# Speech Assessment Report Fall 2020

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

# 1 Introduction

Florida SouthWestern's Communication Studies Department has employed a common rubric used by all faculty as a means to evaluate an agreed upon series of student level outcomes. With a goal towards increasing student oral communication achievement, faculty have focused on a series of Student Learning Objectives (SLOs) using the rubric dimensions Introduction, Organization, Support, Oral Documentation, Language, NV-Vocal, NV-Physical, Presentation Media, Attire, and Conclusion, in a formative speech common assessment. Additional department goals for assessment include comparing results of SPC 1017 Fundamentals of Speech Communication, with that of SPC 2608 Introduction to Public Speaking, and comparisons by campus, dual enrollment (concurrent)/traditional, and online/traditional, when applicable. These correlative measures will serve as support for instructive improvement (Cole et al., 2011; Elder and Paul, 2007).

For additional detail or further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Asst. Vice President of Institutional Research, Assessment & Effectiveness, Academic Affairs (<a href="mailto:jfvangaalen@fsw.edu">jfvangaalen@fsw.edu</a>; x16965).

# 2 LEARNING OBJECTIVES, OUTCOMES, AND DESCRIPTIVE STATISTICS

Using common rubric criterion as an assessment method, in the 2014-15 academic year the FSW Speech faculty defined three areas of interest for evaluation that apply to both SPC 1017 and SPC 2608 and set goals appropriately. As results are gathered and reviewed, these three areas of interest have shifted over the years to address areas of greatest concern. For AY 2020-21, these areas are incorporating oral citations, nonverbal physical behaviors, and the effect of the outline on the speech itself.

The rubric dimensions are modeled on a 5-point scale where a score of 0 indicates "Insufficient", 1 indicates "Beginning" level, 2 indicates the "Developing" level, 3 indicates the "Accomplished" level, and 4 indicates the "Exemplary", or highest level. The SLOs and their measure of success are:

SLO1: Students will know how to avoid plagiarizing when speaking by incorporating an oral citation that includes appropriate information. The faculty established measure of success for this SLO is a rating of "Developing" or higher for 70% of the students.

SLO2: Students will be able to incorporate appropriate nonverbal physical behaviors. The faculty established measure of success for this SLO is a rating of "Developing" or higher in "NV-Physical" for 70% of the students for the Informative Speech.

SLO3: Students will improve in the common outcomes of the Informative Speech Outline and the Informative Speech. These areas include Introduction, Oral documentation, Support, Organization, and Conclusion.

# 2.1 SPC 1017

#### 2.1.1 Learning Objectives

For the Fall 2020 assessment, 637 artifacts (based on highest rubric dimension count, not highest overall scores collected) were collected for SPC 1017 from 37 of 49 course sections. In some cases, rubric scores could either not be accessed or located. The faculty established goal for SLO1, a rating of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "Oral Documentation" for 70% of the students was met. Fall 2020 artifacts exhibit 85% of artifacts scored level 2 or greater (Table 1). The faculty established goal for SLO2, a rating of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "NV-Physical" for 70% of the students was met. Fall 2020 artifacts exhibit 95% scored level 2 or greater. Results for SLO3 require a somewhat different reporting process and, for convenience and clarity, are discussed below and listed in Table 2.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion
Developing or higher	95%	99%	97%	85%	99%	98%	95%	80%	97%	96%
4	53.2%	72.0%	61.0%	46.1%	72.7%	47.5%	45.4%	37.3%	80.8%	59.9%
3	27.6%	22.3%	30.4%	25.2%	24.2%	32.4%	32.0%	30.6%	11.5%	26.8%
2	14.1%	4.5%	5.4%	13.8%	2.3%	17.9%	17.5%	12.0%	5.1%	9.0%
1	4.2%	0.6%	2.1%	8.2%	0.3%	1.7%	4.1%	3.4%	1.0%	2.8%
0	0.8%	0.7%	1.1%	6.8%	0.6%	0.6%	1.1%	16.8%	1.5%	1.5%

Table 1. Percentage of student achievement level by rubric dimension for Informative Speech (includes percentage of students scoring in developmental level or higher as per SLOs). Rubric dimensions identified in SLOs in blue.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion
Developing or higher	93%	96%	93%	83%	93%
4	52.9%	72.1%	46.6%	36.2%	54.9%
3	29.4%	14.9%	35.2%	33.5%	26.6%
2	11.0%	8.6%	11.0%	13.8%	11.3%
1	4.4%	2.5%	4.1%	6.9%	3.9%
0	2.4%	1.9%	3.1%	9.6%	3.3%

Table 2. Percentage of student achievement level by rubric dimension for Outline that are common to Informative Speech for (includes percentage of students scoring in developmental level or higher as per SLOs).

The faculty established goal for SLO3, students will improve in the common outcomes of the Informative Speech Outline and the Informative Speech was met. To effectively illustrate this, two separate descriptions are provided. First, Table 3 describes mean scores by dimension and overall score for both Outline and Informative Speech.

