



## Oral Communication Artifact Assessment Report 2018-2019

### Executive Summary

- In AY 2019, 199 previously recorded presentations were scored by two separate raters using a revised version of the AAC&U Oral Communication VALUE rubric. The rubric consisted of:
  - Seven criterion: Introduction, Organization, Language, Supporting Material, Delivery-Voice, Delivery-Nonverbals, and Conclusion.
  - Rated on a five-point scale: Capstone (4 or Advanced), Milestones (3 or Proficient and 2 or Basic), Benchmark (1 or Beginning), and Not Present (0 or Unobserved).
- 3<sup>rd</sup> ratings were generated for 15 (7.5%) of the artifacts, due to the average score of the 1<sup>st</sup> rater's scoring and the 2<sup>nd</sup> rater's scoring differing by 1.00 or greater.
  - The 3<sup>rd</sup> rating scores were compared to the first two raters' scores, and score farthest from the 3<sup>rd</sup> rater's score was removed from further analysis.
- Overall, most of the average ratings were scored at Proficient (72.4%), less than a quarter were Basic (22.6%), Advanced was 5.0%, 0.0% were Beginning, and Unobserved was 0.0%.
- For overall normalized ratings by criteria:
  - The criterion with the highest mean score was Language with 2.96 (Proficient); 84.9% of oral presentations resulted in a Proficient rating.
  - Delivery – Voice and Supporting Material had average ratings in the Proficient level (2.65 and 2.20, respectively); 54.3% and 39.2% of presentation were rated Proficient in these areas, respectively.
  - Delivery – Nonverbals, Introduction, and Organization were rated similarly with average ratings of 2.33, 2.23, 2.20 and 2.19, respectively, which was considered Proficient, however, these criteria were primarily scored as Basic (44.2%, 45.7%, and 56.3%, respectively).
  - Conclusion was the weakest of the seven areas with an average rating of 1.51 or Basic; 17.6% of oral presentations were rated as not present (unobserved) in this area.
- Almost all the mean scores for oral presentations were higher in 2018-19 than 2014-15 and 2015-16. For the 2018-2019 analysis, the highest mean score was for Language with 2.96, an increase from 2.87 in 2014-2015 and 2.75 in 2015-2016.
- Although 72.4% of oral communication artifacts were scored at the Proficient level, the overall mean score was 2.29, indicating that scores were on the lower third of Proficient scores. The criteria Language yielded the highest mean score, 2.96, on the high end of the Proficient range, however, the remaining criteria were scored in the middle to lower range of Proficient, and in the case of Conclusion, scored as Basic. Although scores have improved over time, there is room to improve these scores to achieve greater Proficiency and more Advanced scores.

## Introduction

Oral Communication was assessed during the 2018-19 academic year (AY) using a modified version of the Association of American Colleges and Universities (AAC&U) Oral Communication Valid Assessment of Learning in Undergraduate Education (VALUE) rubric (see Appendix A). The AAC&U VALUE rubrics were developed by teams of educational professionals, and include the most frequently identified criteria of learning for different learning outcomes. Washburn University (Washburn) implements performance assessments using modified versions of the AAC&U VALUE rubrics for assessing Oral Communication every three years. Artifacts in audiovisual format were collected from 199 students classified as Seniors in Communication Studies (20), Computer Information Systems (6), History (35), Kinesiology (5), Mass Media (37), Modern Languages (10), Philosophy and Religious Studies (4), Psychology (64), and Technology Administration (18).

## Oral Communication Artifact Review Process

Washburn faculty were invited to attend the in-person training on May 17, 2019. Faculty who attended the training were assigned 199 previously recorded oral presentations. The 199 presentations were reviewed by two independent raters on seven criterion: Introduction, Organization, Language, Supporting Material, Delivery-Voice, Delivery-Nonverbals, and Conclusion. These seven criterion were scored on a five-point scale that consisted of Capstone (4 or Advanced), Milestones (3 or Proficient and 2 or Basic), Benchmark (1 or Beginning), and Not Present (0 or Unobserved).

When the average difference in scores was equal to or greater than 1.00, a 3<sup>rd</sup> rater was utilized to normalize the ratings. After the initial round of scoring, there were 15 artifacts (7.5%) that met or exceeded 1.00 and required a 3<sup>rd</sup> rating. The 15 artifacts that required a 3<sup>rd</sup> rating were scored by a faculty member who did not initially rate those artifacts. The 3<sup>rd</sup> rating scores were compared to the first two raters' scores, and score farthest from the 3<sup>rd</sup> rater's score was removed from further analysis. See Appendix B for further discussion of the methodology and results of the 3<sup>rd</sup> rater reviews.

