# Analysis of Artifacts aligned to Marshall's Baccalaureate Degree Profile (BDP)
## Academic Year 2021 – 2022

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## Executive Summary

### Background

### Recommendations from the 2021 Assessment Team

The 2021 Summer Assessment Team made the following recommendations:
1. That we work with the Center for Teaching and Learning to form an interdisciplinary committee to review, and consider modifications to, our existing Baccalaureate Degree Profile (BDP) outcome, *Creative Thinking*.  This outcome had the lowest performance in our assessment this year and these results mirrored those found for student performance on *Creative Thinking* in summers 2018 and 2017.  The Summer Assessment Team has noted that, although we think it is important to have a rubric that works for all disciplines, our earlier efforts to do this may have resulted in a rubric that does not include appropriate evaluation criteria for creative productions, such as those developed by students in the creative arts (e.g., visual art and music).  One member of the team suggested that we modify the outcome to include *creative production* and *creative problem-solving*.  This recommendation has not been carried out and should be a priority for academic year 2022-2023.

2. That the Office of Assessment and Quality Initiatives complete an analysis of the alignment between undergraduate degree program outcomes and those of the BDP.  Since programs have made these alignments by BDP trait, this analysis will help us to identify to which outcomes/traits our degree programs align most often.  <span style="color:red">This analysis is ongoing. Please refer to this year's recommendations at the end of the executive summary.</span>
3. That, following completion of point 2, we start the process of determining if modifications should be considered for outcomes of the BDP not mentioned in point 1. <span style="color:red">Same as above.</span>
4. That we work with the General Education Council regarding strategies to ensure that faculty teaching Core I courses align the assignment (their Core I application indicated would be aligned) to the appropriate BDP outcome in Blackboard.  This might include a communication strategy, e.g., presenting results of past assessments to the Faculty Senate and talking about why this process is important.  It might include emphasizing the people available to help faculty make these alignments in Blackboard, e.g., the MU Online Design Center. <span style="color:red">Please refer to this year's recommendations.</span>
5. That the Office of Assessment and Quality Initiatives continue to provide and distribute shorter reports in more digestible formats.  We recommend that these reports be disseminated campus-wide through the Assessment Newsletter and shared with the Faculty Senate. <span style="color:red">Please refer to this year's recommendations.</span>
6. That we work with the Center for Teaching and Learning and the General Education Council to consider wider involvement by faculty teaching core curriculum courses in the assessment of artifacts uploaded to Blackboard.  This might take the form of a pilot year of using existing rubrics to assess samples of the student artifacts required for alignment to the Baccalaureate Degree Profile outcome they have chosen in Blackboard.  Our hope is that, by using the university level rubrics to evaluate a sample of the artifacts they have asked students to complete, they will either suggest modifications to the rubric <u>or</u> they will ensure that their assignments align with the rubric being used.  <span style="color:red">This had not been completed.</span>

### *Procedures for 2022 Assessment*

***General Procedures***

In May 2022 we evaluated student artifacts produced in response to course assignments aligned to *Intercultural Thinking*, *Ethical & Civic Thinking*, and *Communication Fluency*.   A group of seven faculty representing several academic colleges from across the university evaluated a sample of these artifacts using rubrics adapted from Marshall's Baccalaureate Degree Profile outcomes.  These rubrics are included in the supporting documentation.  Our sample initially consisted of 336 artifacts, 112 per outcome.

Prior to beginning our assessment, we spent a day reviewing all assignments aligned to *Intercultural Thinking* and to *Ethical & Civic Thinking* to determine if there were assignments that either did not align to the outcome in question or did not align to one or more of its traits.  Assignments that reviewers agreed did not align to the outcome were removed from the sample and reviewers were instructed to note the traits to which each assignment that remained in the sample did not align and to assign these artifacts scores of "not applicable" (N/A) for those

traits. Additionally, for artifacts that aligned to *Ethical & Civic Thinking*, evaluators were instructed to assign a score of "0" if they felt the assignment allowed the student to address the trait in question, but the evaluator felt that the student had not done so. The team collectively decided to eliminate one trait (context/audience) from the *Communication Fluency* rubric, but otherwise decided that, unless the course instructor directed otherwise, all artifacts should receive numerical scores for each of the remaining three traits. The following chart shows the total number of assignments (for artifacts aligned to *Intercultural Thinking* and to *Ethical & Civic Thinking*) that aligned to their respective outcome traits. We did not count assignments aligned to *Communication Fluency* due to their large number. Finally, the chart provides the number of artifacts that received scores for each outcome trait.

| Outcome | Trait (MU rubric) | Total Assignments Aligned | Total Artifacts Aligned to Each Trait |
|---|---|---|---|
| | | | |
| **Intercultural Thinking** | Own and Other Cultures | 22 | 107 |
| | Communication with Others from Different Cultures | 15 | 84 |
| | Global Awareness | 6 | 63 |
| | Cultural Conflict | 21 | 87 |
| **Total for Intercultural Thinking** | | **23** | **341** |
| | | | |
| **Ethical & Civic Thinking** | Ethical Self-Awareness | 9 | 44 |
| | Professional Rules and Standards of Conduct | 6 | 37 |
| | Civic Well-Being | 17 | 102 |
| | Complex Ethical Issues | 6 | 36 |
| **Total for Ethical & Civic Thinking** | | **18** | **219** |
| | | | |
| **Communication Fluency** | Design/Organization | Multiple | 111 |
| | Diction | Multiple | 109 |
| | Communication Style | Multiple | 110 |
| **Total for Communication Fluency** | | **Multiple** | **330** |
| | | | |

Each artifact was evaluated by two independent reviewers. This project was coordinated by the Office of Assessment and Quality Initiatives.

*Scoring Procedures*

Evaluators assessed each artifact using the following scale:

| Special Scoring Codes | |
|---|---|
| **Score** | **Explanation** |
| 0 | **Note:  This score was allowed only for artifacts that were assessed for *Ethical & Civic Thinking*.** This score was only used when the evaluator/s saw no evidence of the trait in the student's work.  When two reviewers agreed on scores of "0," the score was dropped from the final analysis. |
| **Regular Scoring Codes** | |
| These codes were given to artifacts that were aligned with appropriate outcomes/traits and contained enough information to allow assessment. | |
| 1 | The artifact demonstrated Level 1 performance. |
| 2 | The artifact demonstrated Level 2 performance. |
| 3 | The artifact demonstrated Level 3 performance. |
| 4 | The artifact demonstrated Level 4 performance. |

Please see the supporting information that follows this summary to view the rubrics used and a detailed explanation of scoring procedures.

*General Information about the Sample*

Although the total sample numbered 336, one artifact, aligned to *Ethical & Civic Thinking*, was discarded due to scores of "0" on the aligned traits, and a second artifact, aligned to *Communication Fluency*, was not uploaded into Blackboard.  Of the 334 scorable artifacts, 178 (53%%) were drawn from courses at the 100/200 level, with the remaining 156 (47%) drawn from courses at the 300/400 level.

*Results and Analysis*

Results based on course level were as follows:

| Intercultural Thinking | | | | Ethical & Civic Thinking | | | | Communication Fluency | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trait** | **Course Level** | **Number** | **Mean (SD)** | **Trait** | **Course Level** | **Number** | **Mean (SD)** | **Trait** | **Course Level** | **Number** | **Mean (SD)** |
| **Own and Other Cultures** | 100/200 | 65 | 2.48 (0.62) | **Ethical Self-Awareness** | 100/200 | 12 | 2.25 (0.81) | **Design/Organization** | 100/200 | 59 | 2.53 (0.49) |
| | 300/400 | 42 | 2.64 (0.46) | | 300/400 | 32 | 1.95 (0.79) | | 300/400 | 52 | 2.80 (0.54) |
| **Communication with Others from Different Cultures** | 100/200 | 53 | 2.25 (0.72) | **Professional Rules and Standards of Conduct** | 100/200 | 5 | 2.90 (0.89) | **Diction** | 100/200 | 59 | 2.73 (0.42) |
| | 300/400 | 31 | 2.55 (0.49) | | 300/400 | 32 | 2.52 (1.00) | | 300/400 | 50 | 2.97 (0.48) |

| Intercultural Thinking | | | | Ethical & Civic Thinking | | | | Communication Fluency | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Global Awareness | 100/200 | 37 | 1.81 (0.73) | Civic Well-Being | 100/200 | 48 | 2.34 (0.55) | Communication Style | 100/200 | 59 | 2.53 (0.52) |
| | 300/400 | 26 | 2.15 (0.83) | | 300/400 | 54 | 2.20 (0.70) | | 300/400 | 51 | 2.78 (0.47) |
| Cultural Conflict | 100/200 | 48 | 2.15 (0.74) | Complex Ethical Issues | 100/200 | 9 | 2.94 (0.63) | | | | |
| | 300/400 | 39 | 2.55 (0.57) | | 300/400 | 27 | 2.89 (0.68) | | | | |

For all traits of *Intercultural Thinking* and for *Communication Fluency*, students enrolled in courses at the 300/400 level had higher mean scores than did students enrolled in courses at the 100/200 level. For *Communication Fluency*, course level mean differences were significant for all traits.  For *Ethical & Civic Thinking*, students in 300/400 courses did not perform significantly higher than students in 100/200 level courses.  We note that most artifacts assessed for this outcome were from 300/400 level courses.

A perusal of the chart above shows mean performance for artifacts uploaded from 100/200 level courses ranged from 1.81 for *Intercultural Thinking*: global awareness to 2.94 for *Ethical & Civic Thinking*: complex ethical issues.  These results should be interpreted with caution due to the small number of artifacts aligned to complex ethical issues and to the fact that there were no 100/200 level courses with "International" designations in this sample.  Courses with "International" designations are required to address global awareness.  Means for 300/400 level courses ranged from 1.95 for *Ethical & Civic Thinking*: ethical self-awareness to 2.97 for *Communication Fluency*: diction.  No mean score reached 3.0.
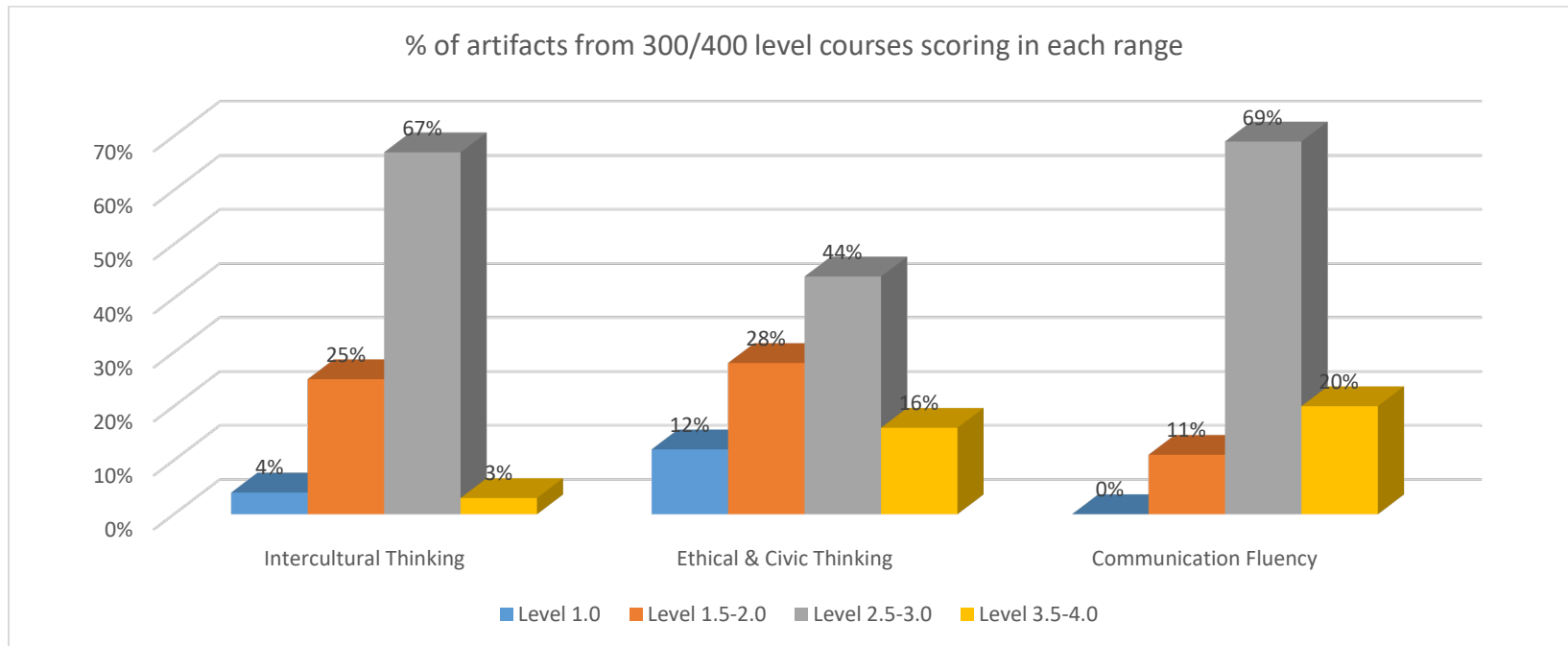
### *Frequency Analysis*

| Intercultural Thinking | | | | | Ethical & Civic Thinking | | | | | Communication Fluency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 | Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 | Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 |
| Own & Other | 100/200 | 2% | 74% | 94% | Self-Awareness | 100/200 | 8% | 50% | 83% | Design | 100/200 | 5% | 75% | 100% |
| | 300/400 | 2% | 81% | 100% | | 300/400 | 6% | 37% | 78% | | 300/400 | 23% | 85% | 100% |
| Communication | 100/200 | 0 | 62% | 88% | Rules & Standards | 100/200 | 40% | 60% | 100% | Diction | 100/200 | 7% | 88% | 100% |
| | 300/400 | 0 | 71% | 100% | | 300/400 | 31% | 62% | 84% | | 300/400 | 26% | 96% | 100% |
| Global Awareness | 100/200 | 0 | 27% | 68% | Civic Well-Being | 100/200 | 4% | 58% | 96% | Style | 100/200 | 5% | 80% | 97% |
| | 300/400 | 8% | 50% | 81% | | 300/400 | 4% | 56% | 89% | | 300/400 | 12% | 88% | 100% |
| Conflict | 100/200 | 2% | 50% | 83% | Issues | 100/200 | 33% | 89% | 100% | Overall | 100/200 | 6% | 81% | 99% |
| | 300/400 | 3% | 72% | 98% | | 300/400 | 33% | 89% | 100% | | 300/400 | 20% | 89% | 100% |

| Intercultural Thinking | | | | | Ethical & Civic Thinking | | | | | Communication Fluency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 | Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 | Trait | Course Level | % Scoring 3.5 to 4.0 | % Scoring 2.5 to 4.0 | % Scoring 1.5 to 4.0 |
| Overall | 100/200 | 1% | 57% | 86% | Overall | 100/200 | 11% | 61% | 95% | | | | | |
| | 300/400 | 3% | 70% | 95% | | 300/400 | 16% | 60% | 88% | | | | | |

While only 3% of students enrolled in 300/400 level courses received scores of 3.5 or higher on artifacts aligned to *Intercultural Thinking*, 70% of students from 300/400 level courses and 57% from 100/200 level courses received scores of 2.5 or higher.  For *Ethical & Civic Thinking*, 16% and 11% of students enrolled in 300/400 and 100/200 level courses (respectively) received scores of 3.5 or higher, with 60% of students from 300/400 level courses and 61% from 100/200 level courses receiving scores of 2.5 or higher.   For *Communication Fluency*, 20% of students enrolled in 300/400 level courses and 6% from courses at the 100/200 level received scores of 3.5 or higher, while 89% (300/400 level) and 81% (100/200 level) received scores ranging from 2.5 to 4.0.

Based on these results, improvement of performance over time appears to be strongest in *Communication Fluency*.  The percentage of students scoring at least a 3.5 (meaning that at least one evaluator had assigned a score of "4") rose 14% between 100/200 and 300/400 level classes. This compares to a 5% increase for *Ethical & Civic Thinking* and a 2% increase for *Intercultural Thinking*.   It also is noteworthy that only 1% of 100/200 level artifacts in the sample (and no 300/400 level artifacts) received scores of 1.0 for *Communication Fluency*, while 5% and 12% of 100/200 and 300/400 level (respectively) received scores of 1.0 for *Ethical & Civic Thinking*.  Finally, 14% and 4% (for 100/200 and 300/400 level courses respectively) received this low score on artifacts aligned to *Intercultural Thinking*.  Taken together, it appears that at the 300/400 level fewer students have reached the highest level of performance for *Intercultural Thinking* than for the other two outcomes, but most have moved beyond a "baseline" level.  On the other hand, based on performance in 300/400 level courses, it appears that, while more students scored at the highest level (16% scoring at 3.5-4.0), 12% were still at level 1 for *Ethical & Civic Thinking*.  In 300/400 level courses, students demonstrated strongest performance in *Communication Fluency*, with no artifacts scoring at 1.0 and 20% at 3.5-4.0.  Additionally, a majority (*Intercultural Thinking* and *Communication Fluency*) or a plurality (*Ethical & Civic Thinking*), of students enrolled in 300/400 level courses achieved scores in the 2.5-3.0 range, meaning that at least one evaluator had assigned their artifact a score of 3.0.  Please refer to the graph on the following page.

**BDP Analysis Graph**

## % of artifacts from 300/400 level courses scoring in each range

| | Intercultural Thinking | Ethical & Civic Thinking | Communication Fluency |
|---|---|---|---|
| Level 1.0 | 4% | 12% | 0% |
| Level 1.5-2.0 | 25% | 28% | 11% |
| Level 2.5-3.0 | 67% | 44% | 69% |
| Level 3.5-4.0 | 3% | 16% | 20% |

Legend: Level 1.0, Level 1.5-2.0, Level 2.5-3.0, Level 3.5-4.0

## *Results for Course Type*

Analyzing results by course type posed several challenges.  Courses analyzed this year could have more than one attribute (e.g., Critical Thinking [CT], Writing Intensive [WI], Core II, Capstone, Multicultural, International, Community-Based Learning, and Honors) in combination (and many did).   So, when analyzing results by course type, we included all courses with the attribute we wanted to assess; this resulted in some courses being included in the analysis for more than one course type.

*Critical Thinking (CT) Courses*

CT courses in the assessment sample included those that aligned to each of the outcomes assessed.  All CT courses are at the 100/200 level.  Results are below:

| Intercultural Thinking | | | Ethical & Civic Thinking | | | Communication Fluency | | |
|---|---|---|---|---|---|---|---|---|
| Trait | Number | Mean (SD) | Trait | Number | Mean (SD) | Trait | Number | Mean (SD) |
| Own & Other | 60 | 2.44 (0.63) | Self-Awareness | 12 | 2.25 (0.81) | Design | 36 | 2.58 (0.44) |
| Communication | 48 | 2.18 (0.72) | Rules & Standards | 5 | 2.90 (0.89) | Diction | 36 | 2.78 (0.35) |
| Global Awareness | 33 | 1.68 (0.66) | Civic Well-Being | 48 | 2.34 (0.55) | Style | 36 | 2.54 (0.50) |
| Conflict | 44 | 2.06 (0.71) | Issues | 9 | 2.90 (0.63) | | | |

While, due to the relatively small */n/*s for most traits of *Ethical & Civic Thinking*, the results should be interpreted with caution, mean scores for students in Marshall's CT courses suggest performance at level 2 or higher on all traits of *Ethical & Civic Thinking* and *Communication Fluency*, and on all but the underline global awareness trait of *Intercultural Thinking*.

*Core II Courses*

Core II courses in the assessment sample included those that aligned to each of the outcomes assessed.  All Core II courses are at the 100/200 level, and many are also CT courses.  Results are below:

| Intercultural Thinking | | | Ethical & Civic Thinking | | | Communication Fluency | | |
|---|---|---|---|---|---|---|---|---|
| Trait | Number | Mean (SD) | Trait | Number | Mean (SD) | Trait | Number | Mean (SD) |
| Own & Other | 62 | 2.47 (0.62) | Self-Awareness | 7 | 2.43 (0.84) | Design | 51 | 2.51 (0.49) |
| Communication | 50 | 2.23 (0.72) | Rules & Standards | 0 | N/A | Diction | 51 | 2.73 (0.42) |
| Global Awareness | 35 | 1.8 (0.71) | Civic Well-Being | 48 | 2.34 (0.55) | Style | 51 | 2.60 (0.42) |
| Conflict | 45 | 2.13 (0.73) | Issues | 4 | 2.88 (0.48) | | | |

Mirroring results for CT courses, mean scores for students in Marshall's Core II courses suggest performance at level 2 or higher on all traits of *Ethical & Civic Thinking* (that were assessed) and *Communication Fluency*, and on all but the global awareness trait of *Intercultural Thinking*.  We note that */n/*s for all *Ethical & Civic Thinking* traits except civic well-being were very small.

*Writing Intensive (WI) Courses*

WI courses in the sample aligned to all outcomes assessed.  Results are given below by course level:

| Intercultural Thinking | | | | Ethical & Civic Thinking | | | | Communication Fluency | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trait | Course Level | Number | Mean (SD) | Trait | Course Level | Number | Mean (SD) | Trait | Course Level | Number | Mean (SD) |
| **Own & Other** | 100/200 | 20 | 2.75 (0.38) | **Self-Awareness** | 100/200 | 3 | 1.83 (0.76) | **Design** | 100/200 | 46 | 2.55 (0.50) |
| | 300/400 | 24 | 2.54 (0.53) | | 300/400 | 21 | 2.05 (0.77) | | 300/400 | 49 | 2.82 (0.56) |
| **Communication** | 100/200 | 16 | 2.68 (0.40) | **Rules & Standards** | 100/200 | 0 | N/A | **Diction** | 100/200 | 46 | 2.72 (.044) |
| | 300/400 | 13 | 2.31 (0.44) | | 300/400 | 21 | 2.88 (0.87) | | 300/400 | 47 | 2.98 (0.49) |
| **Global Awareness** | 100/200 | 12 | 2.29 (0.66) | **Civic Well-Being** | 100/200 | 35 | 2.37 (0.49) | **Style** | 100/200 | 46 | 2.55 (0.52) |
| | 300/400 | 23 | 2.13 (0.86) | | 300/400 | 38 | 2.32 (0.69) | | 300/400 | 48 | 2.78 (0.48) |
| **Conflict** | 100/200 | 17 | 2.68 (0.43) | **Issues** | 100/200 | 0 | N/A | | | | |
| | 300/400 | 20 | 2.55 (0.58) | | 300/400 | 22 | 2.93 (0.68) | | | | |

The only mean score that fell below 2.0 was the mean for three artifacts at the 100/200 level that aligned to the ethical self-awareness trait of *Ethical & Civic Thinking*.  This is too small a sample to draw conclusions; however, it is noteworthy that no mean, even for 300/400 level courses, reached 3.0, although several, e.g., 2.98 for *Communication Fluency*: diction at the 300/400 level, came close.   Mean scores of all traits of *Communication Fluency* were significantly higher at the 300/400 level than at the 100/200 level.

*Multicultural (MC) Courses*

MC courses in the assessment sample aligned to all outcomes assessed.  Results are given below:

| Intercultural Thinking | | | | Ethical & Civic Thinking | | | Communication Fluency | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Trait | Course Level | Number | Mean (SD) | Trait | Number | Mean (SD) | Trait | Course Level | Number | Mean (SD) |
| **Own & Other** | 100/200 | 61 | 2.45 (0.61) | **Self-Awareness** | 3 | 1.83 (0.76) | **Design** | 100/200 | 22 | 2.57 (0.44) |
| | 300/400 | 22 | 2.61 (0.46) | | | | | 300/400 | 3 | 2.67 (0.29) |
| **Communication** | 100/200 | 51 | 2.25 (0.72) | **Rules & Standards** | 0 | N/A | **Diction** | 100/200 | 22 | 2.77 (0.40) |
| | 300/400 | 22 | 2.57 (0.54) | | | | | 300/400 | 3 | 3.00 (0.50) |

| Intercultural Thinking | | | | Ethical & Civic Thinking | | | Communication Fluency | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Global Awareness | 100/200 | 34 | 1.79 (0.72) | Civic Well-Being | 44 | 2.36 (0.50) | Style | 100/200 | 22 | 2.52 (0.52) |
| | 300/400 | 1 | 1.50 (N/A) | | | | | 300/400 | 3 | 2.50 (0.50) |
| Conflict | 100/200 | 44 | 2.14 (0.73) | Issues | 0 | N/A | | | | |
| | 300/400 | 18 | 2.50 (0.59) | | | | | | | |

Multicultural courses are expected to at least address the first two traits of *Intercultural Thinking*: own & other cultures and communication with others from different cultures. Scores for these traits were higher at the 300/400 level than at the 100/200 level, as was the mean for cultural conflict. Only artifacts at the 100/200 level aligned to *Ethical & Civic Thinking*, with most aligning to civic well-being.

