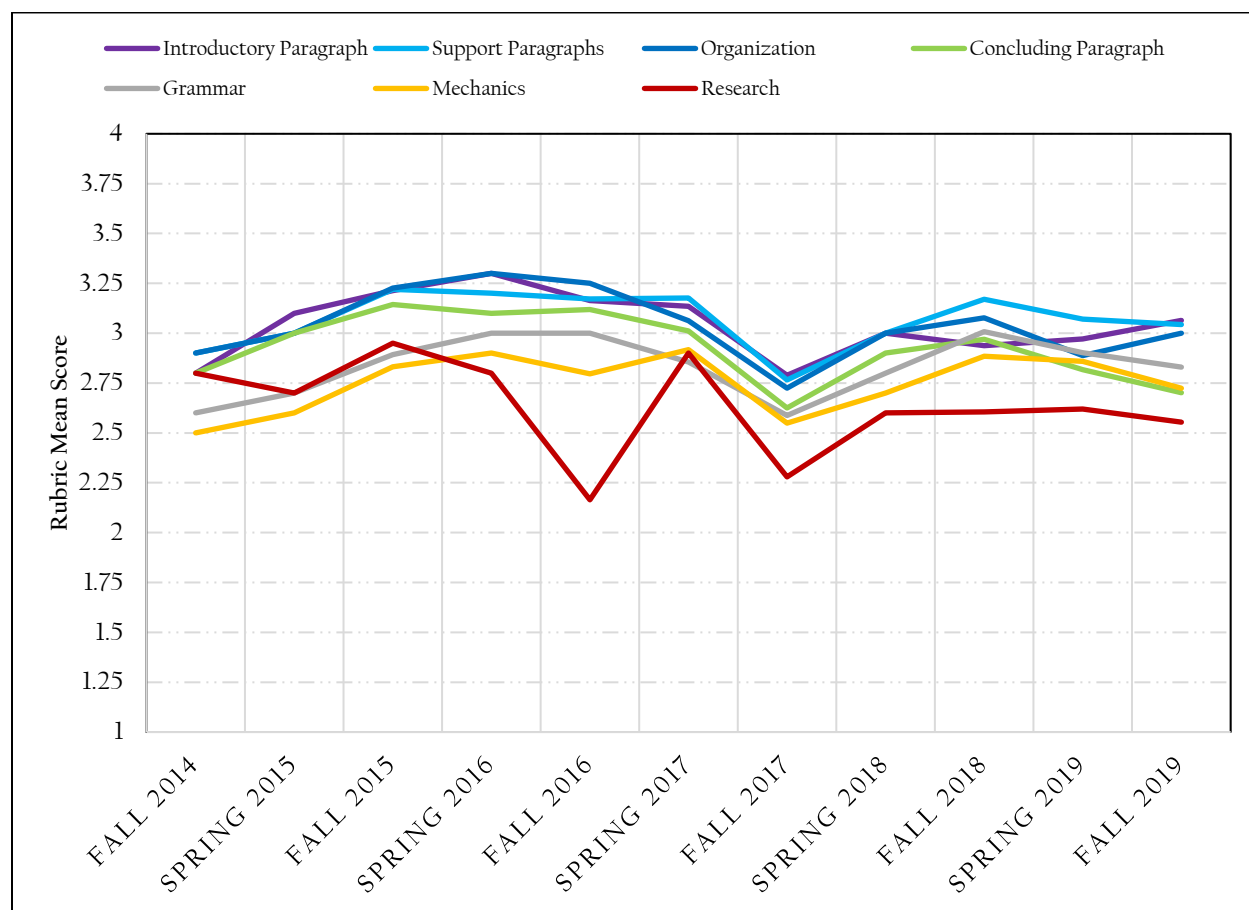
Figure 3. Comparison of mean scores for ENC 0022 through time.