## Oral Communication Artifact Review Results

### Overall Normalized Ratings

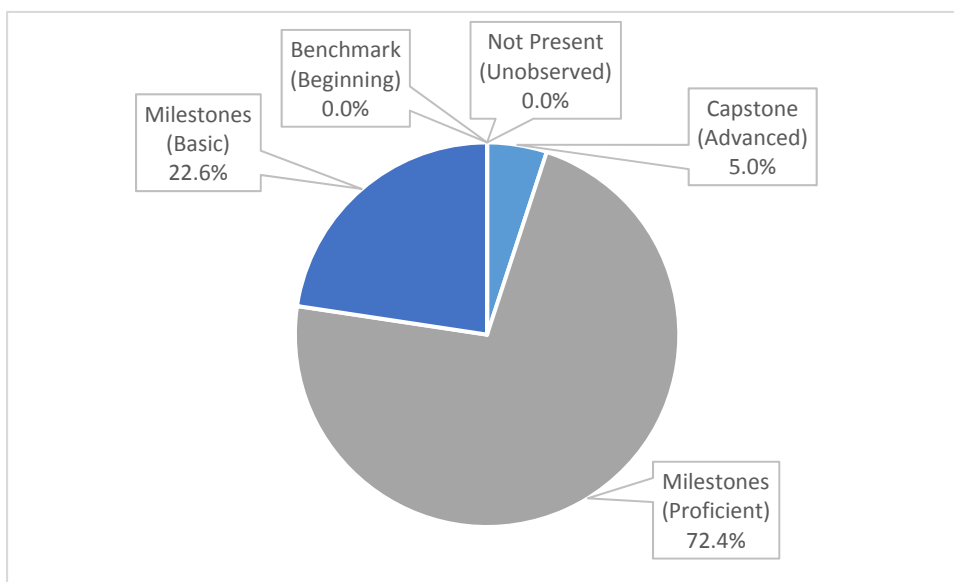
The scores from the two raters were averaged to provide a normalized score for each oral presentation. Table 1 provides the overall distribution of scores for the 199 oral communication artifacts. The range of average scores were categorized as Capstone (4 or Advanced), Milestones (3 or Proficient and 2 or Basic), Benchmark (1 or Beginning), and Not Present (0 or Unobserved).

Table 1. Descriptive Data and Statistics for Overall Averaged Ratings

	Capstone	Milestones		Benchmark	Not Present	Mean ( <i>sd</i> )
	4.00 - 3.01 (% Advanced)	3.00 - 2.01 (% Proficient)	2.00 - 1.01 (% Basic)	1.00 - 0.01 (% Beginning)	0.00 (% Unobserved)	
<b>Overall (<i>n</i> = 199)</b>	10 (5.0%)	144 (72.4%)	45 (22.6%)	0 (0.0%)	0 (0.0%)	2.29 (0.39)

Of the overall normalized ratings, most of the average ratings were Proficient (72.4%), followed by Basic at 22.6% of the average ratings. The remaining performance levels was 5.0% (Advanced) and 0.0% Beginning and Unobserved. See the pie chart, Figure 1, on the following page.

Figure 1. Distribution of Scores for Overall Oral Communication Artifacts



The distribution of average ratings and descriptive statistics for the 199 oral artifacts are in Table 2. The table contains the how the artifacts ( $n = 199$ ) were rated on each of the seven criteria (total of 1,393 scores). For example, the row labeled as Introduction contains the scores from all 199 artifacts on that criteria.

Table 2. Descriptive Data and Statistics for Overall Averaged Ratings

	Capstone	Milestones		Benchmark	Not Present	Mean ( <i>sd</i> )
	4.00 - 3.01 (% Advanced)	3.00 - 2.01 (% Proficient)	2.00 - 1.01 (% Basic)	1.00 - 0.01 (% Beginning)	0.00 (% Unobserved)	
<b>Introduction</b>	4 (2.0%)	70 (35.2%)	91 (45.7%)	34 (17.1%)	0 (0.0%)	2.23 (0.62)
<b>Organization</b>	7 (3.5%)	60 (30.2%)	112 (56.3%)	19 (9.5%)	1 (0.5%)	2.19 (0.53)
<b>Language</b>	13 (6.5%)	169 (84.9%)	14 (7.0%)	3 (1.5%)	0 (0.0%)	2.96 (0.34)
<b>Supporting Material</b>	11 (5.5%)	78 (39.2%)	68 (34.2%)	42 (21.1%)	0 (0.0%)	2.20 (0.76)
<b>Delivery Voice</b>	18 (19.0%)	108 (54.3%)	63 (31.7%)	10 (15.0%)	0 (0.0%)	2.65 (0.58)
<b>Delivery Nonverbals</b>	17 (8.5%)	64 (32.2%)	88 (44.2%)	29 (14.6%)	1 (0.5%)	2.33 (0.73)
<b>Conclusion</b>	9 (4.5%)	20 (10.1%)	66 (33.2%)	69 (34.7%)	35 (17.6%)	1.51 (0.82)
<b>Overall (<math>n = 1,393</math>)</b>	79 (5.7%)	569 (40.8%)	502 (36.0%)	206 (14.8%)	37 (2.7%)	2.29 (0.76)