### International (INT) Courses

There were only five artifacts from INT courses in this assessment, all of which were drawn from courses at the 300/400 level. All artifacts aligned to the two traits of *Intercultural Thinking* (global awareness and cultural conflict) to which INT courses are supposed to align. Mean score across the five artifacts for both traits was 2.9, approaching level 3.

| Intercultural Thinking | | | Communication Fluency | | |
|---|---|---|---|---|---|
| Trait | Number | Mean (SD) | Trait | Number | Mean (SD) |
| Own & Other | 0 | N/A | Design | 3 | 2.33 (1.04) |
| Communication | 0 | N/A | Diction | 2 | 2.5 (0.00) |
| Global Awareness | 5 | 2.90 (0.42) | Style | 3 | 2.83 (0.58) |
| Conflict | 5 | 2.90 (0.42) | | | |

**Community Based Learning (CBL) Courses:** All CBL courses with artifacts in this sample were at the 300/400 level and all were aligned only to one (or more) traits of *Ethical & Civic Thinking*. Sample CBL artifacts most often addressed civic well-being and ethical self-awareness. It is noteworthy that mean performance across all traits of *Ethical & Civic Thinking* was lower for CBL courses than for other artifacts in the sample.

| Ethical & Civic Thinking | | | |
|---|---|---|---|
| Trait | Type | Number | Mean (SD) |
| Self-Awareness | CBL | 10 | 1.60 (0.66) |
| | Not CBL | 34 | 2.16 (0.80) |
| Rules & Standards | CBL | 7 | 1.50 (0.71) |
| | Not CBL | 30 | 2.82 (0.87) |
| Civic Well-Being | CBL | 14 | 1.86 (0.60) |
| | Not CBL | 88 | 2.34 (0.62) |
| Issues | CBL | 1 | 1.50 (N/A) |
| | Not CBL | 35 | 2.94 (0.63) |

*Honors Courses*

There were seven artifacts (5 from 100/200 level courses and 2 from 300/400 level courses) in our sample. Two 100/200 level artifacts aligned Intercultural *Thinking* and 3 to *Communication Fluency*. An additional 2 artifacts at the 300/400 level aligned to *Communication Fluency*.

| Intercultural Thinking | | | Communication Fluency | | |
|---|---|---|---|---|---|
| Trait | Number | Mean (SD) | Trait | Number | Mean (SD) |
| Own & Other | 2 | 2.8 (0.35) | Design | 5 | 2.6 (0.74) |
| Communication | 2 | 2.75 (0.35) | Diction | 5 | 3.1 (0.42) |
| Global Awareness | 0 | N/A | Style | 5 | 3.0 (0.50) |
| Conflict | 2 | 2.5 (0.00) | | | |

While, due to the relatively small sample size, the results should be interpreted with caution, mean scores for students in Marshall's Honors courses ranged from 2.5 to 3.1.

*Capstone Courses*

There were 24 capstone papers in this sample, 14 of which aligned to *Ethical & Civic Thinking*, while 10 aligned to *Communication Fluency*.

| Ethical & Civic Thinking | | | Communication Fluency | | |
|---|---|---|---|---|---|
| Trait | Number | Mean (SD) | Trait | Number | Mean (SD) |
| Ethical Self-Awareness | 14 | 2.04 (0.82) | Design/Organization | 10 | 3.2 (0.42) |
| Rules & Standards of Conduct | 14 | 2.79 (1.00) | Diction | 10 | 3.3 (0.54) |
| Civic Well-Being | 14 | 2.29 (0.83) | Communication Style | 10 | 3.0 (0.24) |
| Complex Ethical Issues | 14 | 3.11 (0.71) | | | |

Due to /*n*/s of only fourteen and ten, the results should be interpreted with caution; however, mean scores for students in the capstone sample suggest performance between Levels 3 and 4 for all traits of *Communication Fluency* and for *Ethical & Civic Thinking*: complex ethical issues.

*Conclusion*

**Overall Analysis**

We used rubrics this year that measured student performance according to the level of sophistication they demonstrated in performance on each trait of the three Baccalaureate Degree Profile (BDP) outcomes assessed. BDP outcomes specify what students are expected to achieve at the time they receive their baccalaureate degrees. The proportion of artifacts from 300/400 level courses in our sample was larger than in past years, comprising 40% of the *Intercultural Thinking* sample, 66% of the *Ethical & Civic Thinking* sample, and 46% of the *Communication Fluency* sample. We were pleased that 89% of students who submitted artifacts from 300/400 level courses received overall scores of 2.5 or higher in

*Communication Fluency* (with 20% receiving scores of 3.5 to 4.0 and no scores of 1.0). Results for the other outcomes were mixed. While 70% of 300/400 level artifacts aligned to *Intercultural Thinking* received scores of 2.5 or higher, only 3% received scores of 3.5-4.0 and 4% received scores of 1.0, suggesting the most students, even those enrolled in 300/400 level courses, are not performing at the highest levels for this outcome. Sixty percent (60%) of 300/400 level artifacts aligned to *Ethical & Civic Thinking* received scores of 2.5 or higher with 16% receiving scores of 3.5-4.0, but 12% received scores of 1.0 suggesting that, although a slight majority of students scored at least 2.5, a sizable proportion scored at the lowest level 1.0.

A score of 2.5 indicates that at least one rater assigned a score of Level 3 to the artifact, a score of 3 indicates that both raters assigned a score of Level 3.0, a score of 3.5 indicates that at least one rater assigned a score of Level 4, and a score of 4.0 indicates that both raters assigned a score of Level 4.

When examining mean performance across all artifacts, we noted that, for *Intercultural Thinking*, global awareness emerged as a relative weakness (*mean* = 1.95; *n* = 63) among the traits of this outcome. Only 36% of the 63 artifacts received scores between 2.5 and 4.0 (as compared to 77% for own and other cultures, 65% for communication with other cultures, and 59% for cultural conflict).

For *Ethical & Civic Thinking*, 66% of artifacts were from 300/400 level courses, and means for artifacts from these courses ranged from 1.95 for ethical self-awareness to 2.89 for complex ethical issues.

*Communication Fluency* emerged as the strongest outcome, with students from 300/400 level courses scoring significantly higher than those from 100/200 level courses across all traits. Mean scores at the 300/400 level ranged from 2.78 for communication style to 2.97 for diction.

**Course Type Analysis**
Regarding performance by course type, we note that mean scores for students enrolled in critical thinking (CT) and Core II courses, all of which are at the 100/200 level, were greater than 2.0 on all traits except *Intercultural Thinking*: global awareness. It is important to note that there were no 100/200 level courses with designations of "International" in this analysis. International courses are required to address the global awareness trait of *Intercultural Thinking*. Mean scores represent average to above average performance for courses at this level.

For artifacts from Writing Intensive courses, means for all traits of *Communication Fluency* were significantly higher for artifacts from 300/400 than from 100/200 level courses. Likewise, means for artifacts from 300/400 level Multicultural courses were higher than those from 100/200 level courses. There were too few artifacts from courses with the designation of "International" to draw any conclusions about the impact these courses have on student learning at Marshall University.

Artifacts from Community-Based Learning courses scored lower than artifacts from courses without this designation on all traits of *Ethical & Civic Thinking*. Finally, students from the small sample of Capstone courses in this analysis achieved the only means that exceeded 3.0 – achieving means of 3.0 or higher on all traits of *Communication Fluency* and on *Ethical & Civic Thinking*: Complex Ethical Issues

***Recommendations from the 2021 Assessment Team***

The 2022 Summer Assessment Team made the following recommendations:

1.  That we follow-up on the recommendation from the 2021 Summer Assessment Team that we work with the Center for Teaching and Learning to form an interdisciplinary committee to review, and consider modifications to, our existing Baccalaureate Degree Profile (BDP) outcomes to include, *Creative Thinking*, *Ethical & Civic Thinking*, and *Intercultural Thinking*. *Creative* Thinking had the weakest performance of the outcomes assessed in summer 2021, and these results mirrored those found for student performance on *Creative Thinking* in summers 2018 and 2017. The Summer Assessment Team has noted that, although we think it is important to have a rubric that works for all disciplines, our earlier efforts to do this may have resulted in a rubric that does not include appropriate evaluation criteria for creative productions, such as those developed by students in the creative arts (e.g., visual art and music). One member of the team suggested that we modify the outcome to include *creative production* and *creative problem-solving*.
2.  That we follow-up on the recommendation from the 2021 Summer Assessment Team that the Office of Assessment and Quality Initiatives complete an analysis of the alignment between undergraduate degree program outcomes and those of the BDP. Since programs have made these alignments by BDP trait, this analysis will help us to identify to which outcomes/traits our degree programs align most often.
3.  That, following completion of point 2, we start the process of determining if modifications should be considered for outcomes of the BDP not mentioned in point 1.
4.  That the Office of Assessment and Quality Initiatives contact deans, chairs, and each instructor teaching a course with a multicultural or international designation regarding the need to align at least one course assignment with the appropriate BDP outcomes in Blackboard and require students to submit their assignment aligned artifacts to the assignment module in Blackboard.
5.  That the Office of Assessment and Quality Initiatives continue to provide and distribute shorter reports in more digestible formats. We recommend that these reports be disseminated campus-wide through the Assessment Newsletter.
6.  That we consider adding a section to each five-year program review that asks each program to report the number of courses they teach with International and Multicultural designations that have assignments aligned to the appropriate Baccalaureate Degree Profile outcomes in Blackboard with uploaded artifacts for university-wide assessment.

Supporting Documentation

# Baccalaureate Degree Profile Artifact Assessment

## Academic Year 2021 – 2022

# Outcomes Assessed: MU Rubrics

| Outcome | Abbreviation | Traits | Abbreviations |
|---|---|---|---|
| **Intercultural Thinking** | ICT | Own and Other Cultures | Own & Other |
| | | Communication with Others from Different Cultures | Communication |
| | | Global Awareness | Global Awareness |
| | | Cultural Conflict | Conflict |
| **Ethical and Civic Thinking** | ECT | Ethical Self-Awareness | Self-Awareness |
| | | Professional Rules and Standards of Conduct | Rules & Standards |
| | | Civic Well-Being | Civic Well-Being |
| | | Complex Ethical Issues | Issues |
| **Communication Fluency** | CF | Design/Organization | Design |
| | | Diction | Diction |
| | | Communication Style | Style |

# Course Types

| Course Type | Abbreviation |
|---|---|
| Critical Thinking | CT |
| Multicultural | MC |
| International | INT |
| Writing Intensive | WI |
| Community Based Learning | CBL |
| Core II | Core II |
| Senior Capstone | Capstone |
| Honors | Honors |

# Population/Sample Comparisons for Marshall's Learning Outcomes by Course Level

| Marshall Outcomes | Course Level = 100/200 | | | Course Level = 300/400 | | |
|---|---|---|---|---|---|---|
| | Population | Sample | Percent | Population | Sample | Percent |
| Intercultural Thinking | 473 | 65 | 14% | 346 | 47 | 14% |
| Ethical and Civic Thinking | 256 | 54 | 21% | 196 | 58 | 30% |
| Communication Fluency | 1,619 | 60 | 4% | 962 | 52 | 5% |
| **Total** | **2,348** | **179** | **8%** | **1,504** | **157** | **10%** |

# Sample Frequencies

## Total # of artifacts assessed = 112 per outcome

**Course Level Frequencies: Intercultural Thinking**
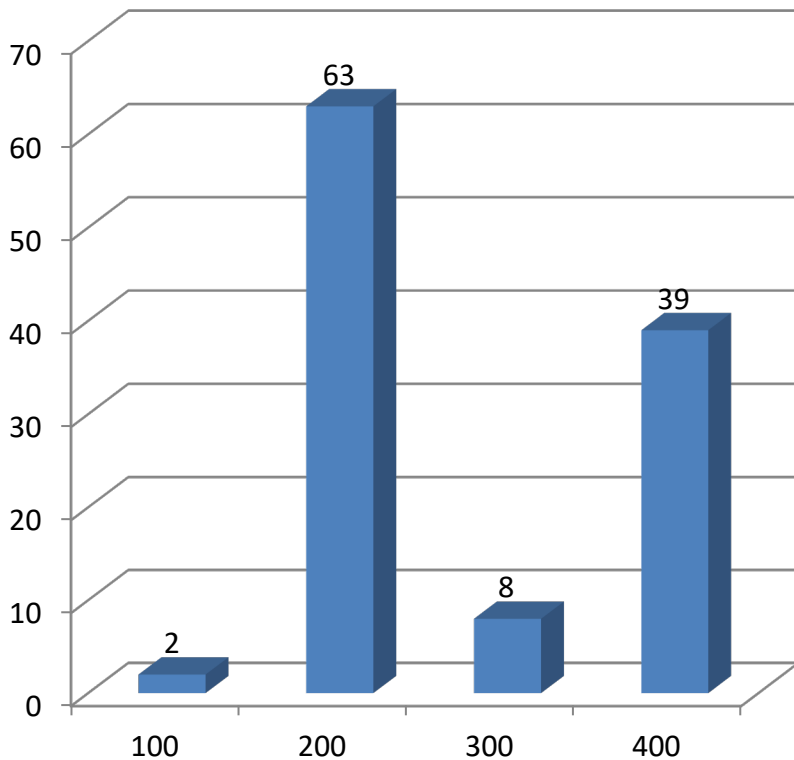
**Course Level Frequencies: Ethical and Civic Thinking**
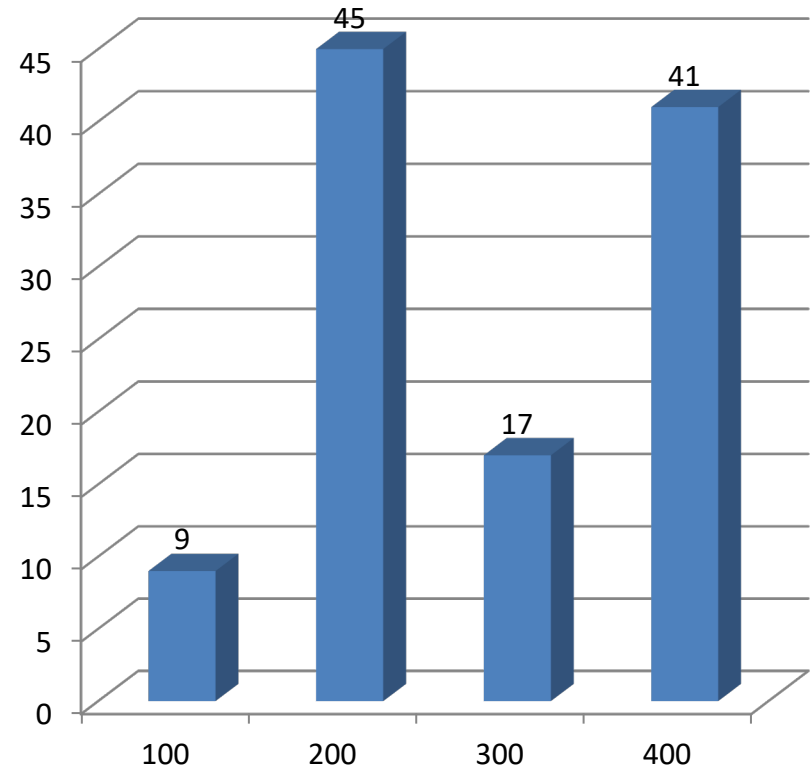
# Sample Frequencies

## Total # of artifacts assessed = 112 per outcome
## Total = 336

**Course Level Frequencies: Communication Fluency**
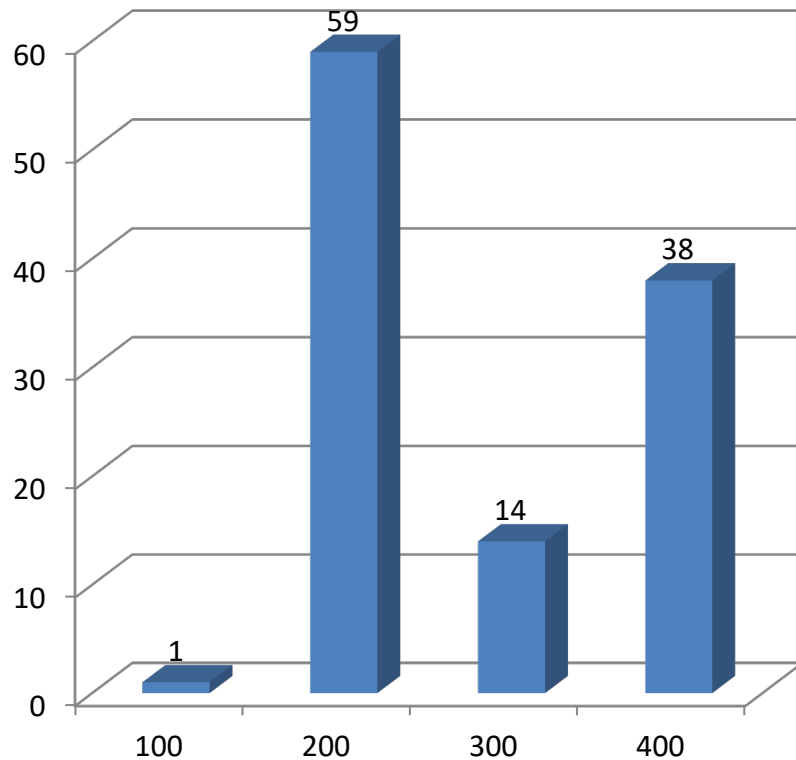


**Course Level Frequencies: Total across the three outcomes**
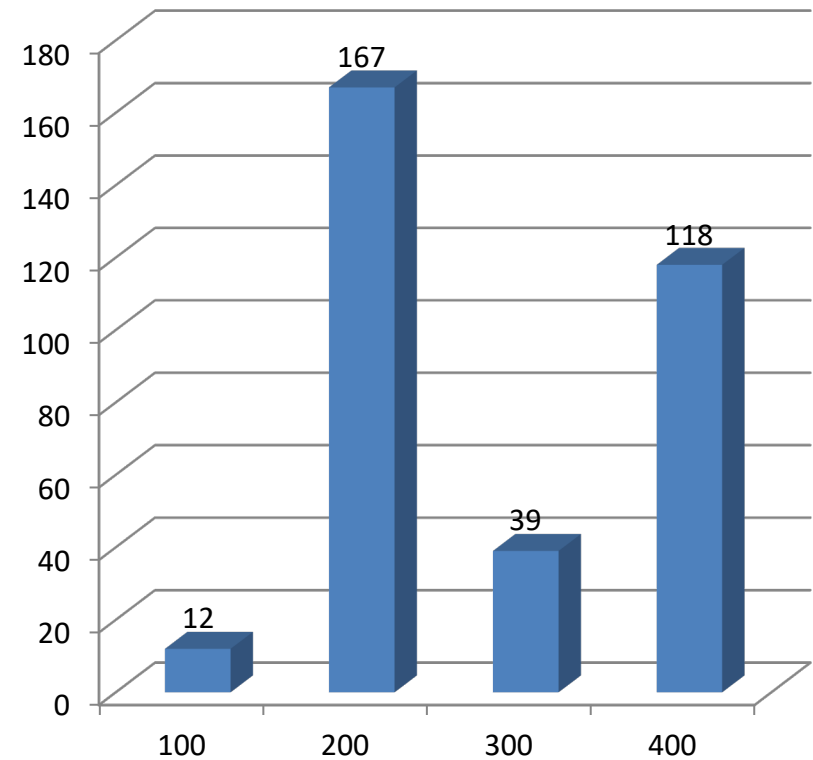
# Review Procedures

- Each artifact had two independent raters and usable scores on the 1 – 4 scale were determined in the following manner:
  - If raters assigned the same score, that became the score for the artifact.
  - If raters' scores differed by one point, e.g., Rater 1 assigned a score of 1 and Rater 2 a score of 2, the final score was the mean, i.e., 1.5.
  - If raters' scores differed by more than one point, e.g., Rater 1 assigned a score of 1 and Rater 2 a score of 3, the raters met to discuss the rationale for their scores to see if they could agree on a score or, at minimum, scores that differed by no more than one point.
  - If raters' scores differed by more than one point and, after discussion, they were not able to resolve the differences, a third rater was assigned to review the artifact. (For this review, all raters were able to reconcile disagreements, so third raters were not needed).

# Review Procedures

- During our norming sessions for *Intercultural Thinking* and for *Ethical & Civic Thinking*, we determined that some artifacts should only be scored for specific rubric traits.  In some cases, course instructors provided these instructions (including for two artifacts aligned to *Communication Fluency*).  In these cases, we assigned scores of N/A, which were not counted in our analyses of means or in our interrater reliability analyses.  We did note disagreements between raters when one rater assigned a score of N/A and the other a score for traits that had not been flagged by the team or by the instructor as not being applicable.

- For *Ethical & Civic Thinking*, we also allowed scores of "0" if the rater felt the assignment allowed the student to produce work that aligned to the trait but, in the judgment of the reviewer, the student's artifact did not address the trait.  If both raters agreed on a score of "0" either initially or following discussion, we eliminated those scores from the analysis.

# Interrater Reliability

- We conducted interrater reliability analyses using the Cohen's Kappa statistical procedure. In so doing, we used the following rules, similar to those suggested Stellmack, Kohneim-Kalkstein, Manor, Massey, & Schmitz (2009):

  - Since our scoring procedure was to average final scores between two raters when scores differed by only one point, we used that averaged score (e.g., 1.5) as the score for both raters, counting it as an agreement in the interrater reliability analysis.
  - For scores that were two or more points apart, the original score of each reviewer was used in the analysis. Therefore, these scores were counted as disagreements.
  - Any time one rater scored the artifact as *N/A* (when it was supposed to have a score) and another provided a score, the scores were counted as disagreements in the analysis.

# Artifacts Excluded from Analysis of Means Due to Inability to Assess or Misalignment with Tagged Outcomes

| Outcome | Total Artifacts | Total Artifacts Not Able to be Scored | Total Used for Analysis |
|---|---|---|---|
| Intercultural Thinking | 112 | 0 | 112 |
| Ethical and Civic Thinking | 112 | 1 (artifact at 300-400 had two scorable traits, which both received scores of "0"). | 111 |
| Communication Fluency | 112 | 1 (artifact at 100/200 level not uploaded) | 111 |
| **Total** | **336** | **2** | **334** |

# Revised Intercultural Thinking MU Rubric

**Intercultural Thinking**: Students will **evaluate** generalizations about cultural groups, **analyze** how cultural groups might affect communication across cultures, **evaluate** how specific approaches to global issues will affect multiple cultural communities or political institutions, and **untangle** competing economic, religious, social, political, or geographical interests of cultural groups in conflict.

| Traits: Performance Indicators/Performance Levels | N/A | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|---|---|
| **Own and Other Cultures:** **Evaluate** generalizations about cultural groups. | Cannot assess due to issues with the assignment and/or the artifact. | Uses cultural stereotypes uncritically | Struggles with recognizing and articulating differences between individuals or groups grounded in culture | Accurately recognizes and articulates some differences between individuals or groups factually grounded in culture | Accurately evaluates and explains all differences between individuals or groups factually grounded in culture |
| **Communication with Others from Different Cultures:** **Analyze** how cultural groups might affect communication across cultures. | Cannot assess due to issues with the assignment and/or the artifact. | Mentions, but is unable to evaluate and explain how elements of culture (e.g. assumptions) affect forms of communication between individuals and groups | Struggles to evaluate and explain how elements of culture (e.g. assumptions) affect forms of communication between individuals and groups | Evaluates and explains how some elements of culture (e.g. assumptions) affect some forms of communication between individuals and groups | Evaluates and explains how elements of culture (e.g. assumptions) affect all forms of communication between individuals and groups |
| **Global Awareness: Evaluate** how specific approaches to global issues will affect multiple cultural communities or political institutions. | Cannot assess due to issues with the assignment and/or the artifact. | Mentions, but is unable to evaluate and explain how specific approaches to global issues have differential impact due to cultural or political interpretations (e.g. interests and values) | Struggles to evaluate and explain how specific approaches to global issues have differential impact due to cultural or political interpretations (e.g. interests and values) | Evaluates and explains how some approaches to global issues have differential impact due to cultural or political interpretations (e.g. interests and values) | Evaluates and explains how specific approaches to global issues have differential impact due to cultural or political interpretations (e.g. interests and values) |
| **Cultural Conflict: Untangle** competing economic, religious, social, political, or geographical interests of cultural groups in conflict. | Cannot assess due to issues with the assignment and/or the artifact. | Mentions, but is unable to compare and contrast, some competing economic, religious, social, political, or geographical interests that are at the core of cultural conflict. | Struggles to compare and contrast some competing economic, religious, social, political, or geographical interests that are at the core of cultural conflict. | Compares and contrasts some competing economic, religious, social, political, or geographical interests that are at the core of cultural conflict. | Compares and contrasts the competing economic, religious, social, political, or geographical interests that are at the core of cultural conflict. |

# Revised Ethical and Civic Thinking MU Rubric

**Outcomes of Marshall's Baccalaureate Degree Profile**

**Ethical and Civic Thinking:** Students will **determine** the origins of core beliefs and ethical principles, **evaluate** the ethical basis of professional rules and standards of conduct, **evaluate** how academic theories and public policy inform one another to support civic well-being, and **analyze** complex ethical problems to address competing interests.

| Traits: Performance Indicators/Performance Levels | N/A | Level 0 | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|---|---|---|
| **Ethical Self-Awareness:** **Determine** the origins of core beliefs and ethical principles. | Cannot assess due to issues with the assignment and/or the artifact | No evidence in student paper, although assignment called for this trait. | Mentions core beliefs or ethical principles but does not indicate origins | Clearly indicates origins of core beliefs or ethical principles | Discusses origins of core beliefs or ethical principles | Thoroughly discusses origins of core beliefs or ethical principles and considers others' perspectives |
| **Professional Rules and Standards of Conduct:** **Evaluate** the ethical basis of professional rules and standards of conduct. | Does not consider professional rules or standard of conduct | No evidence in student paper, although assignment called for this trait. | Mentions professional rules or standards of conduct | Relates ethical basis to professional rules or standards of conduct | Discusses ethical basis of professional rules or standards of conduct and proposes a single solution or approach | Discusses ethical basis of professional rules or standards of conduct and considers alternative solutions or approaches |
| **Civic Well-Being: Evaluate** how academic theories and public policy inform one another to support civic well-being. | Considers neither academic theories nor public policy | No evidence in student paper, although assignment called for this trait. | Mentions academic theory or public policy without connecting to civic well-being | Connects either academic theory or public policy to civic well-being | Connects both academic theory and public policy to civic well-being | Thoroughly explains how academic theory and public policy inform one another to support civic well-being |
| **Complex Ethical Issues:** **Analyze** complex ethical problems to address competing interests. | Does not consider ethical problems or competing interests | No evidence in student paper, although assignment called for this trait. | Mentions ethical problems without considering competing interests | Mentions ethical problems while considering competing interests | Discusses ethical problems from the viewpoint of competing interests | Level 3 + Proposes possible approaches or solutions |

# Revised Communication Fluency MU Rubric

**Outcomes of Marshall's Baccalaureate Degree Profile**

**Communication Fluency:** Students will **develop** cohesive oral, written, and visual communications **tailored** to specific audiences.

