# Understanding Students' Oral Communication Skills:

# Summary of Evidence from Fall 2021

Cal Poly Pomona (CPP) is deeply committed to ensuring an educational experience that fosters student learning and success for every student. As part of that commitment, the Office of Assessment and Program Review leads the assessment of undergraduate learning outcomes each year, focusing on gathering evidence of *Oral Communication* in 2021. The evidence is used to understand student learning and experiences concerning their oral communication skills. The findings also assist the institution in learning about potential equity gaps, and subsequently identifying additional resources to improve the undergraduate experience in oral communication.

*Oral Communication* is both an institutional and a General Education (GE) learning outcome at CPP, as well as a WSCUC Core Competency. The GE learning outcome is defined as being able to speak effectively to various audiences, while the institutional learning outcome expresses oral communication as using verbal, written, visual and listening skills to communicate persuasively and coherently

This report summarizes the findings of student achievement regarding *Oral Communication* from a combination of direct evidence via video recordings of student presentations scored by CPP faculty, and indirect evidence drawn from student responses to related questions on the 2020 National Survey of Student Engagement (NSSE).

## Direct Evidence: Oral Communication Rubric

### Methodology

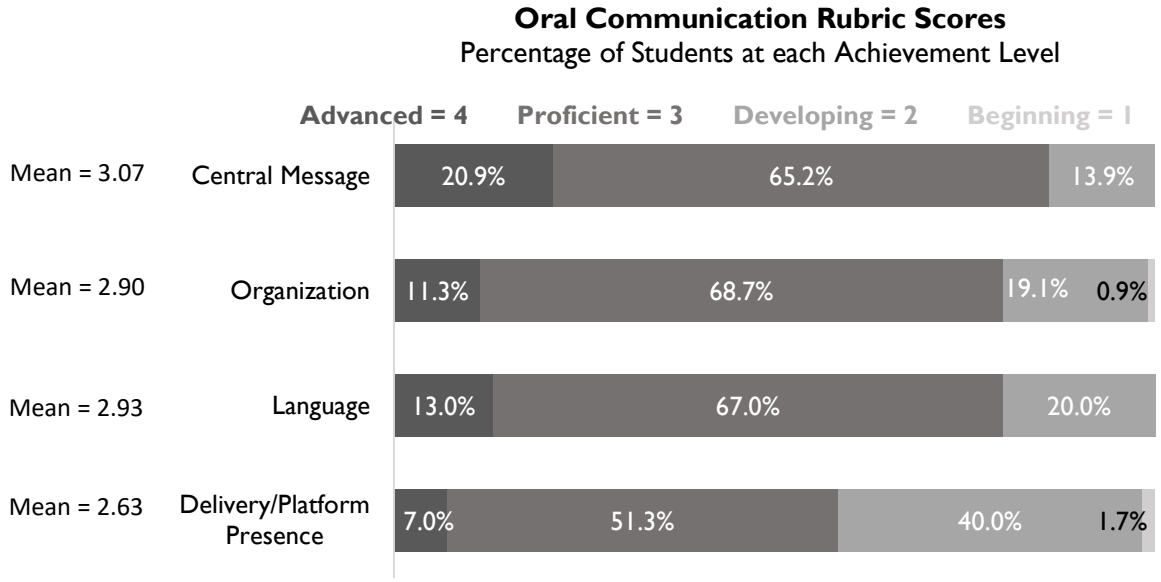
In Fall 2021, faculty teaching senior-level courses from each of the eight colleges were invited to provide the Office of Assessment and Program Review with student artifacts to be scored using the oral communication rubric (Appendix A) approved by the Academic Programs Assessment Committee (APAC) and GE Assessment Committee (GEAC.) Adjusting for fewer in-person courses as a result of our COVID-19 landscape, submitted artifacts were videos that were 1) Zoom recordings by professors; 2) live in-person recordings of presentations either in class or using Studio 6 facilities; or 3) student self-recordings. The recordings depicted either a single student giving an oral presentation or a group of students giving an oral presentation. In the case of group presentations, every student was identified by time stamps to ensure that each student received their own oral communication assessment score. The professors shared the videos with the Office of Assessment and Program Review using multiples formats as well, such as granting access to the class on Canvas, or uploading their videos on CPP Streaming or YouTube. In the latter case, students uploaded videos to YouTube as part of their course assignment, and provided faculty links to the videos.