The criterion with the highest mean score was Language with 2.96 or Proficient. This was further explained by 84.9% of oral presentations resulting in a Proficient rating and 1.5% ratings for the

Beginning level for the Language criterion. Delivery – Voice and Delivery - Nonverbals also had average ratings in the Proficient level ( $\bar{x}$ s = 2.65 and 2.33, respectively); 54.3% and 32.2% of presentation were rated Proficient in these areas, respectively. Introduction, Supporting Material, and Organization were rated similarly with average ratings of 2.23, 2.20 and 2.19, respectively, and primarily scored as Basic (45.7%, 34.2% and 56.3%, respectively). Conclusion was the weakest of the seven areas with an average rating of 1.51 or Basic; 17.6% of oral presentations were rated as not present (unobserved) in this area.

See Figures 2-7 on the following pages for visual representations of the distributions of ratings. The criteria presented distributions of ratings in a normal curve.

Figure 2. Distribution of Scores for Introduction

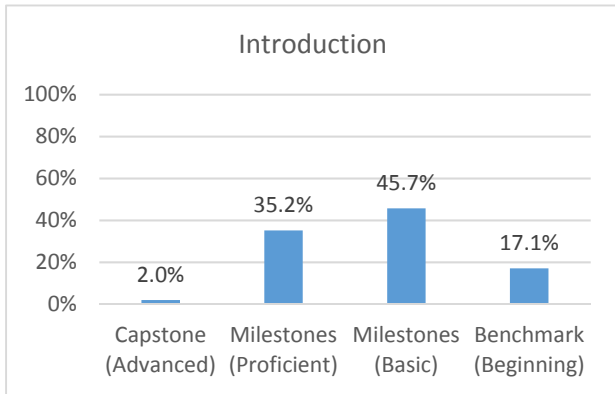


Figure 3. Distribution of Scores for Organization

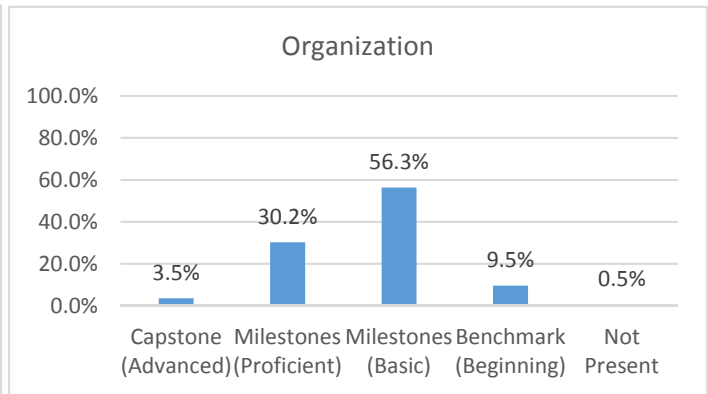


Figure 4. Distribution of Scores for Language

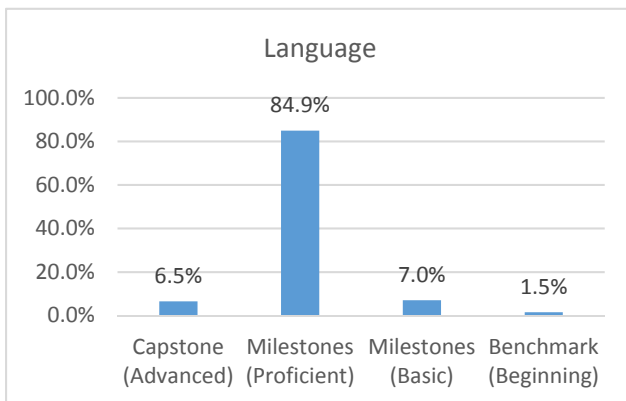


Figure 5. Distribution of Scores for Supporting Material

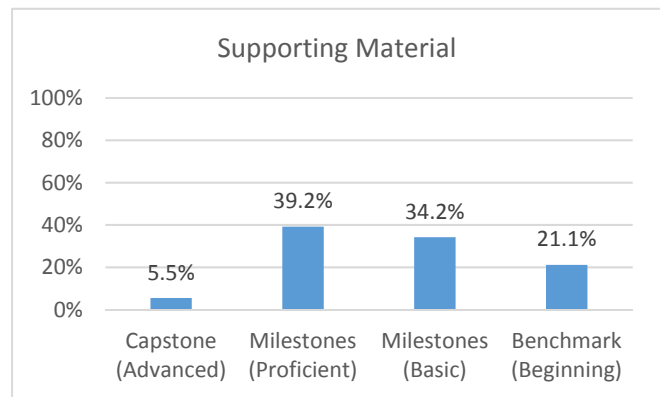


Figure 6. Distribution of Scores for Delivery – Voice

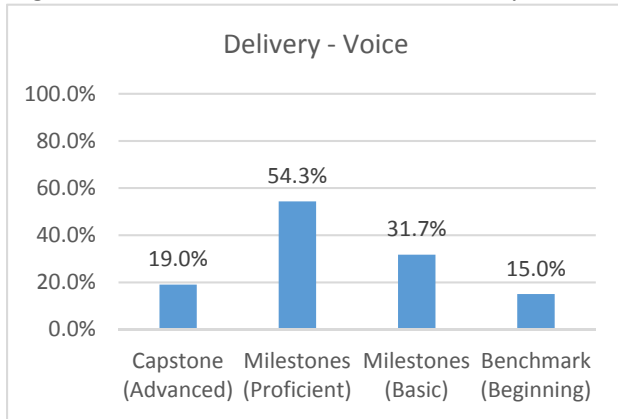


Figure 7. Distribution of Scores for Delivery-Nonverbals

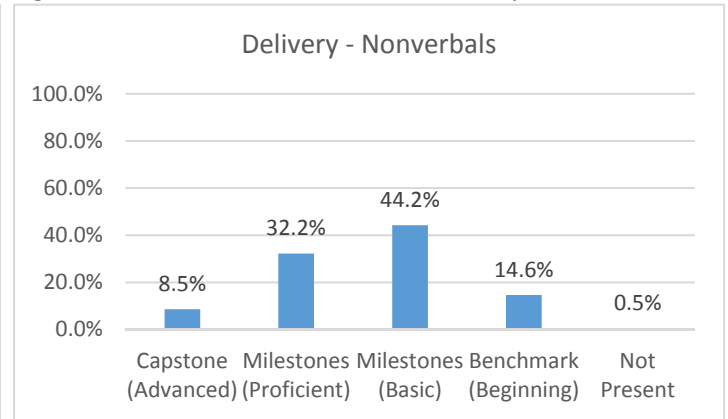
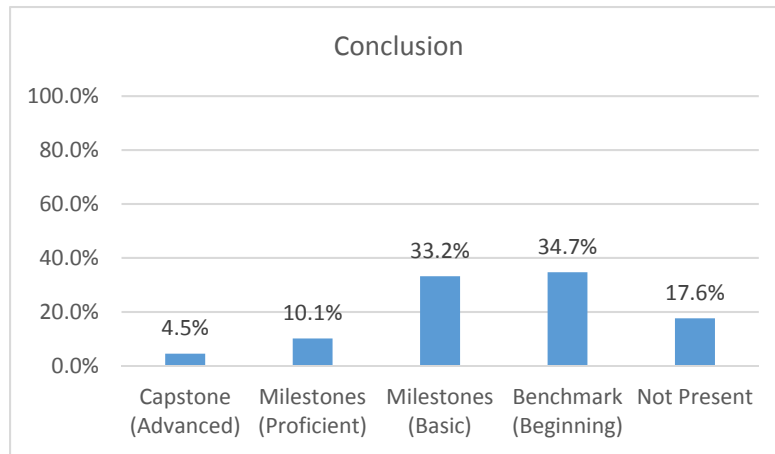


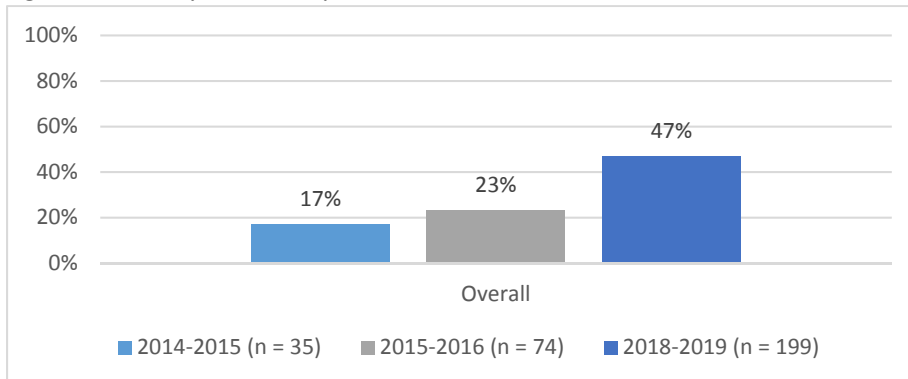
Figure 7. Distribution of Scores for Conclusion