| Traits: Performance Indicators/Performance Levels | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|---|
| **Design/Organization: Fully develop** the design/organization of the communication in a cohesive manner. | Little or no attempt to organize the artifact | Some attempt to organize the artifact | The artifact is well organized | The artifact is exceptionally well organized |
| **Diction:** With the audience in mind, **choose** a varied vocabulary that conveys the intended meaning of the communication. | Language/expression does not satisfy the conventions of the discipline and/or task(s) | Language/expression partially satisfies the conventions of the specific discipline and/or task(s) | Language/expression satisfies the conventions of the specific discipline and/or task(s) | Language/expression is executed at a professional level according to the specific discipline and/or task(s) |
| **Communication Style: Use** complex and varied sentences, concepts, or visual representations. | Uses language/expression that sometimes impedes meaning because of errors in usage | Uses language/expression that generally conveys meaning to readers with clarity, although writing may include some errors | Uses straightforward language/expression that conveys meaning to readers. The language has few errors. | Uses sophisticated language/expression that skillfully communicates meaning to readers with clarity and fluency, and is virtually error free |

# Intercultural Thinking

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score
(Although there were 98 artifacts in the analysis, not all artifacts aligned to every trait)

## Overall Analysis

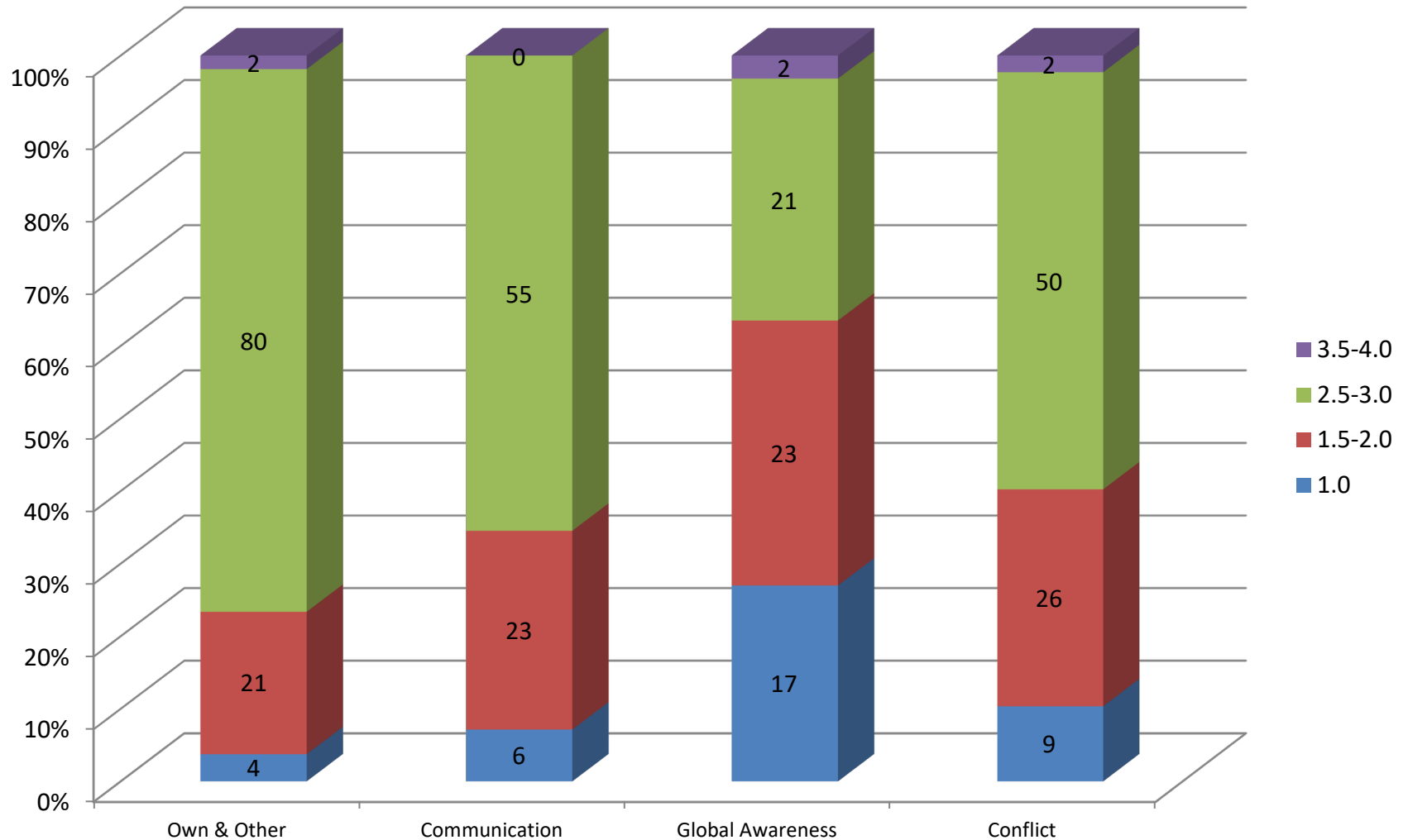■ Own & Other; n = 107　■ Communication; n = 84　■ Global Awareness; n = 63　■ Conflict; n = 87
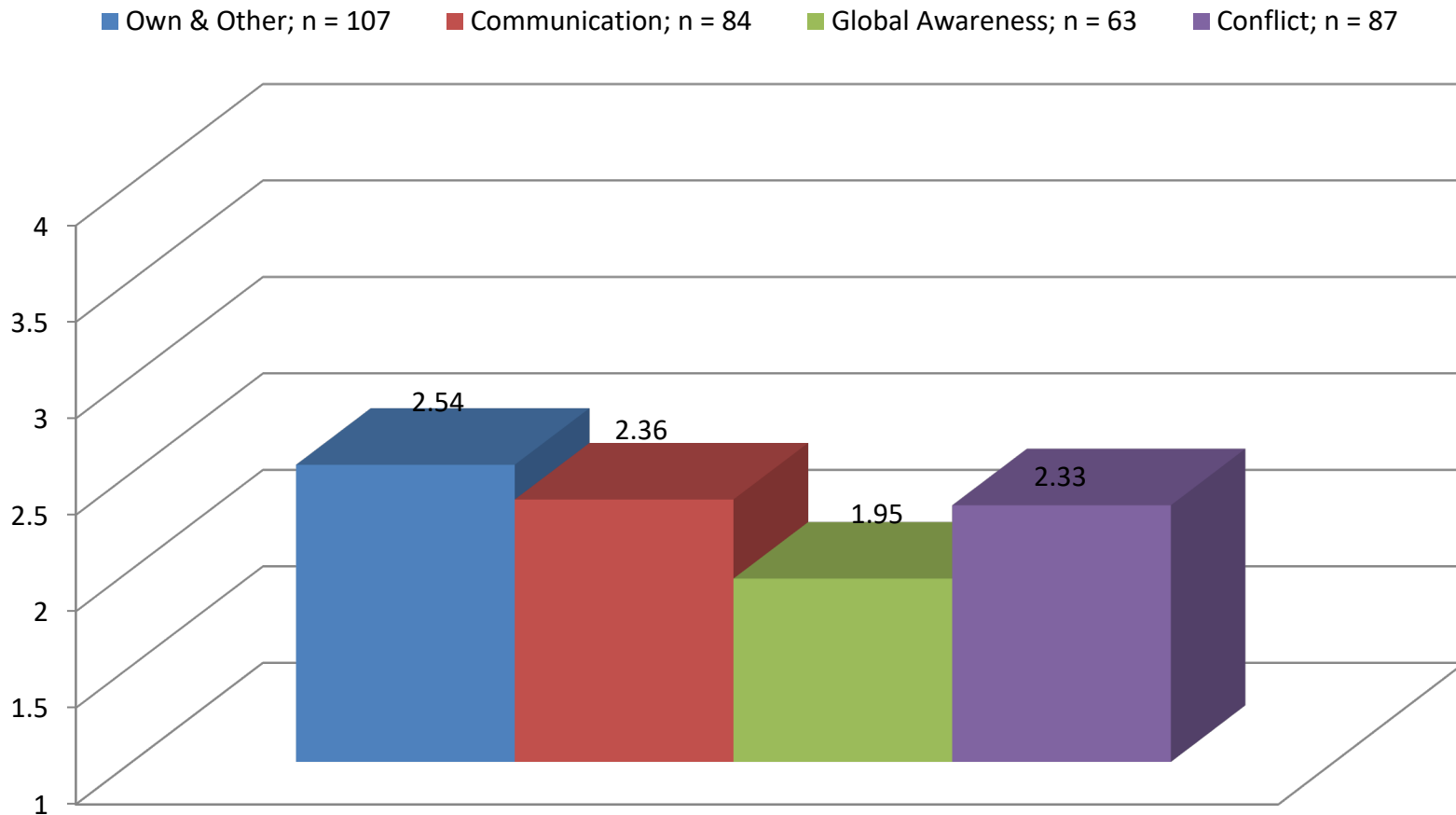
# Intercultural Thinking

**Frequency Analysis**

Number of artifacts (with usable scores) scoring at each performance level

| Trait/ Performance Level | Own & Other | Communication | Global Awareness | Conflict | Total |
|---|---|---|---|---|---|
| 1.0 | 4 (4%) | 6 (7%) | 17 (27%) | 9 (10%) | 36 (11%) |
| 1.5 – 2.0 | 21 (20%) | 23 (27%) | 23 (37%) | 26 (30%) | 93 (27%) |
| 2.5 – 3.0 | 80 (75%) | 55 (65%) | 21 (33%) | 50 (57%) | 206 (60%) |
| 3.5 – 4.0 | 2 (2%) | 0 | 2 (3%) | 2 (2%) | 6 (2%) |
| **Total Tags with Usable Scores** | **107 (100%)** | **84 (100%)** | **63 (100%)** | **87 (100%)** | **341 (100%)** |

# Intercultural Thinking

## Frequency Analysis



| | 3.5-4.0 |
| | 2.5-3.0 |
| | 1.5-2.0 |
| | 1.0 |

| | Own & Other | Communication | Global Awareness | Conflict |
|---|---|---|---|---|
| 3.5-4.0 | 2 | 0 | 2 | 2 |
| 2.5-3.0 | 80 | 55 | 21 | 50 |
| 1.5-2.0 | 21 | 23 | 23 | 26 |
| 1.0 | 4 | 6 | 17 | 9 |

# Intercultural Thinking

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score

**Course Level Analysis**



| | 100/200 | 300/400 |
|---|---|---|
| Owen & Other; n = 65 (100/200) 42 (300/400) | 2.48 | 2.64 |
| Communication; n = 53 (100/200); 31 (300/400) | 2.25 | 2.55 |
| Global Awareness; n = 37 (100/200); 26 (300/400) | 1.81 | 2.15 |
| Conflict; n = 48 (100/200); 39 (300/400) | 2.15 | 2.55 |
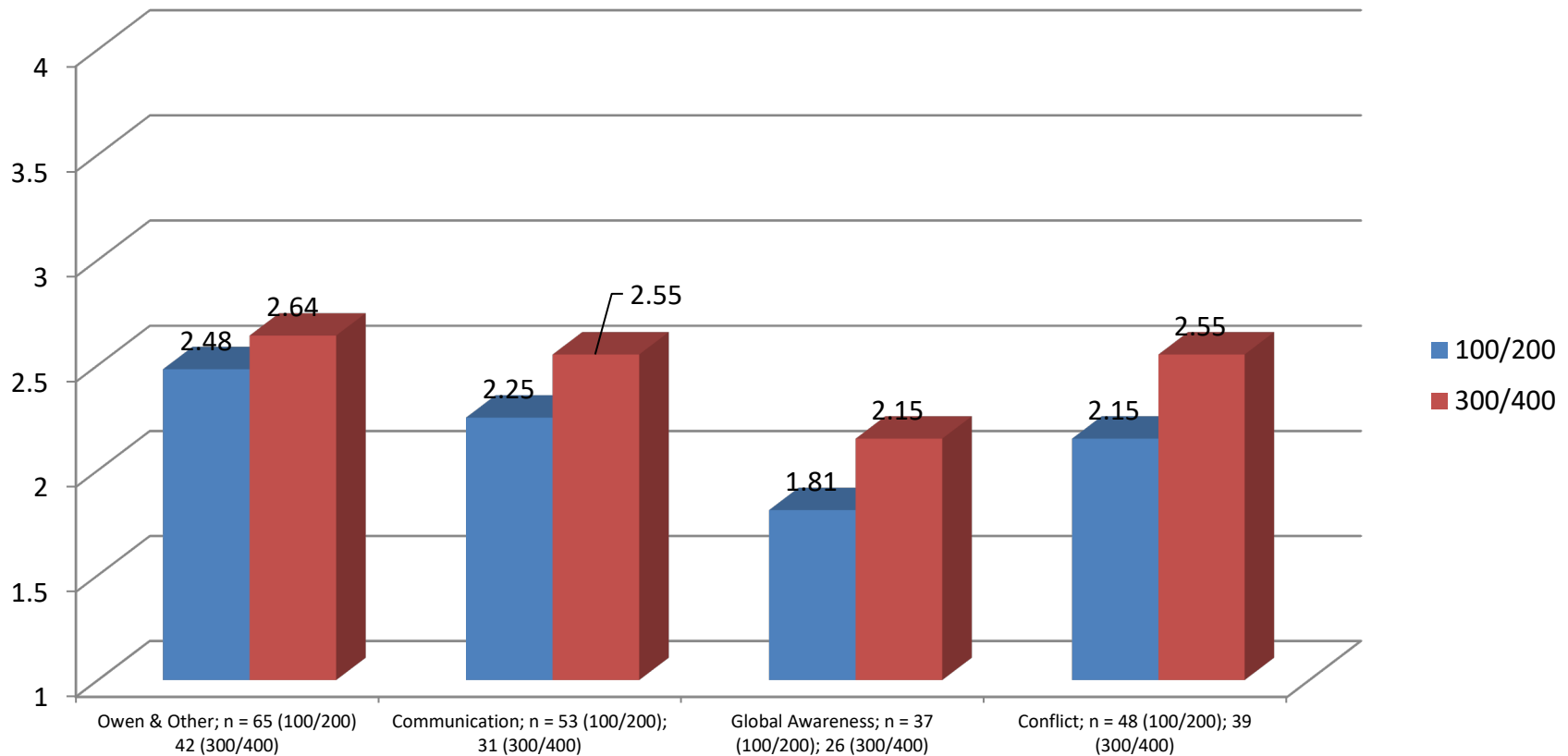
# Intercultural Thinking

## Frequency Analysis by Course Level

Number of artifacts (with usable scores) scoring at each performance level

| Course Level | Trait/ Performance Level | Own & Other | Communication | Global Awareness | Conflict | Total |
|---|---|---|---|---|---|---|
| 100/200 | 1.0 | 4 (6%) | 6 (11%) | 12 (32%) | 8 (17%) | 30 (15%) |
| 300/400 | | 0 | 0 | 5 (19%) | 2 (3%) | 6 (4%) |
| 100/200 | 1.5 – 2.0 | 13 (20%) | 14 (26%) | 15 (41%) | 16 (33%) | 58 (29%) |
| 300/400 | | 8 (19%) | 9 (29%) | 8 (31%) | 10 (26%) | 35 (25%) |
| 100/200 | 2.5 – 3.0 | 47 (72%) | 33 (62%) | 10 (27%) | 23 (48%) | 113 (56%) |
| 300/400 | | 33 (79%) | 22 (71%) | 11 (42%) | 27 (69%) | 93 (67%) |
| 100/200 | 3.5 – 4.0 | 1 (2%) | 0 | 0 | 1 (2%) | 2 (1%) |
| 300/400 | | 1 (2%) | 0 | 2 (8%) | 1 (3%) | 4 (3%) |
| 100/200 | **Total with Usable Scores** | **65 (100%)** | **53 (100%)** | **37 (100%)** | **48 (100%)** | **203 (100%)** |
| 300/400 | | **42 (100%)** | **31 (100%)** | **26 (100%)** | **39 (100%)** | **138 (100%)** |
| All Course Levels | **Grand Totals** | **107** | **84** | **63** | **87** | **341** |

# Intercultural Thinking
## Frequency Analysis by Course Level



Own & Other
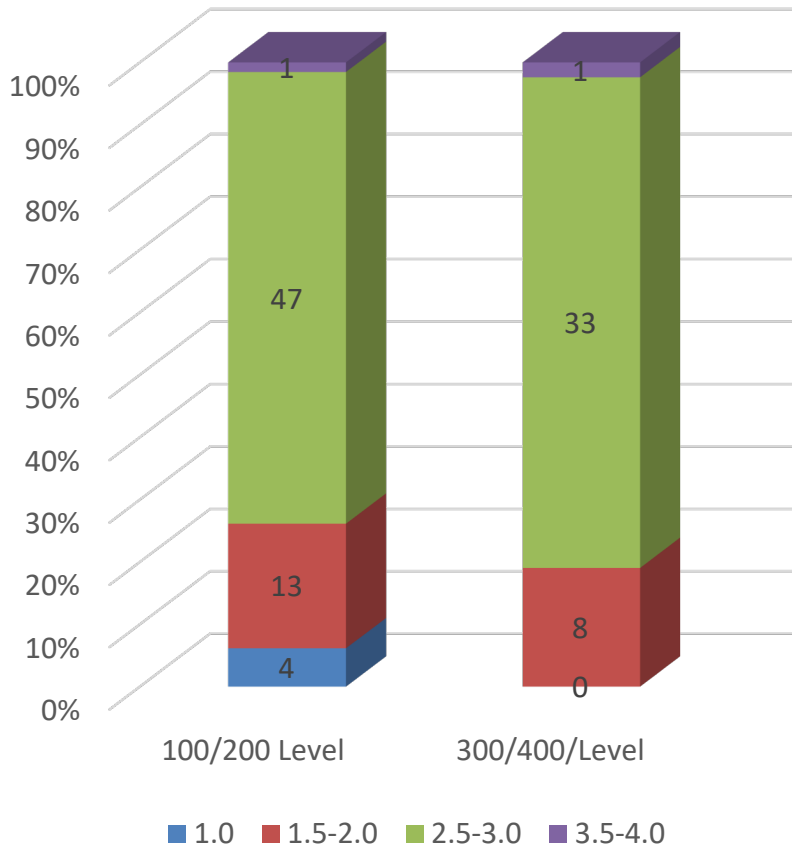
Communication
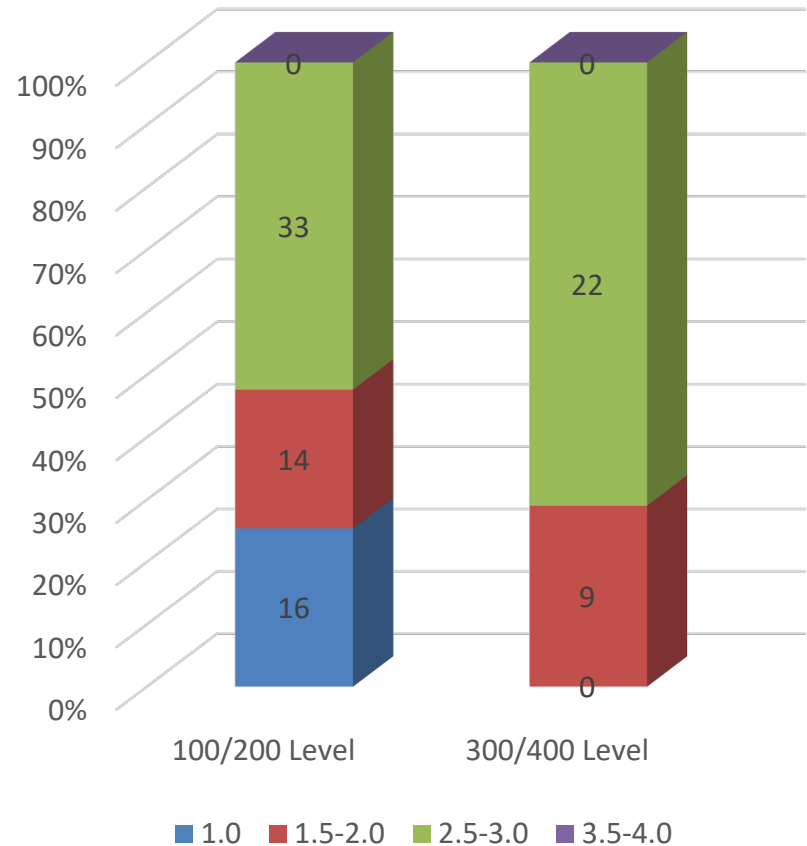
# Intercultural Thinking
## Frequency Analysis by Course Level



Global Awareness

| | 100/200 Level | 300/400 Level |
|---|---|---|
| 3.5-4.0 | 0 | 2 |
| 2.5-3.0 | 10 | 11 |
| 1.5-2.0 | 15 | 8 |
| 1.0 | 12 | 5 |

Conflict

| | 100/200 Level | 300/400 Level |
|---|---|---|
| 3.5-4.0 | 1 | 1 |
| 2.5-3.0 | 23 | 27 |
| 1.5-2.0 | 16 | 10 |
| 1.0 | 8 | 2 |

Legend: ■ 1.0  ■ 1.5-2.0  ■ 2.5-3.0  ■ 3.5-4.0
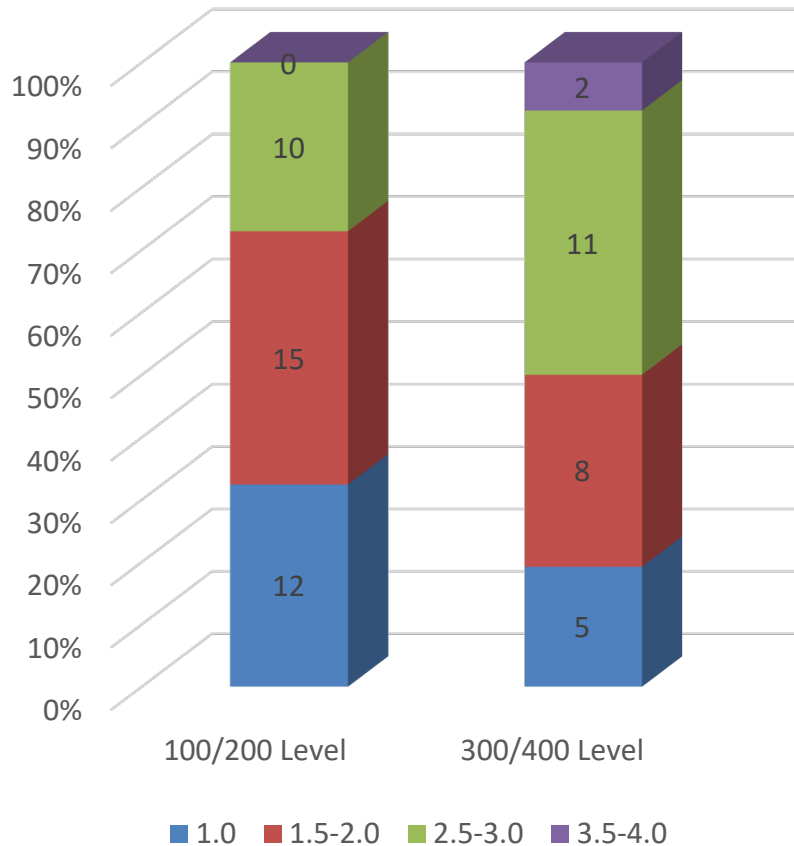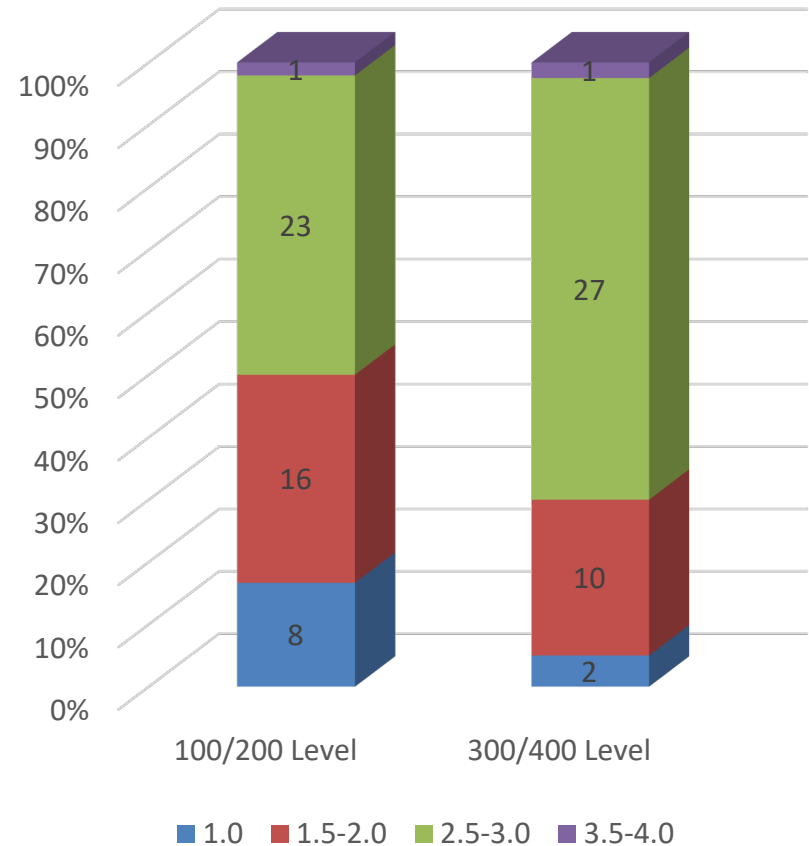
# Intercultural Thinking

## Inter-Rater Agreement Results

| Trait/ Performance Level | Own & Other<br><br>Cohen's Kappa (Liberal) = .908 | Communication<br><br>Cohen's Kappa (Liberal)= .792 | Global Awareness<br><br>Cohen's Kappa (Liberal)= .716 | Conflict<br><br>Cohen's Kappa (Liberal)= .782 |
|---|---|---|---|---|
| Agree on score | 60 (55%) | 38 (43%) | 29 (30%) | 44 (45%) |
| Difference = 1 point | 41 (37%) | 32 (36%) | 20 (20%) | 31 (32%) |
| Difference = 2 points | 7 (6%) | 14 (16%) | 10 (10%) | 11 (11%) |
| Difference = 3 points | 0 | 0 | 0 | 0 |
| Agree on Not Aligned (N/A) | 2 (2%) | 5 (6%) | 27 (28%) | 6 (6%) |
| Score + Not Aligned (N/A) | 0 | 0 | 12 (12%) | 6 (6%) |
| **Total** | **110 (100%)** | **89 (100%)** | **98 (100%)** | **98 (100%)** |