A random sample of 115 seniors representing six of the eight colleges* and reflecting CPP's undergraduate population by college, URM status, and first-generation status was selected for scoring. Prior to scoring, each student was assigned a unique ID to maximize anonymity. However, this effort was imperfect because in some cases, students introduced themselves, or their video link contained their name. In addition, the majority of students had their cameras turned on, so it was possible the faculty may identify or recognize some of the students. To help limit internal bias, faculty scorers were instructed to ignore student names and any other possibly identifying information as much as possible.

The video recordings were scored by a group of 11 faculty from seven colleges and the library using the oral communication rubric approved by the Academic Programs Assessment Committee (APAC) and GE Assessment Committee (Appendix A). These faculty participated in a norming session during winter break in 2022 to calibrate the Rubric and its application to sample video artifacts. Thereafter, over a one-week period, each student artifact was viewed and scored independently by two faculty members. Artifacts with discrepancies greater than two points in scores were scored by a third reviewer. Subsequently, means for each Rubric criterion were calculated for every student, and then rounded to the nearest whole number. The Rubric defined oral communication through four criteria (central message, organization, language, and delivery/platform presence) and four levels of performance (beginning, developing, proficient, and advanced).

**Results**

In addition to computing frequencies to obtain percentages for each of the rubric criteria, t-tests were used to compare potential differences in performance based on gender, URM status, first-generation status, and Pell grant status. The chart below displays the overall percentage of students who scored at each level of achievement in each criterion. The results show a mixed distribution of student performance in each criteria of oral communication, with the majority of seniors at the "proficient" and "advanced" levels across all criteria.




***Oral Communication by Criterion***

It is our goal and expectation that seniors reach "proficient" and "advanced" levels of oral communication by the time they graduate. Our findings affirm that seniors generally do perform at these levels, performing the strongest in *central message* with the majority (86.1%) at the "proficient" and "advanced" levels. For both *organization* and *language,* 80% of seniors performed at the "proficient" and "advanced" levels.

The lowest measured performance was in *Delivery/platform presence*. This criterion is concerned with delivery techniques students incorporate to make their presentation compelling and/or interesting, while appearing professional. Only 58.3% of seniors demonstrated "proficient" and "advanced" levels. This meant that a total of 41.7% did not perform at the levels expected of a graduating senior, with scores at the "beginning" and "developing" levels.

***Oral Communication by Demographic Group***

Additional analyses were conducted to compare student performance by key demographic characteristics; that is, under-represented minority (URM) status[1], first-generation status, Pell Grant status, and gender. There were no statistically significant differences found based on URM status nor Pell Grant status on any of the oral communication rubric criteria. However, there were statistically significant differences found based on first-generation status and gender on some of the rubric criteria. That is, students who are not first-generation performed better than first-generation students on *central message* and the *language* of their oral presentations. In addition, males performed better than females on the *organization* of their presentations. The significant rubric score differences found for gender and first-generation status were not consistent with perceived oral communication skills reported on the NSSE.

[1] URM status includes students who identify as American Indian/Alaska Native, Black or African American, and Hispanic/Latino

***Oral Communication by Gender***

The first chart in Appendix B displays the percentage of males and females at each level of performance in each criterion. A greater percentage of males performed at higher levels ("proficient" and "advanced") across all criteria, with a statistically significant difference found only in *organization.* Specifically, 11.9% more males scored in the "advanced" and "proficient" levels on the *organization* criterion.

***Oral Communication by First-generation Status***

The second chart in Appendix B displays the percentage of first-generation students and those who are not first-generation students at each level of performance in each criterion. A greater percentage of non-first-generation students performed at the "proficient" and "advanced" levels in comparison to first-generation students across all criteria. However, statistically significant differences were found only for *central message* (a 14% difference at the "advanced" and "proficient" levels) and *language* (difference of 21.2%).

## Indirect Evidence: National Survey of Student Engagement (NSSE)

### Methodology

As part of CPP's commitment to ensuring educational experiences that foster student learning and success, CPP participated in the National Survey of Student Engagement (NSSE) in Spring 2020. With a response rate of 25%, this survey collected information from 1,747 first- and senior-year students regarding their participation in various educational practices.

NSSE scores serve as complementary indirect evidence of student learning concerning quantitative reasoning. In addition, as the test is national, benchmark data from comparative institutions is provided.

