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GLO Team Members

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Rubric and Terminology

In preparing this document, we found several inconsistencies in the terminology used to describe the GLO rubrics. These inconsistencies exist in part because there are currently two versions of the rubric, the “standard” version shown on the school’s website and a more “student-friendly” version designed at the April 2015 Assessment Days for students to use as they reflect on their own work. In this report, we will use the following terminology when discussing the rubrics.

- **Skills** - By skill, we mean the individual components of each GLO, i.e. the rows in the rubric labelled a, b, c, d, and e. In past GLO Reports and other documents, these were referred to as “criteria”.

- **Levels** - In this report, we use the term levels to refer to the four different columns labelled “Benchmark (1)”, “Emerging (2)”, “Milestone (3)”, and “Capstone (4)”. These represent four, potential levels of achievement that a students’ work could demonstrate. In past GLO Reports and other documents, these levels were referred to as “Milestones.” We found this terminology confusing since one of the “Milestones” is called “Milestone” while the other three have different names. Furthermore, the first level is named “Benchmark,” which is a synonym for milestone, and the highest level is named “Capstone”, which could easily be conflated with Guttman’s Capstone courses and/or the Capstone portfolios. In future, revised versions of the GLO rubrics, we suggest dropping the names for each level and just referring to them by the numbers 1 through 4.

- **Criteria** - We use the word criteria to describe the bullet points listed within each GLO on the student-friendly version of the rubric. For example, at level 2 for skill A, a student’s work should satisfy the following two criteria: (1) “Explore an issue with some depth by applying skills or present evidence provided in classes”, and (2) “Provide occasional insight and/or connection to self.”

- **Milestones** - In this report, we use the term milestones to refer to the Bridge, FYE, and Capstone portfolios. That is, milestones refer to different points in a student’s time at Guttman at which we capture samples of their work. Thus, the word milestone is used to refer to something outside the rubric.

- **CLOs and PLOs** – Occasionally, we use the abbreviation CLO and PLO to refer to Course Learning Outcomes and Program Learning Outcomes, respectively.

![Figure 1](image.png)
Executive Summary

The Broad Integrative Knowledge GLO asks students to “integrate learning from broad fields of general study and connect different academic disciplines and multiple perspectives.” These outcomes are informed by the Lumina Foundation’s Degree Qualifications Profile (DQP) and the Association of American Colleges and Universities’ (AAC&U) Value Rubrics. As observed in the AAC&U’s Integrative Learning VALUE Rubric, “Fostering students’ abilities to integrate learning—across courses, over time, and between campus and community life—is one of the most important goals and challenges for higher education.” Real-world problems are unscripted and often require students to integrate knowledge and perspectives from a variety of different experiences; they do not always conform nicely to a single discipline or perspective.

At Guttman, we have made these skills a hallmark of our institution. As part of their First Year Experience, students complete Integrated Assignments that cross disciplinary lines; they conduct field research and participate in Community Days activities that bring them outside the classroom. Students are expected to critically engage with complex issues that do not conform to traditional classroom boundaries, and they navigate these academic trajectories through instructional teams with embedded advisors and faculty from a multitude of different disciplinary backgrounds. Broad Integrative Knowledge entails an essential set of skills that we want every student to learn, and because of this, it is important that we take a deep and critical look at how we are achieving this learning outcome.

This report is part of a broader exercise to develop a closer understanding of what our students learn and how we can impact that learning. Many of the findings and recommendations reported here echo those of the past two GLO Reports, which can be found on the college’s website. The recommendations in this report are divided into two categories: (1) those that address opportunities to directly improve student learning, and (2) those that describe ways we can hone and refine our own assessment process.

Student Learning. Guttman students demonstrate learning related to Broad Integrative Knowledge with increasing sophistication from the Bridge program through the First Year Experience (FYE) and into the Programs of Study (PoS). However, analysis of overall GLO rubric ratings suggests that this learning is modest at best. In fact, the average rating for most Broad Integrative Knowledge skills peaked at around 1.5, and only skill A reached an average rating of 2 or greater (see figure 2 on the next page). Figures 3-8 at the end of this section (page 9) show more specifically how the distribution of ratings changed for each skill in the progression from Bridge to the Capstone.
Some portion of these limited gains can be attributed to problems with the assessment process. For example, faculty and staff reported frustrations with inconsistent language in the GLO rubrics, and often felt that ePortfolio overlooked relevant examples of student learning such as co-curricular activities and learning that occurs outside of the classroom. Nonetheless, the findings also indicate several opportunities for improvement in the curriculum. We address these opportunities skill by skill.

**Skill A:** Skill A deals with how students engage with “issues that have contemporary, historical, scientific, economic, technological, or artistic significance”. Faculty and staff suggested that they do not actively work on this skill and assume that it is addressed elsewhere since most college classes engage “issues” in one way or another. This appears to lead to a lack of scaffolding or deliberate emphasis of the skill. As such, we recommend that faculty and staff engage in workshops to scaffold increasing levels of engagement with issues in assignments across the FYE and PoS courses. Workshops during the February and April Assessment Days would be open to all faculty and OSE staff, but a wider selection of workshops would form a sustained professional development series for a dedicated cohort of 5-10 faculty and staff. Additionally, we recommend that Guttman revise the curriculum maps with more specific guidelines for connecting course learning outcomes to GLOs. This would provide an opportunity to better identify how skill A can be scaffolded across the curriculum.

**Skills B & C:** Skills B and C focus on how students understand and integrate varying disciplines and perspectives. We found that faculty and staff have diverging opinions about the role and significance of disciplines in Guttman’s interdisciplinary curriculum. Some faculty argued that it was counterproductive for students to spend time distinguishing disciplines from one another if
the curriculum ultimately emphasizes the integration of disciplines. Others felt that it was important for students to understand the distinctions between disciplines in order to fully leverage their integration. These discrepancies clearly impact student learning as we found that Guttman students have trouble distinguishing between fields of study and do not understand the meaning of the term “academic discipline”. Research from experts in the field of interdisciplinary learning suggests that it is important to distinguish between disciplines, and Guttman students also indicated that this is something they would like to learn more about. As such, we recommend that faculty and staff engage in workshops on the assessment of interdisciplinary knowledge using the researcher Boix-Mansilla’s framework. These workshops will (1) explain why it is important to distinguish between disciplines in a program that is actively trying to blend disciplines, and (2) provide tools to faculty and staff to better assess how students are integrating knowledge in their courses. These workshops would be open to all Assessment Day participants, but would be part of a more comprehensive workshop series offered to a dedicated cohort of 5-10 faculty and staff.

Skills D & E: Skills D and E address how students “connect prior knowledge to ideas, concepts, and experiential learning across courses and majors” and their awareness of relationships between personal, academic, and professional identities. We found that most signature assignments/activities do not ask students to display “reflection and self-assessment” in terms of personal, academic, and professional identities. These skills are more likely to be evidenced in lower stakes assignments, in interactions between students and faculty/staff, and in interactions between students and their peers that occur outside the classroom. As such, we recommend bringing OSE more into the assessment process to make co-curricular activities a bigger part of the work we assess. Note that the two previous GLO Reports (Intellectual Skills and Civic Engagement) both proposed similar recommendations. We also recommend engaging faculty and staff in workshops to design explicit classroom activities that help students make meaningful connections between their course work and the GLOs.

More specifically, this report offers four recommendations for improving student learning related to the Broad Integrative Knowledge GLO skills.

SL.1 - Offer workshops to help faculty scaffold increasing levels of engagement with issues (of contemporary, historical, scientific, economic, technological, or artistic significance) in assignments across the FYE and PoS courses.

SL.2 - Offer workshops on the assessment of integrative knowledge using Boix-Mansilla’s framework. These workshops will (1) explain why it is important to distinguish between disciplines in a program that is actively trying to blend disciplines, and (2) provide tools to faculty and staff to better assess how students are integrating knowledge in their courses.

SL.3 - Engage staff from OSE & OAA in professional development around learning outcome assessment and co-curricular mapping. Some of this work has already begun into OSE, but we need to bring faculty and OAA staff into these discussions to ensure that efforts are aligned across units.

SL.4 – Offer workshops to address how we publicize and communicate GLOs to students. These workshops will (1) confirm why it is important for faculty to discuss the GLOs in class with students; (2) provide guidance to faculty on how to better connect the GLOs
with assignments and how to make this connection more meaningful for students, and (3) as a deliverable, produce a series of small (5-10 minute) activities that faculty and staff can use in their classes to discuss portfolios and the Guttman Learning Outcomes with students. This recommendation is an extension of ongoing efforts to revise the How Do I GLO? section of students’ ePortfolios.

**Assessment Process.** Our work also revealed several opportunities to improve the assessment process itself. As mentioned above, there are several places in which the GLO rubrics use inconsistent and/or confusing language. Fixing these problems with the rubric would make assessment at Guttman more meaningful and the findings more useful. Likewise, we found that the college’s current assessment process prioritizes learning demonstrated via the Digication ePortfolio, and thus often overlooks learning that occurs outside the classroom or in co-curricular activities. To address this problem, we recommend designing new methods for collecting assessment data outside of signature assignments, and developing a co-curriculum map (similar to the curriculum map) that maps GLOs to learning outcomes in signature co-curricular programs. We also found that the curriculum maps are unreliable, and suggest revising them with more specific guidelines for how the course learning outcomes should map to GLOs.

This report offers six recommendations for improving the assessment process.

**AP.1** - Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills).

**AP.2** - Integrate more varied types of assignments and activities into assessment rather than just high-stakes signature assignments.

**AP.3** – Create co-curricular maps of learning outcomes mapped to key co-curricular programs.

**AP.4** - Review and revise the curriculum maps, providing clearer guidelines for mapping Course Learning Outcomes to the GLOs.

**AP.5** - Establish a designated two-week time period on the academic calendar in Fall 1 and again in Spring 1 in which faculty are expected to ask students in their classes to post work to the How Do I GLO section of their ePortfolios.

**AP.6** - In the future, each portfolio should be rated by two pairs of raters, and where there is disagreement, a third pair of raters should be used as tie-breakers to ensure inter-rater reliability.
Distribution of GLO Ratings from Bridge to Capstone

Skill A from Bridge to Capstone

Skill B from Bridge to Capstone

Skill C from Bridge to Capstone

Figure 3

Figure 4

Figure 5
Figure 6

Figure 7
Methodology

The Broad Integrative Knowledge GLO Team collected data in seven forms. Student work was collected using Digication’s ePortfolio system and rated according to the GLO rubric. Global Guttman portfolios were also rated using the GLO rubric and excerpts were coded for specific themes. The team gathered additional data to supplement this work and triangulate findings. In particular, we conducted focus groups with faculty and staff and separately with students. The team also collected assignments and analyzed their relevance to the GLO rubrics, reviewed curriculum maps to better understand how Course Learning Outcomes map to the GLOs, and conducted a short “Flash Feedback” student survey about Broad Integrative Knowledge.

Direct Evidence of Student Learning (through ePortfolio)

The full assessment process is outlined in the Guttman Institutional Assessment Plan. The Plan was drafted by the Assessment and Professional Development Committee in collaboration with the Associate Dean of Assessment and Technology and approved by College Council in May 2016. Students submit ePortfolios for assessment at three milestones: the conclusion of Bridge, the conclusion of their First Year Experience (FYE), and in a Program of Study course near the end of their Guttman career (the Capstone portfolio).

Students are first introduced to ePortfolio in the two-week Bridge program. At the end of Bridge, they submit a portfolio of their work on an integrated project that involves field research in NYC neighborhoods. Students continue to use ePortfolio in their classes in the FYE. At the end of the FYE, students are asked to curate work from their classes in an FYE ePortfolio that they feel exemplifies their accomplishments towards the different GLOs. Students once again submit curated work in a Capstone ePortfolio in one program of study course near the end of their Guttman career.

To assess the Broad Integrative Knowledge GLO, faculty and staff read and rated student ePortfolio submissions during Assessment Days. A portfolio may receive a rating from 1 to 4 based on the four levels identified in the GLO rubric. Additionally, portfolios may receive a rating of 0, indicating they are “below benchmark” (level 1 in the rubric), and they may also be coded with a -1, indicating that there was no appropriate evidence to assess in the ePortfolio.

Three pools of student ePortfolio submissions were assessed during 2017-2018.

- **Bridge ePortfolios**: This pool included 808 submissions with 47 from Winter Bridge 2016, 419 from Summer Bridge 2016, and 342 from Summer Bridge 2017. A total of 151 of these submissions were rated during the October 2017 Assessment Days including 1 from Winter Bridge 2016, 114 from Summer Bridge 2016, and 36 from Summer Bridge 2017.
- **FYE ePortfolios**: This pool included 151 submissions with 86 from Spring 2016 and 64 from Spring 2017. A total of 83 of these submissions were rated during the December 2017 Assessment Day including 45 from Spring 2016 and 38 from Spring 2017.
• **Capstone ePortfolios**: The pool included 206 submissions with 59 from Spring 2015, 48 from Spring 2016, and 99 from Spring 2017. A total of 119 of these submissions were rated during the February Assessment Days including 35 from Spring 2015, 27 from Spring 2016, and 57 from Spring 2017. The submissions came from a variety of different Program of Study courses as outlined in table 1 below.