### Comparison to Previous Years Results

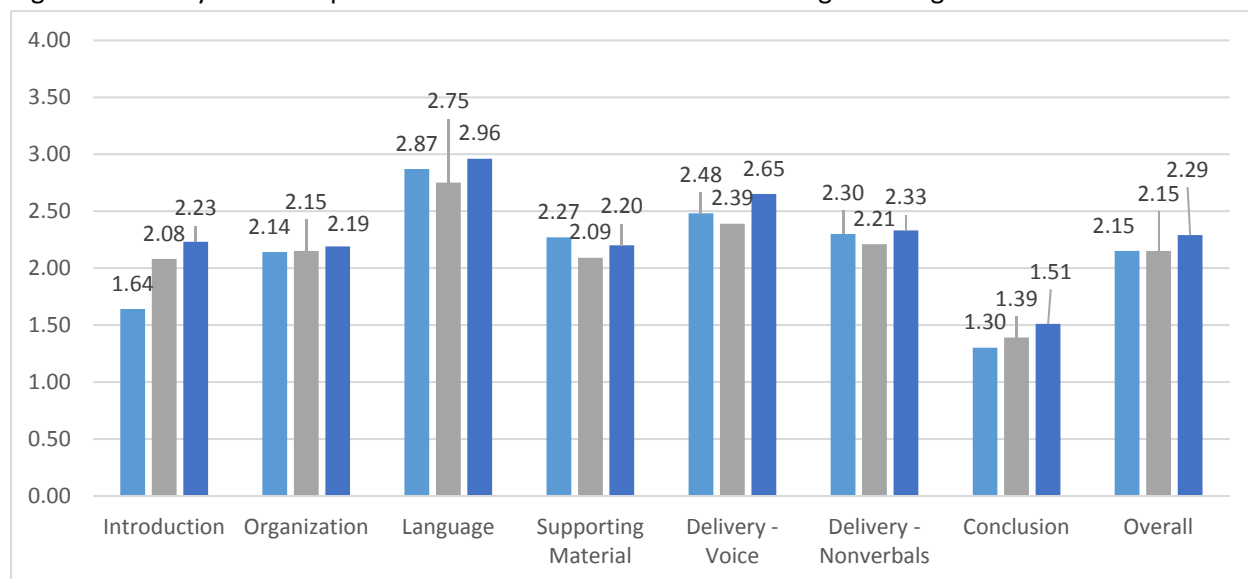
Oral communication artifacts were reviewed for the pilot round in 2014-15 ( $n = 35$ ) and in 2015-16 ( $n = 74$ ). In 2014-15, 17% of the oral presentations attained an overall average score at the Proficient or Advanced performance levels; in 2015-16, 23% of the 74 average scores were categorized at the Proficient or Advanced performance levels. For the 2018-19 analysis of scores ( $n = 199$ ), 47% of the overall average scores were categorized at the Proficient or Advanced performance levels. See Figure 8.

Figure 8. Year by Year Comparison of Percent of Proficient/Advanced Scores for Overall Averaged Ratings



Almost all criteria mean scores were rated higher in 2018-19 from 2014-15 and 2015-16. For the 2018-2019 analysis, the highest mean score was Language with 2.96, an increase from 2.87 and 2.75 in 2014-2015 and 2015-2016, respectively. Delivery – Voice and Delivery - Nonverbals also increased from the 2018—2019 from the 2014-2015 and 2015-2016 mean scores (2.65 vs. 2.48 and 2.39, and 2.33 vs. 2.30 and 2.21, respectively). Introduction yielded an average rating of 2.23 in 2018-2019, whereas in previous years these areas were 1.64 and 2.08. Organization had a minimal upward increase from 2.14 and 2.15 in 2014-15 and 2015-16, respectively, to 2.19 in 2018-19. Although Conclusion was the weakest of the seven areas with an average rating of 1.51 for the 2018-19 analysis, this mean score was higher than 2014-15 with 1.30 and 2015-16 with 1.39. Supporting Material had an average rating of 2.20 for the 2018-19 analysis, however, this was lower than the mean score in 2014-15 of 2.27. In the 2015-16 analysis, the mean score for Supporting Material was lower than 2018-19, with 2.09. See Figure 8, below, for the distribution of mean scores across the years.

Figure 9. Year by Year Comparison of Mean Scores for Overall Averaged Ratings



### Conclusion, Areas of Consideration and Limitations

Oral communication artifacts scored during the 2018-19 academic year, using a modified version of the AAC&U Oral Communication VALUE rubric, totaled 199. Each artifact was rated by two reviewers. Of the 398 ratings for the 199 artifacts, 15 (7.5%) artifacts total scores varied by 1.00 or more. More than half (8, 53.3%), of these rated artifacts that needed a 3<sup>rd</sup> rater were by the same pair of raters, while an additional four (30.2%) were another pair of raters. In subsequent oral communication artifact rating, the reviews will not be done in pairs, but rather each rater will receive a random set of artifacts to rate. This may further reduce the amount of artifacts that need a 3<sup>rd</sup> rater to normalize scores.