# Ethical and Civic Thinking

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.
(Although there were 111 artifacts in the analysis, not all artifacts aligned to every trait)

## Overall Analysis

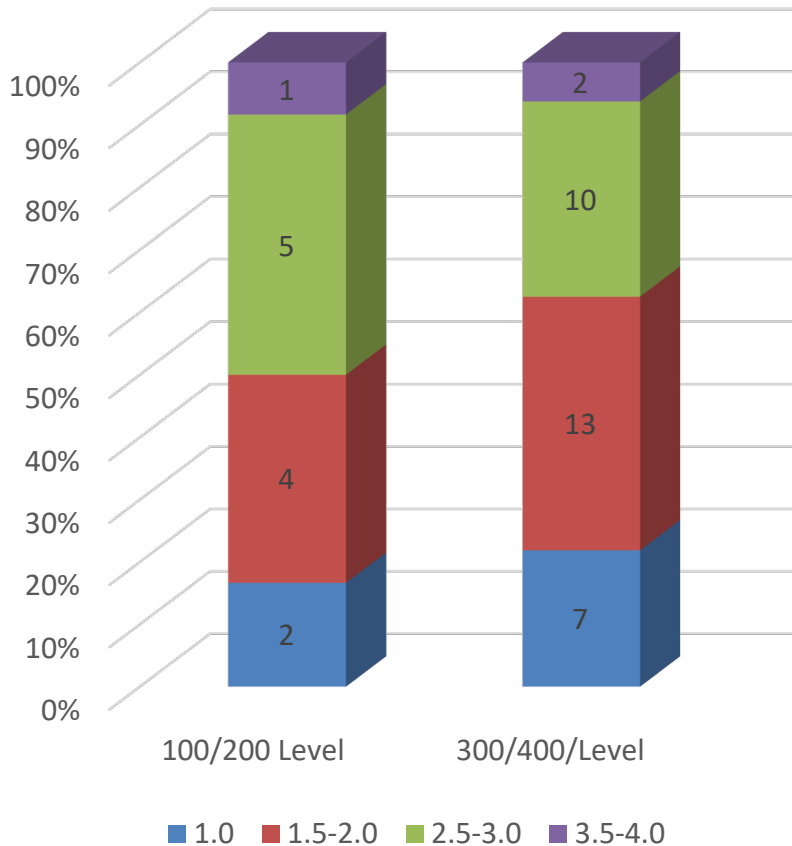■ Self-Awareness (n = 44)   ■ Rules & Standards (n = 37)   ■ Civic Well-Being (n = 102)   ■ Issues (n = 36)
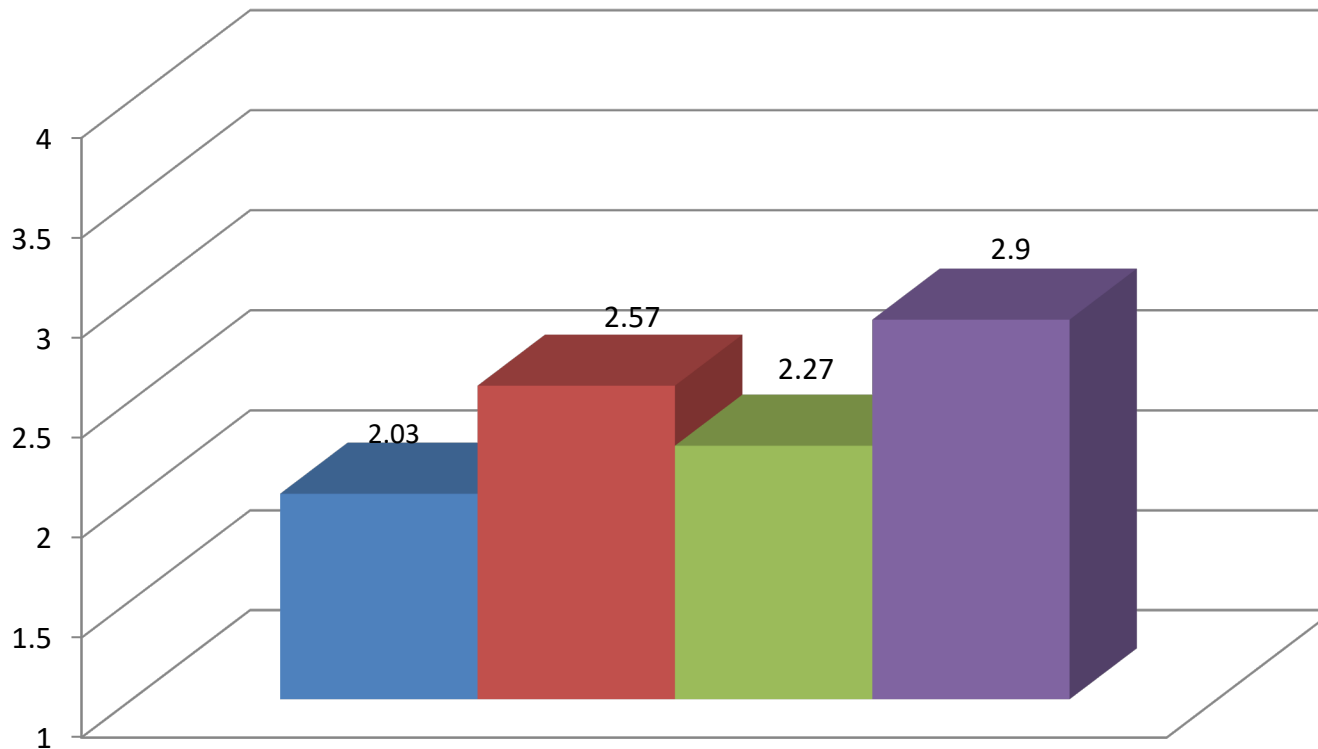
# Ethical and Civic Thinking

Number of artifacts (with usable scores) scoring at each performance level

| Trait/ Performance Level | Self-Awareness | Rules & Standards | Civic Well-Being | Issues | Total |
|---|---|---|---|---|---|
| 1.0 | 9 (20%) | 5 (14%) | 8 (8%) | 0 | **22 (10%)** |
| 1.5 – 2.0 | 17 (39%) | 9 (24%) | 36 (35%) | 4 (11%) | **66 (30%)** |
| 2.5 – 3.0 | 15 (34%) | 11 (30%) | 54 (53%) | 20 (56%) | **100 (46%)** |
| 3.5 – 4.0 | 3 (7%) | 12 (32%) | 4 (4%) | 12 (33%) | **31 (14%)** |
| **Totals** | **44 (100%)** | **37 (100%)** | **102 (100%)** | **36 (100%)** | **219 (100%)** |

# Ethical and Civic Thinking
## Frequency Analysis



Legend:
- 3.5-4.0
- 2.5-3.0
- 1.5-2.0
- 1.0

| | Self-Awareness | Rules & Standards | Civic Well-Being | Issues |
|---|---|---|---|---|
| 3.5-4.0 | 3 | 12 | 4 | 12 |
| 2.5-3.0 | 15 | 11 | 54 | 20 |
| 1.5-2.0 | 17 | 9 | 36 | 4 |
| 1.0 | 9 | 5 | 8 | 0 |
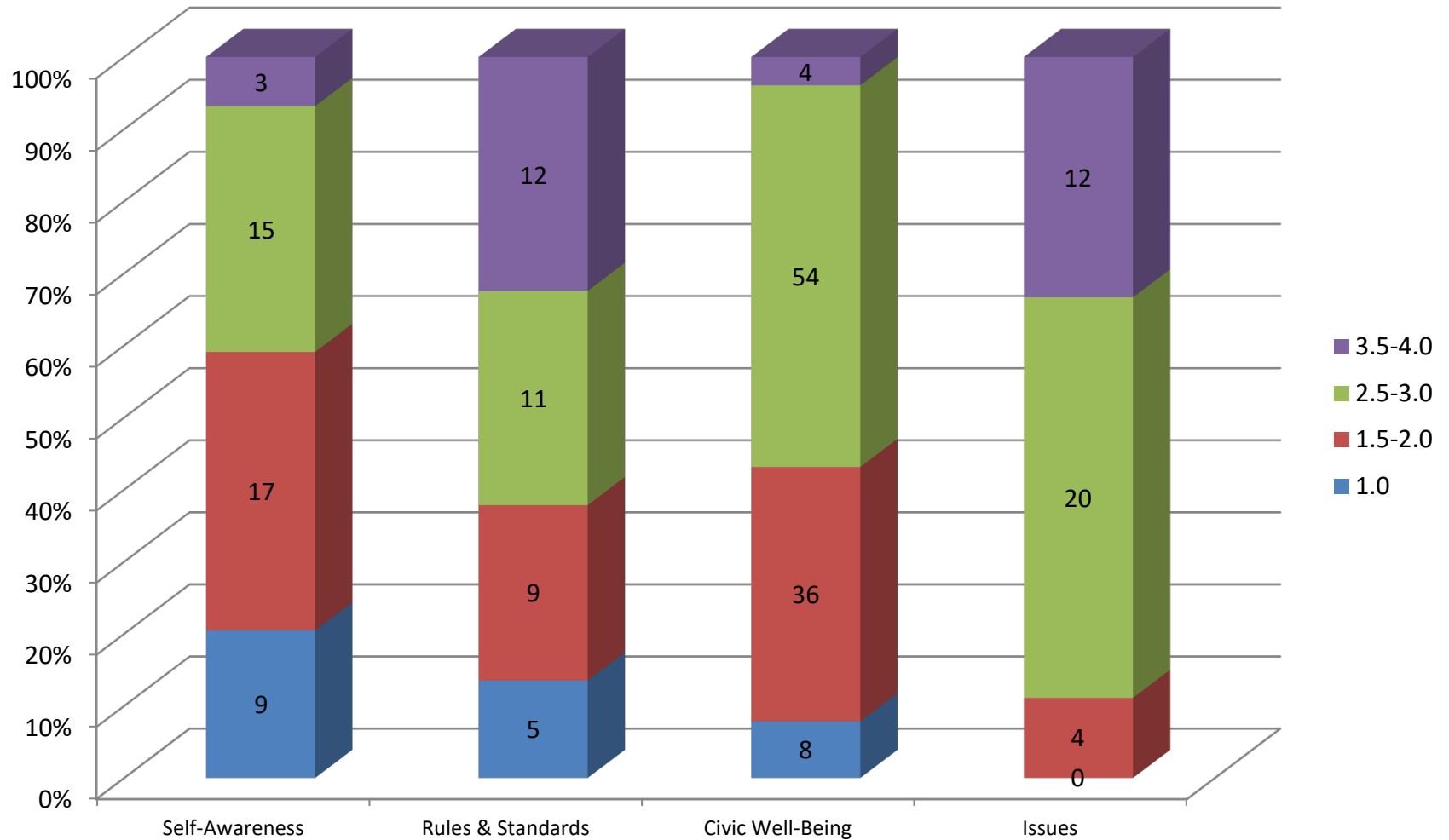
# Ethical and Civic Thinking: Course Level Analysis

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score
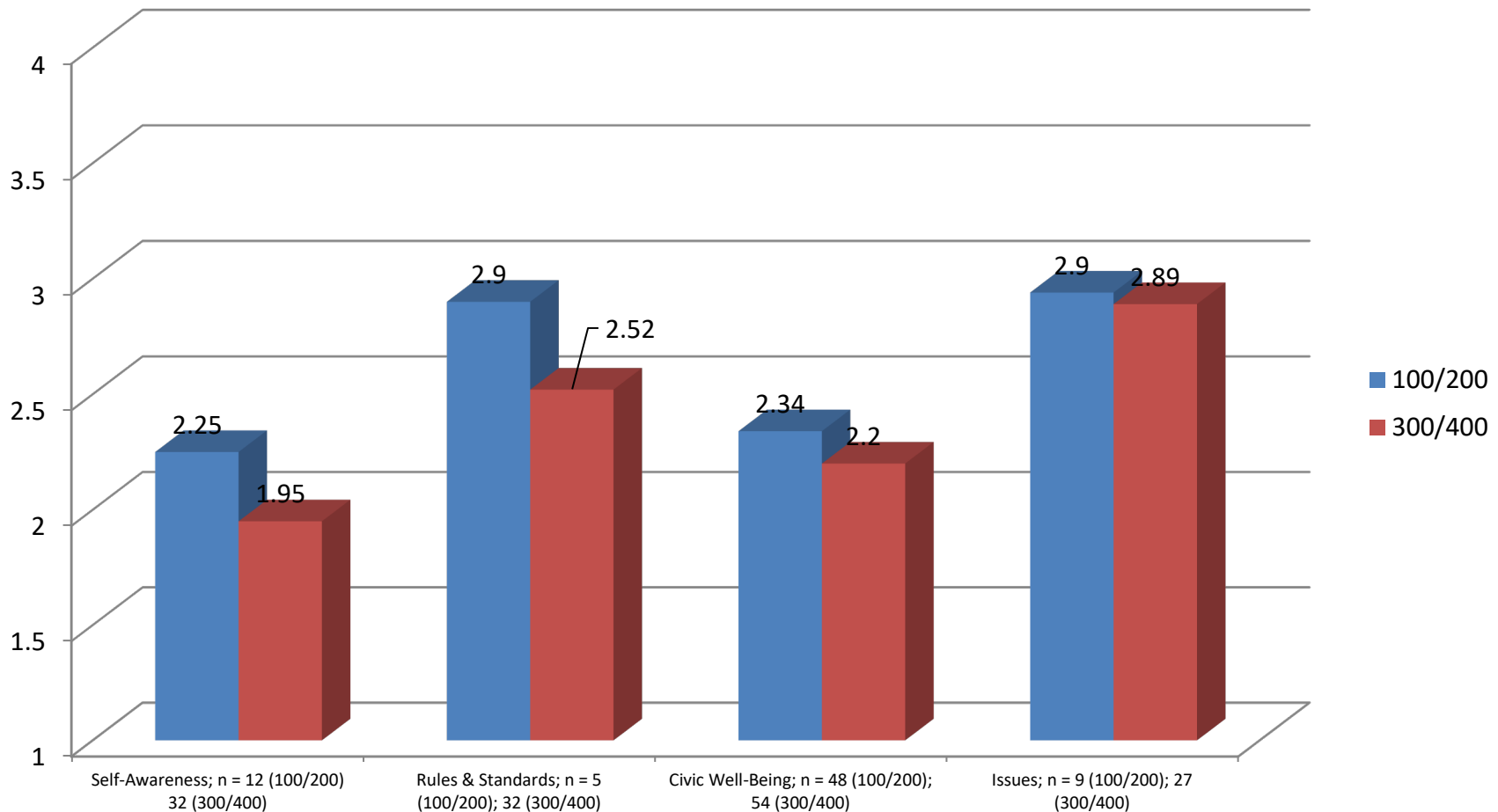
## Course Level Analysis



Legend:
- 100/200
- 300/400

Self-Awareness; n = 12 (100/200) 32 (300/400): 2.25, 1.95
Rules & Standards; n = 5 (100/200); 32 (300/400): 2.9, 2.52
Civic Well-Being; n = 48 (100/200); 54 (300/400): 2.34, 2.2
Issues; n = 9 (100/200); 27 (300/400): 2.9, 2.89

# Ethical and Civic Thinking

## Frequency Analysis by Course Level

Number of artifacts (with usable scores) scoring at each performance level

| Course Level | Trait/ Performance Level | Self-Awareness | Rules & Standards | Civic Well-Being | Issues | Total |
|---|---|---|---|---|---|---|
| 100/200 | 1.0 | 2 (17%) | 0 | 2 (4%) | 0 | 4 (5%) |
| 300/400 | | 7 (22%) | 5 (16%) | 6 (11%) | 0 | 18 (12%) |
| 100/200 | 1.5 – 2.0 | 4 (33%) | 2 (40%) | 18 (38%) | 1 (11%) | 25 (34%) |
| 300/400 | | 13 (41%) | 7 (22%) | 18 (33%) | 3 (11%) | 41 (28%) |
| 100/200 | 2.5 – 3.0 | 5 (42%) | 1 (20%) | 26 (54%) | 5 (56%) | 37 (50%) |
| 300/400 | | 10 (31%) | 10 (31%) | 28 (52%) | 15 (56%) | 63 (44%) |
| 100/200 | 3.5 – 4.0 | 1 (8%) | 2 (40%) | 2 (4%) | 3 (33%) | 8 (11%) |
| 300/400 | | 2 (6%) | 10 (31%) | 2 (4%) | 9 (33%) | 23 (16%) |
| 100/200 | **Totals** | **12 (100%)** | **5 (100%)** | **48 (100%)** | **9 (100%)** | **74 (100%)** |
| 300/400 | | **32 (100%)** | **32 (100%)** | **54 (100%)** | **27 (100%)** | **145 (100%)** |
| All Course Levels | **Grand Totals** | **44** | **37** | **102** | **36** | **219** |

# Ethical and Civic Thinking
## Frequency Analysis by Course Level
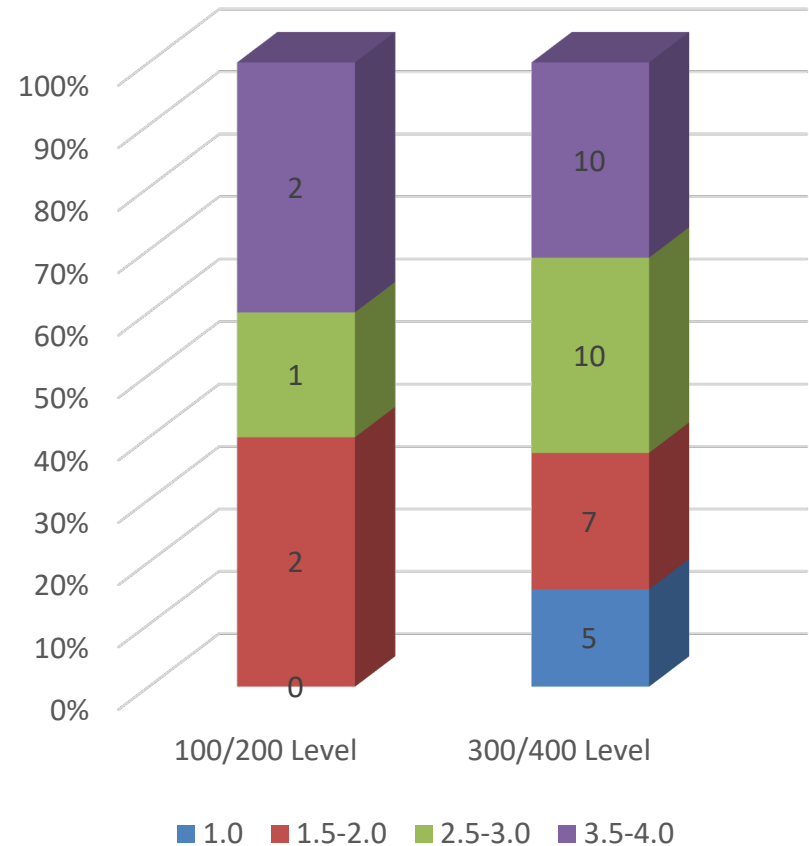
# Ethical and Civic Thinking
## Frequency Analysis by Course Level



**Civic Well-Being**

| | 100/200 Level | 300/400/Level |
|---|---|---|
| 3.5-4.0 | 2 | 2 |
| 2.5-3.0 | 26 | 28 |
| 1.5-2.0 | 18 | 18 |
| 1.0 | 2 | 6 |

Legend: ■ 1.0　■ 1.5-2.0　■ 2.5-3.0　■ 3.5-4.0

**Issues**

| | 100/200 Level | 300/400 Level |
|---|---|---|
| 3.5-4.0 | 3 | 9 |
| 2.5-3.0 | 5 | 15 |
| 1.5-2.0 | 1 | 3 |

Legend: ■ 1.0　■ 1.5-2.0　■ 2.5-3.0　■ 3.5-4.0
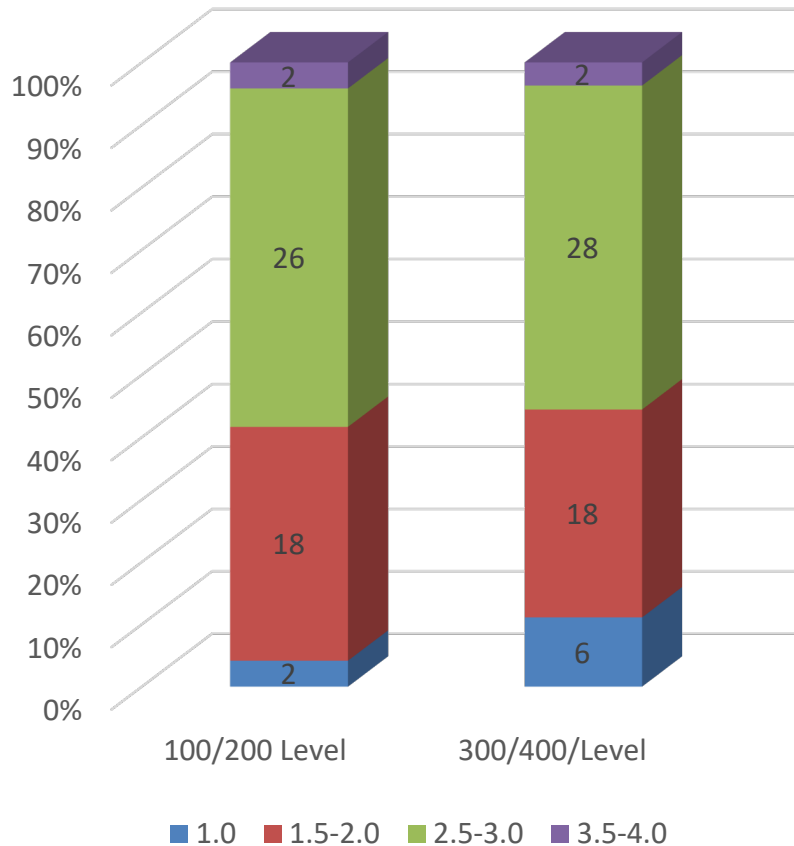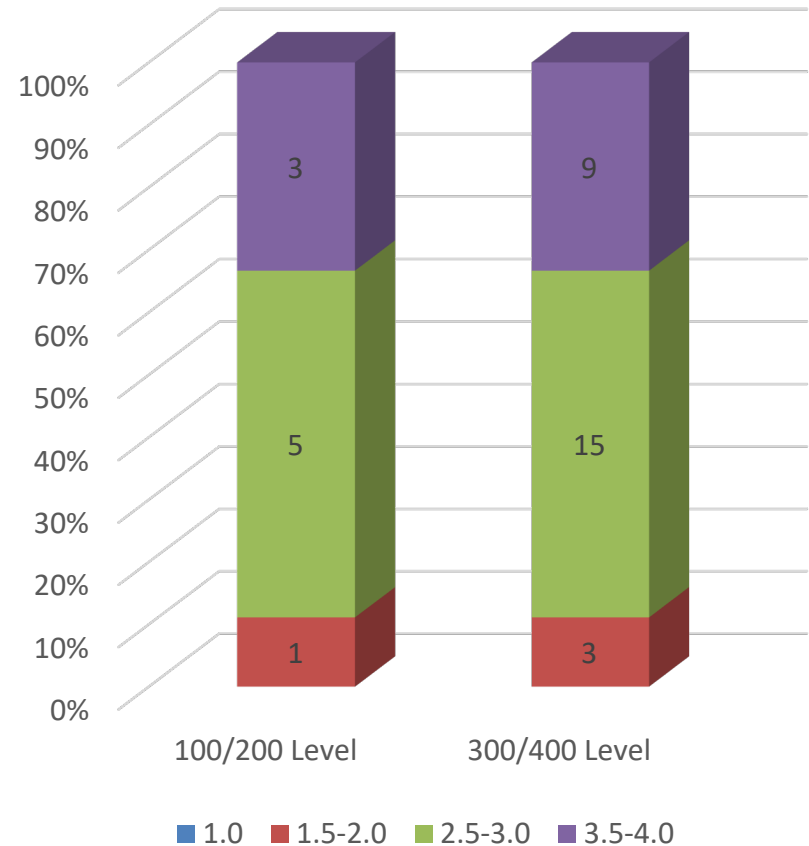
# Ethical and Civic Thinking
## Inter-Rater Agreement Results

| Trait/ Performance Level | Self-Awareness Cohen's Kappa (Liberal)= .521 | Rules & Standards Cohen's Kappa (Liberal)= .702 | Civic Well-Being Cohen's Kappa (Liberal)= .568 | Issues Cohen's Kappa (Liberal)= .870 |
|---|---|---|---|---|
| Agree on score | 11 (22%) | 14 (36%) | 30 (28%) | 12 (32%) |
| Agree on score of "0" | 2 (4%) | 1 (3%) | 2 (2%) | 2 (5%) |
| Agree on "Not Aligned" (N/A) | 0 | 0 | 1 (1%) | 0 |
| Difference = 1 point | 17 (33%) | 14 (36%) | 35 (33%) | 20 (53%) |
| Difference = 2 points | 7 (14%) | 6 15%) | 18 (17%) | 3 (8%) |
| Difference = 3 points | 0 | 0 | 2 (2%) | 0 |
| Score + "0" | 0 | 4 (10%) | 9 (8%) | 1 (3%) |
| Score + Not Aligned (N/A) | 7 (14%) | 0 | 8 (7%) | 0 |
| "0" + N/A | 0 | 0 | 2 (2%) | 0 |
| Total | 51 (100%) | 39 (100%) | 107 (100%) | 38 (100%) |

# Communication Fluency

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score

(Although there were 107 artifacts in the analysis, not all artifacts aligned to every trait)

