## Speech Assessment Report Spring 2021

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## 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).

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## 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 Spring 2021 assessment, 657 artifacts (based on highest rubric dimension count, not highest overall scores collected) were collected for SPC 1017 from 35 of 42 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 ( $\geq 2$ ) in the Informative Speech rubric dimension "Oral Documentation" for 70\% of the students was met. Spring 2021 artifacts exhibit $85 \%$ of artifacts scored level 2 or greater (Table 1). The faculty established goal for SLO2, a rating of "Developing" or higher ( $\geq 2$ ) in the Informative Speech rubric dimension "NV-Physical" for $70 \%$ of the students was met. Spring 2021 artifacts exhibit 96\% 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.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Rubric Score \& E

0 \&  \& $$
\begin{aligned}
& \stackrel{\rightharpoonup}{0} \\
& 0.0 \\
& \text { Bn }
\end{aligned}
$$ \&  \&  \&  \&  \&  \&  \&  <br>

\hline Developing or higher \& 96\% \& 99\% \& 98\% \& 85\% \& 99\% \& 97\% \& 96\% \& 93\% \& 97\% \& 95\% <br>
\hline 4 \& 64.4\% \& 76.9\% \& 60.7\% \& 43.7\% \& 73.2\% \& 49.5\% \& 46.4\% \& 57.1\% \& 81.0\% \& 66.8\% <br>
\hline 3 \& 23.0\% \& 16.6\% \& 32.1\% \& 29.8\% \& 23.4\% \& 32.1\% \& 33.8\% \& 26.2\% \& 10.8\% \& 21.2\% <br>
\hline 2 \& 8.5\% \& 5.5\% \& 5.2\% \& 11.9\% \& 2.7\% \& 15.7\% \& 16.0\% \& 9.6\% \& 5.0\% \& 7.0\% <br>
\hline 1 \& 3.3\% \& 0.3\% \& 1.1\% \& 7.0\% \& 0.2\% \& 2.1\% \& 2.4\% \& 2.1\% \& 2.0\% \& 3.0\% <br>
\hline 0 \& 0.8\% \& 0.8\% \& 0.9\% \& 7.6\% \& 0.5\% \& 0.6\% \& 1.4\% \& 5.0\% \& 1.2\% \& 2.0\% <br>
\hline
\end{tabular}

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 | $93 \%$ | $96 \%$ | $91 \%$ | $84 \%$ | $92 \%$ |
| higher | $68.2 \%$ | $74.8 \%$ | $50.6 \%$ | $38.3 \%$ | $64.8 \%$ |
| 4 | $14.2 \%$ | $15.6 \%$ | $26.7 \%$ | $30.6 \%$ | $19.0 \%$ |
| 3 | $10.8 \%$ | $5.6 \%$ | $14.0 \%$ | $15.3 \%$ | $8.3 \%$ |
| 2 | $1.6 \%$ | $1.7 \%$ | $5.6 \%$ | $6.3 \%$ | $4.3 \%$ |
| 0 | $2.2 \%$ | $2.3 \%$ | $3.1 \%$ | $9.6 \%$ | $3.5 \%$ |

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 4 s 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 artifacts |  |  |  |  |  |  |
| Outline Mean | 8.7 | 9.1 | 8.2 | 7.4 | 8.6 | 80.3 |
| Informative Speech Mean | 8.9 | 8.5 | 8.8 | 8.3 | 9.3 | 86.6 |
| Change from Outline to Speech | 0.2 | -0.4 | 0.6 | 0.9 | 0.7 | 6.3 |
| Only artifacts that did not score 4/4 on outline |  |  |  |  |  |  |
| Outline Mean | 6.0 | 6.5 | 6.4 | 5.7 | 6.1 | 78.9 |
| Informative Speech Mean | 8.3 | 7.5 | 8.4 | 7.9 | 8.2 | 85.0 |
| Change from Outline to Speech | 2.3 | 1.0 | 2.0 | 0.4 | 2.1 | 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, all dimensions except "Organization" exhibits a net improvement by students. 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 $54.7 \%$ in "Organization" to $73.7 \%$ in "Support."