Although 72.4% of oral communication artifacts were scored at the Proficient level, the overall mean score was 2.29, indicating that scores were on the lower third of Proficient scores. The criteria Language yielded the highest mean score, 2.96, on the high end of the Proficient range, however, the remaining criteria were scored in the middle to lower range of Proficient, and in the case of Conclusion, scored as Basic. Although scores have improved over time, there is room to improve these scores to achieve greater Proficiency and more Advanced scores.

Language was the highest rated criteria with the majority of ratings at Proficient (84.9%), and there were a minimal amounts of Basic ratings (7.0%), and 1.5% Beginning ratings, which was much different than the other criteria which had greater ratings of Basic. For future training sessions, the rubric will be reviewed to ensure the categories for Language are distinct enough.

Conclusion received the most scores for Not Present or Unobserved ( $n = 37$ , 2.7%). Faculty or mentors may need to emphasize or reinforce the importance of concluding statements at the end of oral presentations.

When comparing results to previous years, it should be noted that the methodology of determining 3<sup>rd</sup> ratings and normalized scores was modified in 2018-2019. The cut line for 3<sup>rd</sup> rater scores was increased from scores with a difference more than 1.00 ( $\leq 1.01$ ) to include those with differences of 1.00 or greater ( $\leq 1.00$ ). This may have resulted in more 3<sup>rd</sup> raters needed for 2018-19. Additionally, when normalizing ratings, the 3<sup>rd</sup> ratings were compared to the first two raters' scores, and score farthest from the 3<sup>rd</sup> rater's score was removed from further analysis. In previous years, the 3<sup>rd</sup> raters' scores had been averaged with the first two raters' scores, resulting in more varied normalized scores for those that required a 3<sup>rd</sup> rater (i.e., those scores with a 3<sup>rd</sup> rater were an average of three scores, others were an average of two scores). Consequently, the ranges of the scoring levels of Advanced, Proficient, Basic, Beginning and Unobserved were modified in 2018-19 to accommodate the normalization of the two ratings, not three.

Finally, efforts were made to draw from a representative profile of Washburn students for generalizability purposes. However, only Senior level students' oral presentations from nine departments were reviewed, so results are difficult to generalize to the entire Senior population.

## Appendix A

### ORAL COMMUNICATION VALUE RUBRIC

*for more information, please contact [value@aacu.org](mailto:value@aacu.org)*



The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success.

*The type of oral communication most likely to be included in a collection of student work is an oral presentation and therefore is the focus for the application of this rubric.*

#### Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

#### Framing Language

Oral communication takes many forms. This rubric is specifically designed to evaluate oral presentations of a single speaker at a time and is best applied to live or video-recorded presentations. For panel presentations or group presentations, it is recommended that each speaker be evaluated separately. This rubric best applies to presentations of sufficient length such that a central message is conveyed, supported by one or more forms of supporting materials and includes a purposeful organization. An oral answer to a single question not designed to be structured into a presentation does not readily apply to this rubric.

#### Glossary

*The definitions that follow were developed to clarify terms and concepts used in this rubric only.*

- **Orientation/Central message:** The main point/thesis/"bottom line"/"take-away" of a presentation. A clear central message is easy to identify; a compelling central message is also vivid and memorable. The central message is established throughout the entire speech, but effective speakers orient the audience to the speech topic and purpose in the introduction. Orientation refers to those parts of the introduction that explain the speaker's interest in the subject and/or rationale for engaging in the project. Orientation may also refer to why the topic is important for the audience. Very complex topics may require additional information in the beginning of the presentation to fully orient a lay audience.
- **Delivery techniques:** Posture, gestures, eye contact, and use of the voice. Delivery techniques enhance the effectiveness of the presentation when the speaker stands and moves with authority and purpose, looks more often at the audience than at his/her speaking materials/notes, uses the voice expressively, and uses few vocal fillers ("um," "uh," "like," "you know," etc.). Vocal variety refers to intentional changes in pitch, tone, volume, and pace intended to enhance or clarify a speaker's words.
- **Language:** Vocabulary, terminology, and sentence structure. Language that supports the effectiveness of a presentation is appropriate to the topic and audience, grammatical, clear, and free from bias. Language that enhances the effectiveness of a presentation is also vivid, imaginative, and expressive.
- **Organization:** The grouping and sequencing of ideas and supporting material in a presentation. An organizational pattern that supports the effectiveness of a presentation typically includes an introduction, one or more identifiable sections in the body of the speech, and a conclusion. An organizational pattern that enhances the effectiveness of the presentation reflects a purposeful choice among possible alternatives, such as a chronological pattern, a problem-solution pattern, an analysis-of-parts pattern, etc., that makes the content of the presentation easier to follow and more likely to accomplish its purpose.
- **Supporting material:** Explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities, and other kinds of information or analysis that supports the principal ideas of the presentation. Supporting material is generally credible when it is relevant and derived from reliable and appropriate sources. Supporting material is highly credible when it is also vivid and varied across the types listed above (e.g., a mix of examples, statistics, and references to authorities). Supporting material may also serve the purpose of establishing the speaker's credibility. For example, in presenting a creative work such as a dramatic reading of Shakespeare, supporting evidence may not advance the ideas of Shakespeare, but rather serve to establish the speaker as a credible Shakespearean actor.