<table>
<thead>
<tr>
<th>Course in which ePortfolios were submitted</th>
<th>Pool</th>
<th>Rated</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 203: Microeconomics</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ECON 204: Contemporary Economic Issues</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>ECON 223: Economics of Social Issues</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>HSVC 213: Health and Human Services Policy</td>
<td>50</td>
<td>29</td>
</tr>
<tr>
<td>INFT 204: Internship in Information Technology</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>LASC 254: Capstone Seminar in the Liberal Arts &amp; Sciences</td>
<td>90</td>
<td>49</td>
</tr>
<tr>
<td>UBST 225: Global Urbanisms</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>UBST 253: Urban Research Seminar</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Each rating activity began with norming. For example, at the October 2017 Assessment Days, faculty and staff rated two example Bridge ePortfolios using the Broad Integrative Knowledge GLO Rubric, and discussed the results in order to identify agreements and disagreements about appropriate ratings. Pairs of faculty and staff were then assigned samples of approximately twenty ePortfolios which they read together and rated using the GLO rubric. This process was repeated at subsequent Assessment Days, with a focus on FYE ePortfolios in December and Capstone ePortfolios in February.

While the GLO assessment process provides a snapshot of student learning at different stages of the Guttman academic program, it does not follow individual students longitudinally through the program.

This year, a little over half (49) of the 92 FYE ePortfolios were rated twice to test for inter-rater reliability. The GLO ratings are a mixture of ordinal data (ratings from 0 to 4) and categorical data (-1’s which code for “no evidence” but are not intended to be interpreted as lower than the other ratings). Hence, we adopt the following interpretation of agreement.

- Two ratings *agree* if they are both ordinal (0, 1, 2, 3, or 4) and differ by no more than one, or if they are both a rating of -1 (no evidence).
• Two ratings disagree if they are both ordinal (0, 1, 2, 3, or 4) and differ by more than one, or if one rating is ordinal while the other is -1 (no evidence).

If the raters disagreed on a portfolio then it was discarded from our sample. If the raters agreed that there was no evidence in a portfolio (both ratings were -1) then the portfolio received a rating of -1. If the raters agreed on a portfolio that did have evidence (both ratings were from 0 to 4 and differed by at most 1) then we averaged the two ratings. As a result, some of the FYE portfolios received ratings of 1.5, 2.5, etc.

Student demographics for rated ePortfolios were compared to the fall 2016 and Fall 2017 Guttman student populations. Each of the assessment samples is roughly comparable to the overall student population. It is interesting to note that almost half (44%) of the Capstone students were male, which is much higher than the percentage of the graduating class that is male.

### Table 2. Student Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Bridge (n = 151)</th>
<th>FYE (n = 83)</th>
<th>Capstone (n = 119)</th>
<th>All Portfolios (n = 353)</th>
<th>Guttman CC Fall 2016 (N = 995)</th>
<th>Guttman CC Fall 2017 (N = 1,066)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>48%</td>
<td>60%</td>
<td>56%</td>
<td>54%</td>
<td>55%</td>
<td>53%</td>
</tr>
<tr>
<td>Male</td>
<td>52%</td>
<td>40%</td>
<td>44%</td>
<td>46%</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>4%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Black</td>
<td>24%</td>
<td>17%</td>
<td>18%</td>
<td>20%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>64%</td>
<td>66%</td>
<td>61%</td>
<td>64%</td>
<td>60%</td>
<td>59%</td>
</tr>
<tr>
<td>White</td>
<td>8%</td>
<td>11%</td>
<td>16%</td>
<td>11%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>College Admissions Average (Mean)</td>
<td>72.0</td>
<td>75.7</td>
<td>73.3</td>
<td>73.3</td>
<td>74.2</td>
<td>74.5</td>
</tr>
</tbody>
</table>

Throughout the year, the GLO Team shared summaries of the ePortfolio ratings at Assessment Days to provide context for subsequent rating activities. At the June Assessment Days, the team shared preliminary findings and invited feedback from participants.
Additional Data Gathering

Initial Inquiries
At the September Assessment Day, before any ePortfolios had been reviewed, the GLO Team asked faculty and staff to respond to a short survey about the five skills on the GLO rubric. This survey was anonymous but not private; participants could read each other’s answers after submitting their own. The goal of this survey was to identify areas of inquiry that the team might want to target as they planned assessment activities throughout the year.

Assignments/Activities
To better understand how the Broad Integrative Knowledge GLOs relate to course learning outcomes and the work that students do in their classes, the GLO Team asked faculty and staff to bring a relevant assignment or activity to the February 26 Assessment Day that they felt exemplified the Broad Integrative Knowledge GLO. Forty faculty and staff participated, creating a sample that included low-stakes in-class activities, high stakes signature assignments, and co-curricular activities that were facilitated by staff working in the Office of Student Engagement. Participants answered a series of questions about their assignment on an open-ended survey. Then, they swapped assignments with one of their peers and filled-out the same survey for their peer’s assignment.

Faculty/Staff Focus Groups
The GLO Team also conducted two 90-minute focus groups with faculty and staff at the February Assessment Days. Twenty-two faculty and staff participated. These focus groups centered around seven questions. Five questions asked faculty and staff about their general impressions and use of the BIK GLO. The remaining questions focused specifically on skills B/C and D/E.

Transcripts of the focus groups were prepared by Rev Transcribing. The transcripts were coded and analyzed by members of the Broad Integrative Knowledge GLO Team. The team then examined the transcripts for common themes and organized categories around these themes. These categories included understanding disciplines, broad/interactive, challenges and struggles, multiple perspectives and measuring curiosity. Many of the focus group excerpts supported the data we had already analyzed through the quantitative assessment data. However, some responses were more present in the qualitative data.

Global Guttman Portfolios
In focus groups and other conversations, faculty and staff repeatedly expressed concern that the type of work documented in ePortfolios would not illustrate learning relevant to skills D and E. Since these two skills focus on personal growth and curiosity, the team thought there might be better, more relevant examples of student work in the Global Guttman portfolios. Global Guttman is a study-abroad program in which students travel outside New York City during their
Spring Break to complete work for one of their Program of Study courses. Students document their travels in a page on their ePortfolio including preparation beforehand and reflections after the trip. At the April Assessment Days, faculty and staff rated a total of 53 Global Guttman portfolios for skills D and E. In addition to applying ratings, raters were asked to identify excerpts from each Global Guttman portfolio as evidence to support the ratings. For example, the excerpts below were provided as evidence for ratings of criteria D:

**RATING OF 1:** “The part of business I'm into the most is marketing. As I learn more and more about marketing I want to find a way to teach and show people what I learned and experienced while in Nicaragua. I want to be able to help and promote a better environment. Whether it is through a campaign or small workshop in the future I believe that as a global citizen is my job to help others understand what's in the world outside of New York City and how our current way of living can make bigger impact to us in the future.”

**RATING OF 3:** “From what we have spoke about in class the Mayan families seem to have a close bond they seem to be very family oriented which is something that might be part of their tradition. Which made me think about my family because I come from a family that is very family oriented. Being very close to each other is something normal for us. It would be weird if we were so distance from one another which is seem is how the mayan families are.”

Finally, raters were asked to identify excerpts from the Global Guttman portfolios that exemplified the following themes: “self-awareness”, “discovery”, “connections”, and “growth”.

**Student Focus Groups**

The team felt that there was an absence of student voices in the assessment process. To rectify this problem, two 90-minute student focus groups were conducted in May. The first focus group had six participants, and the second had only two. Similar to the faculty and staff focus groups, this data was organized into categories that were used to support or expand the data we collected quantitatively. The categories included *perspectives, past experiences, growth* and *student learning*.

**Flash Feedback Survey**

The team also worked with the Center for College Effectiveness (CCE) to conduct a short (three question) “Flash Feedback” survey for students. This survey was administered by the CCE from May 15-22. The survey consisted of three questions. It asked students to list examples of disciplines, and tried to gauge student thoughts on skills D and E. The survey had 105 respondents for a 12.5% response rate, which is similar to other Flash Feedback surveys. The CCE did the majority of the work summarizing the results.
Curriculum Maps

Finally, the team also analyzed the curriculum maps, measuring how often the course learning outcomes map to the GLOs in first year courses and each of the Programs of Study. Guttman maintains curriculum maps for each of its five major as well as one for the First Year Experience (or “Guttman Common Core”). Each map lists all the courses in the corresponding program along with their Course Learning Outcomes (CLOs). The map is laid out in a grid, showing which course learning outcomes map to which GLOs. To make analysis easier, we prepared a version of the curriculum maps that only contains the Broad Integrative Knowledge GLOs. For each course in each program, we counted the number of CLOs that mapped to each GLO. We then calculated the percentage of the CLOs in each course that map to a corresponding GLO, and looked to see how many courses in each major had 50% or more of their CLOs mapping to different Broad Integrative Knowledge GLOs.

Preliminary Findings

After compiling preliminary findings, the Broad Integrative Knowledge GLO Team presented these findings at the June Assessment Day to faculty, staff, students and administration. We were thus able to collect feedback from the community and incorporate it into this document.

Limitations

The team encountered at least four limitations in the Assessment process. First, there was a preponderance of “no evidence” ratings in the FYE and Capstone submissions. In other words, many of the submissions did not include work relevant to the Broad Integrative Knowledge GLOs. Second, the team realized that students demonstrate learning in several places and ways that are not documented in ePortfolio—for example, class presentations, co-curricular events, etc. Given the time constraints, it was difficult to develop alternative ways to document and assess this learning. Third, we conducted student focus groups very late in the assessment process, and they were one of the only things we did that directly involved students. In some cases, student feedback opened up new areas of inquiry that we did not have time to fully explore. It would be helpful to involve students earlier and more often in the process. Finally, the qualitative data that we collected confirmed and elaborated on the assessment work done on the ePortfolios but may have also presented additional findings that we did not have time to analyze on its own. In the future, we may want to conduct focus groups with faculty earlier in the semester to provide space for a fuller analysis.
Recommendations Related to Skill A

The recommendations and findings in this section deal primarily with Broad Integrative Knowledge Skill A:

- **Skill A** – Engages with issues that have contemporary, historical, scientific, economic, technological, or artistic significance.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill A. Engages with issues that have contemporary, historical, scientific, economic, technological, or artistic significance.</td>
<td>Explores issue at surface level, providing little insight and/or information beyond the basic facts. Can state ideas from other sources.</td>
<td>Explores an issue with some depth by applying skills or presenting evidence provided in classes. Provides occasional insight and/or connection to self.</td>
<td>Situates an issue in a broader context to provide in depth explanation. Independently gathers information from multiple sources. Can articulate own position on an issue.</td>
<td>Applies new knowledge on an issue to academic and/or experiential contexts. Independently evaluates information from multiple sources. Can articulate multiple perspectives on an issue to others.</td>
</tr>
</tbody>
</table>

**Finding 1 / Recommendation SL.1**

**What we learned:**

Finding 1: The Intellectual Skills GLO Team set the goal that each skill should have an average rating of three across the Capstone portfolios. We have yet to reach this goal for any of the three GLOs assessed so far. We came closest to achieving this goal for Broad Integrative Knowledge GLO skill A. GLO ratings were higher for this skill than any other Broad Integrative Knowledge skill, but the ratings still grew quite modestly from Bridge to the Capstone, plateauing at around 2.

The word “issues” is very comprehensive; most college classes engage with some kind of “issue”. Since the word “issues” has such broad application, faculty may assume that all classes push to engage students in important issues. This appears to lead to a lack of scaffolding or deliberate emphasis of the skill.

**What we recommend doing about it:**

Recommendation SL.1: Offer workshops to help faculty scaffold increasing levels of engagement with issues (of contemporary, historical, scientific, economic, technological, or artistic significance) in assignments across the FYE and PoS courses.
Evidence
The following table shows how the mean ratings changed for each skill in the progression from Bridge to FYE to the Capstone.

<table>
<thead>
<tr>
<th>Table 3. Broad Integrative Knowledge</th>
<th>Mean Ratings from Bridge to the Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Bridge</td>
<td>1.47</td>
</tr>
<tr>
<td>FYE</td>
<td>1.69</td>
</tr>
<tr>
<td>Capstone</td>
<td>2.08</td>
</tr>
<tr>
<td>Global Guttman</td>
<td>-</td>
</tr>
</tbody>
</table>

The rankings of skill A as measured by ePortfolio assessment rose from 1.47 to 2.08 from Bridge to the Capstone milestone and remain the highest ranked at the FYE and Capstone milestones. Students begin the FYE at the level of “explor[ing] issues at a surface level, providing little insight and/or information beyond the basic facts.” After their time here, they have begun to “explore an issue with some depth” but few “situate an issue in a broader context” or “explore an issue with some depth by applying skills or present evidence provided in classes or provide occasional insight and/or connection to self.”