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 int o 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 Sampled / Enrolled / Sample Rate	1101/1130 Paired Sampled / Enrolled / Sample Rate	Overall 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 They Say, I Say.	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 They Say, I Say ("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.
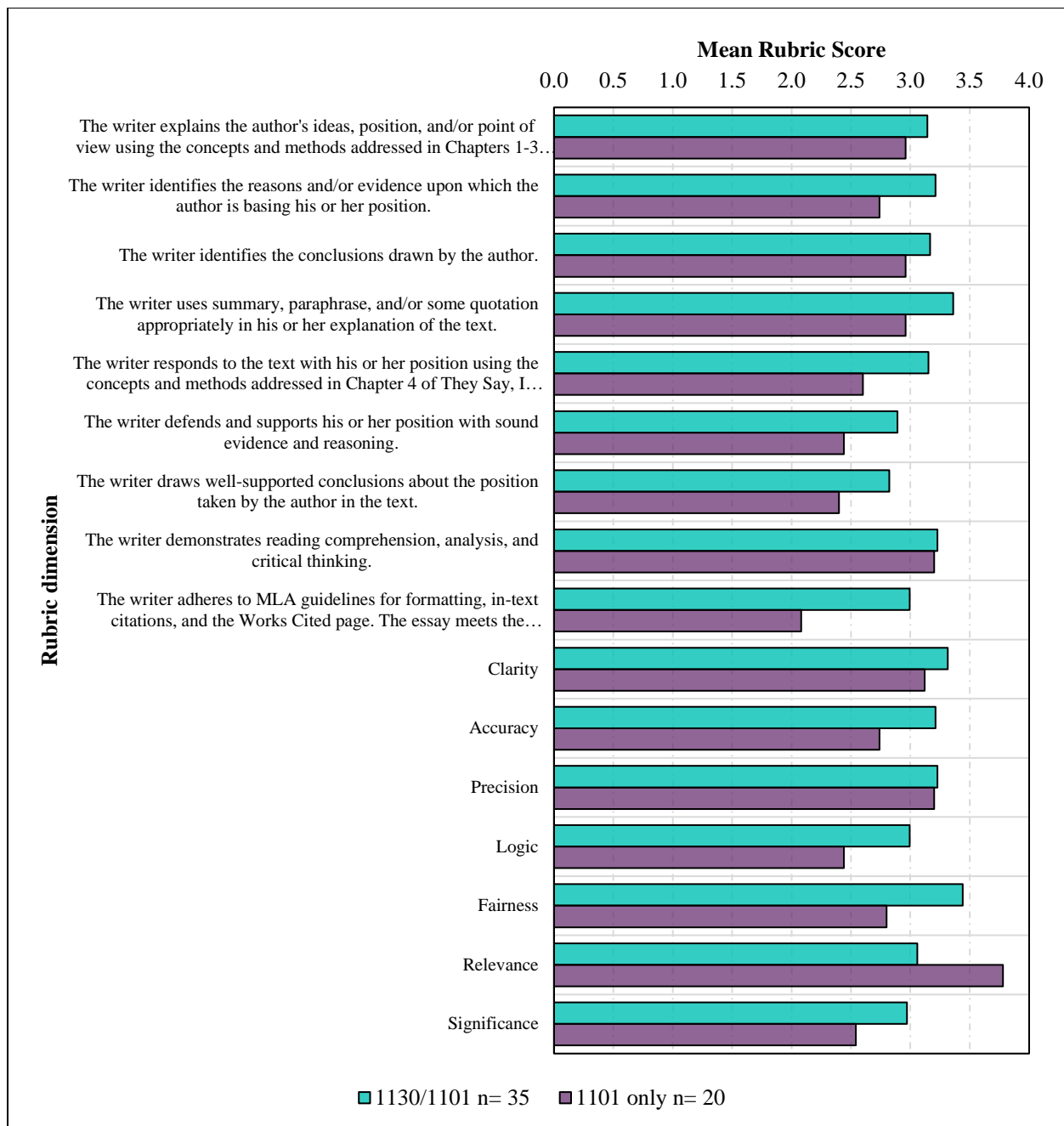
Figure 4. Short Response assessment mean scores by 1101/1130 paired sections and 1101 only sections.