## Overall Analysis



■ Design; n = 111    ■ Diction; n = 109    ■ Style; n = 110

2.66    2.84    2.65
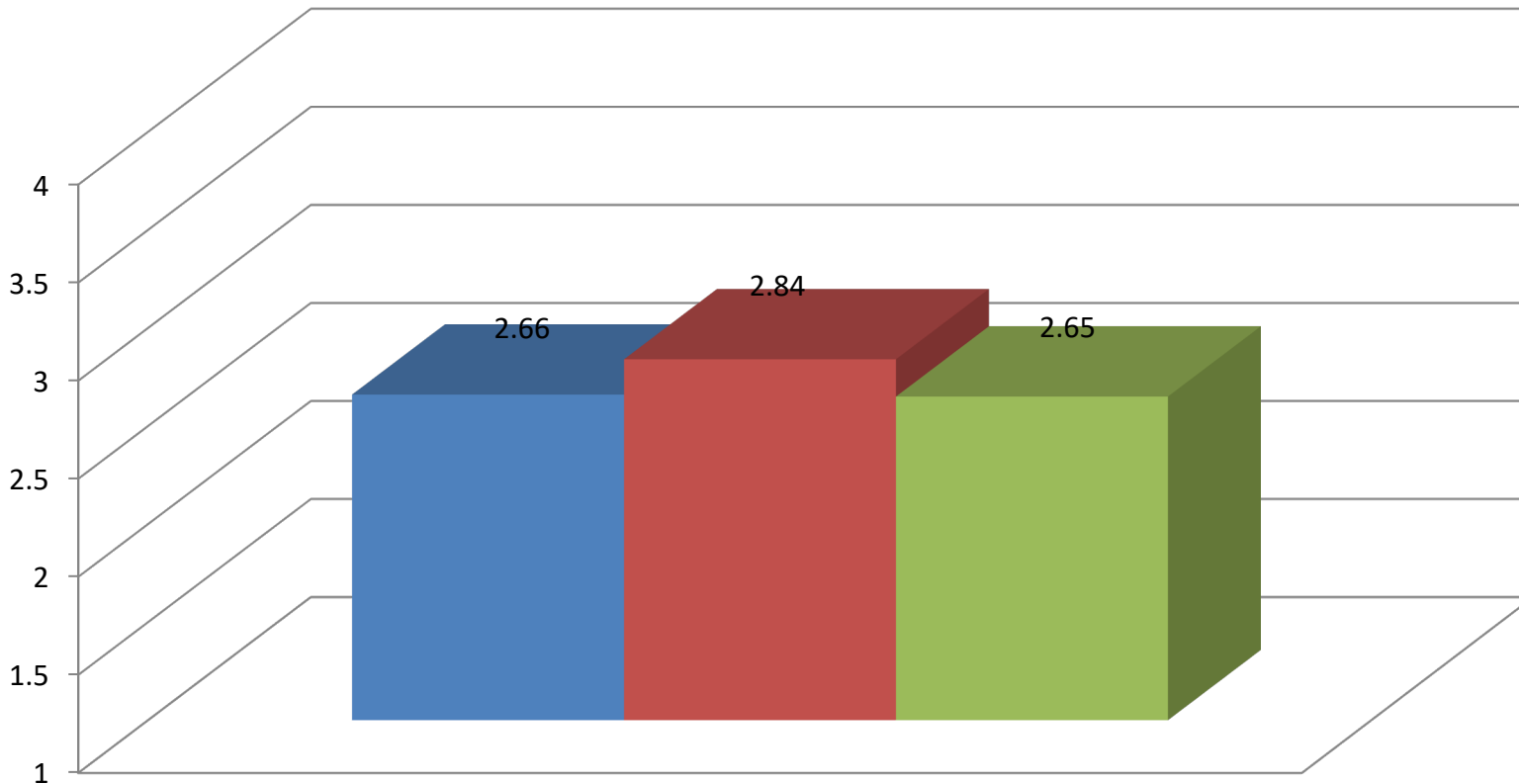
# Communication Fluency

Number of artifacts (with usable scores) scoring at each performance level

| Trait/ Performance Level | Design | Diction | Style | Total |
|---|---|---|---|---|
| 1.0 | 0 | 0 | 2 (2%) | 2 (1%) |
| 1.5 – 2.0 | 23 (21%) | 9 (8%) | 16 (15%) | 48 (15%) |
| 2.5 – 3.0 | 73 (66%) | 83 (76%) | 83 (75%) | 239 (72%) |
| 3.5 – 4.0 | 15 (14%) | 17 (16%) | 9 (8%) | 41 (12%) |
| **Totals** | **111 (100%)** | **109 (100%)** | **110 (100%)** | **330 (100%)** |

# Communication Fluency
## Frequency Analysis
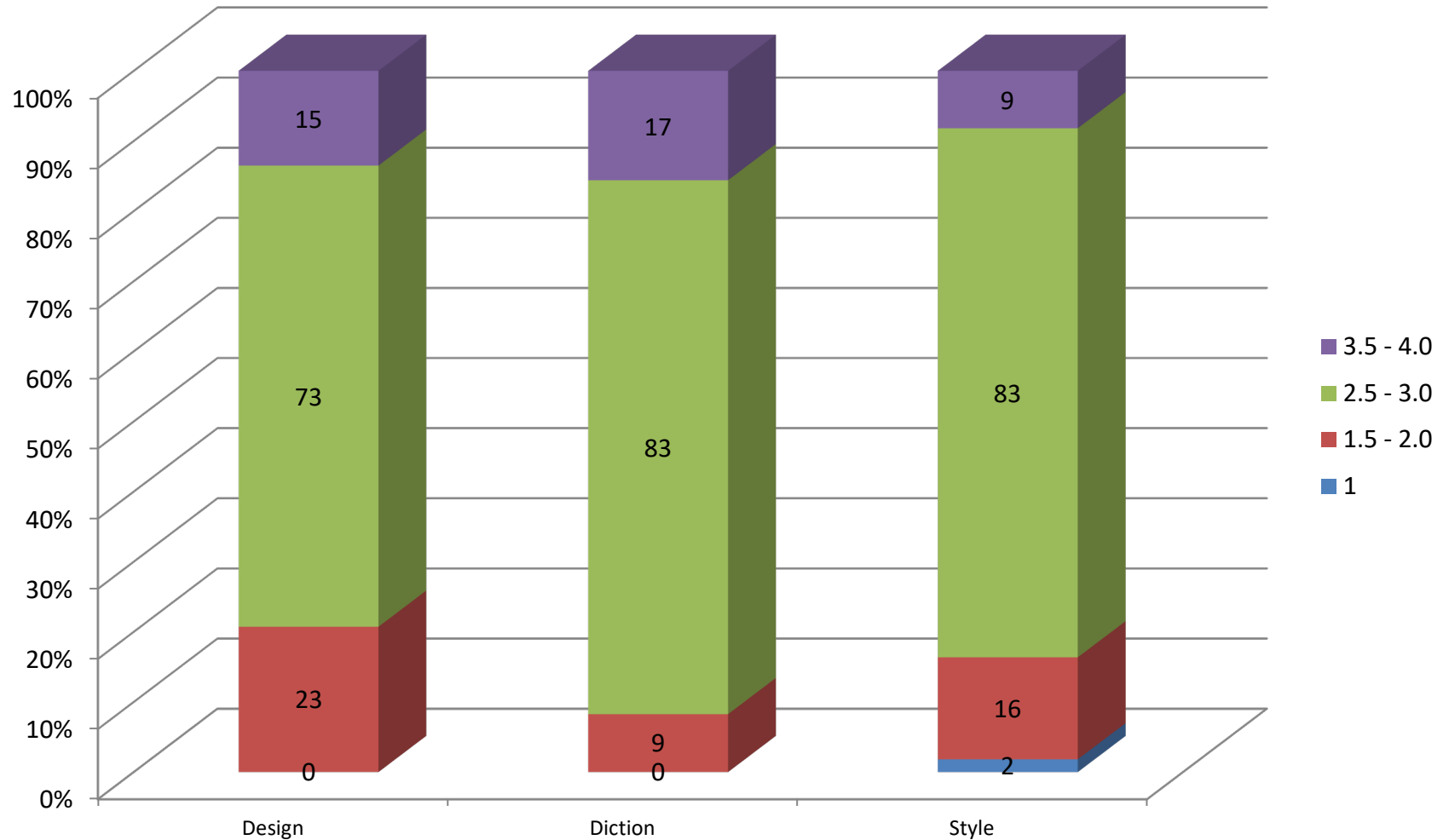


| | Design | Diction | Style |
|---|---|---|---|
| 3.5 - 4.0 | 15 | 17 | 9 |
| 2.5 - 3.0 | 73 | 83 | 83 |
| 1.5 - 2.0 | 23 | 9 | 16 |
| 1 | 0 | 0 | 2 |

# Communication Fluency

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score

## Course Level Analysis



Chart legend:
- 100/200 (blue)
- 300/400 (red)

Data values:
- Design; n = 59 (100/200); 52 (300/400): 2.53 / 2.8
- Diction; n = 59 (100/200); 50 (300/400): 2.73 / 2.97
- Style; n = 59 (100/200); 51 (300/400): 2.53 / 2.78
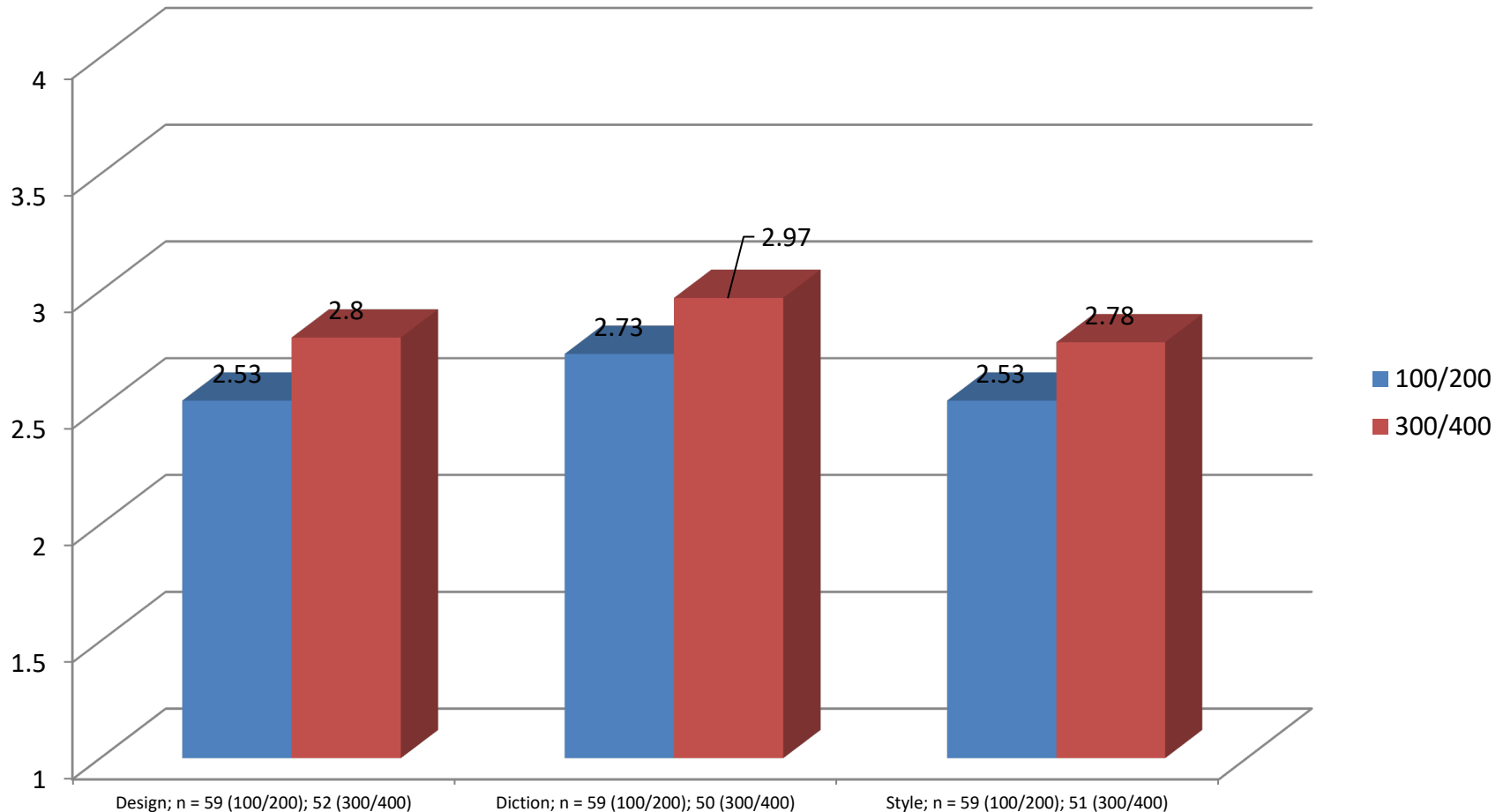
# Communication Fluency

## Frequency Analysis by Course Level

Number of artifacts (with usable scores) scoring at each performance level

| Course Level | Trait/ Performance Level | Design | Diction | Style | Total |
|---|---|---|---|---|---|
| 100/200 | 1.0 | 0 | 0 | 2 (3%) | 2 (1%) |
| 300/400 | | 0 | 0 | 0 | 0 |
| 100/200 | 1.5 – 2.0 | 15 (25%) | 7 (12%) | 10 (17%) | 32 (18%) |
| 300/400 | | 8 (15%) | 2 (4%) | 6 (12%) | 16 (11%) |
| 100/200 | 2.5 – 3.0 | 41 (70%) | 48 (81%) | 44 (75%) | 133 (75%) |
| 300/400 | | 32 (62%) | 35 (70%) | 39 (76%) | 106 (69%) |
| 100/200 | 3.5 – 4.0 | 3 (5%) | 4 (7%) | 3 (5%) | 10 (6%) |
| 300/400 | | 12 (23%) | 13 (26%) | 6 (12%) | 31 (20%) |
| 100/200 | **Total Tags with Usable Scores** | **59 (100%)** | **59 (100%)** | **59 (100%)** | **177 (100%)** |
| 300/400 | | **52 (100%)** | **50 (100%)** | **51 (100%)** | **153 (100%)** |
| All Course Levels | **Grand Totals** | **111** | **109** | **110** | **330** |

# Communication Fluency
## Frequency Analysis by Course Level

Design



| | 1.0 | 1.5-2.0 | 2.5-3.0 | 3.5-4.0 |
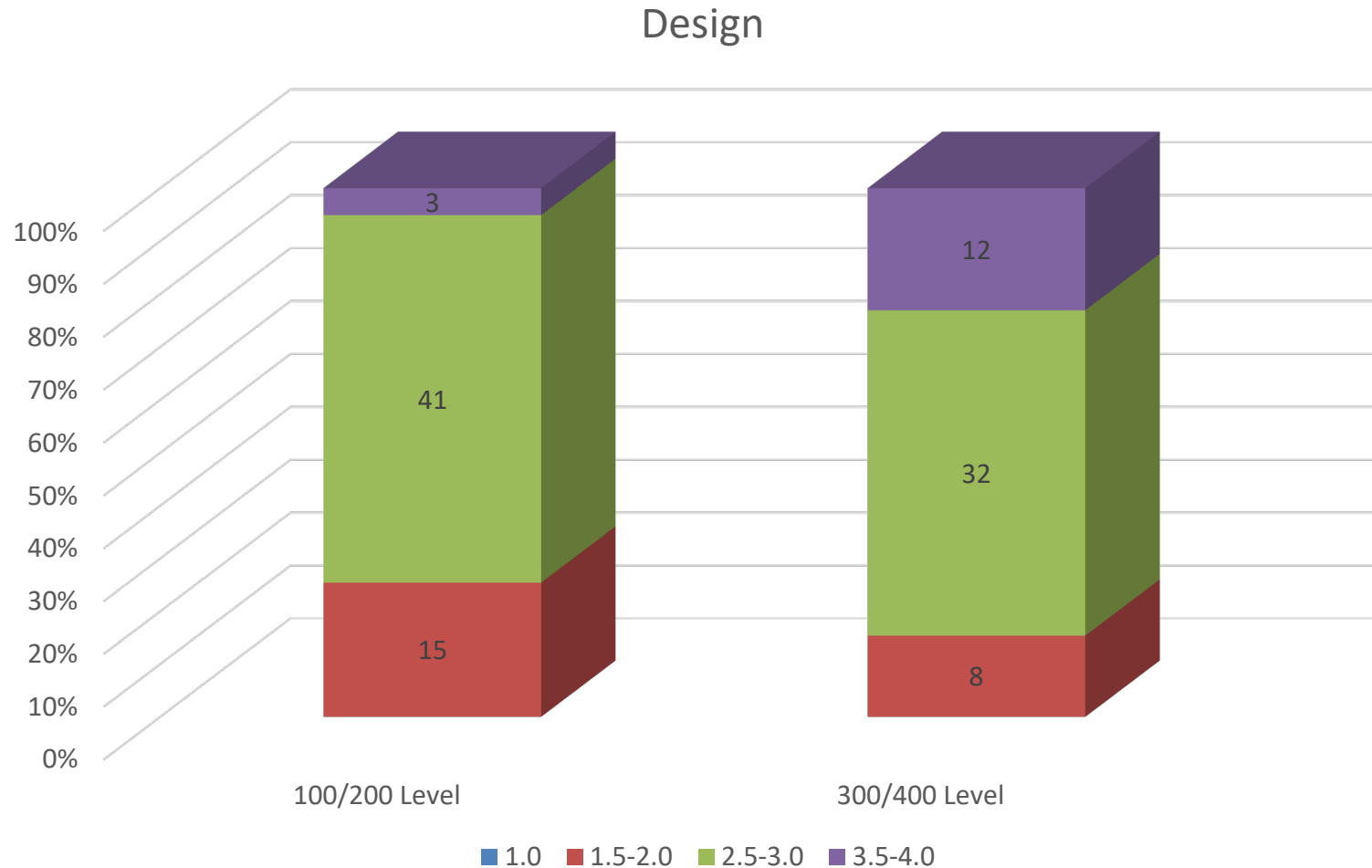
# Communication Fluency
## Frequency Analysis by Course Level



**Diction**

| | 100/200 Level | 300/400/Level |
|---|---|---|
| 3.5-4.0 | 4 | 13 |
| 2.5-3.0 | 48 | 35 |
| 1.5-2.0 | 7 | 2 |

Legend: ■ 1.0  ■ 1.5-2.0  ■ 2.5-3.0  ■ 3.5-4.0

**Style**

| | 100/200 Level | 300/400 Level |
|---|---|---|
| 3.5-4.0 | 3 | 6 |
| 2.5-3.0 | 44 | 39 |
| .5-2.0 | 10 | 6 |
| 1.0 | 2 | 0 |

Legend: ■ 1.0  ■ .5-2.0  ■ 2.5-3.0  ■ 3.5-4.0
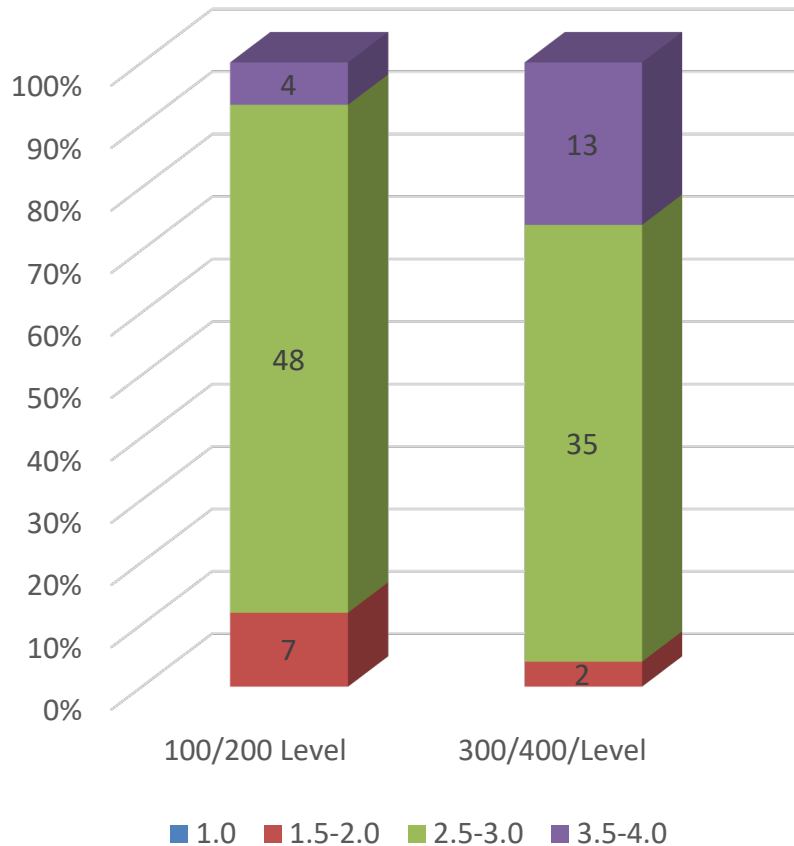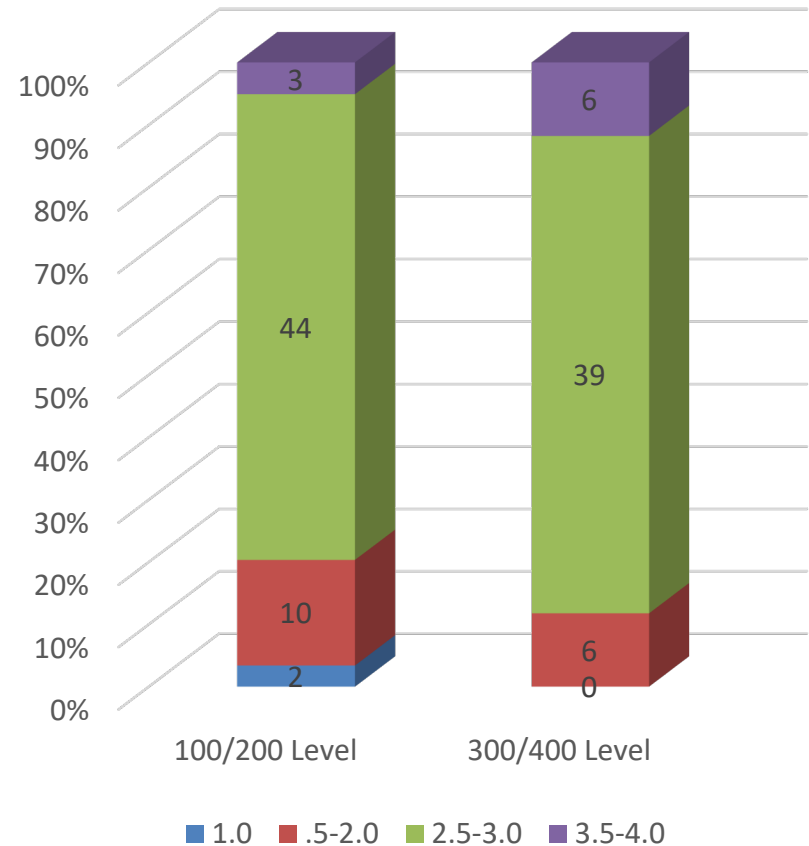
# Communication Fluency
## Inter-Rater Agreement Results

| Trait/ Performance Level | Design<br><br>Cohen's Kappa (Liberal) = .939 | Diction<br><br>Cohen's Kappa (Liberal) = .973 | Style<br><br>Cohen's Kappa (Liberal) = .897 |
|---|---|---|---|
| Agree on score | 50 (45%) | 56 (51%) | 48 (44%) |
| Difference = 1 point | 56 (50%) | 49 (45%) | 52 (47%) |
| Difference = 2 points | 5 (5%) | 2 (2%) | 7 (6%) |
| Difference = 3 points | 0 | 0 | 1 (1%) |
| Agree on Not Aligned or Unable to Score Due to Error | 0 | 2 (2%) | 2 (2%) |
| Score + Not Aligned | 0 | 0 | 0 |
| **Total** | **111 (100%)** | **109 (100%)** | **110 (100%)** |