When faculty and staff brought in assignments and activities at the February 26 Assessment Day, 29 (or 73%) of the 40 participants said that their assignment/activity addressed skill A. This was the highest number among all the Broad Integrative Knowledge skills. A review of the curriculum maps corroborated this story. On average, 56% of the classes in each program mapped skill A to at least half of their Course Learning Outcomes. For comparison, the next most common skill in the curriculum maps was skill D with an average of 38% of the classes in each program mapping skill A to at least half their Course Learning Outcomes. Clearly, Guttman faculty and staff view skill A as present everywhere in the curriculum.

During the focus groups, faculty and staff confirmed that they think skill A is ever-present in students’ classes at Guttman, leading to a lack of scaffolding of engagement in issues or deliberate emphasis on the skill in their classes. One faculty member commented that “I always find, like, is there an assignment in the world that doesn't meet one of those things. That is just like everything, right?”. Another added:

> Take for instance, City Seminar. I know...that, at least the teams that I've been on, the ways that they incorporate the learning outcomes of City Seminar in their courses. They're addressing all of these. But that doesn't mean that I necessarily go look at these and say, ‘okay I'm going to now have an activity that does blah, blah blah.’ But I know that we’re addressing all of these.

It is important to further engage our students in the issues facing them in our world today by being more deliberate in acknowledging the importance of this engagement and how we
address it. Rather than the assumption that students are not only being exposed to but making progress on this particular skill, we need to begin by mapping out how engagement on issues happens across related classes as well as within one class.

Implementation details

The GLO Team recommends that the college provide a series of assignment/activity design workshops focused on two main objectives: (1) designing assignments and activities that scaffold increasing levels of engagement with issues (of contemporary historical, scientific, economic, technological, or artistic significance) across the FYE and PoS, and (2) designing assignments and activities that effectively assess integrative knowledge. This second goal is addressed below under Recommendation SL.2 (page 27). Faculty and staff will have the option to participate in these activities in one of two ways.

First, a targeted cohort of 5-10 faculty and staff will participate in a sustained series of workshops that meet both during and outside Assessment Days in the Fall 2018 and Spring 2019 semesters. These workshops will be roughly 90 minutes long, and will include one workshop in November, one in January, two workshops during the February Assessment Days, a workshop in March, another workshop during the April Assessment Days, and a final workshop in May. Cohort members will be expected to produce and assess deliverables (described below). This cohort model is designed to align with the college’s new PD Plan, which recommends that PD be “sustained over time and carried out in cohorts or faculty learning communities.”

Second, faculty and staff who are not part of this cohort will have the opportunity to participate in a more limited fashion by joining the three workshops offered during the February and April Assessment Days. Cohort members will take a leadership role in these Assessment Days workshops, and will be expected to follow-up on their experiences outside of Assessment Days in ways that other participants are not.

The effectiveness of these workshops will be assessed in two ways. First, cohort members will be asked to select one primary assignment or activity to serve as the focal point of their work. Cohort members will use the Broad Integrative Knowledge GLO Rubrics to rate a small sample (10-15 items) of student work as a pre-test. After completing the workshop series, participants will use a redesigned version of the assignment or activity in a comparable class in the 2019-2020 academic year, and rate a comparable sample of student work as a post-test follow-up. Second, all participants (cohort members and otherwise) will be asked to complete a short survey about their experiences participating in the workshops.

The full details of these workshops will be formulated in Fall 2018 by the Broad Integrative Knowledge GLO Team in coordination with the Dean of Faculty Affairs, the Associate Dean of Assessment, the Professional Development Steering Committee, and the Assessment and Learning Committee. The workshops should be included as a Practice in the Assessment and Learning Committee’s SAGE Plan and in the SAGE Plans of the Dean of Faculty Affairs and the Associate Dean of Assessment. A rough outline of the anticipated workshops is as follows:
• **November** – This meeting is simply an introduction to the workshop series. It could be shorter than the other meetings, and could be partially supplemented by online work. In particular, cohort members will be given the outline for the workshop series. They will identify the primary assignment or activity they will be working on, and they will begin assessing student work using the GLO Rubric as part of the “pre-test”.

• **January** – Cohort members will be asked to bring in an assignment or activity that “engages students with issues of contemporary, historical, scientific, economic, technological, or artistic significance.” This should probably be the same assignment identified and assessed in the first workshop. Working in pairs with a specific set of prompts, they will be asked to think about this assignment from an increasingly wider frame of reference. First, they will ask “how does this assignment engage students in these issues?” Then, “how does the assignment fit into the class more broadly and how does the class as a whole engage students in these issues?” Finally, “what classes would students take prior-to this class or as a follow-up to this class, and how do those classes engage students in these issues?” The goal is for participants to think about how their assignment or activity fits more broadly into the curriculum as a whole”.

• **February Assessment Day #1** – All participants (from the cohort or otherwise) will be asked to bring in an assignment that “engages students with issues of contemporary, historical, scientific, economic, technological, or artistic significance.” Participants will work in three to four-person groups, and will review each other’s assignments/activities. For each assignment/activity, each group member will use the Broad Integrative Knowledge GLO Rubric for skill A to assess and describe the extent to which the assignment engages students in these issues. Then, using a specific set of prompts, faculty and staff will brainstorm ways that the assignment/activity could be redesigned to prompt student work that demonstrates higher levels on the GLO rubric.

• **February Assessment Day #2** – This workshop is included in response to Recommendation SL.2 as described on page 27. All participants (from the cohort or otherwise) will be asked to bring in an assignment or activity that asks students to integrate knowledge from more than one discipline. Participants will be introduced to Boix-Mansilla’s framework for assessing integrative learning. This framework provides a structure for creating rubrics to assess integrative learning in a variety of contexts. Some example rubrics will be provided that facilitate assessment in very different contexts. Working in pairs, participants will then use Boix-Mansilla’s framework to design rubrics that assess integrative learning for their specific assignment or activity. Finally, each pair will share their rubrics with the participants from another pair, and reflect on how this rubric might guide them to modify the instructions for their assignment/activity.

• **March** – Cohort members will share out about their experiences during the Assessment Day activities, and then begin modifying the assignment(s) they worked on at Assessment Days to (1) better engage students in issues (of contemporary historical, scientific, economic, technological, or artistic significance), and (2) encourage more integrated learning. Participants will also revisit their discussion from the January workshop, and in consultation with the curriculum maps, consider how work in their course fits into the larger picture. The goal is for cohort members to share the revisions
they made to their assignments at the April Assessment Days, and lead a discussion about scaffolding skill A. Thus, this workshop is primarily to help prepare them for the April Assessment Day.

- **April Assessment Day** – Cohort members will share the revisions they made to the assignment(s) they worked on at the February Assessment days. Then, they will lead a discussion with faculty and staff about how to best scaffold skill A across the curriculum. The results of this discussion will be documented by the cohort members and will help inform future revisions to the curriculum map as described in recommendation AP.4.

- **May** – This meeting is primarily an opportunity for cohort members to follow-up on work from the April Assessment Days, and debrief on their experience with workshop series. This meeting could be shorter than the other meetings, and could be partially supplemented by online work.
Finding 2 / Recommendations AP.1 and AP.4

What we learned:

Finding 2: In addition to our Guttman Learning Outcomes (GLOs), each program has Program Learning Outcomes (PLOs) and the courses within the programs also have Course Learning Outcomes (CLOs). As part of the assessment work we have been doing over the past several years, faculty have created curriculum maps connecting the GLOs with the CLOs. Faculty considered a GLO to match a CLO if they felt that a particular GLO was covered in a class through the attainment of the CLO. These curriculum maps were created for each program of study as well as the Guttman Common Core (First Year Experience).

The number of times that a particular CLO and GLO are matched varies greatly across programs. Even though, as discussed above, faculty think of skill A as all encompassing, the curriculum maps tell a different story. There are large differences in the links between CLOs and GLOs in different programs. Skill A maps to all of the courses in Liberal Arts and Sciences and a large majority of the courses in Urban Studies and Business Administration. The CLOs map to the GLOs much less often in many of the other programs including the FYE where many expect students to encounter this skill.

What we recommend doing about it:

Recommendation AP.1: Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills).

In particular, with regard to skill A, we recommend revising the rubric in the following ways:

● Clarify the meaning of the term “issues” in skill A, and make sure that the concepts addressed by this skill are consistent and scaffolded across the rubric.
● Address the dissonance between levels 3 and 4 in the rubric for skill A; level 3 talks about “situating” an issue while level 4 talks about "applying new knowledge on an issue". We need to adapt the language of “situating” an issue to level 4 of the rubric in order to reconcile these differences.

Recommendation AP.4: Review and revise the curriculum maps, providing clearer guidelines for mapping Course Learning Outcomes to the GLOs.

Evidence

The following table shows the percentage of courses in which at least half of the CLOs (Course Learning Outcomes) map to the Broad Integrative Knowledge GLOs in the curriculum map.
Table 4. Percentage of courses in which at least half of the course learning outcomes map to Broad Integrative Knowledge GLO Skills

<table>
<thead>
<tr>
<th></th>
<th># courses in program</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td>10</td>
<td>80%</td>
<td>40%</td>
<td>20%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Guttman Common Core</td>
<td>11</td>
<td>27%</td>
<td>9%</td>
<td>18%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Human Services</td>
<td>9</td>
<td>33%</td>
<td>11%</td>
<td>22%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>11</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
<td>18%</td>
<td>0%</td>
</tr>
<tr>
<td>Liberal Arts &amp; Sciences</td>
<td>11</td>
<td>100%</td>
<td>55%</td>
<td>91%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Urban Studies</td>
<td>9</td>
<td>89%</td>
<td>56%</td>
<td>22%</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Overall Average</td>
<td>56%</td>
<td>30%</td>
<td>29%</td>
<td>38%</td>
<td>23%</td>
<td></td>
</tr>
</tbody>
</table>

Faculty saw links to skill A occurring (or not occurring) at both the FYE and the PoS as evidenced in the chart above and quotes below.

In thinking about the way I frame the second year courses I teach versus the first year courses, I make it explicit that, "We are going to be doing things. I expect you to have gone through reading and writing, critical issues, and be thinking in ways that is implied in practice." Of course they try to catch up and I scaffold whatever I need to, but ...in my second year classes in particular, I think trying to be too explicit with this stuff becomes dangerous for when they get to four year school where there are 10,000 students and they don’t get that ...

They don’t have the availability of their faculty, the language is not there in the way that it was, so it’s ... Maybe part of the reason we’re talking about the FYE in a lot of this is because the language lends itself to the more explicit nature of the first year we have our students, rather than...where we’re trying to let them go, pulling back on some of the explicit stuff but hoping that it’s there.

Looking more closely at skill A in the FYE and the Programs of Study, the following graph shows how the ratings are distributed across the Bridge, FYE, and Capstone portfolios.
Of the three milestones of portfolios assessed, the FYE portfolios received the highest percentage of -1 (no evidence) for skill A, providing further evidence that this skill has not found a foothold in the FYE. The results are mixed in the Capstone portfolios, but more than 70% of ePortfolios received a rating of 1, 2, or 3.

Different Programs of Study exhibit different idiosyncrasies in the ways that curriculum maps align CLOs with GLOs. In Business Administration, if a course mapped at least half of its CLOs to any GLO then it did so for every GLO. In every single course in the Liberal Arts and Sciences major, at least half of the CLOs mapped to skill A. Likewise, there was only a single course in the Urban studies major in which fewer than half the CLOs mapped to skill A. The final two programs, Human Services and Information Technology, are minimally represented. Although all but two classes in the Human Services major contained CLOs that mapped to skill A, most of these classes had a very small percentage of CLOs matching with GLOs. In the Information Technology major, very few classes contained CLOs that map to skill A, and for the few that do, the percentages of matching CLOs is very small.