From these results improvement is exhibited in 4 of 5 dimensions. It is somewhat misleading, however, to compare improvement/decline percentages based on all data. Inherently, those scoring '4' on the Outline can only decline or remain unchanged. Similarly, those scoring '0' can only improve or remain unchanged. As the purpose of this study is to determine where improvement occurs and why, it may be

more prudent to compare improvement/decline percentages and exclude those scoring 4s on the Outline score (bottom three rows, Table 3). Based on these results, improvement is exhibited in all dimensions and overall score at greater differences between each.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion	OVERALL
		All art	ifacts			
Outline Mean	8.4	9.0	8.3	7.3	8.4	81.2
Informative Speech Mean	8.3	9.3	8.9	7.5	8.7	84.4
Change from Outline to Speech	-0.1	0.3	0.6	0.2	0.3	3.2
	Only	artifacts that did n	ot score 4/4 o	on outline		
Outline Mean	6.7	6.4	6.7	5.8	6.5	81.2
Informative Speech Mean	7.1	7.5	7.6	6.2	7.0	84.3
Change from Outline to Speech	0.4	1.1	0.9	0.4	0.5	3.1

Table 3. Comparison of changes in mean score from Outline rubric dimensions to Informative Speech.

A second way of describing results for this type of study is to review the percent improvements of common artifacts (originating from the same student) as shown in Figure 1 denoted by the black bar along with percent declines denoted by the red bar. From this figure, only the "Support" dimension exhibits a net improvements by students. The others exhibit declines. As with Table 3, we compare only those artifacts which did not score perfect results on the Outline (Figure 2). From this figure, as with Table 3 above using extracted data, all five dimensions exhibit net improvement ranging from 39.9% in "Oral Documentation" to 51.7% in "Organization."

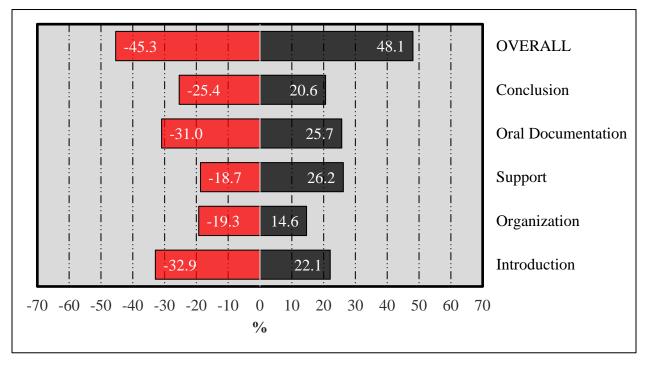


Figure 1. Percent increase/decrease from Outline to Speech by common rubric dimension.

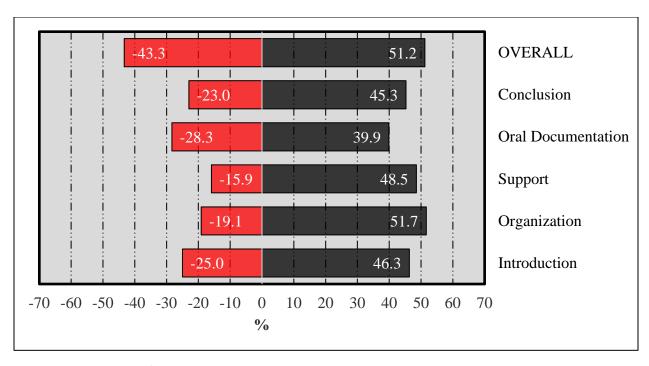


Figure 2. Percent increase/decrease from Outline to Speech by common rubric dimension excluding those artifacts scoring perfect 4/4 on Outline.

# 2.1.2 Descriptive Statistics & Longitudinal Data

Descriptive statistics for SPC 1017 artifacts for both Outline and Informative Speech can be found in Tables 4 and 5. Note that comparative means in Tables 2 and 3 above may differ from those in Tables 4 and 5 as the comparative study includes common artifacts only. If a student did not complete both Outline and Informative Speech, a comparative score could not be completed and is thus excluded in results for Tables 2 and 3. Tables 4 and 5 exhibit all artifacts. A histogram of artifact scores for both Outline and Speech is shown in Figure 3. The speech exhibits a sharp decline in scores lower than 61-62 visible in the lack of overlap between purple (outline) and speech (aqua).

	Introduction	Organization	Support	Oral Documentation	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion
n	710	710	710	710	710	710	710	710	710	710
Max	10	10	10	10	10	10	10	10	10	10
Min	0	0	0	0	0	0	0	0	0	0
Mode	10	10	10	10	10	10	10	10	10	10
Mean	8.5	9.3	8.9	7.7	9.3	8.5	8.3	7.0	9.3	8.8
Standard deviation	2.01	1.43	1.75	2.95	1.27	1.79	2.05	3.54	1.70	1.97

Table 4. Descriptive statistics for SPC 1017 Informative Speech.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion
n	637	637	637	636	636
Max	10	10	10	10	10
Min	0	0	0	0	0
Mode	10	10	10	10	10
Mean	8.4	9.0	8.3	7.3	8.4
Standard deviation	2.23	2.02	2.30	3.07	2.36

Table 5. Descriptive statistics for SPC 1017 Outline.