# Course Type Analysis

# CT Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. All CT courses are 100/200 Level.

## Intercultural Thinking

- ■ Own & Other; n = 60
- ■ Communication; n = 48
- ■ Global Awareness; n = 33
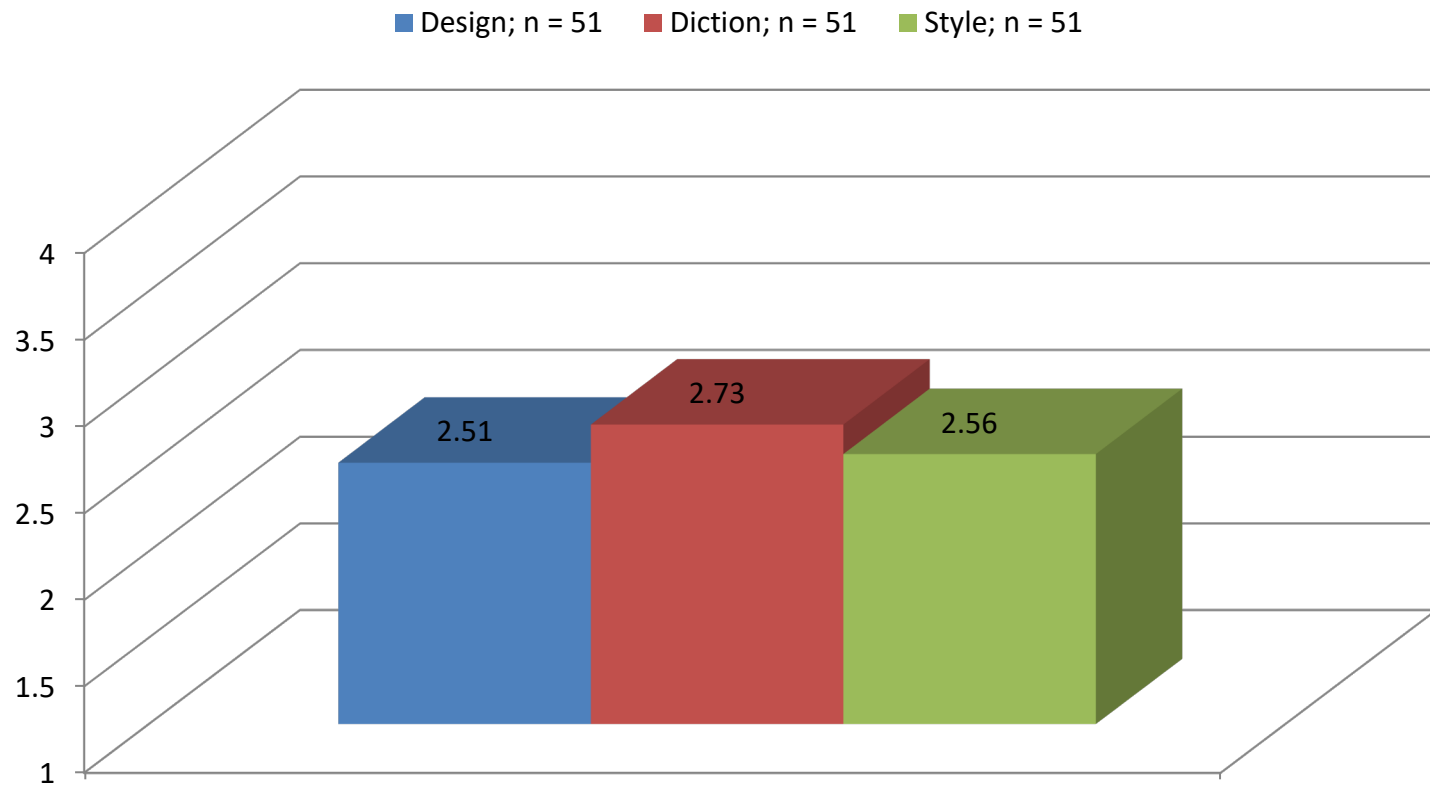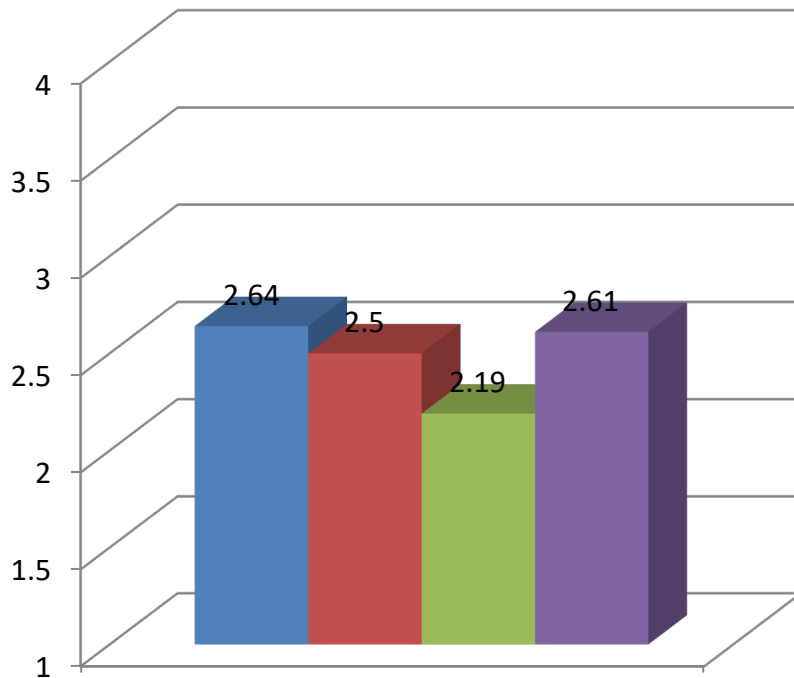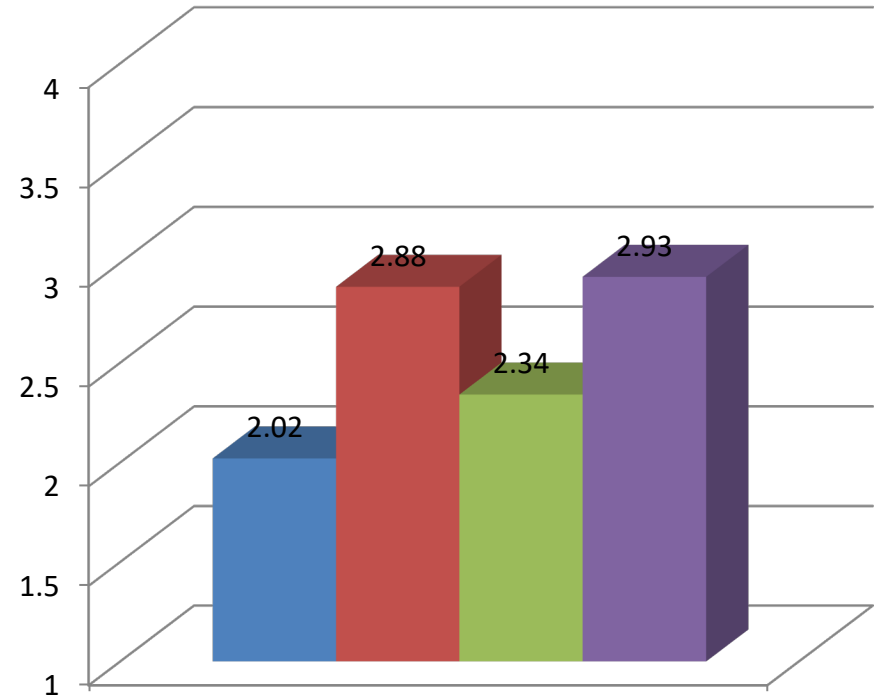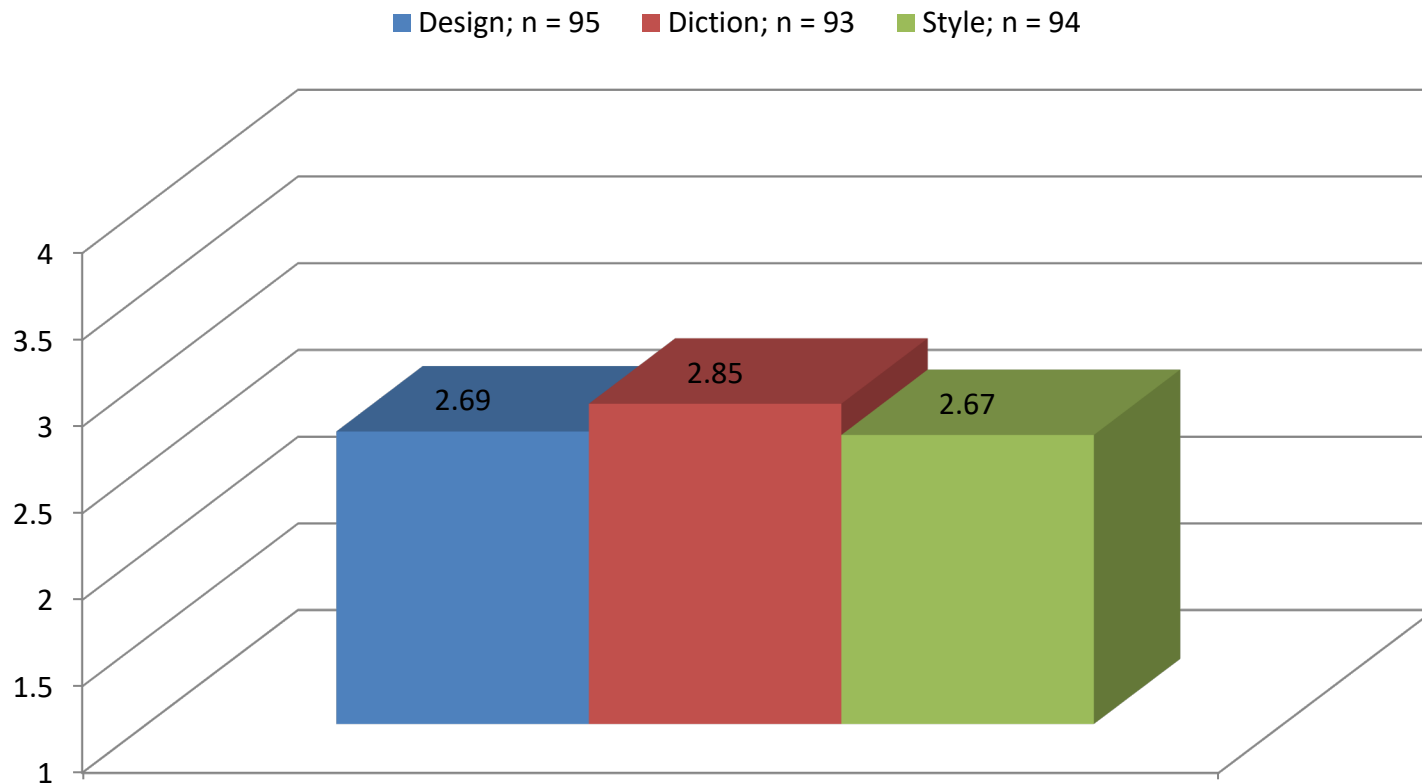- ■ Conflict; n = 44
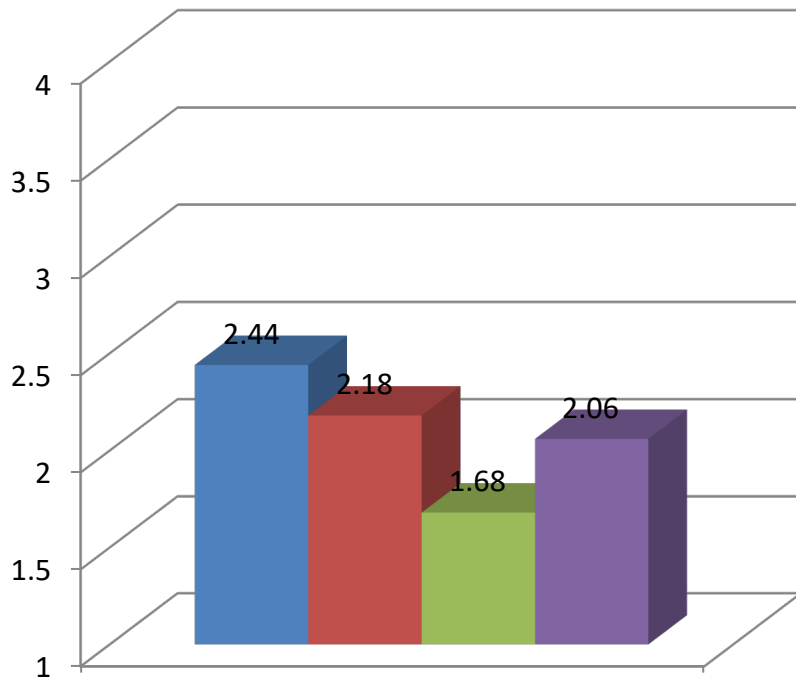


## Ethical and Civic Thinking

- ■ Self-Awareness; n = 12
- ■ Rules & Standards; n = 5
- ■ Civic Well-Being; n = 48
- ■ Issues; n = 9
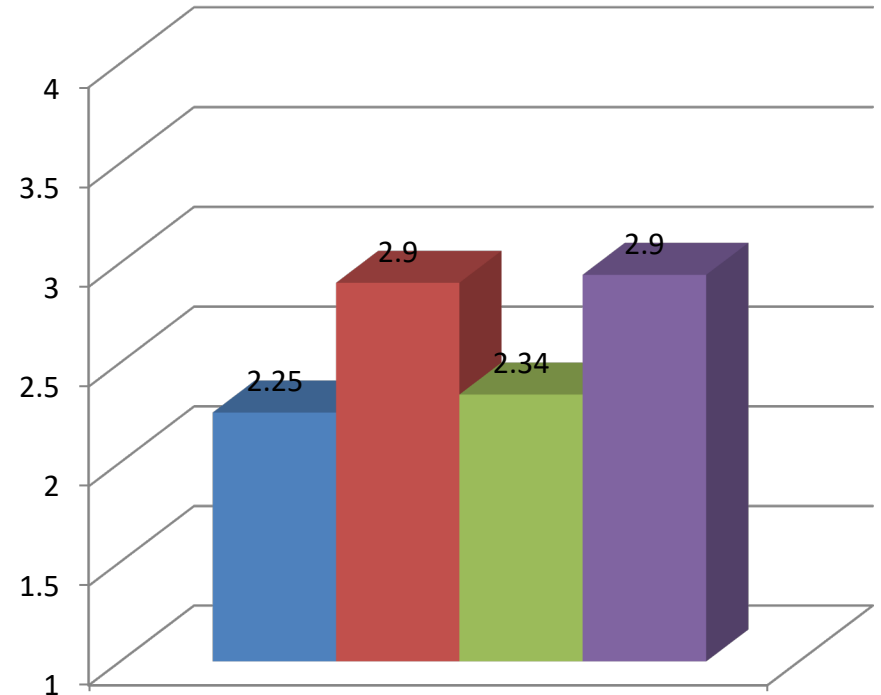
# CT Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.  All CT courses are 100/200 Level.
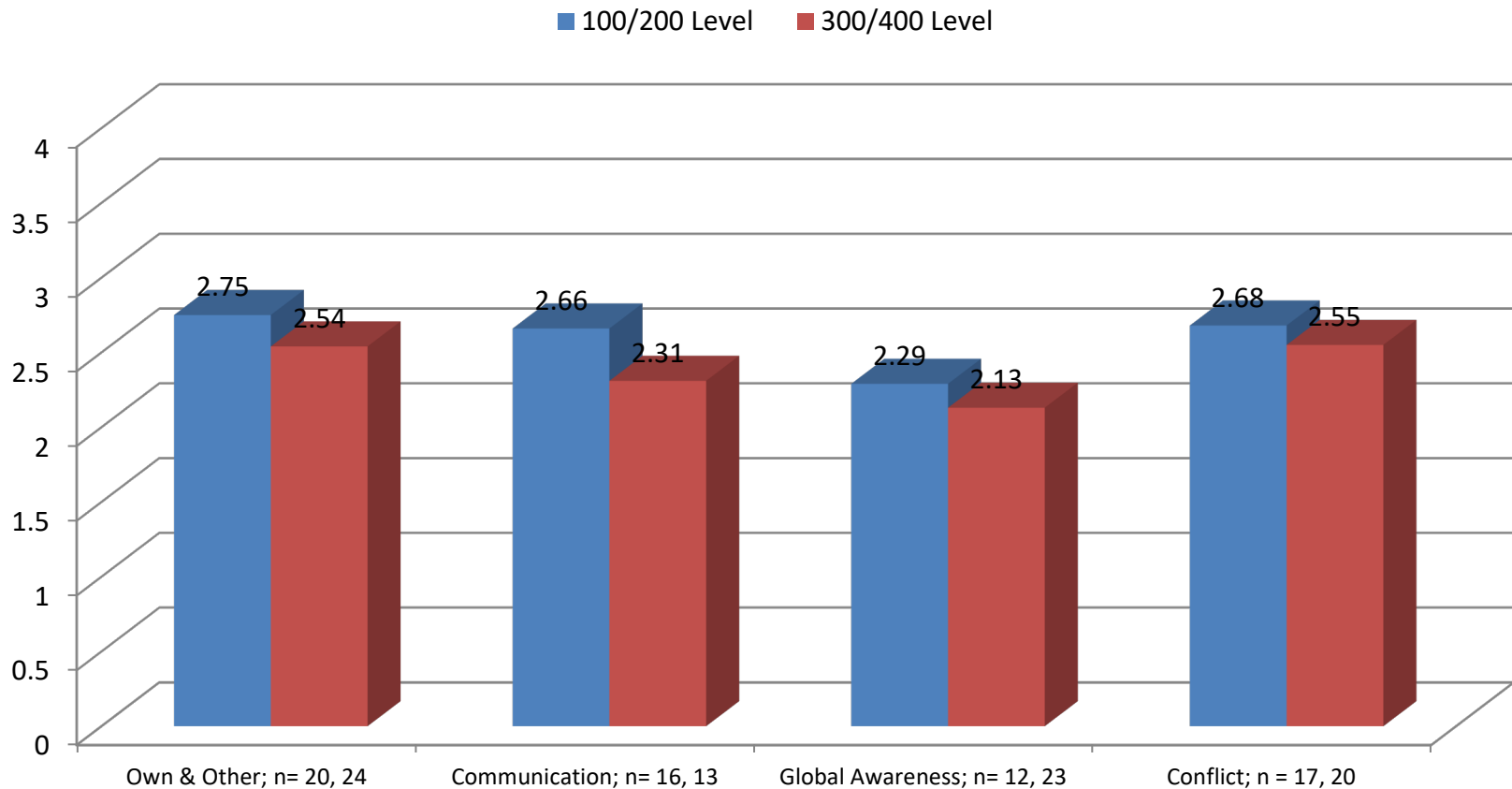
## Communication Fluency

■ Design; n = 36    ■ Diction; n = 36    ■ Style; n = 36

2.58    2.78    2.54
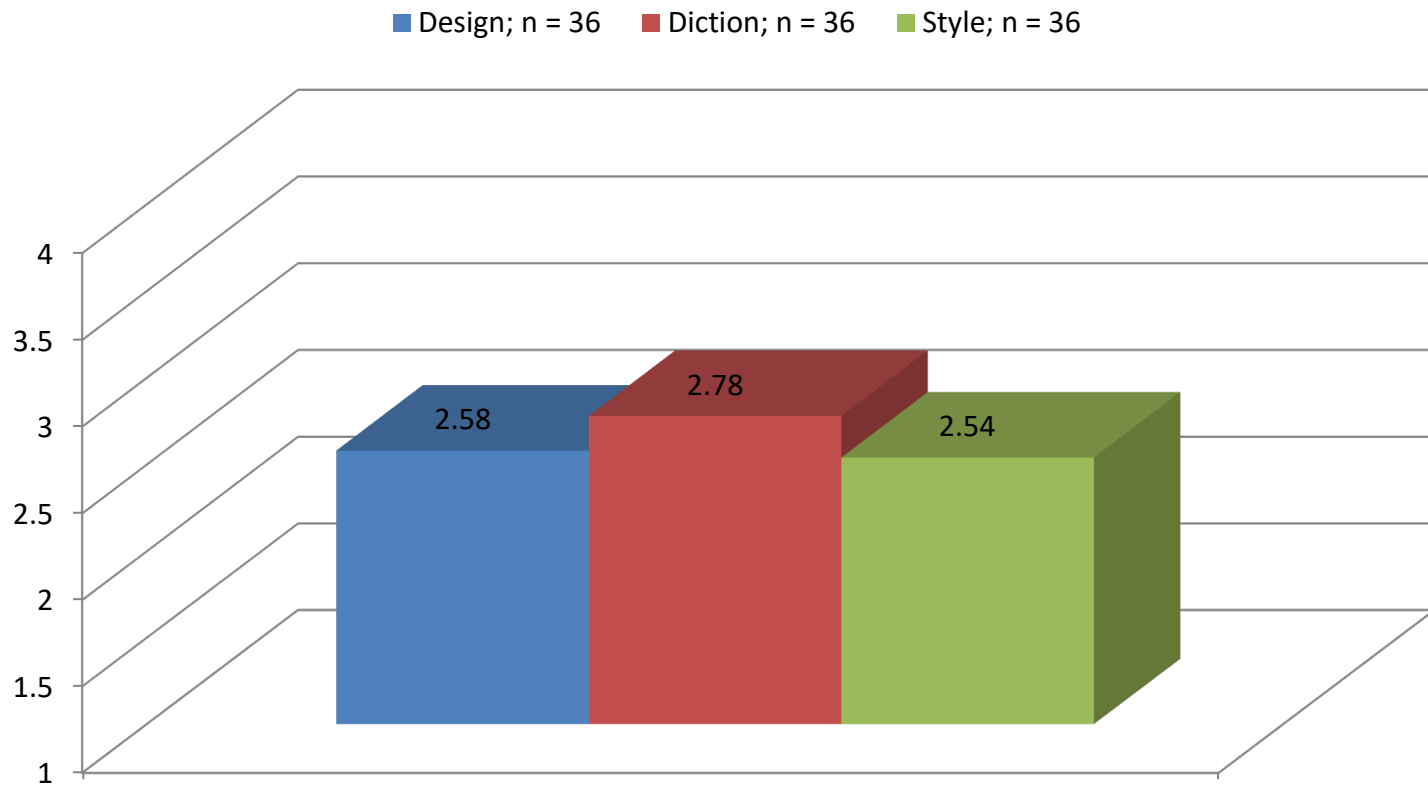
# Core II Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. All Core II courses are 100/200 Level.



## Intercultural Thinking

- Own & Other; n = 62
- Communication; n = 50
- Global Awareness; n = 35
- Conflict; n = 45

2.47
2.23
1.8
2.13
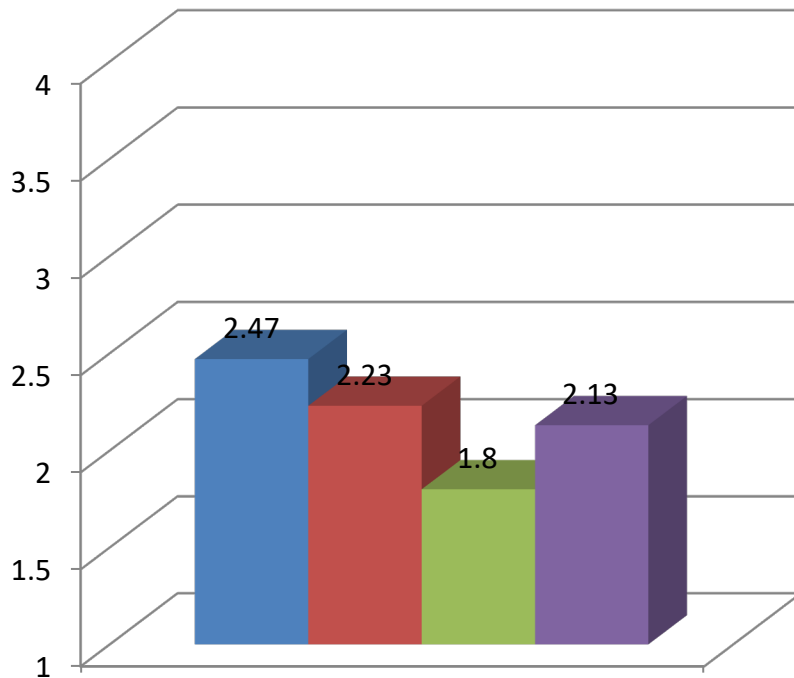
## Ethical and Civic Thinking

- Self-Awareness; n = 7
- Rules & Standards; n = 0
- Civic Well-Being; n = 48
- Issues; n = 4
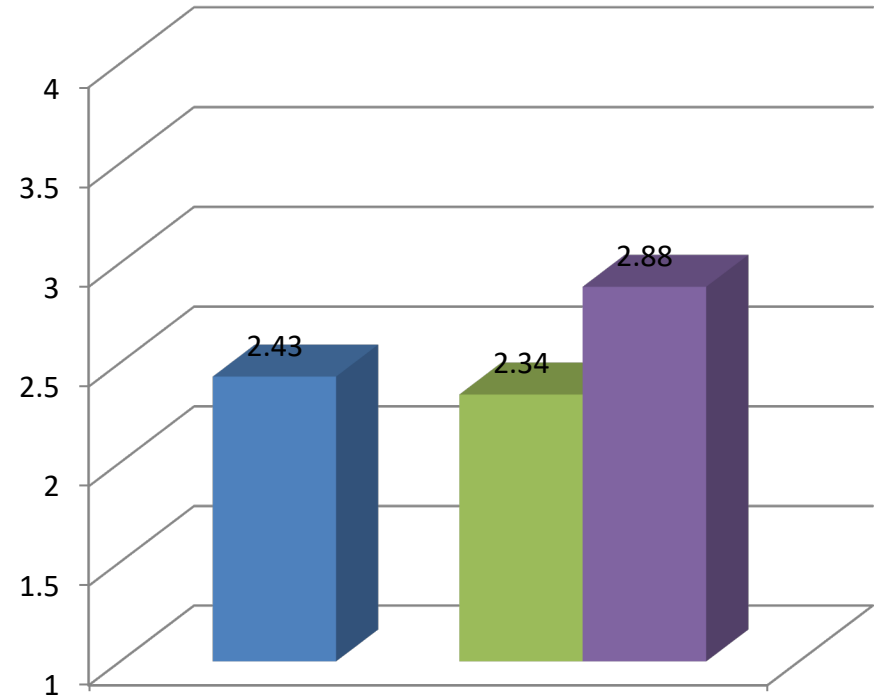
2.43
2.34
2.88

# Core II Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.  All Core II courses are 100/200 Level.

## Communication Fluency

# Writing Intensive Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.



## Intercultural Thinking

- Own & Other; n = 44
- Communication; n = 29
- Global Awareness; n = 35
- Conflict; n = 37

## Ethical and Civic Thinking

- Self-Awareness; n = 24
- Rules & Standards; n = 21
- Civic Well-Being; n = 73
- Issues; n = 22