### Results

CPP seniors reported that they "often" give presentations in their courses and did so with greater frequency than CPP first-year students, and significantly more often than their peers at comparator institutions. Furthermore, seniors reported that CPP contributed "some" to their knowledge and skills regarding their personal development in speaking clearly and effectively, which is significantly less than their peers at other CSU institutions. CPP seniors did state that they have "Quite a bit" of confidence in their ability to speak persuasively. The tables below detail mean responses to oral communication-related questions disaggregated by first- and senior-year students and by comparison groups.

| During the current school year, about how often have you done the following: | | | | | |
|---|---|---|---|---|---|
| 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often | | Mean Response | | | |
| | | CPP | Master's | CSU | NSSE TOTAL |
| Given a course presentation? | FY | 2.4 | 2.3* | 2.5* | 2.3* |
| | SR | 3.0 | 2.6* | 2.9* | 2.7* |

**Please note that these scores are significantly different from the corresponding CPP score, p < .05*

| How much has your experience at this institution: | | | | | |
|---|---|---|---|---|---|
| 1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much | | Mean Response | | | |
| | | CPP | Master's | CSU | NSSE TOTAL |
| Contributed to your knowledge, skills, and personal development in speaking clearly and effectively? | FY | 2.8 | 2.8 | 2.9* | 2.7* |
| | SR | 2.9 | 2.9 | 3.0* | 2.9 |

**Please note that these scores are significantly different from the corresponding CPP score, p < .05*

| How much confidence do you have in your ability to complete tasks requiring: | | | |
|---|---|---|---|
| 1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much | | Mean Response | |
| | | CPP | Master's |
| Persuasive speaking? | SR | 3.0 | 3.1 |

## Summary and Discussion

The evidence from our Oral Communication rubric scores and the NSSE reveal somewhat complementary levels of oral communication skills on the part of CPP seniors. That is, our indirect assessment (NSSE) demonstrate that CPP provided opportunity to develop oral communication skills and confidence, while our direct assessment data reveal that the majority of seniors performed at "proficient" and "advanced" levels of oral communication. These skills are crucial for all students due to oral communication's foundational role for many aspects of everyday life and careers, including how well one can communicate with potential employers, professionals in their field(s), potential clients/customers, and even conversations with friends and family. In fact, communication was ranked as the top workplace competency according to the Georgetown University Center on Education and the Workforce[2]. Possessing strong oral communication skills is particularly important to ensure that one is heard and understood clearly, minimizing opportunities for misinterpretation.

While we can commend our graduating seniors on their oral communication skills as they pertain to *central message, organization,* and *language* with 80% or more performing at the "proficient" and "advanced" levels, this also means that about 20% of our seniors are still at the "beginning" and "developing" level of each of these criteria.

Our findings show that only about 58.3% of seniors performed at the "proficient" and "advanced" level for *delivery/platform presence*, which means that close to 42% of our graduating seniors performed at the "beginning" and "developing" level for this criterion. Potentially some of the performance on this criterion may be attributed to the inconsistency of the recorded video presentations. For instance, some students created slides to complement their presentation while others did not. Some students did not turn on their camera. Additionally, due to the COVID-19 requirement of masks on campus, some students wore face masks during their in-person presentation recordings, resulting in less-than-ideal video presentations. The possible impact of this on faculty scoring should be considered when drawing conclusions pertaining to this criterion. Furthermore, discussion with faculty leaders, and approval to adopt an improved and relevant Rubric criterion is warranted to capture the varied delivery platforms that have become the norm.

Of concern are the differences found by gender and first-generation status. Although, on the NSSE, males and females reported similar levels of perceived oral communication skills, males did receive higher scores on all rubric criteria, and significantly so on *organization* in our direct assessment. This finding is not explained by research on the topic, which has long postulated that females are more skilled with most aspects of communication (Roter et al., 2009; Taylor et al., 2014; Wu & McLaughlin, 2013). In fact, Berglund, Eriksson, and Westerlund (2005) found that gender differences appear in favor of females as young as 18-months-old.

We also found that non-first-generation students performed better than first-generation students regarding the *central message* and *language* of their presentations. This finding is consistent with the available research on oral communication skills among first-generation college students. For example, Housel (2012) asserts that first-generation students struggle with oral communication not only because they lack adequate educational resources, but because they may also struggle with assimilating into the college culture, feeling the pull between "working-class home culture" and "upper-class academic culture."