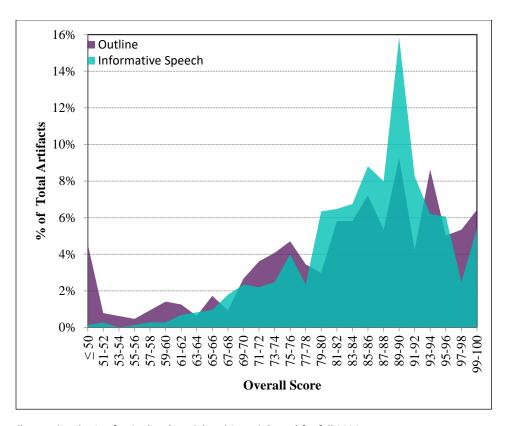


Figure 3. Overall score distribution for Outline (purple) and Speech (aqua) for fall 2020.

To describe the behavior of the rubric dimensions for the Informative Speech based on overall achievement a color map, or binary raster image was created by calculating the mean scores for each dimension as a function of combined score (Figure 4). To create this image the rubric scores (4, 3, 2, 1, or 0) for each artifact was grouped based on combined raw rubric score (10 dimensions x maximum rubric level of 4 = 40 overall points). The color represents the mean rubric score achieved in each dimension based on the combined score as shown in the x-axis.

- 5 -

	Introduction	Organization	Support	Oral Doc	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion	Equal Distributi on
40	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
39	3.9	4.0	4.0	3.9	4.0	3.8	3.7	4.0	4.0	4.0	3.9
38	3.8	4.0	3.7	3.7	3.9	3.7	3.6	3.8	3.9	3.9	3.8
37	3.7	3.9	3.6	3.6	3.9	3.7	3.4	3.5	3.9	3.8	3.7
36	3.8	3.9	3.7	3.7	3.8	3.8	3.7	1.9	3.9	3.8	3.6
35	3.6	3.7	3.5	3.2	3.7	3.5	3.5	2.8	3.8	3.7	3.5
34	3.5	3.7	3.6	3.1	3.7	3.2	3.2	2.7	3.8	3.6	3.4
33	3.3	3.6	3.6	2.5	3.9	2.9	3.1	2.6	3.7	3.7	3.3
32	3.1	3.7	3.5	2.6	3.6	3.1	2.9	2.6	3.6	3.2	3.2
31	3.2	3.5	3.4	2.2	3.4	3.2	3.2	2.2	3.5	3.3	3.1
30	2.7	3.5	3.4	2.4	3.6	3.0	3.0	2.5	3.3	2.8	3.0
29	2.2	3.4	3.1	1.6	3.6	2.8	2.7	3.2	3.6	3.1	2.9
28	2.2	3.2	3.3	1.8	3.8	2.9	2.7	2.3	3.3	2.7	2.8
27	2.4	3.3	3.1	1.8	3.3	2.8	2.4	2.3	3.7	1.8	2.7
26	2.3	3.2	1.9	1.2	3.5	2.7	1.9	2.7	3.5	3.2	2.6
25	2.3	3.1	3.1	1.4	3.4	2.9	2.5	1.7	2.7	2.1	2.5
≤ 24	1.3	1.3	2.3	0.6	2.2	1.7	1.7	1.6	2.2	0.9	2.4
			Scale	1	2	3	4				

Figure 4. Colormap of mean scores for each rubric dimension (range: 0-4) based on overall rubric score (combined rubric score of all dimensions, max=40) for SPC 1017. (Right Sidebar) Comparison rubric dimension if dimension score is the same as overall (i.e. artifact overall score is equally distributed across all sections). A rubric dimension with hotter colors (reds) means that dimension achievement exceeds the overall score and is an area of strength. An exam section with colder colors (blues) means that section achievement is lower than the overall score and is therefore an area of weakness.

A review of the colormap in Figure 4 shows that at 39/40 and above (average rubric score of 3.8 or higher) all dimensions fair relatively equally (hot colors fairly evenly distributed). When overall rubric scores range from 32-38, the "Organization," "Support," "Language," "Attire," and "Conclusion" dimensions exhibit strong scores even when the overall score is somewhat lower. For example, at an overall score of 33, those dimensions exhibit average scores ranging from 36 to 3.9, while other dimensions range from 2.5 to 3.1. Moreover, the "Language" and "Attire" attributes remains high even at very low overall scores. At an overall score of 26, for example, "Language" and "Attire" exhibit an average of 3.5 and 3.5, respectively, while all other categories range from 1.2 to 3.2. Lastly, when overall rubric scores range 30 or below, "Oral Documentation" and "Presentation Media" is exceptionally weaker than the others.

A comparison of Informative Speech results over time is shown in Figure 5 below. The "Oral Documentation" dimension was consistently the lowest dimension over time until spring 2020, in which "Presentation Media" exhibits the lowest. In Fall 2020, the "Presentation Media" dimension drops even further, down to 7.0, or 0.8 below the next lowest ever recorded. By contrast, the "Attire" dimension is consistently the highest, scoring the highest score in 12 of 13 terms. Most dimensions exhibit a dip between fall 2015 and fall 2017 making improvements over time difficult to discern.