	<b>Capstone</b> 4 (Advanced)	<b>Milestones</b>		<b>Benchmark</b> 1 (Beginning)
		3 (Proficient)	2 (Basic)	
<b>Introduction</b>	Excellent orientation of audience to topic; clear topic statement; previews main points.	Good orientation of audience to topic; discernible topic statement; previews main points.	Orientation of audience to topic is mundane; topic statement unclear; preview provides little direction for audience.	No orientation of audience to topic; abrupt jump into body of speech.
<b>Organization</b>	Very well organized; main points clear; effective transitions.	Organizational pattern is evident, main points are apparent; transitions present between main points.	Organizational pattern somewhat evident; main points are present but not distinct; transitions are present but are minimally effective.	Speech did not flow well; speech was not logically organized; transitions present but not well formed.
<b>Language</b>	Language is exceptionally clear, vivid; free from grammar errors and inappropriate usage.	Language appropriate to the goals of the presentation; free from grammar errors and inappropriate usage.	Language selection adequate; some errors in grammar; language at times misused (e.g, slang, awkward structure).	Grammar and syntax need to be improved as can level of language sophistication.
<b>Supporting Material</b>	All key points are well supported with a variety of credible material.	Main points were supported using appropriate material.	Points were generally supported; a greater quality of material needed.	Most points were not supported; a greater quantity and quality of material needed.
<b>Delivery-Voice</b>	Excellent use of vocal variation; intensity and pacing; vocal expression natural and enthusiastic; avoids fillers.	Good vocal variation and pace; appropriate vocal expression; few if any fillers.	Demonstrates some vocal variation; enunciates clearly and speaks audibly; generally avoids fillers.	Sometimes uses a voice too soft or articulation too indistinct for listeners to comfortably hear; often uses fillers.
<b>Delivery- Nonverbals</b>	Almost no reliance on notes; posture, gestures, facial expression and eye contact well developed, natural, and display high level of poise and confidence. All components above should be polished.	Almost no reliance on notes; posture, gestures and facial expressions are suitable for the speech; speaker appears confident. The speaker faces the audience (camera) with almost no distracting movement toward a visual aid.	Some reliance on notes, but has adequate eye contact; generally avoids distracting mannerisms. Speaker mostly faces audience (camera) with limited nonverbal distractions.	Speaker relies heavily on notes; nonverbal expressions stiff and unnatural. Speaker faces a visual aid or wall instead of the audience (camera); or has nonverbal distractions (hitting hand on desk, swiveling in chair, turning back and forth toward a computer).
<b>Conclusion</b>	Develops a clear review of main points; ends with strong and memorable closing statement.	Clear review of main points; clear closing statement	Provides some review of main points; closing technique can be strengthened.	Conclusion lacks clarity, trails off, ends in a tone not consistent with the rest of the speech.

## Appendix B

### 3<sup>rd</sup> Rater Review Methodology

Washburn faculty were invited to attend the in-person training on May 17, 2019. Faculty who attended the training were assigned 199 previously recorded oral presentations. The 199 presentations were reviewed by two independent raters on seven criterion: Introduction, Organization, Language, Supporting Material, Delivery-Voice, Delivery-Nonverbals, and Conclusion. These seven criterion were scored on a five-point scale that consisted of Capstone (4 or Advanced), Milestones (3 or Proficient and 2 or Basic), Benchmark (1 or Beginning), and Not Present (0 or Unobserved). Of the 24 raters who participated in the artifact review process, 60.9% scored 15 artifacts, 26.1% scored less than 15 artifacts, and 13.0% scored more than 15 artifacts.

### 3<sup>rd</sup> Rater Review Process

The range of differences in ratings was from 0.00 to 2.00. The greatest percentage of average ratings differed by 0.14 (23.6%), followed by 0.29 (23.1%), and 0.43 (21.1%). The distribution of scores were positively skewed (right-skewed) in that the mean (average) was 0.40 which was greater than the Median (middle) of 0.29. The distribution of rating differences are shown in the tables and chart, below.