At Guttman, we have created and revised curriculum maps at least twice since Guttman began as The New Community College. The process has been done differently and by different groups of people and has not led to consistent results. In comparing the numbers matching the CLOs and GLOs from the curriculum map (in the chart above) with the average assessment ratings, there are obvious differences.
<table>
<thead>
<tr>
<th>Program of Study</th>
<th>Mean GLO Rating of Capstone Portfolios for Skill A (excluding -1’s)</th>
<th>Percent of courses in which at least half the CLOs map to GLOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration (n = 11)</td>
<td>1.90</td>
<td>80%</td>
</tr>
<tr>
<td>Guttman Common Core (n = 92)</td>
<td>1.69</td>
<td>27%</td>
</tr>
<tr>
<td>Human Services (n = 29)</td>
<td>2.07</td>
<td>33%</td>
</tr>
<tr>
<td>Information Technology (n = 12)</td>
<td>2.10</td>
<td>9%</td>
</tr>
<tr>
<td>Liberal Arts &amp; Sciences (n = 52)</td>
<td>2.22</td>
<td>100%</td>
</tr>
<tr>
<td>Urban Studies (n = 15)</td>
<td>1.73</td>
<td>89%</td>
</tr>
</tbody>
</table>

Of the three programs with the highest connection to skill A according to the curriculum map, only Liberal Arts and Sciences has a similarly high assessment average. Despite the map presenting Urban Studies with 89% of CLOs matched to GLOs, the ranking of those ePortfolios are at the second lowest number. Likewise, Information Technology which had the lowest number amount of matching CLOs, but had the second highest assessment average. The Guttman Common Core is included for the comparison. However it is important to recall that portfolios assessed for the Common Core are work completed after the students’ first year while programs of study work can include anything through to their graduation. Additionally, the samples are very small for some of these Programs of Study so some caution need to be taken when drawing conclusions from this data. For example, n = 12 for Information Technology and n = 11 for Business Administration!

There are several reasons why these numbers could be inconsistent: 1) The CLOs may not match what is actually occurring in the classroom; 2) there may be a difference in the way those within and outside of the program understand skill A as the assessment average would include a mix of faculty and staff from different programs; or 3) the curriculum maps might not accurately reflect the relationship between the CLOs and GLOs. As changes to the CLOs and PLOs (Program Learning Outcomes) are more closely connected with the PPR process, revisiting the curriculum maps is a good place to address the disconnect between the curriculum map and the assessment averages. The potential different understandings will be addressed below.
Implementation details

The implementation details for Recommendation AP.1 are discussed on page 49. As explained there, the Assessment and Learning Committee has begun to consider a process of revising the GLO rubrics to reduce the total number of skills. It would not make sense to revise the curriculum maps until this work has completed, most likely in April 2020. As such, we recommend beginning the process of revising the curriculum maps at the April 2020 Assessment Days.

In order to ensure the maps truly reflect the curriculum at Guttman, we need to provide a more rigorous set of guidelines to direct these revisions. At the very least, faculty and staff should be advised to map each CLO to no more than two GLOs. In the current curriculum maps, some CLOs map to one or two GLO while others map to nearly every GLO. The curriculum map should take a conservative approach, focusing on the primary GLOs addressed by a CLO, not every single one.

Additionally, each Program at Guttman (including the FYE) already has a list of PLOs (Program Learning Outcomes) that sit somewhere between the CLOs and GLOs, and the Program Coordinators already map these PLOs to the GLOs. Since Program Learning Outcomes are less removed from Course Learning Outcomes, it might make sense to map the CLOs to the PLOs, and then trace this map through to the GLOs. This would help keep us honest about what GLOs we are really addressing through the CLOs.

Finally, the curriculum maps should be reviewed by several people who teach in each program. The Program Coordinators can start this process, but their curriculum maps should be reviewed and further revised by a collection of faculty in their program. This process should include discussion of (and perhaps a written description about) how each CLO relates to the corresponding PLO/GLO. Another way faculty might participate in this process would be to bring in signature assignments from their classes and assess which CLOs, PLOs, and GLOs the assignments address. Then, we could use these assignments as a starting point to build up to the curriculum map.

Some of the Programs of Study are currently revising their PLOs. We thus propose the April 2020 Assessment Days as a date of convergence. All revisions to PLOs and GLOs should conclude by this date so that the process of revising the curriculum maps can begin in earnest. Program Coordinators will formulate an initial draft of the revised curriculum map at this Assessment Day in consultation with other faculty who teach in their program. Revisions will continue between Assessment Days with discussions and feedback at the June Assessment Day leading to a final draft of the curriculum map by the end of the 2019-2020 academic year.

In terms of specific revisions to the rubric for skill A, we note that the VALUE rubrics contain definitions of key terms, and these rubrics served as the starting point for many of our GLO rubrics. Rather than invent our own definition of “issues”, we should start by investigating how this term is used/defined in the VALUE rubrics. We should also ask Program Coordinators how this term is defined in their Programs of Study and how it is used by academics in their field of study. These varying definitions would help us create a common definition that makes sense on the rubric for skill A.
Recommendations Related to Skills B & C

The recommendations and findings in this section deal primarily with Broad Integrative Knowledge skills B and C:

- **Skill B** – Exhibits an understanding of how different disciplines create knowledge and approach questions.
- **Skill C** – Evaluate multiple perspectives on key issues connected to societal concerns.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill B. Exhibits an understanding of how different disciplines create knowledge and approach questions.</td>
<td>Lists academic disciplines and expresses interest in one more subject area.</td>
<td>Recognizes knowledge in a specific discipline. Asks and answers questions using the general assumptions and approaches of one own discipline.</td>
<td>Considers that different disciplines ask and answer questions in different ways. Presents a rationale for following one disciplinary approach over another in specific cases.</td>
<td>Synthesizes knowledge and approaches from at least two disciplines in planning and conducting research geared toward answering questions.</td>
</tr>
<tr>
<td>Skill C. Evaluate multiple perspectives on key issues connected to societal concerns.</td>
<td>States a single perspective on a key issue connected to societal concerns with basic description.</td>
<td>Acknowledges two sides of a key issue connected to societal concerns. Describes both perspectives by clarifying each position.</td>
<td>Analyzes multiple perspectives on a key issue connected to societal concerns. Provides some evidence to support an argument.</td>
<td>Synthesizes multiple perspectives through comprehensive evidence-based analysis of positions.</td>
</tr>
</tbody>
</table>

**Finding 3 / Recommendation SL.2**

*What we learned:*

**Finding 3:** Faculty and staff have diverging opinions about the role and significance of disciplines and perspectives in Guttman’s interdisciplinary curriculum. Many faculty and staff felt that the rubric’s discipline-forward approach to skill B runs counter to Guttman’s interdisciplinary model. They argued that it was counterproductive for students to spend time distinguishing disciplines from one another if the curriculum emphasizes the importance of integrating disciplines. On the other hand, some people felt that it was important for students to understand the distinctions between disciplines in order to fully leverage their integration.

These disagreements sound abstract and philosophical, but they have a concrete, lasting impact on students’ learning experiences at Guttman. Questions about the role of disciplines
shape the nature of Guttman’s First Year Experience, especially in classes like City Seminar and EoW/LaBSS where multiple faculty and staff from different disciplinary backgrounds teach one course. If faculty and staff are expected to teach together then they need a common understanding of how disciplinary knowledge will function in their courses, and how its integration will be assessed.

More importantly though, we found that Guttman students struggled to distinguish between fields of study, and in general, did not understand the meaning of the term “academic discipline”. When we shared preliminary versions of these findings on Assessment Days, many students said that they would like to better understand the differences between disciplines because it would help them identify potential majors and careers they might pursue. Leading research on the assessment of interdisciplinary knowledge seems to confirm the importance of distinguishing between disciplines (Boix Mansilla, 2007). Thus, it is important for faculty and staff to establish some ground rules for how disciplines and perspectives will function in Guttman’s interdisciplinary curriculum.

What we recommend doing about it:

**Recommendation SL.2:** Offer workshops on the assessment of integrative knowledge using Boix-Mansilla’s framework. These workshops will (1) explain why it is important to distinguish between disciplines in a program that is actively trying to blend disciplines, and (2) provide tools to faculty and staff to better assess how students are integrating knowledge in their courses.

**Evidence**

The benchmark milestone for skill B asks that students “list academic disciplines and express interest in one [or?] more subject area.” In norming and in focus group discussions, faculty and staff debated whether or not there was value in asking students to list academic disciplines. For example, one focus group participant noted “I totally recognize the need to understand these disciplines, but to look for it in the artifacts seems like we’re then conditioning them not to do the actual work and just name things.” A second participant observed:

“I mean, speaking for me, we’re not necessarily asking students to name that in their papers. Even if we’re saying, ‘Include some data,’ or, ‘Include a narrative or an interview,’ they could do all those things also without naming them, and I think [person X] made the point earlier in the conversation that sometimes some of the criteria of the rubric, we have to start looking for things like if the student named it. If the student maybe named two disciplines, you might get a two or a three on this discipline or on this criteria, but also what is that assessing, and also then the other point is should we even really be assessing this or is that important?”

It should also be noted that the higher levels on the rubric for skill B do not ask students to list disciplines. A student in City Seminar might mix ethnographic research with quantitative data analysis without ever explicitly acknowledging the disciplines they are using. Should this student
receive a 4 on the rubric since they “synthesized knowledge and approaches from at least two disciplines” or should they receive a 0 since they never explicitly listed the disciplines?

Perhaps on account of these discrepancies, there was very little inter-rater reliability for Broad Integrative Knowledge skill B. As shown in the table below, raters were in agreement on only 43% of the portfolios. For 39% of the portfolios, raters could not even agree on whether the portfolio provided evidence of skill B, let alone how salient this evidence was. The Weighted Cohen Kappa (a common measure of inter-rater reliability1) was 0.046 for skill B, indicating virtually no agreement.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>differ by 0</td>
<td>33%</td>
<td>27%</td>
<td>31%</td>
<td>31%</td>
<td>27%</td>
</tr>
<tr>
<td>differ by 1</td>
<td>43%</td>
<td>16%</td>
<td>41%</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>differ by 2</td>
<td>10%</td>
<td>10%</td>
<td>16%</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>differ by 3</td>
<td>0%</td>
<td>8%</td>
<td>0%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>differ by 4</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>disagree about whether or not there is evidence</td>
<td>14%</td>
<td>39%</td>
<td>12%</td>
<td>18%</td>
<td>27%</td>
</tr>
<tr>
<td>agree</td>
<td>76%</td>
<td>43%</td>
<td>71%</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>disagree</td>
<td>24%</td>
<td>57%</td>
<td>29%</td>
<td>41%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Some faculty and staff argued that students are clearly capable of listing disciplines, but no one assignment would ever prompt them to authentically do so. As an example, consider the following excerpt from a faculty and staff focus group.

“The rubric would have to change. Because I don't think anybody, except maybe in a reflection when they're talking about what they're going to major in is ever going to

---

1 The Cohen Kappa is used to measure inter-rater reliability for categorical variables, but here, we use the Weighted Cohen Kappa, a variant for situations in which the codes are ordered (as in the milestones on the GLO rubrics.) This calculation is generally considered to be a more robust measure of inter-rater reliability than percent agreement because it accounts for the probability that two raters might agree on a result by chance. Generally speaking, the Cohen Kappa has a value between zero (no agreement) and one (perfect agreement), but it is possible for Kappa to be negative. There is no widespread agreement about how to interpret the values of Kappa, but a value less than 0.3 would universally not be considered good, and a value of 0.046 (as in the case of skill B) would certainly be considered abysmal.
list academic disciplines and express interests. Even if we keep this idea of students having an understanding of different disciplines, somehow the rubric has to change.

Another participant questioned “Should we be providing opportunities for them to say, ‘I picked this discipline or that,’” and explicitly saying, ‘Describe through these ones, and explain which one you think is better at this situation?’” and a third participant observed that “I never ask my students to say, ‘I’m using mathematics,’ or I never say, ‘List the disciplines that you’re using.’”

On a Flash Feedback survey, we specifically asked students to list three academic disciplines. Only 14% of survey respondents were able to correctly list disciplines. Another 38% listed things like “time management, impulse control, gentrification, immigration, honesty, and dependability”, and half (49%) of the respondents simply indicated that they were “not sure” what an academic discipline was.

Conversations with students in focus groups seemed to confirm these survey findings. For example, when asked about academic disciplines, one student talked about classroom rules surrounding snacks.

“Yeah because one, the professor would allow maybe snacks in class and another professor wouldn’t. One professor would set up a strict deadline and no later than that and then the other professor will be more flexible with the deadline.”

Another student brought up conflicting expectations about due dates.

“I still do the work I had to do. It was just the way we’d believe in the work. Because you keep in mind, ‘Oh I have plenty of time for this project. But I have to get this one done because I have to submit it even sooner.’ But definitely there are different disciplines with different classical professors because one of them expects something from me and the other one expects something different from me.”

A few students did seem to grasp the topic at hand. For example, the following student perfectly captured the interplay between different disciplines in their EoW course.

“I can say that, at EoW, we were studying about ethnography of work, if necessary. We were studying how work is built in America. It was my first time encountering philosophical texts, because we had to read Marx. To me, it was a combination of ethnography as a practice, anthropology as a discipline, and then also philosophy as a way of writing. Maybe these two together, if that counts, together with quantitative data configuration that will combine with the rest of the paper, how to take what Marx was saying and show it happening in reality in numbers.”

Note the way the student hedges their answer—“if that counts”—indicating that while they are aware of different disciplines in their EoW class, this may be the first time they’ve ever explicitly discussed them.

The interplay between disciplines and interdisciplinary course work can be difficult to reconcile. To better understand this interplay, Boix-Mansilla and Duraising (2007) interviewed and observed the classes of 41 instructors at four well-recognized interdisciplinary undergraduate programs. They also interviewed 28 students in these programs and looked at samples of
student work. Based on this wealth of qualitative data, they created a normative framework for promoting and assessing interdisciplinary learning.