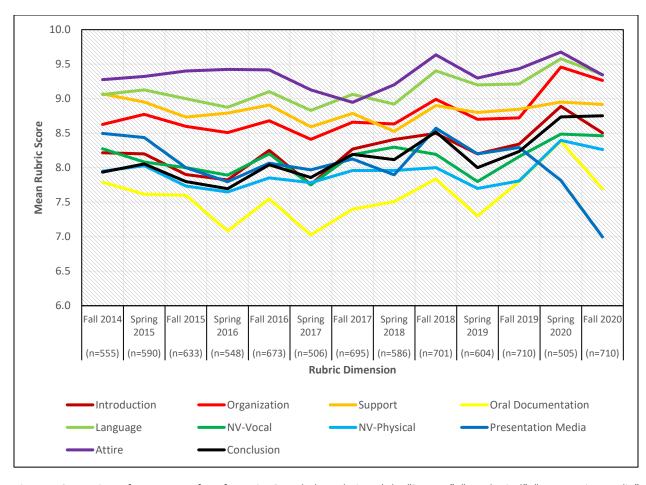


Figure 5. Comparison of mean scores for Informative Speech through time. \*The "Support", "NV-Physical", "Presentation Media", and "Attire" dimensions maximum rubric score was altered beginning fall 2017. The results from previous terms have been normalized to the new dimension maximum for comparative purposes.

# 2.2 SPC 2608

#### 2.2.1 Learning Objectives

For the Fall 2020 assessment, 228 artifacts (based on highest rubric dimension count, not highest overall scores collected) were collected for SPC 2608 from 13 of 21 course sections. In some cases, rubric scores could either not be accessed or located. In other sections, assignments could not be identified as matching the assessment. The faculty established goal for SLO1, a rating of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "Oral Documentation" for 70% of the students was met. Fall 2020 artifacts exhibit 86% of artifacts scored level 2 or greater (Table 6). The faculty established goal for SLO2, a rating of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "NV-Physical" for 70% of the students was met. Fall 2020 artifacts exhibit 97% scored level 2 or greater. Results for SLO3 require a somewhat different reporting process and, for convenience and clarity, are discussed below and listed in Table 7.

- 7 -

Rubric Score	Introduction	Organization	Support	Oral Documentation	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion
Developing or higher	96%	99%	97%	86%	99%	98%	97%	93%	99%	97%
4	65.4%	69.3%	50.0%	43.4%	78.9%	67.1%	52.2%	66.2%	94.7%	69.3%
3	25.0%	27.2%	38.2%	34.6%	17.1%	24.6%	31.6%	17.5%	1.3%	23.2%
2	5.7%	2.2%	9.2%	7.9%	2.6%	6.1%	13.2%	8.8%	2.6%	4.8%
1	2.2%	0.0%	1.3%	5.3%	0.0%	0.9%	1.3%	2.6%	0.0%	1.3%
0	1.8%	1.3%	1.3%	8.8%	1.3%	1.3%	1.8%	4.8%	1.3%	1.3%

Table 6. Percentage of student achievement level by rubric dimension (includes percentage of students scoring in developmental level or higher as per SLOs) for SPC 2608. Rubric dimensions identified in SLOs in blue.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion
Developing or higher	98%	98%	98%	88%	97%
4	68.0%	70.9%	57.5%	40.1%	69.6%
3	23.9%	24.7%	30.8%	28.3%	25.1%
2	5.7%	2.0%	9.3%	19.8%	2.0%
1	0.8%	1.6%	0.4%	2.8%	0.4%
0	1.6%	0.8%	2.0%	8.9%	2.8%

Table 7. Percentage of student achievement level by rubric dimension for Outline that are common to Informative Speech for (includes percentage of students scoring in developmental level or higher as per SLOs).

The faculty established goal for SLO3, students will improve in the common outcomes of the Informative Speech Outline and the Informative Speech was met. To effectively illustrate this, again two separate descriptions are provided. First, Table 8 describes mean scores by dimension and overall score for both Outline and Informative Speech.

From these results improvement is exhibited in 0 of 5 dimensions. As with SPC 1017, it is somewhat misleading to compare improvement/decline percentages based on all data. As such, the bottom three rows of Table 8 compare improvement/decline percentages and excludes those scoring 4s on the Outline score (bottom row, Table 8). Based on these results, improvement is exhibited in 5 of 5 dimensions and the overall score.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion	OVERALL
		All art	ifacts			
Outline Mean	9.1	9.2	8.8	7.6	9.1	85.8
Informative Speech Mean	8.9	9.2	8.7	7.6	9.1	88.7
Change from Outline to Speech	-0.2	0.0	-0.1	0.0	0.0	0.9
	Only	artifacts that did n	ot score 4/4	on outline		
Outline Mean	7.1	7.4	7.3	6.3	7.0	82.6
Informative Speech Mean	8.2	7.8	7.9	7.0	8.5	85.2
Change from Outline to Speech	1.1	0.4	0.6	0.7	1.5	2.6

Table 8. Comparison of changes in mean score from Outline rubric dimensions to Informative Speech.