Table 1B. Rating Differences

Rating Difference	Frequency	Percent
0.00	14	7.0%
0.14	47	23.6%
0.29	46	23.1%
0.43	42	21.1%
0.57	22	11.1%
0.71	9	4.5%
0.86	4	2.0%
1.00	6	3.0%
1.14	2	1.0%
1.29	2	1.0%
1.43	3	1.5%
1.71	1	0.5%
2.00	1	0.5%
<b>Total</b>	<b>199</b>	<b>100%</b>

Figure 1B. Percent of Rating Differences

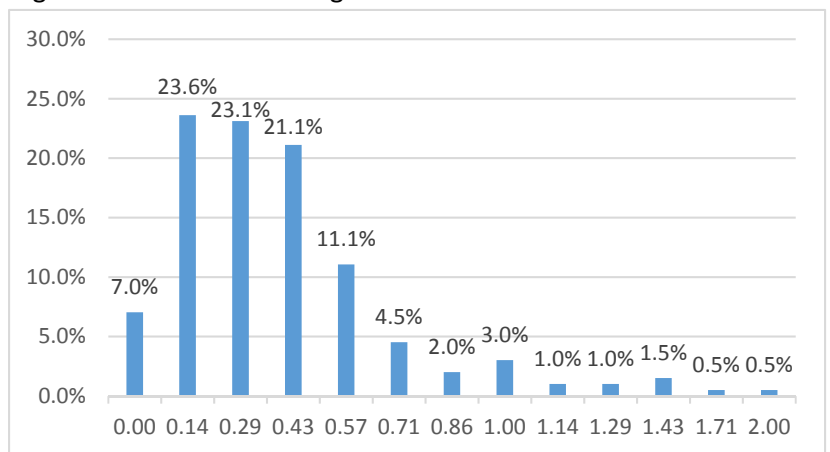


Table 2B. Descriptive Statistics for Rating Differences

Mean	Median	Mode	Standard Deviation
0.40	0.29	0.14	0.32

When the average difference in scores was equal to or greater than 1.00, a 3<sup>rd</sup> rater was utilized to normalize the ratings. After the initial round of scoring, the majority (92.5%) of average ratings from the 1<sup>st</sup> reviewer and the 2<sup>nd</sup> reviewer did not differ by 1.00 or more, and did not require a 3<sup>rd</sup> rating. However, there were 15 artifacts (7.5%) that met or exceeded 1.00 and required a 3<sup>rd</sup> rating.

For those requiring a 3<sup>rd</sup> rating, highlighted in blue in the table above, there were a total of 15 artifacts. Six (3.0%) artifacts had an average rating difference of 1.00, two each with rating differences of 1.14 (1.0%) and 1.29 (1.0%), three artifacts with rating differences of 1.43 (1.5%), and one rating difference of 1.71 (0.5%) and one artifact with a 2.00 rating difference (0.5%).

The 15 artifacts that required a 3<sup>rd</sup> rating were scored by a faculty member who did not initially rate those artifacts. The 3<sup>rd</sup> rating scores were compared to the first two raters' scores, and the score farthest from the 3<sup>rd</sup> rater's score was removed from further analysis. See Table 3B for means, the minimum difference, and maximum difference between ratings.

Table 3B. Descriptive Statistics for Ratings Selected and Not Selected

	Mean	Standard Deviation	Minimum	Maximum
<b>Rating Selected</b>	0.40	0.18	0.14	0.71
<b>Rating Not Selected</b>	0.93	0.29	0.57	1.43

The mean difference between those ratings that were selected and the 3<sup>rd</sup> rater's scores was 0.40; the mean difference between those ratings that were not selected and the third rater's scores was 0.93. The minimum difference for those ratings that were selected was 0.14; the maximum difference was 0.71.

### Differences by Criteria

The AAC&U Oral Communication VALUE rubric defines Oral Communication as “a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.” The rubric contained seven criterion: Introduction, Organization, Language, Supporting Material, Delivery-Voice, Delivery-Nonverbals, and Conclusion. The previously recorded oral presentations were rated on these seven criterion on a five-point scale that consisted of Capstone (4 or Advanced), Milestones (3 or Proficient and 2 or Basic), Benchmark (1 or Beginning), and Not Present (0 or Unobserved).

The 199 oral presentations were rated by two different reviewers for a total of 398 scores. These scores were reviewed for each of the seven criteria to examine differences in ratings per criteria. Table 4B provides the descriptive statistics for the differences in ratings by criteria.

Table 4B. Descriptive Statistics for Differences in Ratings by Criteria

	Introduction	Organization	Language	Supporting Material	Delivery Voice	Delivery Nonverbals	Conclusion	Total Difference
<b>Mean</b>	0.64	0.62	0.28	0.67	0.62	0.57	0.78	0.60
<b>SD</b>	0.67	0.65	0.49	0.65	0.65	0.67	0.81	0.68
<b>Min</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Max</b>	3.00	3.00	2.00	3.00	3.00	3.00	4.00	4.00

The mean difference was greatest for the criteria Conclusion in that the ratings on average differed by 0.78, the minimum rating was 0.00 (or no difference) and the maximum was 4.00. The mean difference was the least for the criteria Language with an average difference in rating of only 0.28, a minimum of 0.00 (or no difference) and a maximum of 2.00.