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．Both speech and outline overlap substantially between 81 and 94，although the speech exhibits a sharp peek at 99－100．

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 |
| 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 | 9.4 | 9.0 | 7.7 | 9.4 | 8.5 | 8.4 | 8.4 | 9.3 | 8.9 |
| Standard deviation | 1.86 | 1.43 | 1.59 | 2.94 | 1.23 | 1.80 | 1.96 | 2.50 | 1.72 | 2.05 |

Table 4．Descriptive statistics for SPC 1017 Informative Speech．

| Rubric Score |  | Introduction | Organization | Support | Oral Documentation |
| :---: | :---: | :---: | :---: | :---: | :---: | Conclusion | 648 |  |
| ---: | ---: |
| n | 648 |
| Max | 10 |

Table 5．Descriptive statistics for SPC 1017 Outline．


Figure 3. Overall score distribution for Outline (purple) and Speech (aqua) for spring 2021.
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.

|  | $\begin{aligned} & \text { 을 } \\ & \text { Z } \\ & 0 \\ & \text { ⿹ㅡㄹ } \end{aligned}$ |  | $\begin{aligned} & 5 \\ & \text { 늘 } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { 8 } \\ & \text { 튼 } \end{aligned}$ |  | $\begin{aligned} & \bar{U} \\ & \text { O } \\ & \text { र } \\ & \text { z} \end{aligned}$ | $\begin{aligned} & \frac{\overline{U S}}{\sum_{n}^{n}} \\ & \frac{\pi}{2} \\ & \frac{1}{2} \end{aligned}$ |  | $\frac{y}{E}$ | $\begin{aligned} & \text { E} \\ & \text { in } \\ & \frac{3}{U} \\ & 0 \\ & 0 \end{aligned}$ | 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 | 4.0 | 4.0 | 4.0 | 3.9 | 4.0 | 3.9 | 3.8 | 3.9 | 4.0 | 3.9 | 3.9 |
| 38 | 3.9 | 4.0 | 3.9 | 3.5 | 3.9 | 3.6 | 3.6 | 3.8 | 3.9 | 3.8 | 3.8 |
| 37 | 3.8 | 3.8 | 3.7 | 3.5 | 3.8 | 3.4 | 3.5 | 3.5 | 3.9 | 3.8 | 3.7 |
| 36 | 3.7 | 3.8 | 3.6 | 3.4 | 3.8 | 3.5 | 3.4 | 3.3 | 3.8 | 3.7 | 3.6 |
| 35 | 3.7 | 3.8 | 3.5 | 3.1 | 3.7 | 3.3 | 3.2 | 3.5 | 3.8 | 3.6 | 3.5 |
| 34 | 3.4 | 3.6 | 3.4 | 2.8 | 3.6 | 3.2 | 3.1 | 3.2 | 3.7 | 3.5 | 3.4 |
| 33 | 3.5 | 3.7 | 3.4 | 2.3 | 3.7 | 3.2 | 3.0 | 3.1 | 3.8 | 3.4 | 3.3 |
| 32 | 3.3 | 3.7 | 3.5 | 2.0 | 3.7 | 3.3 | 3.2 | 2.9 | 3.4 | 3.1 | 3.2 |
| 31 | 3.1 | 3.6 | 3.4 | 2.3 | 3.7 | 3.3 | 2.8 | 2.5 | 3.5 | 2.9 | 3.1 |
| 30 | 2.7 | 3.7 | 3.4 | 2.0 | 3.5 | 2.9 | 2.9 | 3.2 | 3.3 | 2.4 | 3.0 |
| 29 | 2.7 | 3.2 | 3.3 | 1.5 | 3.3 | 2.9 | 3.1 | 2.6 | 3.5 | 2.8 | 2.9 |
| 28 | 2.9 | 3.3 | 3.3 | 1.7 | 3.4 | 2.8 | 2.9 | 2.1 | 3.0 | 2.6 | 2.8 |
| 27 | 2.8 | 3.2 | 3.2 | 2.5 | 3.2 | 2.3 | 2.1 | 2.0 | 2.7 | 3.0 | 2.7 |
| 26 | 2.1 | 2.9 | 3.5 | 1.8 | 3.6 | 2.8 | 2.9 | 2.0 | 2.3 | 2.0 | 2.6 |
| 25 | 1.6 | 2.7 | 3.1 | 1.5 | 3.7 | 2.4 | 2.7 | 3.2 | 2.1 | 2.1 | 2.5 |
| $\leq 24$ | 1.7 | 2.1 | 1.7 | 1.1 | 2.7 | 2.1 | 1.7 | 1.5 | 2.2 | 2.4 | 2.4 |
|  |  |  | Sca | 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," "Language," and "Attire" 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 3.7 to 3.8 , while other dimensions range from 2.3 to 3.5 . Moreover, the "Language" attributes remain high even at very low overall scores. At an overall score of 28, for example, "Language" exhibits an average of 3.3, while all other categories range from 1.7 to 3.3.