% Scoring 3 or Higher on Rubric

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Rubric dimension (y-axis categories, top to bottom):
- The writer explains the author's ideas, position, and/or point of view using the concepts and methods addressed in Chapters 1-…
- The writer identifies the reasons and/or evidence upon which the author is basing his or her position.
- The writer identifies the conclusions drawn by the author.
- The writer uses summary, paraphrase, and/or some quotation appropriately in his or her explanation of the text.
- The writer responds to the text with his or her position using the concepts and methods addressed in Chapter 4 of They Say, I…
- The writer defends and supports his or her position with sound evidence and reasoning.
- The writer draws well-supported conclusions about the position taken by the author in the text.
- The writer demonstrates reading comprehension, analysis, and critical thinking.
- The writer adheres to MLA guidelines for formatting, in-text citations, and the Works Cited page. The essay meets the…
- Clarity
- Accuracy
- Precision
- Logic
- Fairness
- Relevance
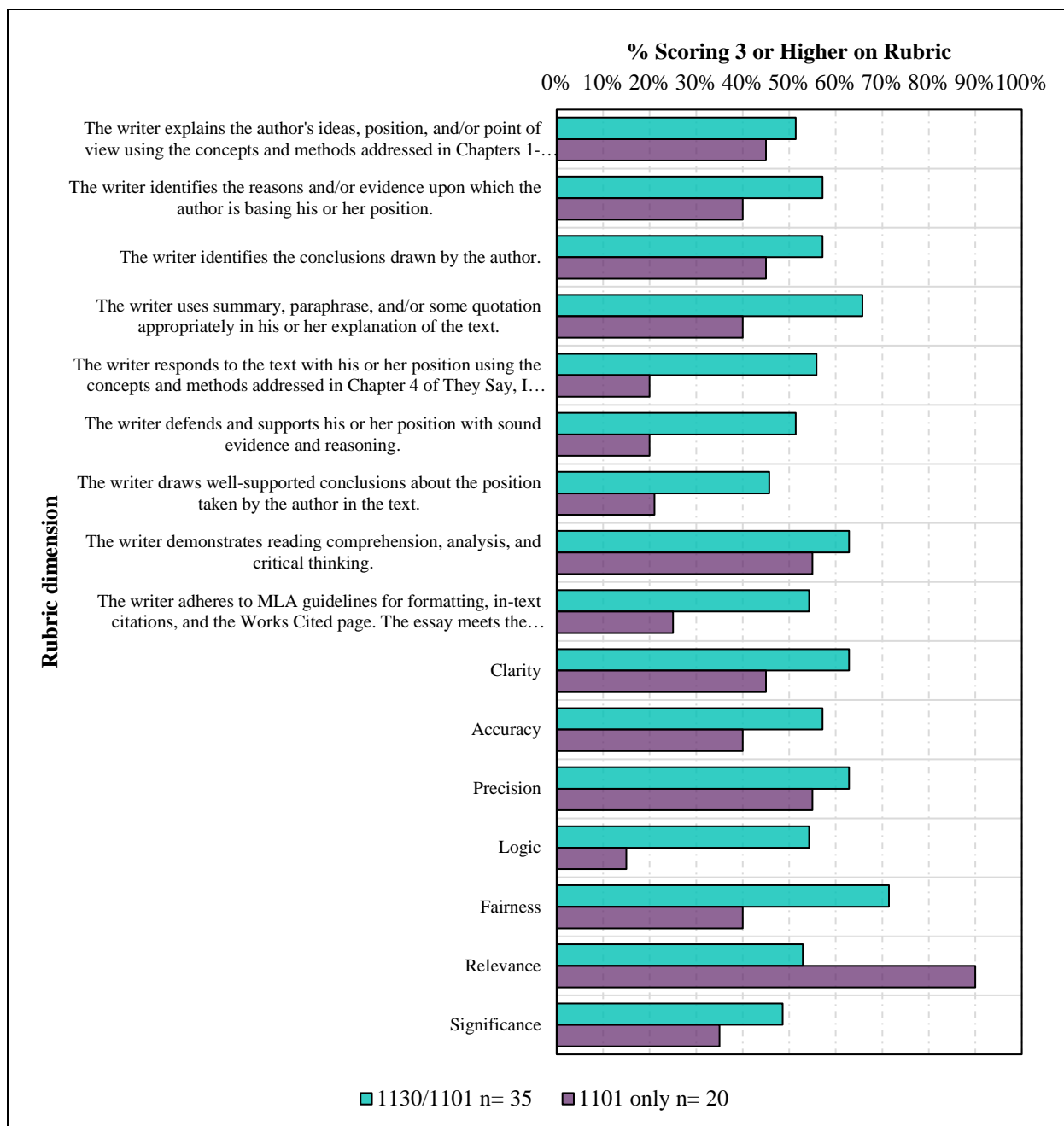- Significance