On the NSSE, CPP seniors reported that they have presentations in their courses "often" and they feel "quite a bit" confident in their ability to speak persuasively; however, seniors received the lowest rubric scores on their delivery/platform presence. This may be due in part to the inconsistencies of recorded videos submitted (i.e., face masks). It is also of note that seniors indicated the institution only contributed "some" to their knowledge, skills, and personal development in speaking clearly and effectively.

As we consider these results in light of the elements of an *inclusive polytechnic university*, it is appropriate to consider the extent to which we incorporate instruction in oral communication skills across the curriculum and co-curriculum. For instance, to what extent do we rely on GE courses to teach students oral communication? How do individual degree programs advance critical oral communication skills in upper-division program courses?

[2] https://cew.georgetown.edu/cew-reports/competencies/

**Improving Student Learning**

Discussing this report with faculty and/or key staff (e.g., academic advisors, career advisors) in your program may help determine program-level actions needed to improve student achievement in the Oral Communication learning outcome. If your program has evidence of learning for a related outcome, it may be useful to consider those results as part of your discussion.

The following questions may be useful in guiding discussions:

- For which components/criteria of Oral Communication do students demonstrated satisfactory levels of achievement? How do students in your program compare?
- For which components/criteria of Oral Communication do you feel students need to improve?
- What types of assignments are used in your program to develop student's ability to apply their oral communication skills to become effective speakers?
- To what extent is scaffolded feedback on assignments provided? When/where is it needed the most to strengthen student learning in this outcome?
- What are some course or program modifications that may facilitate student learning in the necessary oral communication skillset and improve on the components/criteria you identified as needing improvement? While not an exhaustive list, typical categories of changes made as a result of assessment evidence may include:
    - Curriculum (e.g., adequacy of courses, course sequencing, etc.)
    - Pedagogy (e.g., more assignments where students can cultivate their oral communication, provide scaffolded assignments or prompts to ensure students acquire the skills, dedicate a specific amount of class time to a skill identified as needing improvement, incorporate a class activity to enhance student learning, etc.)
- What recommendations do you have for CPP to improve students' oral communication skills?

We recommend keeping a record of the decisions your program makes about the evidence, and the actions taken to improve Oral Communication skills. This information may be useful when completing future assessment reports and program review/accreditation self-studies.

## References

Berglund, E., Eriksson, M., and Westerlund, M. (2005). Communicative skills in relation to gender, birth order, childcare, and socioeconomic status in 18-month-old children. *Scandinavian Journal of Psychology, 46*(6), 485-491. https://doi.org/10.1111/j.1467-9450.2005.00480.x

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Roter, D. L., Hall, J. A., Aoki, Y. (2002). Physician Gender Effects in Medical Communication: A Meta-analytic Review. *JAMA* 288(6):756–764. https://doi:10.1001/jama.288.6.756