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 before bouncing back in spring 2021. The "Attire" dimension is consistently the highest, scoring the highest score in 12 of 14 terms. The "Language" dimension scored the highest mean score for the first time in spring 2021.


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 Spring 2021 assessment, 288 artifacts (based on highest rubric dimension count, not highest overall scores collected) were collected for SPC 2608 from 16 of 20 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 ( $\geq 2$ ) in the Informative Speech rubric dimension "Oral Documentation" for 70\% of the students was met. Spring 2021 artifacts exhibit $88 \%$ of artifacts scored level 2 or greater (Table 6). The faculty established goal for SLO2, a rating of "Developing" or higher ( $\geq 2$ ) in the Informative Speech rubric dimension "NV-Physical" for $70 \%$ of the students was met. Spring 2021 artifacts exhibit $96 \%$ 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.

| Rubric Score |  | $\begin{aligned} & \text { E } \\ & .0 \\ & \text { N } \\ & \text { N } \\ & \text { on on } \\ & 0 \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \stackrel{0}{v} \\ & \stackrel{y}{n} \end{aligned}$ |  | $\begin{aligned} & \text { 品 } \\ & \text { E00 } \\ & \text { 坒 } \end{aligned}$ | $\begin{aligned} & \text { T్ర } \\ & 0 \\ & \text { 立 } \\ & \text { 安 } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { E } \\ & \text { 包 } \\ & \text { U } \\ & \text { B } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Developing or higher | 98\％ | 100\％ | 97\％ | 88\％ | 100\％ | 99\％ | 96\％ | 92\％ | 99\％ | 98\％ |
| 4 | 73．3\％ | 77．8\％ | 55．2\％ | 66．0\％ | 80．6\％ | 59．0\％ | 55．2\％ | 58．7\％ | 94．8\％ | 77．1\％ |
| 3 | 21．5\％ | 18．8\％ | 35．1\％ | 13．9\％ | 17．7\％ | 29．2\％ | 26．0\％ | 22．9\％ | 3．8\％ | 14．2\％ |
| 2 | 3．5\％ | 3．1\％ | 6．9\％ | 7．6\％ | 1．7\％ | 10．4\％ | 14．9\％ | 10．1\％ | 0．7\％ | 6．3\％ |
| 1 | 1．7\％ | 0．0\％ | 2．4\％ | 7．6\％ | 0．0\％ | 1．4\％ | 1．4\％ | 2．1\％ | 0．7\％ | 1．4\％ |
| 0 | 0．0\％ | 0．3\％ | 0．3\％ | 4．9\％ | 0．0\％ | 0．0\％ | 2．4\％ | 6．3\％ | 0．0\％ | 1．0\％ |

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 | $97 \%$ | $99 \%$ | $96 \%$ | $84 \%$ | $97 \%$ |
| 4 | $78.4 \%$ | $76.1 \%$ | $54.5 \%$ | $49.8 \%$ | $73.4 \%$ |
| 2 | $15.0 \%$ | $16.9 \%$ | $26.9 \%$ | $20.9 \%$ | $17.6 \%$ |
| 2 | $3.3 \%$ | $5.6 \%$ | $14.3 \%$ | $13.0 \%$ | $6.0 \%$ |
| 1 | $3.0 \%$ | $1.3 \%$ | $3.3 \%$ | $5.6 \%$ | $1.0 \%$ |
| 0 | $0.3 \%$ | $0.0 \%$ | $1.0 \%$ | $10.6 \%$ | $2.0 \%$ |

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 4 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 4 s 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 artifacts |  |  |  |  |  |  |
| Outline Mean | 9.3 | 9.3 | 8.6 | 7.6 | 9.1 | 85.0 |
| Informative Speech Mean | 9.2 | 9.4 | 9.0 | 8.3 | 9.3 | 90.4 |
| Change from Outline to Speech | －0．1 | 0.1 | 0.4 | 0.6 | 0.2 | 5.4 |
| Only artifacts that did not score 4／4 on outline |  |  |  |  |  |  |
| Outline Mean | 6.8 | 7.2 | 6.9 | 5.4 | 6.4 | 82.4 |
| Informative Speech Mean | 8.9 | 8.5 | 8.5 | 7.5 | 8.7 | 89.2 |
| Change from Outline to Speech | 2.1 | 1.3 | 1.6 | 2.1 | 2.3 | 6.8 |