Legend:
- 1130/1101 n= 35
- 1101 only n= 20

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.
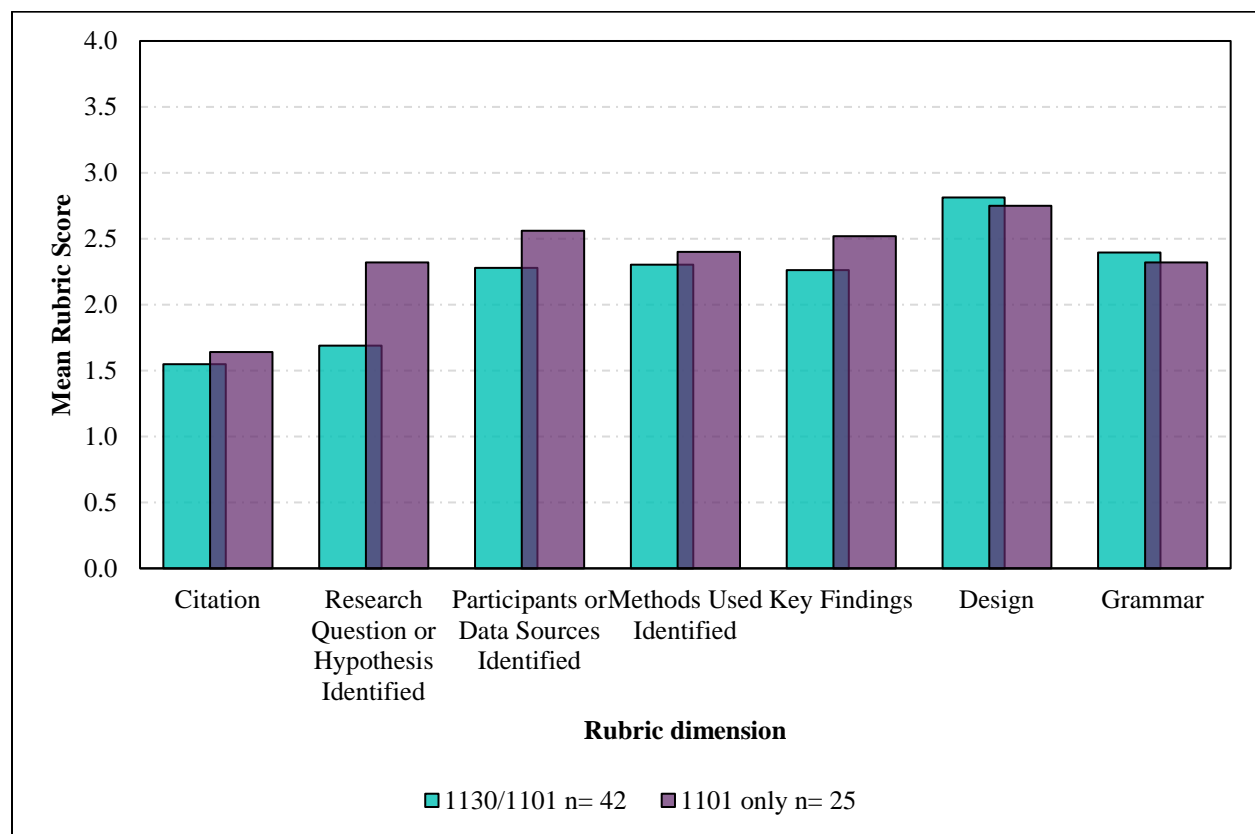