# Writing Intensive Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.
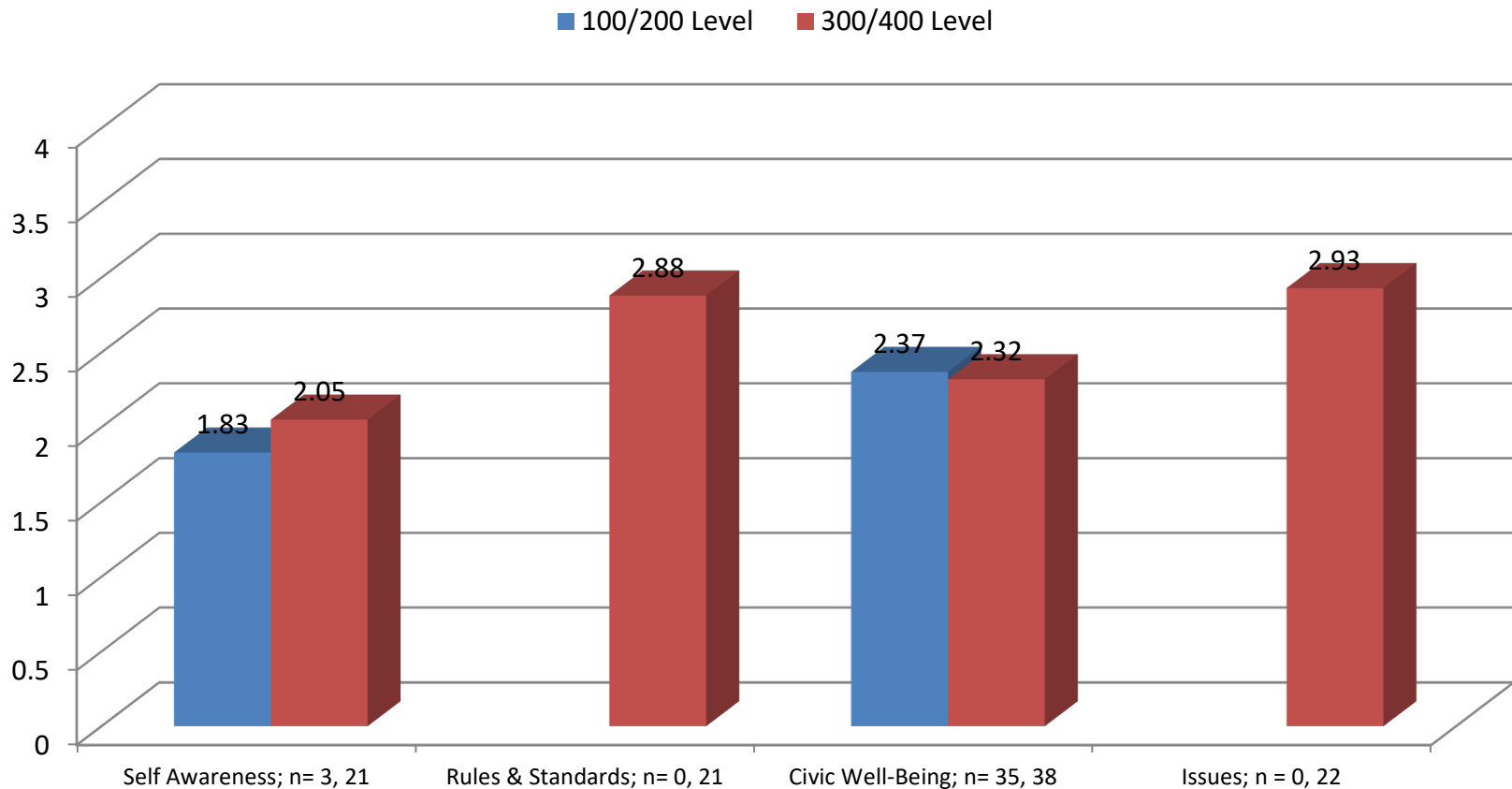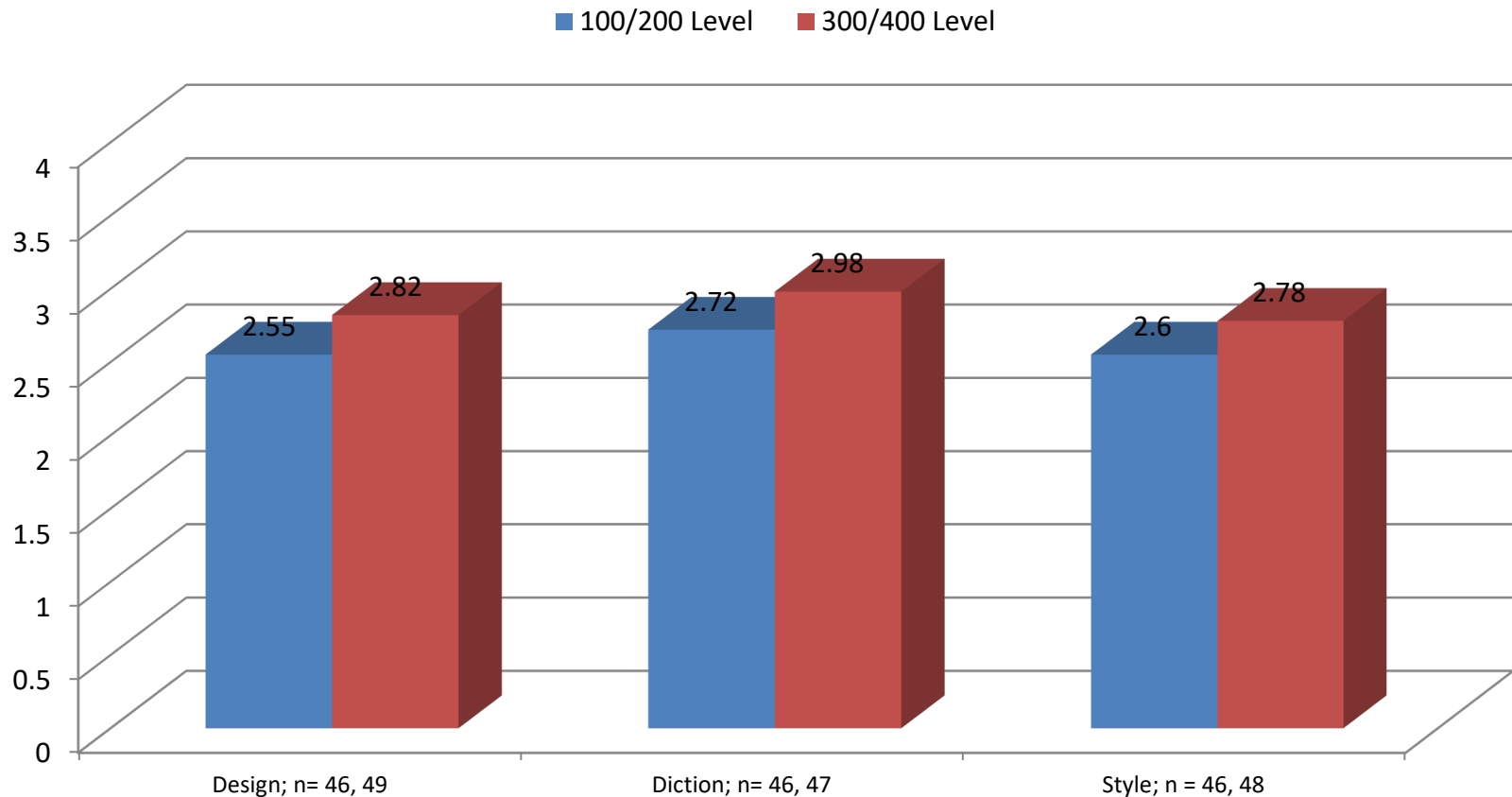
## Communication Fluency



Legend: ■ Design; n = 95  ■ Diction; n = 93  ■ Style; n = 94

Design: 2.69
Diction: 2.85
Style: 2.67

# Writing Intensive Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Intercultural Thinking



■ 100/200 Level   ■ 300/400 Level

| Category | 100/200 Level | 300/400 Level |
|---|---|---|
| Own & Other; n= 20, 24 | 2.75 | 2.54 |
| Communication; n= 16, 13 | 2.66 | 2.31 |
| Global Awareness; n= 12, 23 | 2.29 | 2.13 |
| Conflict; n = 17, 20 | 2.68 | 2.55 |

# Writing Intensive Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Ethical and Civic Thinking



Legend: ■ 100/200 Level   ■ 300/400 Level

| Category | 100/200 Level | 300/400 Level |
|---|---|---|
| Self Awareness; n= 3, 21 | 1.83 | 2.05 |
| Rules & Standards; n= 0, 21 | | 2.88 |
| Civic Well-Being; n= 35, 38 | 2.37 | 2.32 |
| Issues; n = 0, 22 | | 2.93 |

# Writing Intensive Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Communication Fluency

■ 100/200 Level    ■ 300/400 Level

# Multicultural Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Please note that all MC courses aligned to Ethical and Civic Thinking were 100/200 Level

## Intercultural Thinking

- Own & Other; n = 83
- Communication; n = 73
- Global Awareness; n = 35
- Conflict; n = 62



Own & Other: 2.49
Communication: 2.34
Global Awareness: 1.79
Conflict: 2.24
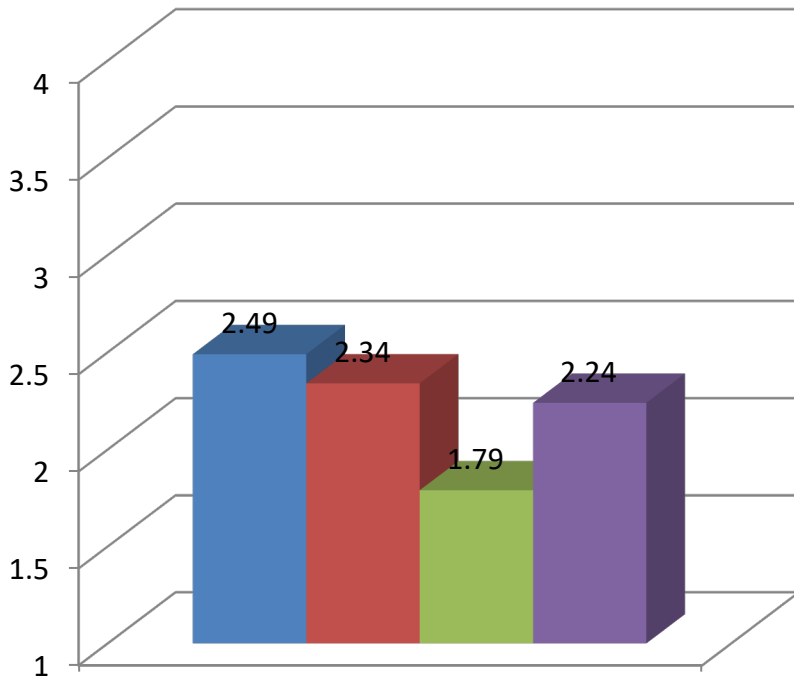
## Ethical and Civic Thinking

- Self-Awareness; n = 3
- Rules & Standards; n = 0
- Civic Well-Being; n = 44
- Issues; n = 0
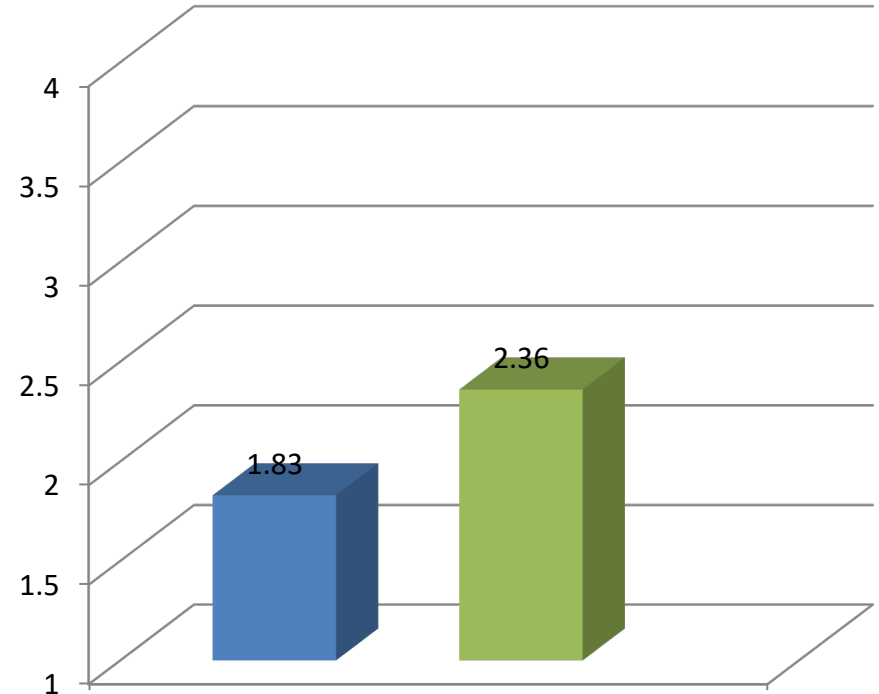


Self-Awareness: 1.83
Civic Well-Being: 2.36

# Multicultural Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Communication Fluency

■ Design; n = 25   ■ Diction; n = 25   ■ Style; n = 25

# Multicultural Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Intercultural Thinking

■ 100/200 Level  ■ 300/400 Level

| | Own & Other; n= 61, 22 | Communication; n= 51, 22 | Global Awareness; n= 34, 1 | Conflict; n = 44, 18 |
|---|---|---|---|---|
| 100/200 Level | 2.45 | 2.25 | 1.79 | 2.14 |
| 300/400 Level | 2.61 | 2.57 | 1.5 | 2.5 |
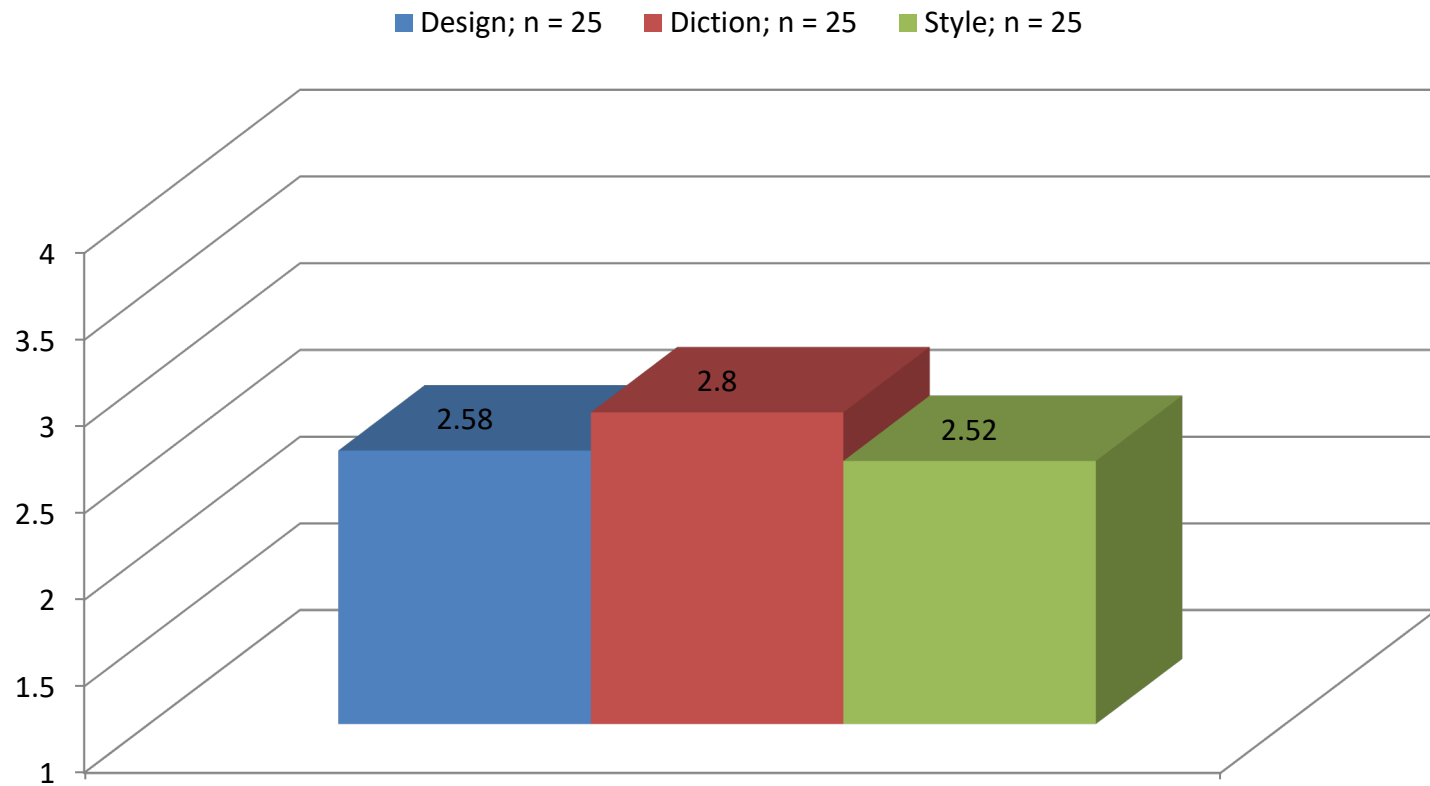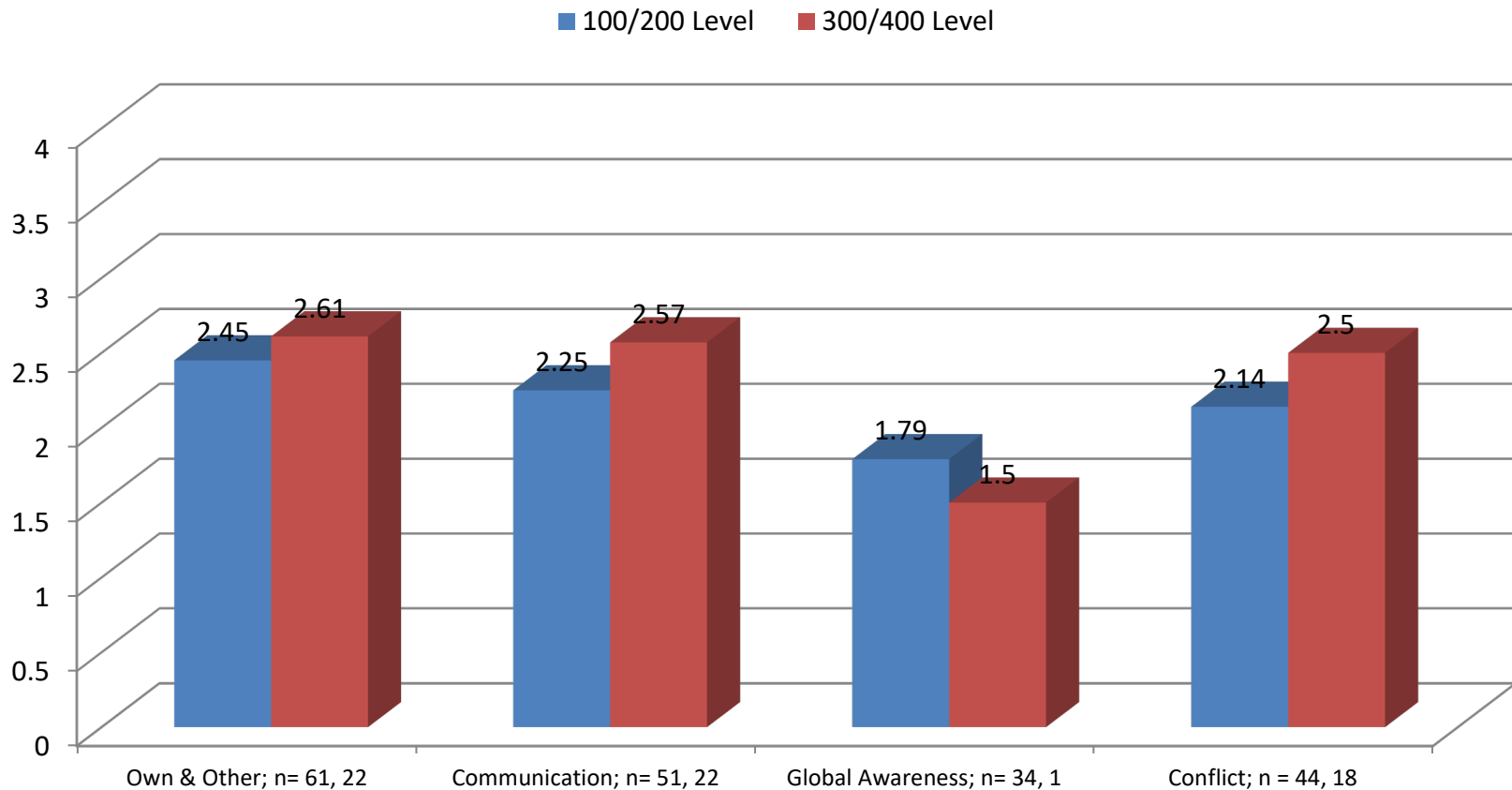
# Multicultural Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Some artifacts were from courses that, in addition to being MC, also were WI, CT, and/or Core II.

## Communication Fluency

■ 100/200 Level    ■ 300/400 Level

| | Design; n= 22, 3 | Diction; n= 22, 3 | Style; n = 22, 3 |
|---|---|---|---|
| 100/200 Level | 2.57 | 2.77 | 2.52 |
| 300/400 Level | 2.67 | 3.00 | 2.50 |
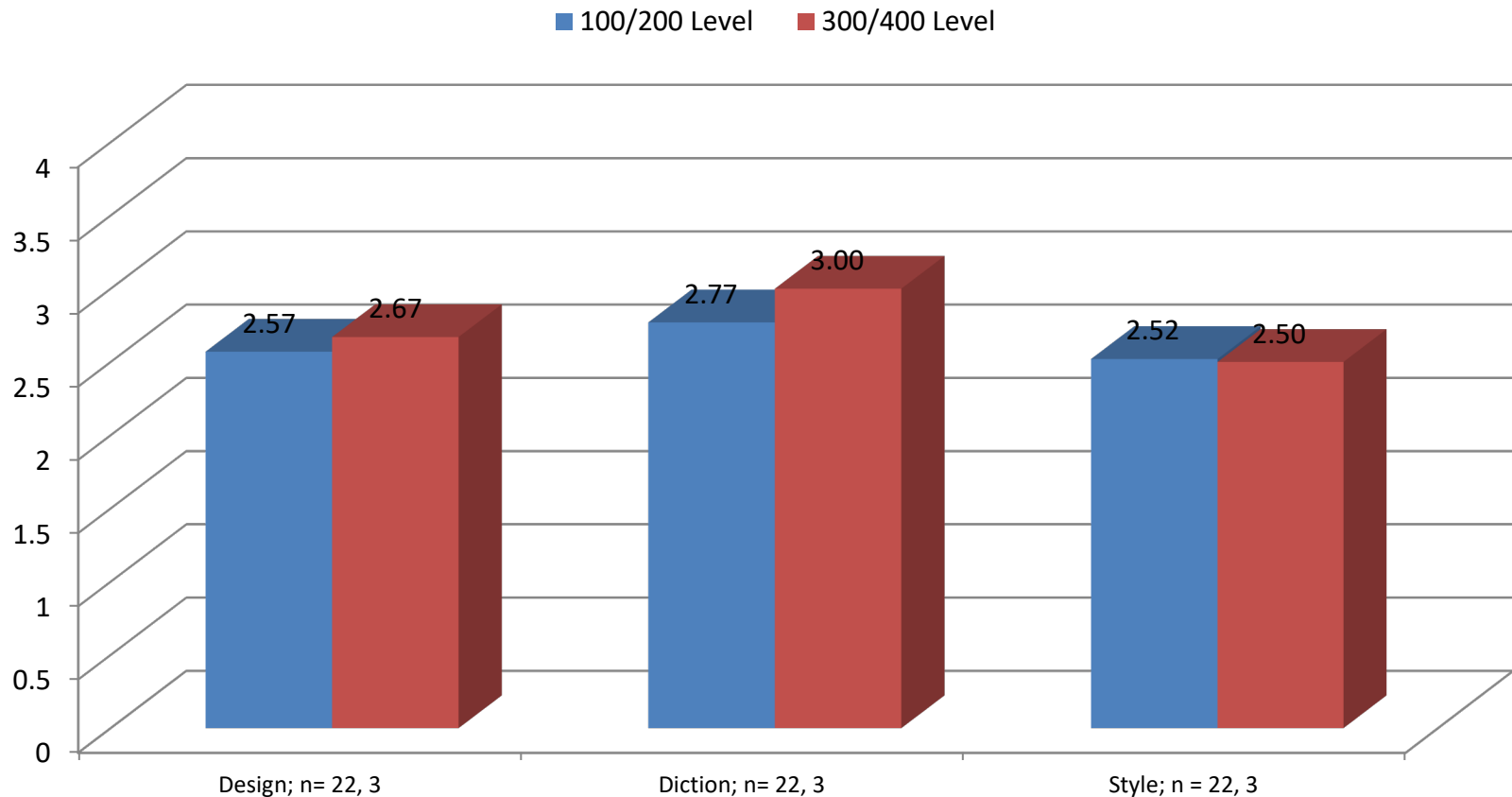
# International Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Please note that there were no International Course artifacts aligned to Communication fluency or to the first three traits of Ethical and Civic Thinking.  All international courses were at the 300/400 level.
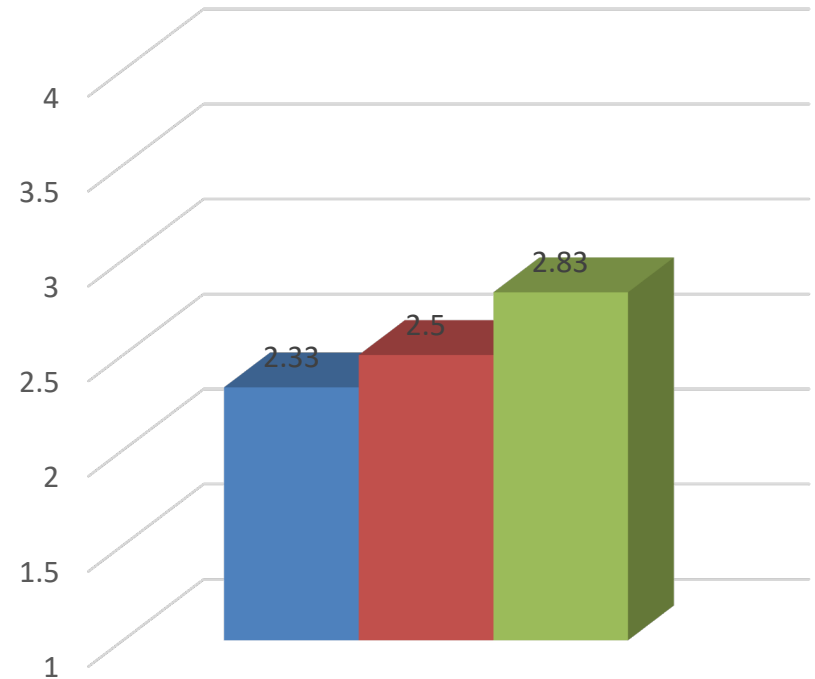
## Intercultural Thinking