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，all dimensions have moderate improvement 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 large net improvements ranging from $48 \%$ in ＂Organization＂to $75 \%$ 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．

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n | 288 | 288 | 288 | 288 | 288 | 288 | 288 | 288 | 288 | 288 |
| Max | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Min | 3 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 3 | 0 |
| Mode | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Mean | 9.3 | 9.5 | 8.8 | 8.4 | 9.6 | 8.9 | 8.5 | 8.4 | 9.8 | 9.3 |
| Standard deviation | 1.32 | 1.15 | 1.63 | 2.80 | 0.92 | 1.52 | 2.10 | 2.67 | 0.77 | 1.66 |

Table 9．Descriptive statistics for SPC 2608.

| Rubric Score | Introduction | Organization | Support | Oral Documentation | Conclusion |
| ---: | :---: | :---: | :---: | :---: | :---: |
| n | 301 | 301 | 301 | 301 | 301 |
| Max | 10 | 10 | 10 | 10 | 10 |
| Min | 0 | 3 | 0 | 0 | 0 |
| Mode | 10 | 10 | 10 | 10 | 10 |
| Mean | 9.3 | 9.3 | 8.6 | 7.6 | 9.1 |
| Standard deviation | 1.57 | 1.34 | 1.98 | 1.85 |  |

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.


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 to a lesser extent, "Conclusion" and "Introduction" dimensions remain strong even at low overall scores. For example, at $35 / 40$, the mean score for those five range from 3.7 to 3.8 . By comparison, all other dimensions range from 3.2 to 3.5 .

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 14 of 14 terms. The "Oral documentation" dimension has been the lowest in 7 of 14 terms. For the first time since the study began, the "Presentation Media" is the lowest achieving dimension, at 8.4.


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 spring 2021 so no comparison study could be completed.

### 3.1.2 Modality Comparison

During the Spring 2021 semester, 473 total asynchronous online artifacts were collected, along with 22 live online, 0 flex, 0 blended, and 122 traditional. A comparison of basic statistics is provided in Table 11. Asynchronous online artifacts exhibit higher mean scores in 5 of 10 dimensions. Live online exhibits the highest mean scores in 4 of 10 dimensions and traditional 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," "Oral Documentation," "NV-Vocal," "Attire," and "Conclusion." Therefore, we can reject the null hypothesis that the mean scores in each modality are equal, and we can conclude with a $95 \%$ confidence that the differences in scores are not solely due to chance.

|  | Blended | Flex | Asynchronous <br> Online | Live <br> Online | Traditional |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Introduction | $\sim$ | $\sim$ | $\mathbf{9 . 3}$ | 9.1 | 7.7 |
| Organization | $\sim$ | $\sim$ | $\mathbf{9 . 5}$ | 9.5 | 9.0 |
| Support | $\sim$ | $\sim$ | 8.9 | 8.8 | $\mathbf{9 . 2}$ |
| Oral Documentation | $\sim$ | $\sim$ | $\mathbf{8 . 1}$ | 6.3 | 6.7 |
| Language | $\sim$ | $\sim$ | 9.4 | $\mathbf{1 0 . 0}$ | 9.3 |
| NV-Vocal | $\sim$ | $\sim$ | 8.7 | $\mathbf{9 . 3}$ | 7.8 |
| NV-Physical | $\sim$ | $\sim$ | $\mathbf{8 . 6}$ | 7.5 | 7.4 |
| Presentation Media | $\sim$ | $\sim$ | $\mathbf{8 . 5}$ | 8.4 | 8.2 |
| Attire | $\sim$ | $\sim$ | 9.5 | $\mathbf{1 0 . 0}$ | 8.6 |
| Conclusion | $\sim$ | $\sim$ | 9.4 | $\mathbf{9 . 5}$ | 7.4 |

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

During the Spring 2021 semester, 13 total Charlotte campus artifacts were collected, along with 43 from Collier, 87 from Thomas Edison (Lee), and 0 from Hendry Glades. A comparison of basic statistics is provided in Table 12. The Charlotte campus exhibits higher mean scores in all 10 dimensions. A oneway analysis of variance was used to compare means by site. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal,"
"Presentation Media," "Attire," and "Conclusion." Therefore, we can reject the null hypothesis that the mean scores in each site are equal, and we can conclude with a $95 \%$ confidence that the differences in scores are not solely due to chance.