Figure 6. Library Infographic assessment mean scores by 1101/1130 paired sections and 1101 only sections.
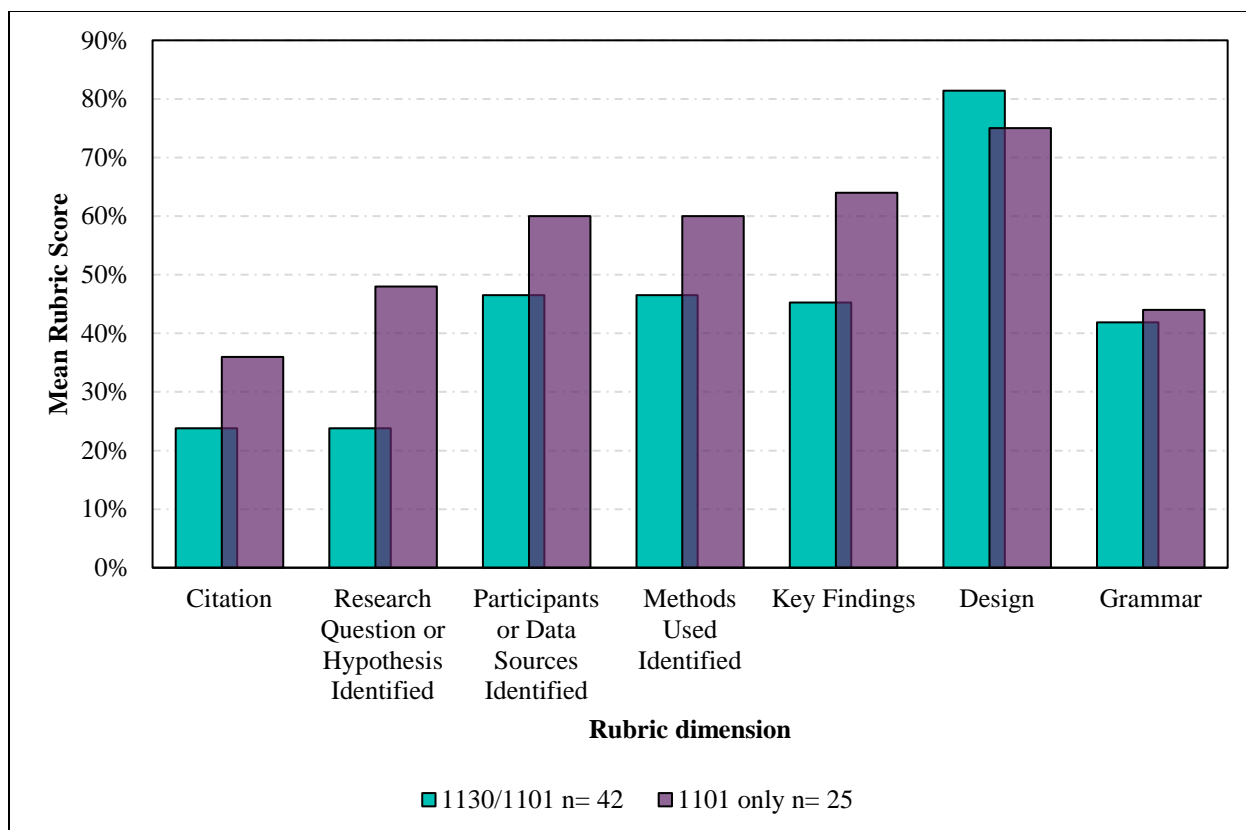
Figure 7. Library Infographic assessment percentage scoring 3 or higher on the rubric by 1101/1130 paired sections and 1101 only sections.