Boix-Mansilla and Duraising’s model revolves around the following key observation:

“In interdisciplinary work, the act of deploying disciplinary insights is necessarily selective. It involves not only deciding which disciplines might best inform the question at hand but also what specific aspect of each discipline might prove most useful (for example, particular content, methods, purposes, or forms of communication). Assessing interdisciplinary student work thus begins with careful consideration of its disciplinary grounding” (Boix-Mansilla, 2005).

As such, their framework recognizes three factors involved in good interdisciplinary work:

1. **disciplinary grounding** - The work must be grounded in disciplinary knowledge that is carefully and appropriately selected.
2. **integrative leverage** - Integrated knowledge should be more than the sum of its parts; it should produce better understanding than any one discipline could on its own.
3. **critical stance** - The work should take a reflective, self-critical stance, demonstrating an awareness of the distinct disciplinary contributions and their limitations.

Based on these three criteria, Boix-Mansilla and Duraising created the following guiding assessment questions.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Guiding Questions</th>
</tr>
</thead>
</table>
| I. Disciplinary grounding               | • Are the selected disciplines appropriate to inform the issue at hand? Are any key perspectives or disciplinary insights missing?  
• Are the considered disciplinary theories, examples, findings, methods, and forms of communication accurately employed, or does the work exhibit misconceptions? |
| II. Advancement through integration (or integrative leverage) | • Where is there evidence of disciplinary integration (e.g., conceptual framework, graphic representation, model, leading metaphor, complex explanation, or solution to a problem)?  
• Is there evidence that understanding has been enriched by the integration of different disciplinary insights? |
| III. Critical awareness (or critical stance) | • Does the work show a clear sense of purpose, framing the issue in ways that invite an interdisciplinary approach?  
• Is there evidence of reflectiveness about the choices, opportunities, compromises, and limitations involved in interdisciplinary work and about the limitations of the work as a whole? |
Implementation Details

The GLO Team recommends that the college offer a workshop on the assessment of integrative knowledge using Boix-Mansilla’s framework. These workshops will (1) explain why it is important to distinguish between disciplines in a program that is actively trying to blend disciplines, and (2) provide tools to faculty and staff to better assess how students are integrating knowledge in their courses. This workshop is envisioned as part of a larger workshop series whose primary participants are a targeted cohort of 5-10 faculty and staff members. This workshop series is described in greater detail on page 19 as part of Recommendation SL.1.

In particular, the workshop will occur during the February Assessment Days. Participants will bring in an assignment or activity that asks students to integrate knowledge from more than one discipline. They will be introduced to Boix-Mansilla’s framework for assessing integrative learning. This framework provides a structure for creating rubrics to assess integrative learning in a variety of contexts. Some example rubrics will be provided that facilitate assessment in very different contexts. For example, the “Collaborative Assessment Protocol for Student Work” (2016) is a rubric designed to guide conversations between a student and their instructor, whereas Mansilla et. al. (2009) designed a rubric for assessing interdisciplinary writing based on the same underlying framework. Working in pairs, participants will use Boix-Mansilla’s framework to design rubrics that assess integrative learning for their specific assignment or activity. Finally, each pair will share their rubrics with the participants from another pair, and reflect on how this rubric might guide them to modify the instructions for their assignment/activity.
Finding 4 / Recommendation AP.1

What we learned:

Finding 4: The words “discipline” and “perspective” have overlapping meanings, which often create confusion for faculty and staff using the GLO rubrics. Since every discipline approaches questions in its own way, a discipline could be viewed as a sort of perspective on the world. At the same time, it seems like there is space for multiple perspectives within a single discipline, and perspectives may not always be shaped strictly along disciplinary lines. For example, someone might support or oppose the death penalty, and neither of these two perspectives is tied to any specific discipline. At the capstone level, skill B asks that students “synthesize knowledge and approaches from at least two disciplines” whereas skill C asks that students “synthesize multiple perspectives.” Since these two components of the GLO rubric use such similar language and work with such similar concepts, the rubric needs to at least provide definitions of these words to clarify their meaning.

Additionally, the GLO rubric uses inconsistent language for skill B. At the Benchmark (1) level, students are expected to “list disciplines and express interest in one more subject area”, but the higher levels of the rubric do not ask students to do either of these two things. When norming, faculty and staff could not decide how to best deal with this discrepancy, and as mentioned in the previous section, inter-rater reliability was exceptionally low for skill B.

What we recommend doing about it:

Recommendation AP.1: Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills).

In particular, with regard to skill B and this finding, we recommend revising the rubric in the following ways:

- Provide definitions for the terms “discipline” and “perspective” to clarify their intended use in skills B and C.
- Provide clearer, more consistent guidelines for skill B. In particular, eliminate the requirement at the Benchmark (1) level for students to “list disciplines”, and create a simple, clear progression from level 1 to level 4 following the framework established by Boix-Mansilla.

Evidence

In norming and in focus groups, many faculty and staff argued that disciplines and perspectives are very similar concepts, a similarity they found confusing. Often faculty developed ad hoc strategies to distinguish between the two terms. For example, the following focus group participant argued that “disciplines” are more institutionalized and thus less accessible than “perspectives”:
Because a discipline is marked by the academy, right? It's like a canonical category, whereas perspective [is more] sensible and useful, I would argue, more realistic, so I think those are two very different. But what we talked about before the beginning of this is this idea that one is canonical, the academy stamp, and one is I would argue more useful and accessible.

This is a sensible way to distinguish between “perspectives” and “disciplines”, but it is not clear if every rater made the same distinction, and it is not clear if this was a distinction the rubric authors had in mind. Many faculty expressed frustration that the rubric did not provide better guidance in this regard:

Whenever I looked at this rubric, this multiple perspective one I always wondered like, what does that mean, like, that I have to present both sides? Or have the students legitimately evaluate both sides or, you know what I mean, like or is it enough that they are making a case from this one perspective that's kind of challenging? It's kind of tempting considering that perspective in light of this dominant one. So, yeah. I wonder could multiple perspectives be brought into different, not just different opinions or different ideas about the issue or it could. Beyond different opinions to different ways to see something. Might not necessarily disagree, but that there’s different ways of seeing things.

This confusion was exacerbated by the fact that the GLO rubric uses similar language at the Capstone level for both skills B and C. Both ask students to “synthesize” something, either “knowledge and approaches” for skill B or “multiple perspectives” for skill C.

Finally, as noted above in the section on Recommendation SL.2 (page 27), the higher levels of the rubric for skill B do not ask students to list disciplines while the lower levels do! A student in City Seminar might mix ethnographic research with quantitative data analysis without ever explicitly acknowledging the disciplines they are using. Should this student receive a 4 on the rubric since they “synthesized knowledge and approaches from at least two disciplines” or should they receive a 0 since they never explicitly listed the disciplines? The assessment data indicates that faculty and staff took a mixture of both approaches, leading to poor inter-rater reliability for skill B. Clearly, the rubrics for skills B and C need to be revised.

Implementation Details

Recommendation AP.1 is discussed at multiple places in this document. For a full description of the implementation details, please see page 49. With regards to skills B and C, we specifically recommend adding a definition of the words “discipline” and “perspective” to the beginning of the rubric.

We propose revising the rubric for skill B as shown below. We recommend eliminating the prompt at level 1 for students to “list disciplines” since students are unlikely to provide authentic evidence of this criteria. We recommend moving the current level 2 prompt (“recognizes knowledge in a specific discipline…”) to level 1 since this more closely matches Boix-Mansilla’s idea of grounding interdisciplinary learning in the disciplines. At the new level 1, a student simply recognizes how a single discipline creates knowledge. There is also a typo (the word
own”) that needs to be fixed. If a student recognizes knowledge in a single discipline at level 1 then level 2 should be marked by an awareness of multiple disciplines. The next tier of Boix-Mansilla’s framework is about leveraging these disciplines, integrating them to create a whole that is greater than the sum of its parts. This actually more closely resembles level 4 of our current rubric so we recommend moving this language to level 3 and replacing the word “synthesize” with “integrate”. Finally, at level 4, a student should be able to do everything described in levels 1-3, but they should also demonstrate an critical awareness of the strengths and weaknesses of one discipline versus another. This is similar to the current language of level 3 so we recommend adapting this language to describe what Boix-Mansilla calls “critical awareness”. Additionally, it seems that all research is “geared toward answering questions” and so this language is redundant. We propose eliminating it from the rubric.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill B. Exhibits an understanding of how different disciplines create knowledge and approach questions.</td>
<td>Lists academic disciplines and expresses interest in one more subject area. Recognizes knowledge in one specific discipline. Asks and answers questions using the general assumptions and approaches of this one own discipline.</td>
<td>Recognizes knowledge in two or more disciplines. Asks and answers questions using the general assumptions and approaches of each of these disciplines.</td>
<td>Integrates Synthesizes knowledge and approaches from at least two different disciplines in planning and conducting research geared toward answering questions.</td>
<td>Integrates Synthesizes knowledge and approaches from at least two different disciplines in planning and conducting research geared toward answering questions, and presents a rationale for following one disciplinary approach over another in specific cases.</td>
</tr>
</tbody>
</table>
Recommendations Related to Skills D & E

The recommendations and findings in this section deal primarily with Broad Integrative Knowledge skills D & E:

- **Skill D** – Connects prior knowledge to ideas, concepts, and experiential learning across courses and majors.
- **Skill E** - Expresses curiosity about the essential questions that drive personal, academic, or professional growth.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill D. Connects prior knowledge to ideas, concepts, and experiential learning across courses and majors.</td>
<td>Identifies connections between life experiences, prior knowledge and academic texts and ideas. Presents basic examples, facts, or theories.</td>
<td>Explains connections between life experiences, prior knowledge and academic texts and ideas. Presents multiple examples, facts or theories from more than perspective.</td>
<td>Selects and connects examples of life experiences, prior knowledge to illuminate concepts from multiple perspectives.</td>
<td>Evaluates differences and similarities among perspectives by comparing life experiences, prior knowledge and academic texts or ideas.</td>
</tr>
<tr>
<td>Skill E. Expresses curiosity about the essential questions that drive personal, academic, or professional growth.</td>
<td>Describes differences between personal, academic, and professional areas of life. Identifies preferences and interests in these areas.</td>
<td>Questions the relationships between personal, academic, and professional objectives. Identifies how preferences in these areas might affect others.</td>
<td>Recognizes overlaps and tensions between personal, academic, and professional objectives and explains reasons for prioritizing growth in one or more areas.</td>
<td>Reflects on how commitments to personal, academic, and professional growth will shape future experiences for self and larger community.</td>
</tr>
</tbody>
</table>

**Finding 5 / Recommendation AP.1**

**What we learned:**

**Finding 5:** The word curiosity in the rubric for skill E points assessors toward one metacognitive skill, intellectual curiosity, and not the actual metacognitive skill they are being asked to assess in the rubric, which is a student’s awareness of the relationship between his/her personal, academic, and professional identities. Since the skill is misleadingly labelled, faculty and staff were often confused about what they were assessing.
What we recommend doing about it:

**Recommendation AP.1:** - Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills).

In particular, with regard to skills D and E, we recommend revising the rubric in the following way:

- Revise the rubric for skill E to more closely follow the Reflection and Self-Assessment skill in the AAC&U’s Integrative Learning VALUE Rubric, one of the original models for the Broad Integrative Knowledge GLO rubric. Re-label this skill so that it is clearly about developing an awareness of the relationship between one’s personal, academic, and professional identities and not about curiosity.

**Evidence**

As described in the methodology section, faculty and staff were asked to bring an assignment or activity to the February 26 Assessment Day that they thought gave students the opportunity to engage with the Broad Integrative Knowledge GLO. Participants were asked if these assignments/activities provided students an opportunity to demonstrate curiosity related to personal, academic, or professional growth. The table below shows their responses.

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Yes with explanation involving criteria for skill E</td>
<td>11</td>
</tr>
<tr>
<td>Yes with explanation involving criteria not related to skill E</td>
<td>14</td>
</tr>
<tr>
<td>Maybe/Not sure</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
</tr>
</tbody>
</table>

While 86% of participants in the Assessment Day Assignment Activity reported that the assignment/activity they brought did provide an opportunity for students to demonstrate their curiosity related to personal, academic, or professional growth (and 70% of their partners agreed with them), their explanatory comments demonstrate a deeper ambivalence and/or confusion regarding the skill as it is described in the current rubric. Of the 40 respondents, only 11 (28%) answered in the affirmative and then followed up that answer with a comment that was
related to the way the skill is currently measured. For example, one respondent noted that for
the activity in question, “Students need to indicate the factors within a senior college that are
important to their success. By selecting personal factors (class size, location, supports) this
could demonstrate their overlap between personal and academic growth (how one may
influence the other).” Another respondent wrote, “The assignment is about how others in the
past attempt(ed) to grow personally and professionally. Thus the responding to it provide an
opportunity to be curious.” Both of these responses are consistent with how the skill is meant to
be measured, according to the description of skill E on the GLO rubric.