As with SPC 1017 above, a second way of describing results for this type of study is to review the percent improvements of common artifacts (originating from the same student) as shown in Figure 6 denoted by the black bar along with percent declines denoted by the red bar. From this figure, the "Oral Documentation" exhibits net improvements by students (as well as the overall). And as before, we compare only those artifacts which did not score perfect results on the Outline (Figure 7). From this figure, as with Table 8 above using extracted data, all five dimensions exhibit net improvement ranging from 24% in "Organization" to 66% in "Conclusions."

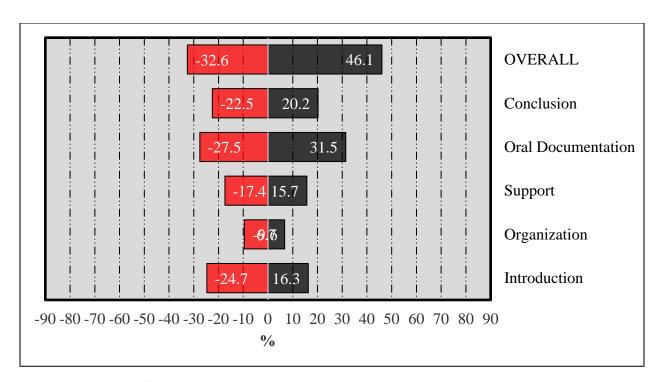


Figure 6. Percent increase/decrease from Outline to Speech by common rubric dimension.

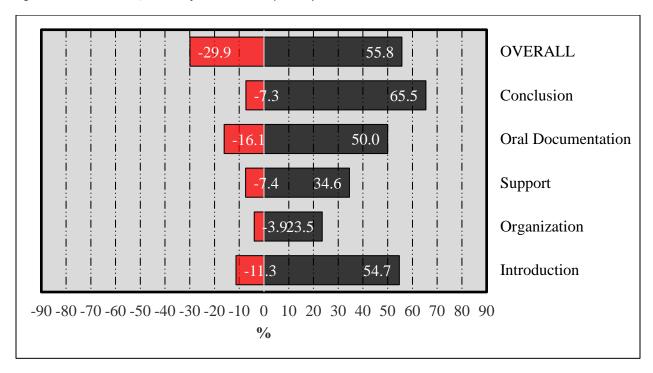


Figure 7. Percent increase/decrease from Outline to Speech by common rubric dimension excluding those artifacts scoring perfect 4/4 on Outline.

## 2.2.2 Descriptive Statistics & Longitudinal Data

Descriptive statistics for SPC 2608 artifacts for both Outline and Informative Speech can be found in Tables 9 and 10. Note that comparative means in Tables 6 and 7 above may differ from those in Tables 9 and 10 as the comparative study includes common artifacts only. If a student did not complete both

Outline and Informative Speech, a comparative score could not be completed and is thus excluded in results for Tables 6 and 7. Tables 9 and 10 exhibit all artifacts. A histogram of artifact scores for both Outline and Speech is shown in Figure 8. Both Speech and Outline data exhibit a large spike at perfect scores.

	Introduction	Organization	Support	Oral Documentation	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion
n	228	228	228	228	228	228	228	228	228	228
Max	10	10	10	10	10	10	10	10	10	10
Min	0	0	0	0	0	0	0	0	0	0
Mode	10	10	10	10	10	10	10	10	10	10
Mean	8.9	9.2	8.6	7.7	9.4	9.1	8.6	8.6	9.7	9.1
Standard deviation	1.91	1.48	1.77	2.99	1.45	1.69	1.94	2.52	1.31	1.70

Table 9. Descriptive statistics for SPC 2608.

Rubric Score	Introduction	Organization	Support	Oral Documentation	Conclusion
n	247	247	247	247	247
Max	10	10	10	10	10
Min	0	0	0	0	0
Mode	10	10	10	10	10
Mean	9.1	9.2	8.8	7.6	9.1
Standard deviation	1.74	1.54	1.86	2.94	1.89

Table 10. Descriptive statistics for SPC 2608 Outline.

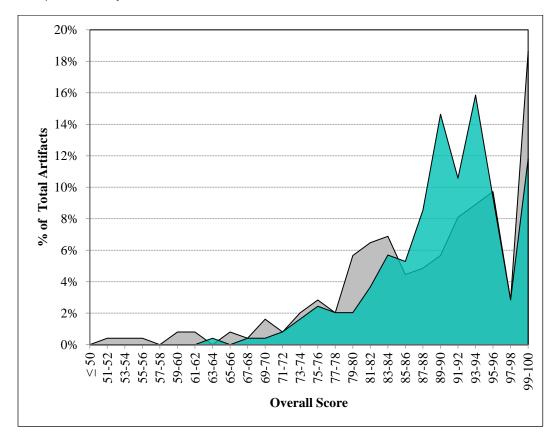


Figure 8. Overall score distribution for Outline (gray) and Speech (aqua).