- Own & Other; n = 0
- Communication; n = 0
- Global Awareness; n = 5
- Conflict; n = 5
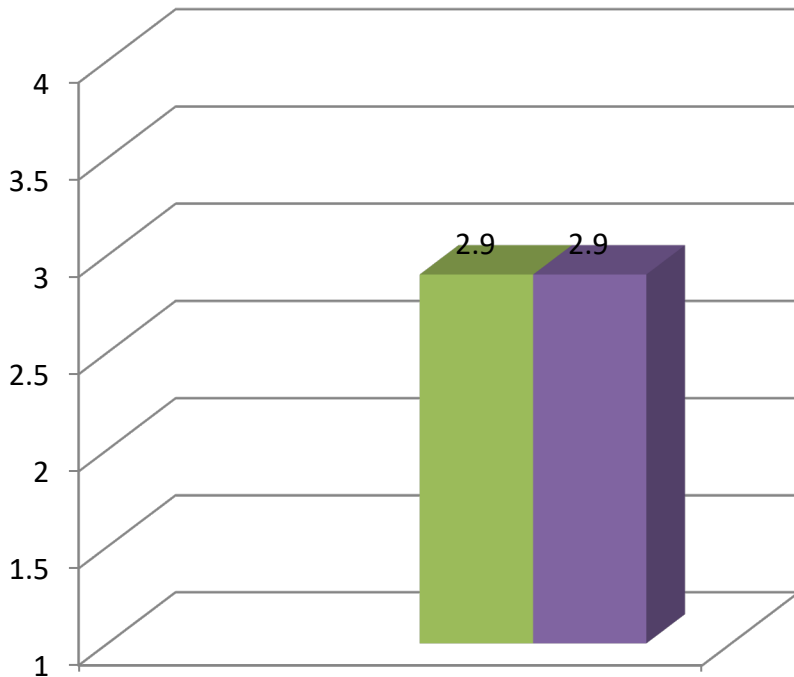
## Communication Fluency: Note: Two courses were at 100/200 level and one at 300/400 level

- Design; n = 3
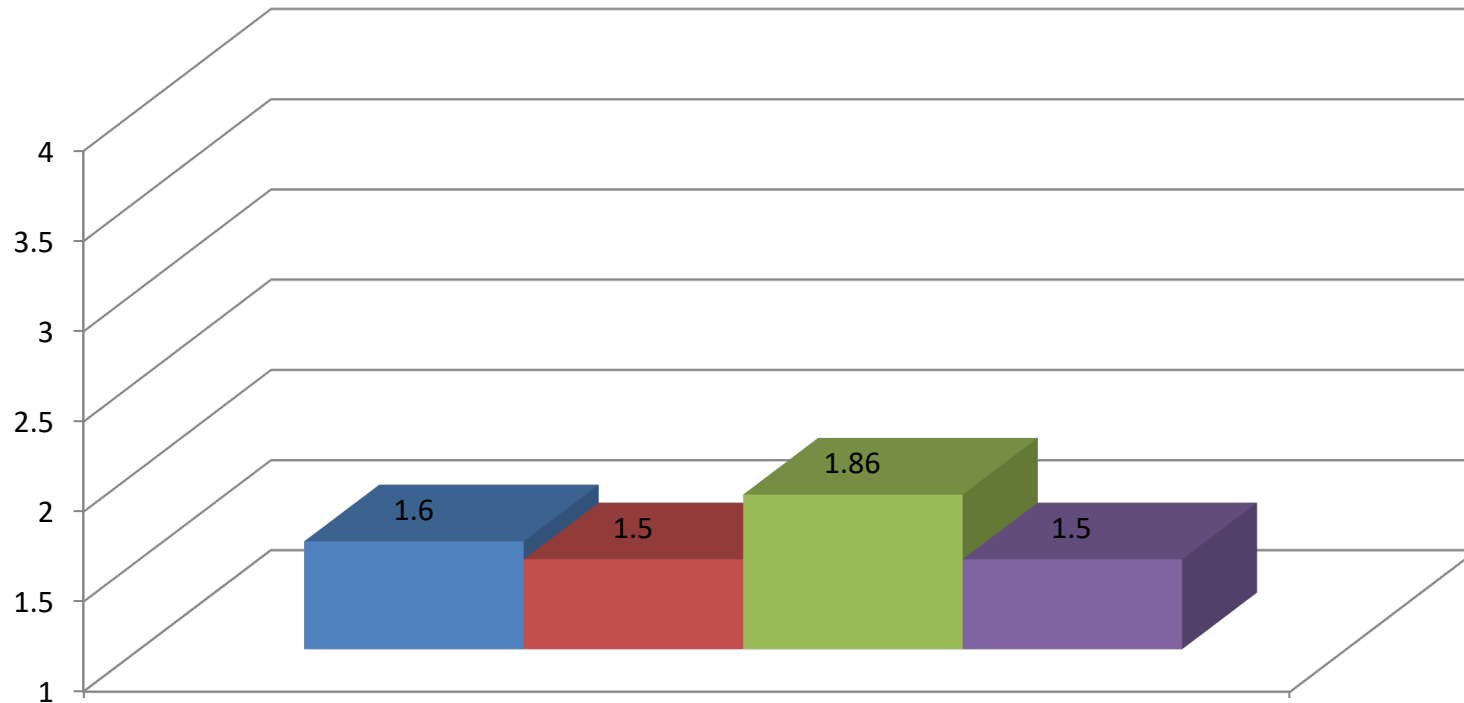- Diction; n = 3
- Style; n = 3

# Community Based Learning Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Please note that there were no CBL Course artifacts aligned to Intercultural Thinking or Communication Fluency.
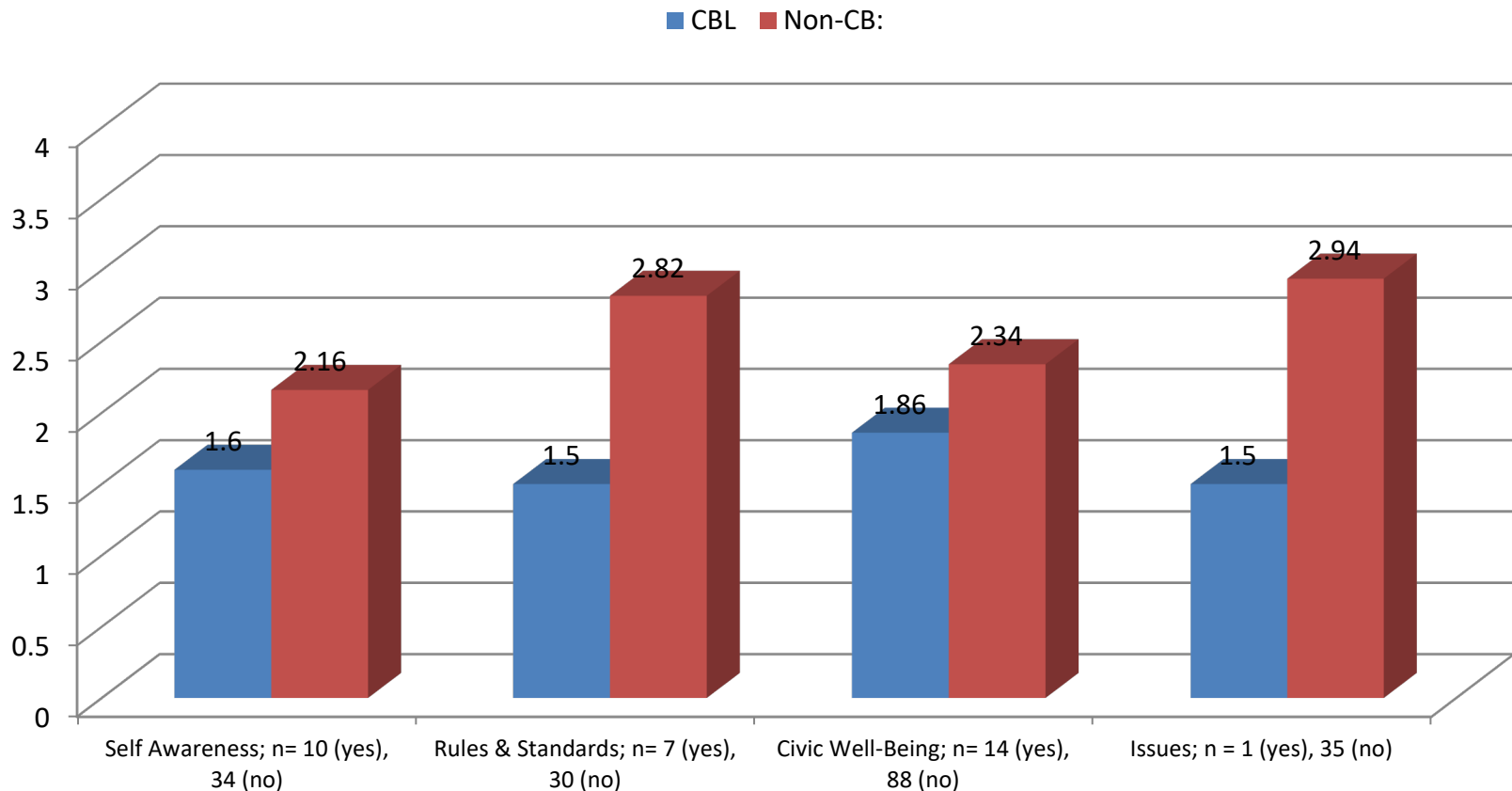
## Ethical and Civic Thinking

■ Self-Awareness; n = 10    ■ Rules & Standards; n = 7    ■ Civic Well-Being; n = 14    ■ Issues; n = 1

# Comparison of CBL and Non-CBL Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.
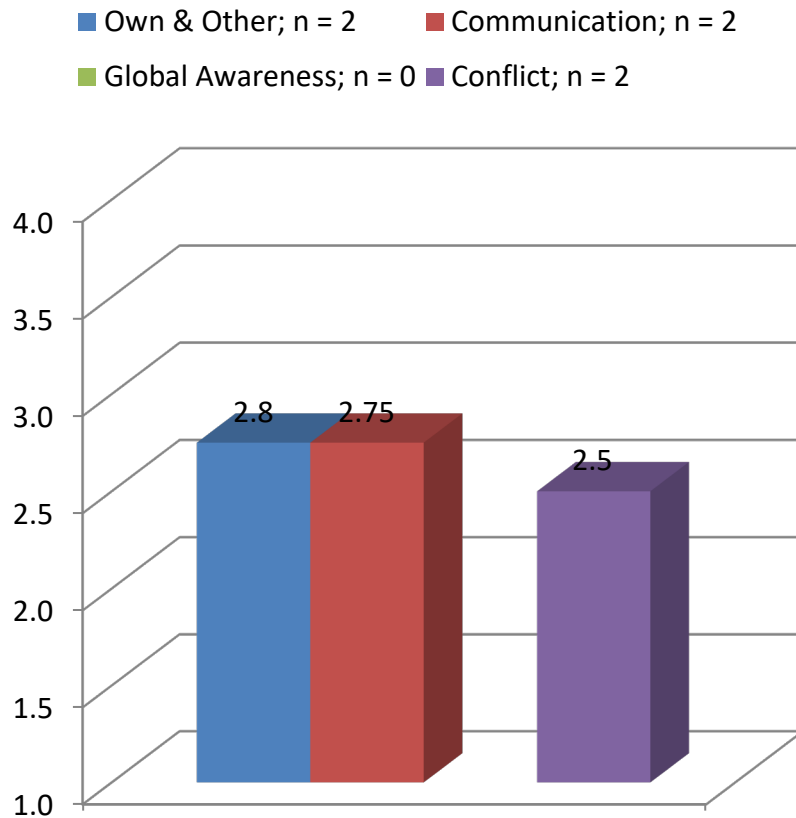
## Ethical and Civic Thinking



Legend: ■ CBL  ■ Non-CB:

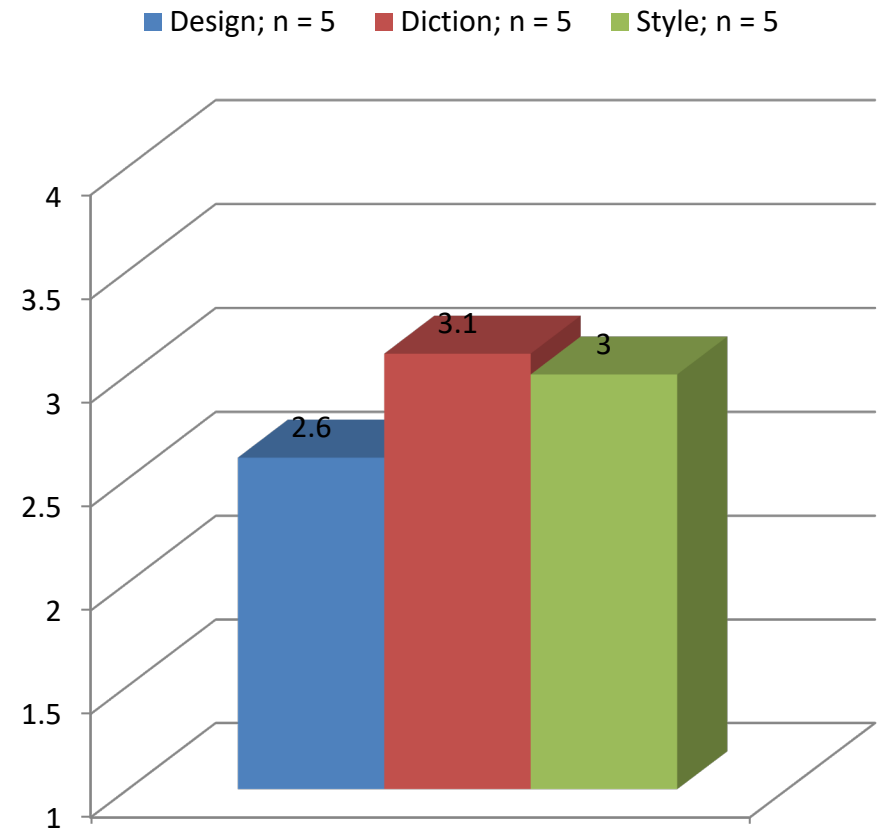| Category | CBL | Non-CBL |
|---|---|---|
| Self Awareness; n= 10 (yes), 34 (no) | 1.6 | 2.16 |
| Rules & Standards; n= 7 (yes), 30 (no) | 1.5 | 2.82 |
| Civic Well-Being; n= 14 (yes), 88 (no) | 1.86 | 2.34 |
| Issues; n = 1 (yes), 35 (no) | 1.5 | 2.94 |

# Honors Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Please note that both Honors courses aligned to *Intercultural Thinking* were at the 100/200 level. Three of the five courses aligned to *Communication Fluency* were at the 100/200 level, with the remaining two at the 300/400 level.
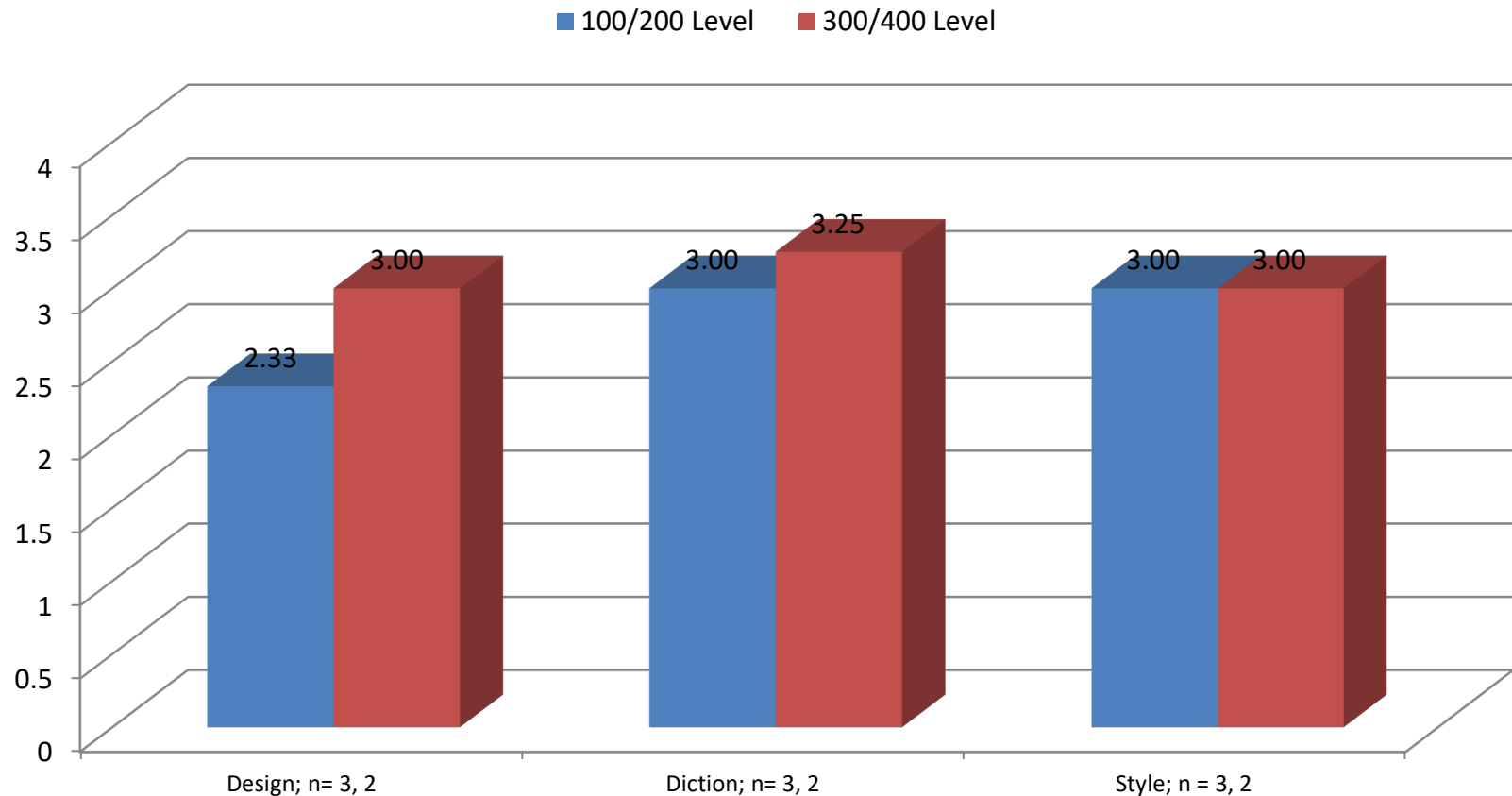
## Intercultural Thinking

- Own & Other; n = 2
- Communication; n = 2
- Global Awareness; n = 0
- Conflict; n = 2

## Communication Fluency

- Design; n = 5
- Diction; n = 5
- Style; n = 5

# Honors Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Communication Fluency

■ 100/200 Level　　■ 300/400 Level

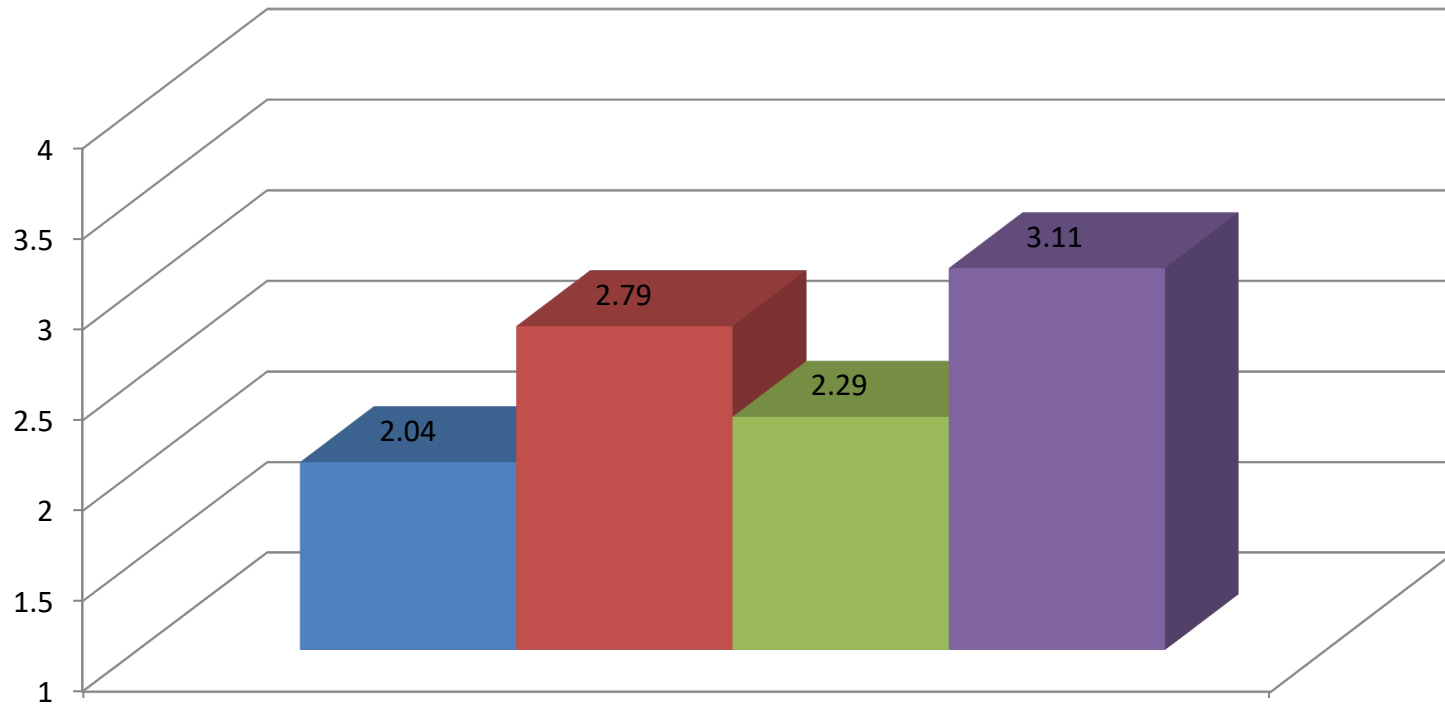| | Design; n= 3, 2 | Diction; n= 3, 2 | Style; n = 3, 2 |
|---|---|---|---|
| 100/200 Level | 2.33 | 3.00 | 3.00 |
| 300/400 Level | 3.00 | 3.25 | 3.00 |

# Capstone Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score.

## Ethical and Civic Thinking

■ Self-Awareness; n = 14　　■ Rules & Standards; n = 14　　■ Civic Well-Being; n = 14　　■ Issues; n = 14

# Capstone Courses

Mean Scores on a scale of 1 – 4, with 4 being the highest possible score. Some artifacts were from courses that, in addition to being Capstone, also were WI, international, CT, and/or CBL.

## Communication Fluency



Legend: Design; n = 10    Diction; n = 10    Style; n = 10

Design: 3.2
Diction: 3.3
Style: 3.0
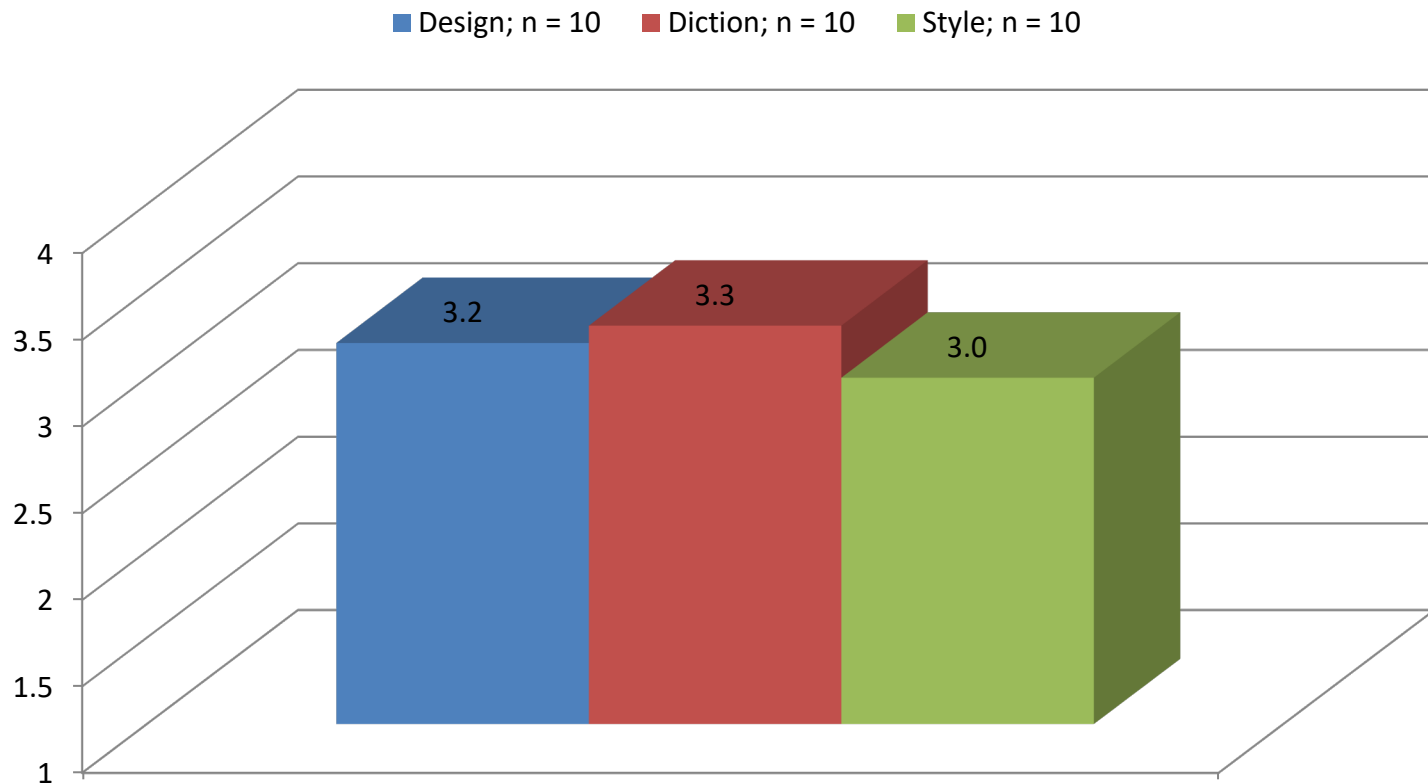
# Reference

Stellmack, M.A., Kohneim-Kalkstein, Y. L, Manor, J. E., Massey, A. R., & Schmitz, J. A. P. (2009). An assessment of reliability and validity of a rubric for grading APA-style introductions. *Teaching of Psychology, 36,* 102-107.