On the contrary, 14 respondents (35%) answered in the affirmative but followed up their answer
with a comment that was unrelated to the way the skill is currently measured. One respondent
talked about data and variables: “This assignment is intended to teach students about the
various data types. Students often inquire about how they can declare other variable types.”
Another thought about curiosity in terms of student autonomy: “The students had the freedom to
answer the questions in different ways.” A third had a similar understanding of curiosity: “The
goal is that they see themselves as researchers testing their own ethnographic skills.” While
these are both valid ways of thinking about curiosity, neither align with how the skill is described
on the rubric for this GLO.

Finally, four respondents (10%) answered yes but did not elaborate; nine respondents (23%)
answered no, and two respondents (5%) were unsure.

Discussion in a faculty/staff focus group further supported this finding. Participants reported that
they were unsure of what skill E was supposed to measure. One said:

I always find that one difficult because I don't know what it is asking. Like is it intellectual
curiosity? Is it asking those big, important questions? Or is it, like the way it's written, I
always think it's personal growth, academic growth, or professional growth, like the way
it's personal, academic, or professional growth? So I've always thought it was more of
that self-reflective thing, and less like are you asking big questions about the topic of
your paper. So I just never know what that question is really about, whether it's
something we assess in summer bridge through those personal reflections at the end or
is it something where we're assessing if they're asking big, critical ... social science
questions.

Another participant concurred: “I guess part of my question is … issue is that I don’t think all this
stuff necessarily can be. I think there’s a part around this language of trying to aggregate
curiosity that sounds crazy, but I have students ask great questions every day.”

If faculty and staff don’t understand what is meant by the term “curiosity,” then their assessment
of such will necessarily be invalid. Thus, we recommend a revision of skill E in the GLO rubric to
clarify the skill and give assessors a better sense of precisely what it is that they’re looking for.
Implementation Details

Revise skill E in the GLO rubric to more closely follow the Association of American Colleges and Universities Integrative Learning VALUE Rubric, one of the original models for the Broad Integrative Knowledge GLO rubric. This rubric (shown below) calls for the assessment of “Reflection and Self-Assessment,” not curiosity. Other than this difference, however, the rubric is remarkably similar to the one used by Guttman to assess Broad Integrative Knowledge skill E. The Broad Integrative Knowledge GLO Team should create a first draft of these revisions, and share this draft with faculty and staff at Assessment Days to gather additional feedback.

Table 8 Association of American Colleges and Universities’ Integrative Learning VALUE Rubric for Skill E

<table>
<thead>
<tr>
<th>Reflection and Self-Assessment</th>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts (may be evident in self-assessment, reflective, or creative work)</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Envisions a future self (and possibly makes plans that build on past experiences) that have occurred across multiple and diverse contexts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., works with ambiguity and risk, deals with frustration, considers ethical frameworks).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self-awareness).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes own performances with general descriptors of success and failure.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finding 6 / Recommendations SL.3, AP.2, and AP.3

What we learned:

Finding 6: Even if we address the confusion (described above in Finding 5) caused by the use of the word “curiosity,” it is unlikely that major assignments and activities in the classroom ask students to display “reflection and self-assessment” in terms of personal, academic, and professional identities. Additionally, it is unlikely that these assignments prompt students to connect “prior knowledge to ideas, concept and experiential learning across courses and majors.” Rather, skill D and E would more likely be evidenced either in lower stakes assignments or in interactions between students and faculty/staff and between students and their peers. None of these items are currently being assessed. More effort must be made to track the learning opportunities, particularly around experiential learning and personal, professional, and academic growth that is occurring outside of the classroom.

What we recommend doing about it:

Recommendation SL.3: Engage staff from OSE & OAA in professional development around learning outcome assessment and co-curricular mapping. Some of this work has already begun in OSE, but we need to bring faculty and OAA staff into these discussions to ensure that efforts are aligned across units.

Recommendation AP.2: Integrate more varied types of assignments and activities into assessment rather than just high-stakes signature assignments.

Recommendation AP.3: Create co-curricular maps of learning outcomes mapped to key co-curricular programs.

Evidence

As shown in the table below, Global Guttman ePortfolios received higher ratings on skills D and E than any other portfolios from any other milestone (Bridge, FYE, & Capstone). This indicates that more effort must be made to track learning opportunities, particularly around experiential learning and personal, professional, and academic growth that occurs outside of the classroom.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge</td>
<td>1.47</td>
<td>0.89</td>
<td>1.52</td>
<td>1.2</td>
<td>0.93</td>
</tr>
<tr>
<td>FYE</td>
<td>1.69</td>
<td>1.35</td>
<td>1.43</td>
<td>1.12</td>
<td>1.14</td>
</tr>
<tr>
<td>Capstone</td>
<td>2.08</td>
<td>1.57</td>
<td>1.91</td>
<td>1.52</td>
<td>1.52</td>
</tr>
<tr>
<td>Global Guttman</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.83</td>
<td>1.83</td>
</tr>
</tbody>
</table>
The Flash Feedback survey showed that students recognize conflicts and relationships but very few mention currently assessable activities that led them to this type of reflection. Specifically, student reflection from Flash Feedback demonstrates they are practicing this skill in ways that would be very difficult to capture through assessment of coursework. For example, one student described a tension between their desired career and the types of learning that go on in the classroom.

I deal with personal conflicts all the time at Guttman. I want to become a filmmaker and do something in the film industry but I feel as if sometimes Guttman isn’t leading me in that path at all and it makes me rethink my goals and what I’m going to be doing in life.

Another student explained how they practiced this skill out of class as they worked on interview skills in the Office of Partnerships.

When I went to the Office of Partnership, I practiced how to answer interview questions for an internship because I was nervous. I realized my integrity of explaining who I am as a student made me feel confident for the actual interview. As a result, my interview went well due to integrity I’ve built up just by taking responsibility of my own work. If it was not for Guttman, I would not have been as confident as I do today.

Likewise, skill D also involves connecting in-class experiences to events and opportunities that occur after completion of coursework. For example, one Flash Feedback respondent wrote:

One time at Guttman that I experienced connections between my personal life at work and academic is from my EOW 2 class. In my EOW2 class, we talked about how workers become adjusted to their workplace and end up not being themselves because they are forced to smile, greet and say certain sayings. When I started working at the Duke on 42nd street off-Broadway theater I started to notice what I learned at Guttman EOW 2 class was happening to me that I was not myself and more like a robot to the company.

Discussion in a faculty/staff focus group further supports this finding. Respondents reported that reflection on personal, professional, and academic growth is difficult to measure if we are only assessing higher stakes assignments. As one participant observed:

I also feel like E is something that’s tricky to look for in an assignment, and in the similar discussion I heard yesterday, there was … Curiosity was one piece, but to me if you look at that entire description, you really are looking at the student’s personal, academic, professional growth, and that I think is hard. Right now, I’m not sure where exactly you find that.

Another participant observed:

These things are happening in human spaces, and so to reapply it in certain ways we’re seeing is problematic, and so for me to try to spend the time to think up how I can capture curiosity, that is existentially repulsive to me, and I'm just saying to be honest. This is a focus group. I'm hoping I can say that. I'm not expecting an answer, right? There’s a way in which we do what we need to do here to obviously keep the institution afloat, and there’s this box you have to check, but there’s a way in which it seems that
the focus is, “How do we jam all this stuff into ePortfolio,” to aggregate things, to then say, “Look what we’re doing.”

Finally, discussions in student focus groups confirmed that much of the personal, academic, and professional growth and reflection occurs outside of high-stakes assignments:

The overlaps, I'll say that it's mostly analyzed outside of class. Because you have more time to think about what's going on, what are you currently doing, and how is it affecting you in a way. So after, let's just say you realize you have all this stress from piling of homework. And you think about what you've been thinking about the most that has limited you from doing the work that you were supposed to do. You think about all that, how you can overcome those overlaps, and how you can move it away. And you also analyze a relationship, or a connection, or friendship outside of class. And that also contributes to the overlaps, the personal, academic, and professional.

A second student agreed, citing their experience through Global Guttman:

I feel good, because I feel like I'm really drawing from the Global Guttman exposure for myself. I went to China on my spring break. Going there, I thought it was going to be very restrictive, considering the communist government. Going there feels so similar to over here, it feels like as if I was still here, it's just that the government does limit things, but not to the extremists people do think over here. I got to enjoy most of the same freedoms that I have with the little exceptions of some social medias are blocked, which is perfectly fine.

While students are demonstrating growth in these areas, faculty recognize that higher stakes assignments may not capture the type of reflection we were able to do in our Flash Feedback Survey. Additionally, the reflection that was gathered points us to consider that some of this growth may be happening outside of the traditional classroom setting in its entirety.

**Implementation Details**

First, we must take inventory of the type of low stakes/current practices, activities and assignments that have been pointed to in our focus groups and surveys. For each example, we should indicate the skill it could demonstrate and whether there is current assessable data available in this area. This will involve partnering with OAA/OSE programmatic areas. If possible, further focus groups and survey of students should occur to capture more data. This work should be completed by the April 2019 Assessment Day.

It would also be advised for the programmatic areas of OAA & OSE to create a co-curricular map for these two skills to identify signature programs and activities that seek to achieve the outcomes listed in this space. This may include updating the current curriculum map for skills D & E as it relates specifically to LaBSS and Studio, as neither is currently broken out but may be the holder of assignments related to this area. In order to successfully achieve this, further professional development in the assessment of student learning should be offered. This professional development could be linked to the SAGE work and training out of the CCE, through the OSE Professional Development Committee or, if appropriate, the Advising Team.
Professional Development Committee. Areas outside of OSE, particularly OPCE, should be included in this as much career development is driven out of this area.

The process of creating a co-curricular map (and revising the curriculum map for skills D and E) should not begin until we have finished revising GLO Rubrics. As described below in the implementation findings for Recommendation AP.1 (page 49), the Assessment and Learning Committee has begun to consider a process for revising the GLO rubrics and then greatly reducing the number of skills contained in these rubrics. This work will not be completed until April 2020. As such, we propose that the work of creating the co-curricular map (and revising the curriculum map) should begin at the April 2019 Assessment Days.
Finding 7 / Recommendations SL.4 and AP.4

What we learned:

**Finding 7:** Students do not have sufficient opportunities to develop skills D & E since there are a limited number of Programs of Study course learning objectives that address these skills. Skills D & E are specifically asking students to make connections with learning outside of the classroom and explore tensions that may arise in their personal, academic, and professional growth. There is not sufficient opportunities in all of our Program of Studies courses to support this connection and development.

What we recommend doing about it:

**Recommendation SL.4:** Offer workshops to address how we publicize and communicate GLOs to students. These workshops will (1) confirm why it is important for faculty to discuss the GLOs in class with students; (2) provide guidance to faculty on how to better connect the GLOs with assignments and how to make this connection more meaningful for students, and (3) as a deliverable, produce a series of small (5-10 minute) activities that faculty and staff can use in their classes to discuss portfolios and the Guttman Learning Outcomes with students. This recommendation is an extension of ongoing efforts to revise the How Do I GLO? section of students’ ePortfolios.

**Recommendation AP.4:** Review and revise the curriculum maps, providing clearer guidelines for mapping course learning outcomes to the GLOs.

**Evidence:** As shown in table 10 on the next page, there are two Programs of Study, Human Services and Information Technology, in which less than 20% of the courses map to skill D (meaning fewer than half of their CLOs map to skill D). Likewise, there are three programs, Business Administration, Human Services, and Information Technology, in which less than 20% of the courses map to skill E.

As shown in table 11 on the next page, the lowest growth from Bridge to Capstone occurs for skill D, which connects to the lack of understanding on how to incorporate or assess curiosity (described above).

The Flash Feedback survey further confirmed this finding. In that survey, only 37% of continuing students reported that they had applied knowledge from other sources outside Guttman, whereas 60% of FYE students reported to have done so.
<table>
<thead>
<tr>
<th>Table 10. Percentage of Courses in Which at Least Half of the Course Learning Outcomes Map to Broad Integrative Knowledge GLO Skills D &amp; E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># courses in program</strong></td>
</tr>
<tr>
<td><strong>Business Administration</strong></td>
</tr>
<tr>
<td><strong>Guttman Common Core</strong></td>
</tr>
<tr>
<td><strong>Human Services</strong></td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
</tr>
<tr>
<td><strong>Liberal Arts &amp; Sciences</strong></td>
</tr>
<tr>
<td><strong>Urban Studies</strong></td>
</tr>
<tr>
<td><strong>Overall Average</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 11. Broad Integrative Knowledge Mean Ratings from Bridge to the Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
</tr>
<tr>
<td><strong>Bridge</strong></td>
</tr>
<tr>
<td><strong>FYE</strong></td>
</tr>
<tr>
<td><strong>Capstone</strong></td>
</tr>
<tr>
<td><strong>Global Guttman</strong></td>
</tr>
</tbody>
</table>

In focus groups, some students also showed how connections are made to their professional growth or how outside materials are used in class. These students identified how they were able to make connections but these connections are not captured in the traditional assessment. For example, one student observed:

Some of the stuff in the classes I'm learning now, I'm not going to be put in the role to understand. Maybe I will, I don't know, God knows for what reason I will have to do statistics, I don't know what statistics has to do in psychology, I would like to learn that, but I feel like I need a lot more personal expansion on how to deal with somebody with psychology so I actually want to understand psychology more than statistics and math. Unless I'm prescribing somebody medication, that's a whole another issue that I have.