To describe the behavior of the rubric dimensions based on overall achievement a color map, or binary raster image was created by calculating the mean scores for each dimension as a function of combined score (Figure 9). To create this image the rubric scores (4, 3, 2, 1, or 0) for each artifact was grouped based on combined raw rubric score (10 dimensions x maximum rubric level of 4 = 40 overall points). The color represents the mean rubric score achieved in each dimension based on the combined score as shown in the x-axis.

	Introduction	Organization	Support	Oral Doc	Language	NV-Vocal	NV-Physical	Presentation Media	Attire	Conclusion	Equal Distribution
40	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
39	4.0	4.0	2.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.9
38	3.9	3.9	3.1	3.6	3.9	4.0	3.9	3.9	4.0	4.0	3.8
37	3.8	3.8	2.9	3.6	3.9	3.7	3.6	3.8	3.9	3.9	3.7
36	3.7	3.7	2.7	3.5	3.7	3.5	3.4	4.0	3.9	4.0	3.6
35	3.7	3.8	2.7	3.4	3.9	3.2	3.2	3.7	3.9	3.8	3.5
34	3.5	3.7	2.8	3.2	3.7	3.1	3.1	3.7	3.8	3.6	3.4
33	3.4	3.7	2.8	2.9	3.8	2.8	2.8	3.3	3.7	3.7	3.3
32	3.2	3.7	2.8	1.9	3.4	3.2	3.1	3.1	3.7	3.8	3.2
31	3.2	3.4	2.6	2.9	3.8	2.7	2.7	2.1	4.0	3.5	3.1
30	3.7	3.2	2.9	3.0	3.5	2.7	2.6	1.9	3.4	3.5	3.0
29	3.5	3.5	2.7	1.9	3.5	2.0	2.0	2.9	3.5	3.7	2.9
28	3.2	3.6	2.4	1.2	3.6	1.8	1.8	3.2	3.6	4.0	2.8
≤ 27	3.2	4.0	2.4	0.0	4.0	1.2	1.2	4.0	4.0	4.0	2.7
			Scale	1	2	3	4				

Figure 9. Colormap of mean scores for each rubric dimension (range: 0-4) based on overall rubric score (combined rubric score of all dimensions, max=40) for SPC 2608. (Right Sidebar) Comparison rubric dimension if dimension score is the same as overall (i.e. artifact overall score is equally distributed across all sections). A rubric dimension with hotter colors (reds) means that dimension achievement exceeds the overall score and is an area of strength. An exam section with colder colors (blues) means that section achievement is lower than the overall score and is therefore an area of weakness.

A review of the colormap in Figure 9 shows that the "Organization," "Language," "Attire," and "Conclusion" dimensions remain strong even at low overall scores. For example, at 32/40, the mean score for those four are 3.7/4, 3.4/4, 3.7/4, and 3.8/4, respectively. By comparison, all other dimensions range from 1.9/4 to 3.2/4. The "Support" dimension exhibits the steepest drop-off at higher overall scores. At 39/40, for example, "Support" is 2.8/4 when all other dimensions are 4.0/4.

A comparison of Informative Speech results over time is shown in Figure 10 below. Over time, the "Attire" dimension has been the highest achieving in 13 of 13 terms. The "Oral documentation" dimension has been the lowest in 7 of 13 terms.

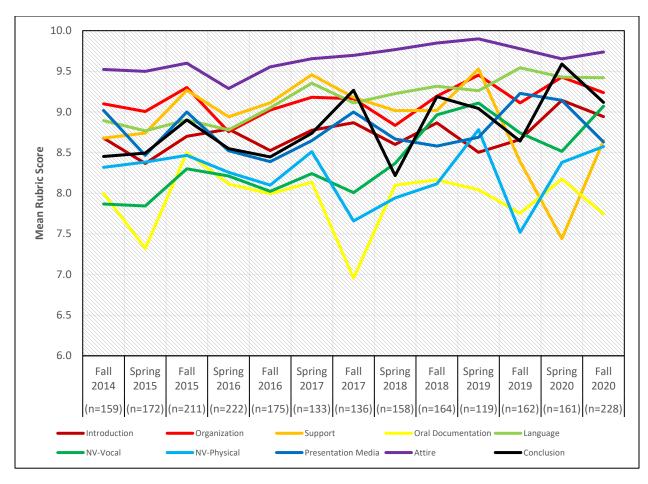


Figure 10. Comparison of mean scores for Informative Speech through time.

# 3 EXPLORATORY ANALYSIS AND SIGNIFICANCE TESTING

Multiple comparisons of artifact scores across varying formats, campuses, and student types were made in order to add depth to the distribution of the artifacts by achievement level. Each course was divided into the appropriate subgroups to perform the analysis. Where possible, additional methods of analysis were conducted to provide a broader picture of these comparisons.

# 3.1 SPC 1017

# 3.1.1 Dual Enrollment (Concurrent) to non-Dual Enrollment Comparison

No dual enrollment sections of SPC 1017 were offered during fall 2020 so no comparison study could be completed.