|  | Charlotte | Collier | Thomas Edison (Lee) | Hendry Glades |
| ---: | :---: | :---: | :---: | :---: |
| Introduction | $\mathbf{1 0 . 0}$ | 6.3 | 8.1 | $\sim$ |
| Organization | $\mathbf{9 . 8}$ | 8.7 | 9.0 | $\sim$ |
| Support | $\mathbf{9 . 8}$ | 9.8 | 8.9 | $\sim$ |
| Oral Documentation | $\mathbf{8 . 5}$ | 7.0 | 6.2 | $\sim$ |
| Language | $\mathbf{1 0 . 0}$ | 9.8 | 9.0 | $\sim$ |
| NV-Vocal | $\mathbf{8 . 6}$ | 7.1 | 8.0 | $\sim$ |
| NV-Physical | $\mathbf{8 . 0}$ | 7.2 | 7.4 | $\sim$ |
| Presentation Media | $\mathbf{9 . 7}$ | 6.6 | 8.8 | $\sim$ |
| Attire | $\mathbf{9 . 7}$ | 6.6 | 9.4 | $\sim$ |
| Conclusion | $\mathbf{9 . 5}$ | 6.0 | 7.7 | $\sim$ |

Table 12. Mean scores for each dimension by site. Bold denotes highest mean score across sites.


Figure 12. Mean scores for each dimension by site.

### 3.2 SPC 2608

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

No dual enrollment sections were offered in spring 2021 and so no comparison study could be completed.

### 3.2.2 Modality Comparison

During the Spring 2021 semester, 177 total asynchronous online artifacts were collected, along with 34 live online, 0 flex, 0 blended, and 74 traditional. A comparison of basic statistics is provided in Table 13. Asynchronous artifacts exhibit higher mean scores in 5 of 10 dimensions. Live online and traditional each exhibit the highest mean scores in 3 of 10 dimensions (tied at 10.0 in "Attire"). 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," "Organization," "Oral Documentation," "NVPhysical," and "Presentation Media." Therefore, we can reject the null hypothesis that the mean scores at each site are equal, and we can conclude with a $95 \%$ confidence that the differences in scores are not solely due to chance.

|  | Blended | Flex | Asynchronous <br> Online | Live <br> Online | Traditional |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Introduction | $\sim$ | $\sim$ | 9.5 | 8.9 | 9.2 |
| Organization | $\sim$ | $\sim$ | 9.2 | 9.8 | 9.8 |
| Support | $\sim$ | $\sim$ | 8.9 | 8.6 | 8.8 |
| Oral <br> Documentation | $\sim$ | $\sim$ | 8.7 | 8.6 | 7.6 |
| Language | $\sim$ | $\sim$ | 9.4 | 9.8 | 9.8 |
| NV-Vocal | $\sim$ | $\sim$ | 8.8 | 9.0 | 9.1 |
| NV-Physical | $\sim$ | $\sim$ | 9.0 | 8.3 | 7.5 |
| Presentation Media | $\sim$ | $\sim$ | 8.3 | 7.4 | 9.0 |
| Attire | $\sim$ | $\sim$ | 9.7 | 10.0 | 10.0 |
| Conclusion | $\sim$ | $\sim$ | 9.4 | 9.1 | 8.9 |

Table 13. Mean scores for each dimension by modality. Bold/italics denotes highest mean score across modalities.


Figure 13. Mean scores for each dimension by modality.

### 3.2.3 Comparison by Campus/Site

During the Spring 2021 semester, 0 total Charlotte campus artifacts were collected, along with 0 from Collier, 33 from Thomas Edison (Lee), and 41 from Hendry Glades (includes Clewiston and Moorehaven offsite locations). A comparison of basic statistics is provided in Table 14. The Hendry Glades (Clewiston offsite) location exhibits higher mean scores in 6 of 10 dimension. The Thomas Edison (Lee) campus exhibits the higher mean score in 5 of 10 (tied for "Attire"). A one-way analysis of variance was used to compare means by site. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal," "Presentation Media," and "Conclusion." Therefore, we can reject the null hypothesis that the mean scores in each site are equal, and we can conclude with a $95 \%$ confidence that the differences in scores are not solely due to chance.