Another student expressed an interest in not only making connections, but seeking them out:

Again like I said, it's forced into us, the system, because you want that check mark on your thing saying Hey, I did this, I got the degree in this, but it's like Okay, now how do we interact with people, that's why I like EOW, because when you learn about not just the school system but how the system is, just entirely people, for example, just people...
interactions, it's that to me is interesting. How are we going to put what we learned in school into the real world with our careers, things that actually matter to us and find the connection. I just want a connection on how is this going to impact my life.

Similar remarks were made by a third student:

Whatever we read, whatever we experience, would inevitably, I believe, I hope, show up paper after paper like suddenly yeah, you draw from here like you did like that, you did like this and I think there is appreciation when teachers read a paper. I get these underscore or those tics next to things that are outside of the curriculum, something that was not on the syllabus and suddenly it's a new reference that brings in a new perspective that it- cause that's my attempt. As a favor back to my teachers I'm trying not to be another one of twenty two papers about the same reading. So usually it's like the more you do that, the more you try to tear about from the reading or give it a very upside down perspective.

As exemplified by the evidence above, students to see how their coursework connects with learning outside the classroom, and need more opportunities in their Program of Studies courses to support this connection and development.

Implementation Details

The implementation details for Recommendation AP.4 are discussed on page 26.

Faculty and staff can begin to address Recommendation SL.4 by designing explicit activities that faculty can use to help students make meaningful connections between the GLOs and the work they are doing in the classroom. We envision these activities as being short, 5-10 minute lessons, that instructors could use in their classrooms to convey the importance of the GLOs and the role that ePortfolio plays in self-assessment. For example, one activity might be a five-minute video about how photographers use portfolios to show off their work accompanied by a short (one-page) handout with reflection questions. Another activity might provide an example student assignment and ask students to work in small groups to discuss which GLOs the assignment addresses best. These small-group discussions could lead to a bigger discussion about how student work relates to the GLOs.

This work is intended to complement ongoing work on the How Do I GLO sections of student ePortfolios. The How Do I GLO section as heavily revised this year. The new version asks students to identify an assignment in each of their FYE classes of which they are especially proud. The intention is for faculty and staff in each class to prompt students to upload their best work to this page. In the past, Graduate Coordinators asked students to populate this page of their ePortfolio during Studio, which gave students the impression that the GLOs were a Studio thing, removed from the rest of their course work. The How Do I GLO? format asks everyone to take responsibility for the GLOs. As such, it will require faculty buy-in to be success. The activities proposed under Recommendation SL.4 could be a crucial tool for developing this faculty buy-in. As discussed below under Recommendation AP.5 (page 51), it would also help set expectations and communicate the importance of the GLOs if there was a designated two-
week time period on the academic calendar in which faculty and staff were expected to petition students for work in the How Do I GLO section of their ePortfolio.

Finally, it is important that students are partners in this conversation through SGA, or other interested students, for feedback on how to best share this information with students. Some ideas for where this information would be shared include the class syllabus, at the Bridge to Program of Study, and the College Bulletin. This feedback would provide us with potential partnerships in the creation of an information campaign and sharing with the students how the GLOs are layered into their coursework.
Recommendations Related to the Assessment Process in General

The recommendations in this section describe recommendations related to Assessment Process overall.

Finding 8 / Recommendation AP.1

What we learned:

Finding 8: As previous GLO Teams have found, the rubrics are inconsistent in how the skills are implemented across the levels (benchmark, milestone, capstone) and how skills are divided across the rows of the rubric. Several of these inconsistencies were discussed in previous sections. Here we collect all the recommended rubric revisions in one place.

What we recommend doing about it:

Recommendation AP.1: Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills).

Specifically, we suggest revising the rubric in the following ways:

- Clarify the meaning of the term “issues” in skill A, and make sure that the concepts addressed by this skill are consistent and scaffolded across the rubric.
- Address the dissonance between levels 3 and 4 in the rubric for skill A; level 3 talks about "situating" an issue while level 4 talks about "applying new knowledge on an issue". We need to adapt the language of “situating” an issue to level 4 of the rubric in order to reconcile these differences.
- Provide definitions for the terms “discipline” and “perspective” to clarify their intended use in skills B and C.
- Provide clearer, more consistent guidelines for skill B. In particular, eliminate the requirement at the Benchmark (1) level for students to “list disciplines”, and create a simple, clear progression from level 1 to level 4 following the framework established by Boix-Mansilla.
- Revise the rubric for skill E to more closely follow the Reflection and Self-Assessment skill in the AAC&U’s Integrative Learning VALUE Rubric, one of the original models for the Broad Integrative Knowledge GLO rubric. Re-label this skill so that it is clearly about developing an awareness of the relationship between one’s personal, academic, and professional identities and not about curiosity.
Evidence

As an example, skill A, addresses multiple skills as well as repeating attributes that are also in other skills.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Benchmark (1)</th>
<th>Emerging (2)</th>
<th>Milestone (3)</th>
<th>Capstone (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I engage with issues that have contemporary, historical, scientific, economic, technological or artistic significance</td>
<td>• Explore issue at surface level, providing little insight and/or information beyond the basic facts. • State ideas from other sources</td>
<td>• Explore an issue with some depth by applying skills or present evidence provided in classes • Provide occasional insight and/or connection to self</td>
<td>• Situate an issue in a broader context to provide in depth explanation • independently gathers information from multiple sources • articulate own position on an issue</td>
<td>• Apply new knowledge or an issue to academic and/or experiential contexts. • Independently evaluate information from multiple sources. • Articulate multiple perspectives on an issue to others</td>
</tr>
</tbody>
</table>

Each level includes at least two different attributes which can make it difficult for an assessor to know what they are evaluating. This is especially problematic as some of the information at the milestone and capstone level is also repeated in other skills. It is important to make sure that faculty, staff, and students know what they are measuring as they work their way through the rubric.

There is also often a dissonance between levels of a skill. For example, level 3 for skill A talks about "situating" an issue while level 4 talks about "applying new knowledge on an issue". The metaphor of "situating" knowledge seems very different from the metaphor of "applying" knowledge. We need to decide how we want to use this language and adapt consistent language across different levels of the rubric.

Another issue is that there are currently two versions of each rubric, a standard one that appears on the website and a “student-friendly” one that was designed to make the GLOs more accessible to students. Digication’s assessment system uses the standard rubrics, but faculty have Assessment Days binders that contain the student-friendly versions. We should have only version of the rubric that is used universally by all, and it should probably be the student-friendly version.

Implementation details

The Broad Integrative Knowledge GLO Team will begin this work. In November 2018 and January 2019, the team will prepare a revised draft of the rubric based on the recommendations in this report. At the February 2019 Assessment Days, the Broad Integrative Knowledge GLO Team will share this draft with faculty and staff to invite feedback. In particular, the GLO Team will identify three or four portfolios that were problematic for raters using the old rubric, and ask faculty and staff to rate these portfolios using the new rubric. Then, faculty and staff will provide feedback and suggest additional revisions to the rubric based on this experience.
These revisions are just the starting point for a much larger revision of the GLO Rubrics that the Assessment and Learning Committee is currently discussing. There are 24 skills identified in the GLO rubrics. This is too many skills for faculty and students to maintain. We need fewer skills for a streamlined, clearer experience. Many skills appear to measure similar things so we propose significantly reducing the number of skills. However, we want to do this in a careful and deliberate fashion. As such, we propose the following plan.

Revised versions of all the GLOs except Specialized Knowledge should be completed by the December 2019 Assessment Day. At this Assessment Day, faculty and staff will rate a sample of roughly 60 portfolios using all four of the newly revised rubrics. There are 20 skills in the GLO Rubrics (excluding the 4 skills in Specialized Knowledge). It is too overwhelming to ask faculty and staff to rate a portfolio for 20 different skills so we propose breaking these 20 skills up into four groups with each group containing skills. Each group of five should include at least one skill from each of the four GLOs (again, excluding Specialized Knowledge) so that there is a mixture of different types of skills in each group. Faculty and staff will be asked to split up into four groups. Each group will meet in a separate room and each group will receive one of the four lists of five skills. Each group will have the same sample of 60 portfolios, and they will be asked to rate these portfolios for the five skills they have been given. Then, using a survey, faculty and staff will be asked to report back on challenges they encountered when working with these rubrics.

This process will serve three purposes. First, it will help us identify problems with these revised rubrics before we put them into action. Second, it will give us a rich data set that shows how the different GLOs are correlated with one another. Finally, separating the skills from the overall GLOs will allow us to determine how they work on their own merit. The Assessment and Learning Committee will use Exploratory Factor Analysis to identify collections of GLOs that seem to be measuring similar outcomes, thereby providing a rigorous rationale for collapsing certain skills and preserving others.

Additionally, the rubrics will be presented to a group of students at the December Assessment Day, and they will be asked to describe work they have done at Guttman that they feel will exemplify each of the skills. They also be asked to identify wording or particular skills that they find confusing. This data will be collected in a survey, and through discussion.

The Assessment and Learning will then use all of this data to create a new, leaner and meaner list of GLO skills. These new GLOs will be presented to faculty, staff, and students at the February Assessment Days for further feedback. This feedback will be used to make final revisions to the GLOs before the April Assessment Days. At the April Assessment Days, faculty and staff will use the newly revised GLOs to begin revising the curriculum maps and creating co-curricular maps as described above in Recommendations AP.3 and AP.4 (pages 42 and 46, respectively).
Finding 9 / Recommendations SL.4, AP.2, and AP.5

What we learned:

**Finding 9:** Since the beginning of our assessment work, there have been questions about what assessment process would provide the most accurate information. During each Assessment Day, there is some discussion about what is missing from the data that we are collecting and the limits of our current processes.

For many faculty, our current process is limiting because the work that we do in our classroom is more than the assignments that students choose to submit. Faculty courses include group work, experiential working, in class discussions, and other activities that might produce work that meets or exceeds our current assessment averages. Faculty might also include things in Blackboard or other systems that do not get collected or curated in the ePortfolio.

In addition to particular pieces of work that are not collected, the collection process itself can also be problematic. When posting work to the How Do I GLO section of their ePortfolio, students are given minimal direction about the particular GLOs and no information, unless someone has particular expertise, about the skills or the levels for that particular GLO. Students are likely selecting their items quickly and are not entirely aware of all the attributes that an individual piece could have and still represent the GLO. This lack of understanding may produce lower assessment averages because students in the Programs of Study courses are using their first year assignments, which means the Capstone portfolios may not represent students best or most recent work.

What we recommend doing about it:

**Recommendation SL.4:** Offer workshops to address how we publicize and communicate GLOs to students. These workshops will (1) confirm why it is important for faculty to discuss the GLOs in class with students; (2) provide guidance to faculty on how to better connect the GLOs with assignments and how to make this connection more meaningful for students, and (3) as a deliverable, produce a series of small (5-10 minute) activities that faculty and staff can use in their classes to discuss portfolios and the Guttman Learning Outcomes with students. This recommendation is an extension of ongoing efforts to revise the How Do I GLO? section of students’ ePortfolios.

**Recommendation AP.2:** Integrate more varied types of assignments and activities into assessment rather than just high-stakes signature assignments.

**Recommendation AP.5:** Establish a designated two-week time period on the academic calendar in Fall 1 and again in Spring 1 in which faculty are expected to ask students in their classes to post work to the How Do I GLO section of their ePortfolios.
Evidence

During the focus group, faculty and staff described how our current assessment process might measure students’ ability to select an appropriate assignment rather than where the students are at in their progress. For example, one focus group participant noted:

I think along those same lines, yesterday as I was reading things. You know, it's a real shame when students pick their integrative project from City Seminar I to put here, because it's just not going to reach these milestone and capstone levels, but we're using it as this is the student's capstone work, but reality it's from their first semester here. And it was zeros and ones and maybe a two, here or there. Simply because it's from their first semester, so that sense of guiding the students of ... This is about your best work and showcasing your best work, not just finding something that fits in a category, but what's the best thing you did that fits in this category and one could hope that their best paper that talks about different perspectives is not from City Sem I.