## 3.1.2 Modality Comparison

During the Fall 2020 semester, 527 total asynchronous online artifacts were collected, along with 15 live online, 0 flex, 94 blended, and 0 traditional. A comparison of basic statistics is provided in Table 11. Live online artifacts exhibit higher mean scores in 5 of 10 dimensions, although it is important to note that four dimensions were not scored in the live online section reported. Asynchronous online exhibits the

highest mean scores in 3 of 10 dimensions and Blended in 1 of 10. A one-way analysis of variance was used to compare means by modality. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Support," "NV-Vocal," "NV-Physical," "Presentation Media," "Attire," and "Conclusion." Therefore, we can reject the null hypothesis that the mean 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.

	Blended	Flex	Asynchronous Online	Live Online	Traditional
Introduction	6.6		8.8	8.9	
Organization	8.9		9.4	10.0	
Support	9.9		8.8	8.7	
<b>Oral Documentation</b>	7.5		7.7	7.8	
Language	9.9		9.3	10.0	
NV-Vocal	6.9		8.7	9.7	
NV-Physical	6.6		8.5		
<b>Presentation Media</b>	7.5		6.6		
Attire	8.5		9.4		
Conclusion	7.5		8.9		

Table 11. Mean scores for each dimension by modality. Bold denotes highest mean score across modalities.

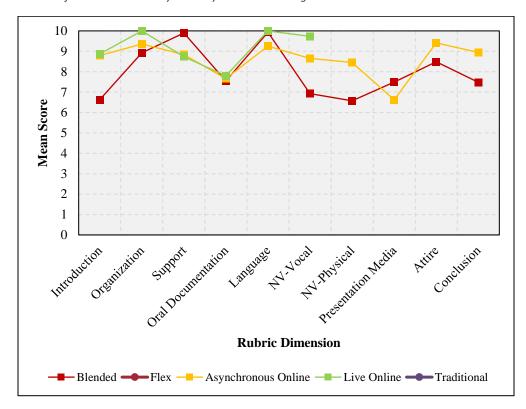


Figure 11. Mean scores for each dimension by modality.

# 3.1.3 Comparison by Campus/Site

All traditional artifacts stem from one site, the Collier campus. As a result, no comparison between sites could be completed.

# 3.2 SPC 2608

## 3.2.1 Dual Enrollment (Concurrent) to non-Dual Enrollment Comparison

No dual enrollment sections were offered in fall 2020 and so no comparison study could be completed.

## 3.2.2 Modality Comparison

During the Fall 2020 semester, 172 total asynchronous online artifacts were collected, along with 43 live online, 0 flex, 0 blended, and 13 traditional. A comparison of basic statistics is provided in Table 12. Traditional artifacts exhibit higher mean scores in 8 of 10 dimensions. Live online exhibits the highest mean scores in 3 of 10 dimensions. A one-way analysis of variance was used to compare means by modality. Results of the ANOVA exhibit statistically significant difference between sites for "Organization," "Documentation," "NV-Physical," and "Presentation Media." Therefore, we can reject the null hypothesis that the mean 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.

	Blended	Flex	Asynchronous Online	Live Online	Traditional
Introduction			8.8	9.1	10.0
Organization			9.1	9.6	10.0
Support			8.6	8.4	10.0
Oral					
Documentation			7.5	8.3	9.2
Language			9.3	9.6	10.0
NV-Vocal			9.0	9.4	8.8
NV-Physical			8.4	9.5	8.3
<b>Presentation Media</b>			8.8	7.6	9.7
Attire			9.7	10.0	10.0
Conclusion			9.1	9.1	9.5

Table 12. Mean scores for each dimension by modality. Bold denotes highest mean score across modalities.

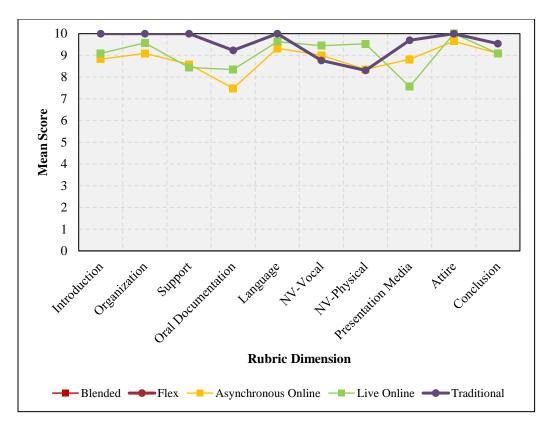


Figure 12. Mean scores for each dimension by modality.

#### 3.2.3 Comparison by Campus/Site

All traditional artifacts stem from one site, the Charlotte campus. As a result, no comparison between sites could be completed.

# 4 Conclusions

FSW's Communication Studies Department employed a common rubric used by all faculty as a means to evaluate an agreed upon series of student level outcomes for SPC 1017 and SPC 2608.