|  | Charlotte | Collier | Thomas Edison (Lee) | Hendry Glades |
| ---: | :---: | :---: | :---: | :---: |
| Introduction | $\sim$ | $\sim$ | 8.8 | 9.5 |
| Organization | $\sim$ | $\sim$ | 9.8 | 9.9 |
| Support | $\sim$ | $\sim$ | 9.2 | 8.5 |
| Oral Documentation | $\sim$ | $\sim$ | 6.9 | 8.2 |
| Language | $\sim$ | $\sim$ | 10.0 | 9.7 |
| NV-Vocal | $\sim$ | $\sim$ | 9.6 | 8.7 |
| NV-Physical | $\sim$ | $\sim$ | 6.9 | 8.0 |
| Presentation Media | $\sim$ | $\sim$ | 9.8 | 8.4 |
| Attire | $\sim$ | $\sim$ | 10.0 | 10.0 |
| Conclusion | $\sim$ | $\sim$ | 7.9 | 9.8 |

Table 14. Mean scores for each dimension by site. Bold denotes highest mean score across sites.


Figure 14. Mean scores for each dimension by site.

## 4 Conclusions

FSW's Communication Studies Department employed a common rubric used by all faculty 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 ( $\geq 2$ ) in the Informative Speech rubric dimension "Oral Documentation" for $70 \%$ of the students was met.
2. SLO 2 - Achievement of "Developing" or higher ( $\geq 2$ ) 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," "Language," and "Attire" 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 3.7 to 3.8, while other dimensions range from 2.3 to 3.5 . Moreover, the "Language" attributes remain high even at very low overall scores. At an overall score of 28 , for example, "Language" exhibits an average of 3.3 , while all other categories range from 1.7 to 3.3 .
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 before bouncing back in spring 2021. The "Attire" dimension is consistently the highest, scoring the highest score in 12 of 14 terms. The "Language" dimension scored the highest mean score for the first time in spring 2021.
6. No dual enrollment sections of SPC 1017 were offered during spring 2021 so no comparison study could be completed.
7. During the Spring 2021 semester, 473 total asynchronous online artifacts were collected, along with 22 live online, 0 flex, 0 blended, and 122 traditional. Asynchronous online artifacts exhibit higher mean scores in 5 of 10 dimensions. Live online exhibits the highest mean scores in 4 of 10 dimensions and traditional in 1 of 10 . Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal," "Attire," and "Conclusion."
8. During the Spring 2021 semester, 13 total Charlotte campus artifacts were collected, along with 43 from Collier, 87 from Thomas Edison (Lee), and 0 from Hendry Glades. The Charlotte campus exhibits higher mean scores in all 10 dimensions. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal," "Presentation Media," "Attire," and "Conclusion."

A drilldown of SPC 2608 results are as follows:

1. SLO 1 - Achievement of "Developing" or higher ( $\geq 2$ ) in the Informative Speech rubric dimension "Oral Documentation" for $70 \%$ of the students was met.
2. SLO 2 - Achievement of "Developing" or higher ( $\geq 2$ ) 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, the "Organization," "Language," "Attire," and to a lesser extent, "Conclusion" and "Introduction" dimensions remain strong even at low overall scores. For example, at $35 / 40$, the mean score for those five range from 3.7 to 3.8 . By comparison, all other dimensions range from 3.2 to 3.5 .
5. In a longitudinal study, over time, the "Attire" dimension has been the highest achieving in 14 of 14 terms. The "Oral documentation" dimension has been the lowest in 7 of 14 terms. For the first time since the study began, the "Presentation Media" is the lowest achieving dimension, at 8.4.
6. No dual enrollment sections of SPC 1017 were offered during spring 2021 so no comparison study could be completed.
7. During the Spring 2021 semester, 473 total asynchronous online artifacts were collected, along with 22 live online, 0 flex, 0 blended, and 122 traditional. Asynchronous online artifacts exhibit higher mean scores in 5 of 10 dimensions. Live online exhibits the highest mean scores in 4 of 10 dimensions and traditional in 1 of 10. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal," "Attire," and "Conclusion."
8. During the Spring 2021 semester, 13 total Charlotte campus artifacts were collected, along with 43 from Collier, 87 from Thomas Edison (Lee), and 0 from Hendry Glades. The Charlotte campus exhibits higher mean scores in all 10 dimensions. Results of the ANOVA exhibit statistically significant difference between sites for "Introduction," "Oral Documentation," "NV-Vocal," "Presentation Media," "Attire," and "Conclusion."

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