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## Appendix A

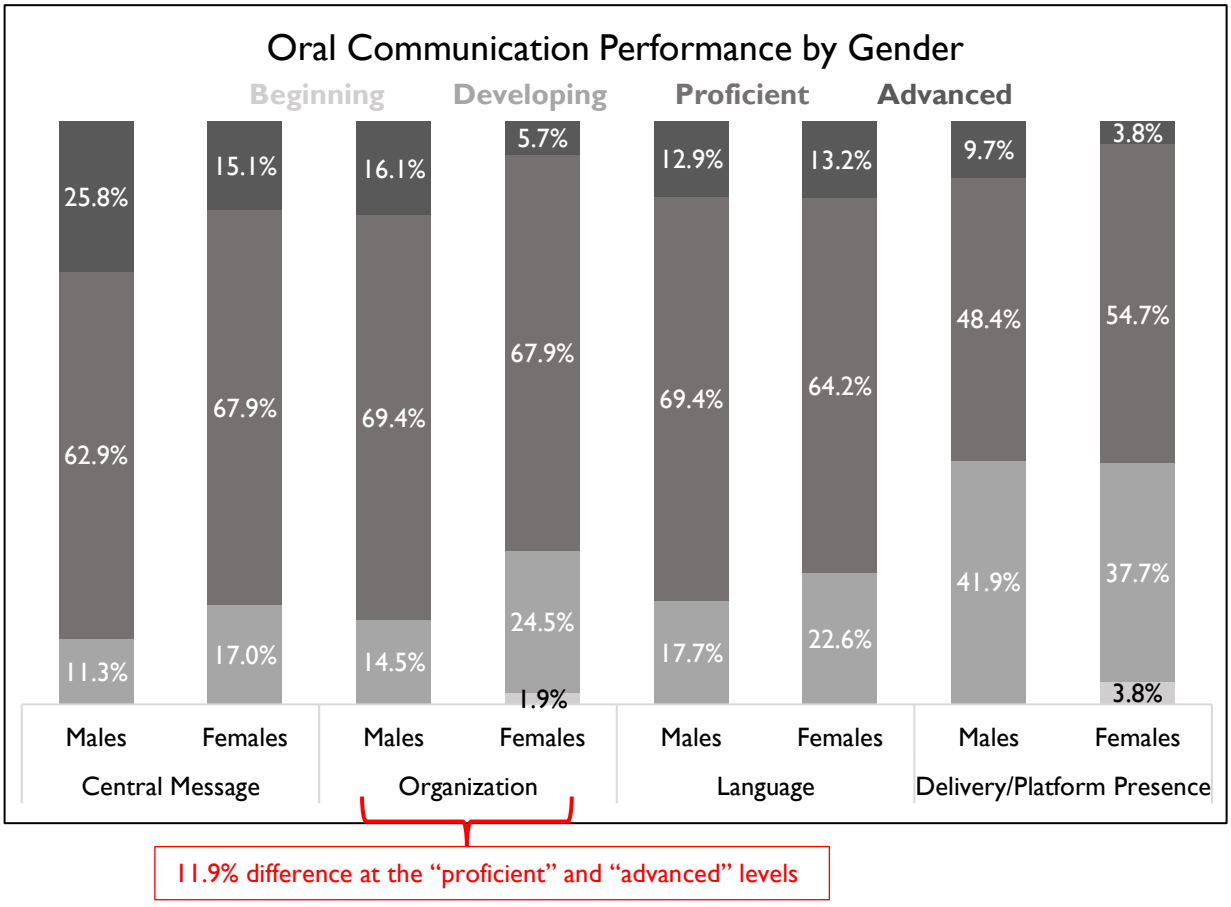
**CORE COMPETENCY – ORAL COMMUNICATION (APPROVED BY APAC and GE ASSESSMENT)**

**CORE COMPETENCY:** Oral Communication at or near graduation
**GE SLO Ib.** Speak effectively to various audiences.
**Institutional Learning Outcome:** Using verbal, written, visual and listening skills to communicate persuasively and coherently
**Practitioners – Communication Skills**

| Criteria | Advanced (4) | Proficient (3) | Developing (2) | Beginning (1) |
|---|---|---|---|---|
| **Central Message** | Central message is compelling, precisely-stated, strongly-supported, and well-developed. | Central message is clearly-stated, and developed with supporting material. | Central message is basically understandable but missing supporting material; message is unmemorable. | Central message is partially-stated, vague, and not explicit. |
| **Organization** | Presentation is logically-sequenced and purposeful (e.g., a central point/problem identified early, arguments well-selected, clear transitions, key points effectively repeated, focused). A listener can easily follow the line of reasoning. | Presentation may be coherent overall but presents some inconsistencies (e.g., presentation may stray from the central message, have awkward transitions, key points get buried). | Presentation has a basic structure. The lines of reasoning are intermittently-observable within the presentation. | Presentation lacks logical sequence or coherent structure (e.g., off topic, poor examples, little or no context, purpose/problem absent or buried). A listener would have difficulty following the line of reasoning. |
| **Language** | Language is appropriate to audience, situation, and purpose. Language choices precisely convey the presenter's intended meaning and enhance the effectiveness of the presentation (e.g. clear points, concise phrasings, fluid sentences, inclusive). | Language is mostly appropriate to audience, situation, or purpose, but does not always advance the intended meaning or the effectiveness of the presentation. Language may be at times simplistic, casual, imprecise, or oddly structured. | Language choices are mundane and commonplace and partially supports the effectiveness of the presentation. | Language is inappropriate to audience, situation, or purpose. Language choices undermine the effectiveness of the presentation or do not advance the intended meaning of the presentation. (e.g. overly casual, wordy, confusing, imprecise) |
| **Delivery/ platform presence** | Delivery techniques make the presentation compelling, and speaker appears polished and professional. | Delivery techniques makes the presentation interesting and speaker appears comfortable. | Delivery techniques make the presentation understandable, and/or speaker appears relatively prepared but tentative. | Delivery techniques detract from the understandability of the presentation, and/or the speaker appears unprepared. |