Another faculty member expressed a similar sentiment:

I feel like one of the issues with this is it's not set in stone what students are submitting for us to evaluate. So in the case that they're asked to pick an assignment that relates to this criteria. That might show up in a different place from the A through D. To me that's the struggle. They'll submit the one thing and review like in the EOW reflection or some other kind of question, they'll do that and then they'll put in their paper where they're doing a research paper on some issue, it might, they may or may not at the end have a reflection on that. I just feel like if, from a practical perspective, if we want to, we have to think about how are we doing the assessments? Because that might influence what the, how we might prove the criteria.

Implementation details

Most of the implementation details for Recommendation SL.4 and AP.5 were described above on page 46.

The implementation details for Recommendation AP.2 were described above on page 42.
Finding 10 / Recommendations AP.6

What we learned:

**Finding 10:** There is very little inter-rater reliability when rating ePortfolios using the Broad Integrative Knowledge GLO Rubric.

What we recommend doing about it:

**Recommendation AP.6:** In the future, each portfolio should be rated by two pairs of raters, and where there is disagreement, a third pair of raters should be used as tie-breakers to ensure inter-rater reliability.

Evidence

When assessing the FYE portfolios at the December 19 Assessment Day, a little over half (49) of the portfolios were assessed more than once. As a result, we were able to assess the inter-rater reliability of our data for the first time at Guttman. The results (as summarized in the table below) were not great.

| Table 12. Inter-Rater Reliability for FYE Broad Integrative Knowledge GLO Ratings |
|-----------------------------------|---|---|---|---|---|
|                                 | A  | B  | C  | D  | E  |
| differ by 0                     | 33%| 27%| 31%| 31%| 27%|
| differ by 1                     | 43%| 16%| 41%| 29%| 33%|
| differ by 2                     | 10%| 10%| 16%| 20%| 6% |
| differ by 3                     | 0% | 8% | 0% | 2% | 6% |
| differ by 4                     | 0% | 0% | 0% | 0% | 2% |
| disagree about whether or not there is evidence | 14%| 39%| 12%| 18%| 27%|
| agree                           | 76%| 43%| 71%| 59%| 59%|
| disagree                        | 24%| 57%| 29%| 41%| 41%|
| Weighted Cohen's Kappa (κ)      | 0.227| 0.046| 0.258| 0.120| 0.062|
Criteria A had the most agreement with 76% of raters agreeing, and criteria C was close behind with 71% agreement. In contrast, criteria B had the least agreement. Only 43% of raters agreed. A large portion of the disagreement (39%) was due to disagreements about whether or not the portfolio contained evidence. Criteria D and E did not fare much better. Only 59% of raters agreed for criteria D and E. However, the nature of this disagreement was quite different for criteria D and E. For criteria D, there was roughly an even split between ratings that differed by 2, and raters who did not agree on whether or not the portfolio contained evidence.

The last row of the table contains a more sophisticated measure of inter-rater reliability: the Weighted Cohen’s Kappa ($\kappa$). This statistic can vary from slightly less than 0 to a maximum of 1. The closer kappa is to 1, the more agreement there is among the raters and the more robust the data is considered to be. Generally speaking, a kappa of 0.6 or 0.7 is considered sufficiently robust. The highest value of kappa that any of our criteria received was 0.258. In short, the data is not robust.

**Implementation Details**

At a typical Assessment Day, faculty and staff rate about 120-150 portfolios. (This count excludes portfolios that do not contain evidence relevant to the GLO being assessed). A sample of 60 portfolios would be more than sufficient for generalizing the results of this assessment as long as there is good inter-rater reliability. Thus, we propose that Guttman should select a smaller pool of portfolios, perhaps filtering out blank portfolios ahead of time to ensure that the sample contains useful evidence. Faculty and staff should norm and pair off into teams of assessors as described in the methodology section above, but each portfolio should be assessed by two different pairs of faculty/staff. After Assessment Days, members of the GLO Team will assess the data to identify any portfolios for which the two pairs of assessors disagree. These portfolios will be re-assessed at the next subsequent Assessment Days by a third team of raters who will function as tie-breakers. If there are only a few portfolios on which raters disagree then the Assessment and Learning Committee may even want to operate as the tie-breaker. This process will require a closer follow-up by the GLO Team, and it will require us to keep track of who assessed which portfolios, but it will help ensure that our data is reliable and meaningful.

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2 Ordinal ratings were weighted by how much they differed so that a portfolio with ratings of 1 and 4 would be given a weight of 3. Portfolios with ratings of 0 and 4 would be given the maximum possible weight of 4, and portfolios with rating of 1 and 1 would be given a weight of 0, indicating agreement. If the raters disagreed about whether or not the portfolio contained evidence (i.e. disagreed about whether it should receive a -1) then the portfolio was given a weight of 2 (the average of the other weights 0 through 4). We tried varying this latter weight and found that it did not significantly impact the value of kappa.
Works Cited


## Action Plan

### Recommendations for Improving Student Learning

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>People / Units Involved</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| **SL.1** - Offer workshops to help faculty scaffold increasing levels of engagement with issues (of contemporary, historical, scientific, economic, technological, or artistic significance) in assignments across the FYE and PoS courses. | • The Dean of Faculty Affairs  
• The Associate Dean of Assessment  
• The Assessment and Learning Committee  
• The PD Steering Committee | • **October 2018** - Recruit a targeted cohort of 5-10 participants and finish planning last-minute details of the workshops  
• **November 2018** – workshop #1  
• **January 2019** – workshop #2  
• **February 2019 Assessment Days** – workshops #3 and #4  
• **March 2019** – workshop #5  
• **April 2019 Assessment Day** – workshop #6  
• **May 2019** – workshop #7 |
| **SL.2** - Offer workshops on the assessment of integrative knowledge using Boix-Mansilla’s framework. These workshops will (1) explain why it is important to distinguish between disciplines in a program that is actively trying to blend disciplines, and (2) provide tools to faculty and staff to better assess how students are integrating knowledge in their courses. | • The Dean of Faculty Affairs  
• The Associate Dean of Assessment  
• The Assessment and Learning Committee  
• The PD Steering Committee | This workshop is part of the larger series described under Recommendation SL.1. This specific workshop is held on the following date:  
• **February 2019 Assessment Days** – workshop #4 |
| **SL.3** - Engage staff from OSE & OAA in professional development around learning outcome assessment and co-curricular mapping. Some of this work has already begun into OSE, but we need to bring faculty and OAA staff into these discussions to | • The Dean of Faculty Affairs  
• The Associate Dean of Assessment  
• The Assessment and Learning Committee  
• A Designee of the Dean of Student Engagement  
• The Center for College | • **Spring 2019** – Bring faculty and the CCE into discussions with OSE about assessing learning outcomes that occur outside the classroom  
• **April 2020 Assessment Days** – Revisions to the GLO and PLO rubrics have completed, begin creating co- |
<table>
<thead>
<tr>
<th>Recommendation</th>
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</table>
| ensure that efforts are aligned across units. | Effectiveness | curricular maps.  
• March 2020 – OSE works with the CCE and relevant staff/faculty to continue developing the co-curricular maps  
• June 2020 Assessment Day – The revised co-curricular maps are presented for final feedback. |

**SL.4** - Offer workshops to address how we publicize and communicate GLOs to students. These workshops will (1) confirm why it is important for faculty to discuss the GLOs in class with students; (2) provide guidance to faculty on how to better connect the GLOs with assignments and how to make this connection more meaningful for students, and (3) as a deliverable, produce a series of small (5-10 minute) activities that faculty and staff can use in their classes to discuss portfolios and the Guttman Learning Outcomes with students. This recommendation is an extension of ongoing efforts to revise the How Do I GLO? section of students’ ePortfolios.

- The Dean of Faculty Affairs  
- The Associate Dean of Assessment  
- The Assessment and Learning Committee  
- The Academic Technologies Committee  
- Team Leaders and Instructional Teams  
- Program Coordinators  

- Fall II, 2018 (January and February of 2019) – A working group consisting of members of the Assessment and Learning Committee, the Academic Technologies Committee, and other volunteers create a series of activities that help students see how the GLOs connect to their coursework.  
- February 2019 Assessment Days – The team presents their activities to faculty and staff at Assessment Days and explains how these activities will be used.  
- March 2019 – Instructional teams discuss the activities at their Team Meetings, and distribute the responsibility of running these activities across the different classes in their House. Program Coordinators organize a similar discussion with faculty teaching in their Program of Study.
## Recommendations for Improving the Assessment Process

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>People / Units Involved</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| AP.1 - Revise the Broad Integrative Knowledge GLO Rubric so that the skills and levels are easier to understand on the first reading, each skill measures only a single thing, the levels are consistent, and criteria are measured in a single place (rather than being repeated across skills). | • The Associate Dean of Assessment  
• The Assessment and Learning Committee  
• The Program/Area/Course Coordinators  
• Faculty and Staff at Assessment Days | • **November 2018 and January 2019** – The Broad Integrative Knowledge GLO Team creates a revised draft of the Broad Integrative Knowledge GLO rubric based on the findings and recommendations in this document.  
• **February 2019 Assessment Days** – The GLO Team will share their revised rubric with faculty and staff at Assessment Days. Faculty and staff rate 3-4 (previously problematic) portfolios using the new rubric and then offer feedback on ways to improve the rubric.  
• **December 2019 Assessment Day** – Faculty and staff rate a sample of ~60 portfolios using revised GLO rubrics (for all 20 GLO skills that are not part of Specialized Knowledge). Collect feedback from both faculty and staff about problems with the rubric.  
• **Fall II 2019 (January and February 2020)** – The Assessment and Learning Committee uses Exploratory Factor Analysis and other data collected at the December Assessment Day to collapse some of the GLO skills and create leaner, meaner GLO rubric. |
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>People / Units Involved</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendations for Improving the Assessment Process</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **AP.2 - Integrate more varied types of assignments and activities into assessment rather than just high-stakes signature assignments.** | • The Associate Dean of Assessment  
• The Assessment and Learning Committee  
• A Designee of the Dean of Student Engagement  
• The Office of Student Engagement | • February 2020 Assessment Days – The Assessment and Learning Committee presents their revised GLO Rubrics to faculty, staff, and students for additional feedback.  
• March 2020 – The Assessment and Learning Committee creates a final, revised version of the rubrics, incorporating feedback from the February Assessment Days.  
• April 2020 Assessment Days – The Assessment and Learning Committee presents the new, revised GLOs to faculty and staff. These rubrics are used to begin work on revising the curriculum map and creating co-curricular maps. |
| **AP.3 – Create co-curricular maps of learning outcomes mapped to key co-curricular programs.** | • The Associate Dean of Assessment  
• The Assessment and Learning Committee | • Spring 2019 – OSE, OAA, and the CCE begin to identify more varied types of assignments and activities that could be assessed.  
• April 2020 Assessment Days – As part of the concurrent work on a co-curricular map, staff and faculty recommend several forms of assignments that can be assessed.  
• April 2020 Assessment Days – revisions to the GLO and PLO rubrics have |
### Recommendations for Improving the Assessment Process

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>People / Units Involved</th>
<th>Timeline</th>
</tr>
</thead>
</table>
| **Committee**  | • A Designee of the Dean of Student Engagement  
|                | • The Office of Student Engagement  
|                | • The Center for College Effectiveness | completed, begin work creating co-curricular maps |
| **AP.4** - Review and revise the curriculum maps, providing clearer guidelines for mapping course learning outcomes to the GLOs. | • The Associate Dean of Assessment  
|                | • The Assessment and Learning Committee  
|                | • The Program/Area/Course Coordinators  
|                | • Faculty and Staff at Assessment Days | • **March 2020** – OSE, lead by a Designee of the Dean of Student Engagement, works with the Assessment and Learning Committee and the CCE to develop co-curricular maps.  
|                | | • **June 2020 Assessment Day**  
|                | | – The co-curricular maps are presented for final feedback.  
| **AP.5** - Establish a designated two-week time period on the academic calendar in Fall 1 and again in Spring 1 in which faculty are expected to ask students in their classes to post work to the How Do I GLO section of their ePortfolios. | • The Office of Academic Affairs | • **April 2020 Assessment Days** – revisions to the GLO and PLO rubrics have completed, begin work revising the curriculum maps  
|                | | • **March 2020** – Program Coordinators work with faculty in their programs to continue revising the curriculum maps  
|                | | • **June 2020 Assessment Day**  
|                | | – The revised curriculum maps are presented for final feedback.  
| **AP.6** - In the future, each portfolio should be rated by two | • The Associate Dean of Assessment | This should be completed in Spring 2019 as Guttman’s academic calendar is being finalized for the 2019-2020 academic year.  
<p>| | | This should be implemented in Fall 2018 as the Applied |</p>
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>People / Units Involved</th>
<th>Timeline</th>
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| pairs of raters, and where there is disagreement, a third pair of raters should be used as tie-breakers to ensure inter-rater reliability. | • The Assessment and Learning Committee  
• The Applied Learning GLO Team | Learning GLO Team begins their work. |