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%.
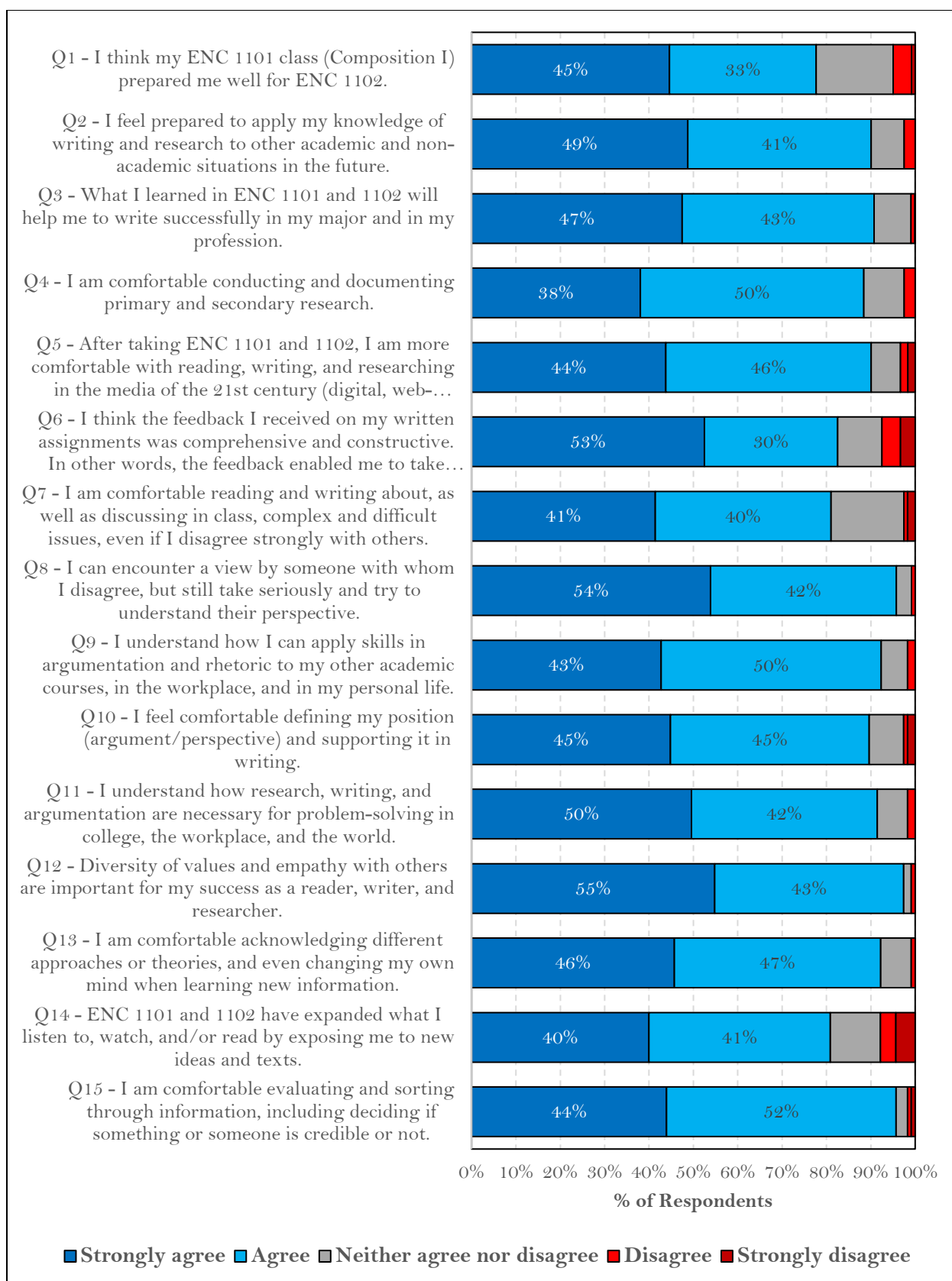
Q1 - I think my ENC 1101 class (Composition I) prepared me well for ENC 1102. — 45% | 33%

Q2 - I feel prepared to apply my knowledge of writing and research to other academic and non-academic situations in the future. — 49% | 41%

Q3 - What I learned in ENC 1101 and 1102 will help me to write successfully in my major and in my profession. — 47% | 43%

Q4 - I am comfortable conducting and documenting primary and secondary research. — 38% | 50%

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-… — 44% | 46%

Q6 - I think the feedback I received on my written assignments was comprehensive and constructive. In other words, the feedback enabled me to take… — 53% | 30%

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. — 41% | 40%

Q8 - I can encounter a view by someone with whom I disagree, but still take seriously and try to understand their perspective. — 54% | 42%

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. — 43% | 50%

Q10 - I feel comfortable defining my position (argument/perspective) and supporting it in writing. — 45% | 45%

Q11 - I understand how research, writing, and argumentation are necessary for problem-solving in college, the workplace, and the world. — 50% | 42%

Q12 - Diversity of values and empathy with others are important for my success as a reader, writer, and researcher. — 55% | 43%

Q13 - I am comfortable acknowledging different approaches or theories, and even changing my own mind when learning new information. — 46% | 47%

Q14 - ENC 1101 and 1102 have expanded what I listen to, watch, and/or read by exposing me to new ideas and texts. — 40% | 41%

Q15 - I am comfortable evaluating and sorting through information, including deciding if something or someone is credible or not. — 44% | 52%

% of Respondents

■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree ■ Strongly disagree

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

Cohen, J. 1988. Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Earlbaum Associates, Hillsdale, NJ.

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

Johnson, V. 2013. Revised Standards for Statistical Evidence. Proceedings of the National Academy of Science, 110(48), 19313-19317.

Lipsey, M.W. and Wilson, D.B. 1993. The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. American Psychologist, 48, 1181-1209.

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

Rosenthal, R. and Rosnow, R.L. 1991. Essentials of behavioral research: Methods and data analysis (2nd ed.). McGraw Hill, New York, NY.

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