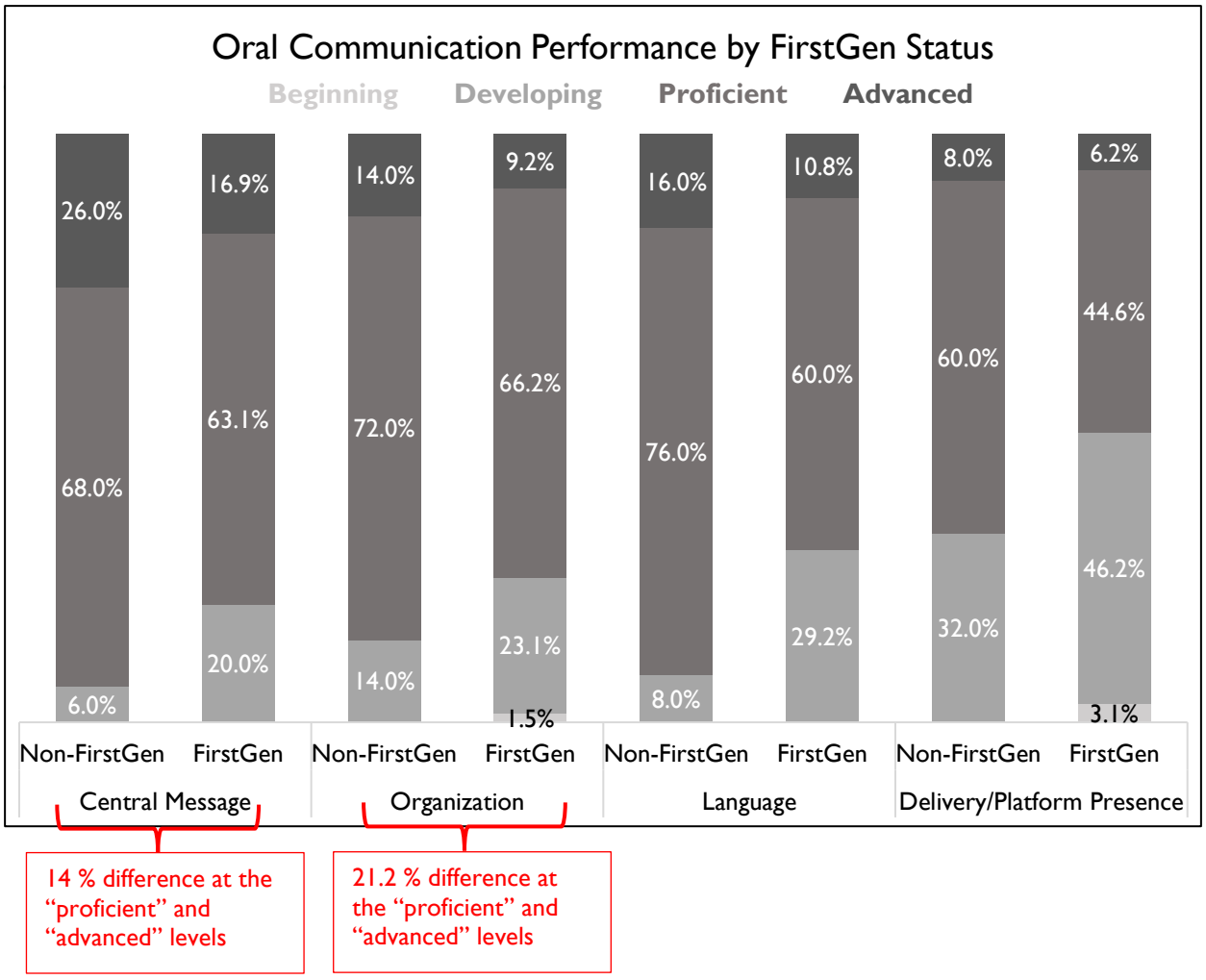
## Appendix B

### Oral Communication by Gender




Note: A statistically significant difference was found in the *organization* criterion.

**Oral Communication by First-generation Status**




Note: Statistically significant differences were found for *central message* (a difference of 14%) and *language* (a difference of 21.2%) at the "proficient" and "advanced" levels.