A drilldown of SPC 1017 results are as follows:

- 1. SLO 1 Achievement of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "Oral Documentation" for 70% of the students was met.
- 2. SLO 2 Achievement of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "NV-Physical" for 70% of the students was met.
- 3. SLO 3 Improvement in common outcomes between Informative Speech Outline and Speech was met. Improvement is exhibited in 4 of 5 dimensions as well as the overall. Improvement excluding Outline scores of '4' are exhibited in 5 of 5 dimensions.
- 4. In a study comparing rubric achievement based on overall score, at 39/40 and above (average rubric score of 3.8 or higher) all dimensions fair relatively equally (hot colors fairly evenly distributed). When overall rubric scores range from 32-38, the "Organization," "Support," "Language," "Attire," and "Conclusion" dimensions exhibit strong scores even when the overall score is somewhat lower. For example, at an overall score of 33, those dimensions exhibit

average scores ranging from 36 to 3.9, while other dimensions range from 2.5 to 3.1. Moreover, the "Language" and "Attire" attributes remains high even at very low overall scores. At an overall score of 26, for example, "Language" and "Attire" exhibit an average of 3.5 and 3.5, respectively, while all other categories range from 1.2 to 3.2. Lastly, when overall rubric scores range 30 or below, "Oral Documentation" and "Presentation Media" is exceptionally weaker than the others.

- 5. In a longitudinal study, results exhibit a few attributes. The "Oral Documentation" dimension was consistently the lowest dimension over time until spring 2020, in which "Presentation Media" exhibits the lowest. In Fall 2020, the "Presentation Media" dimension drops even further, down to 7.0, or 0.8 below the next lowest ever recorded. By contrast, the "Attire" dimension is consistently the highest, scoring the highest score in 12 of 13 terms. Most dimensions exhibit a dip between fall 2015 and fall 2017 making improvements over time difficult to discern.
- 6. No comparison between dual enrollment (concurrent) sections and traditional sections could be made because no dual enrollment sections were offered during fall 2020.
- 7. In a modality comparison, Live online artifacts exhibit higher mean scores in 5 of 10 dimensions, although it is important to note that four dimensions were not scored in the live online section reported. Asynchronous online exhibits the highest mean scores in 3 of 10 dimensions and Blended in 1 of 10. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Support," "NV-Vocal," "NV-Physical," "Presentation Media," "Attire," and "Conclusion."
- 8. All traditional artifacts stem from one site, the Collier campus. As a result, no comparison between sites could be completed.

## A drilldown of SPC 2608 results are as follows:

- 1. SLO 1 Achievement of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "Oral Documentation" for 70% of the students was met.
- 2. SLO 2 Achievement of "Developing" or higher (≥ 2) in the Informative Speech rubric dimension "NV-Physical" for 70% of the students was met.
- 3. SLO 3 Improvement in common outcomes between Informative Speech Outline and Speech was met. Improvement is exhibited in 0 of 5 dimensions as well as the overall. Improvement excluding Outline scores of '4' are exhibited in 5 of 5 dimensions.
- 4. In a study comparing rubric achievement based on overall score, the "Organization," "Language," "Attire," and "Conclusion" dimensions remain strong even at low overall scores. For example, at 32/40, the mean score for those four are 3.7/4, 3.4/4, 3.7/4, and 3.8/4, respectively. By comparison, all other dimensions range from 1.9/4 to 3.2/4. The "Support" dimension exhibits the steepest drop-off at higher overall scores. At 39/40, for example, "Support" is 2.8/4 when all other dimensions are 4.0/4.
- 5. In a longitudinal study, over time, the "Attire" dimension has been the highest achieving in 13 of 13 terms. The "Oral documentation" dimension has been the lowest in 7 of 13 terms.
- 6. No comparison between dual enrollment (concurrent) sections and traditional sections could be made because no dual enrollment sections were offered during fall 2020.
- 7. In a modality comparison, Traditional artifacts exhibit higher mean scores in 8 of 10 dimensions. Live online exhibits the highest mean scores in 3 of 10 dimensions. Results of the ANOVA exhibit statistically significant difference between sites for "Organization," "Documentation," "NV-Physical," and "Presentation Media."

8. All traditional artifacts stem from one site, the Charlotte campus. As a result, no comparison between sites could be completed.

# 5 REFERENCES

- Cohen, J. 1988. Statistical power analysis for the behavioral sciences (2<sup>nd</sup> ed.). Lawrence Earlbaum Associates, Hillsdale, NJ.
- Cole, R., Haimson, J., Perez-Johnson, I., and May, H. 2011. Variability in Pretest-Posttest Correlation Coefficients by Student Achievement Level. NCEE Reference Report 2011-4033. Washington, DC: National Center for Education Evaluation and Regional Assistance, U.S. Department of Education.
- Davis, J.C. 1973. Statistics and Data Analysis in Geology. John Wiley & Sons, New York, New York, 564 pp.
- Elder, L, and Paul, R. 2007. Consequential Validity: Using Assessment to Drive Instruction. In: Foundation For Critical Thinking. Retrieved from <a href="http://www.criticalthinking.org/pages/consequential-validity-using-assessment-to-drive-instruction/790">http://www.criticalthinking.org/pages/consequential-validity-using-assessment-to-drive-instruction/790</a>.
- 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 (2<sup>nd</sup> 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.