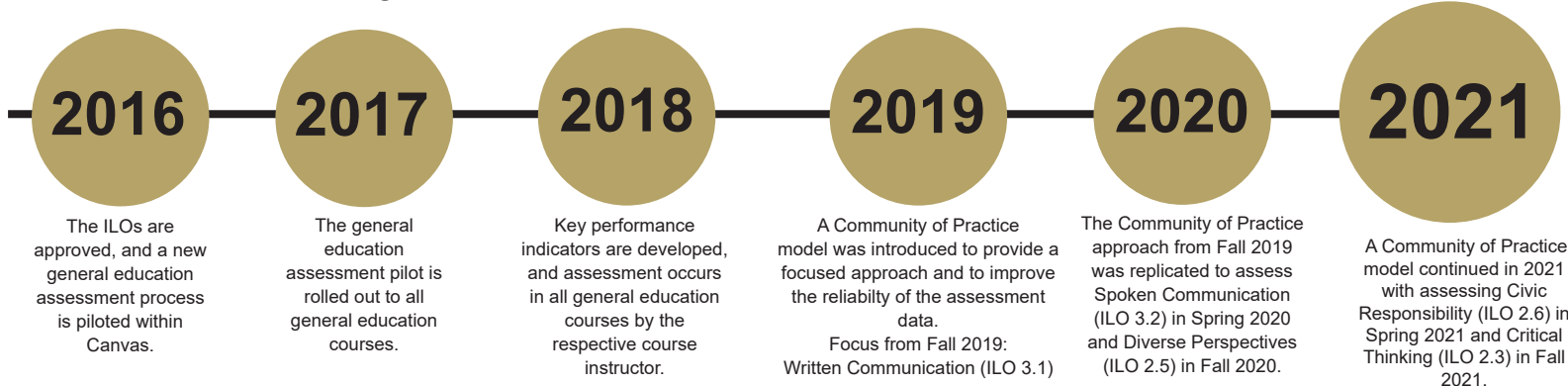


FOCUS ON CRITICAL THINKING IN THE YEAR OF ANALYTICAL THINKING

General Education Assessment at Lindenwood

General education assessment is a key measure of institutional effectiveness because it helps an institution substantiate broad claims it makes about student learning through establishing high-quality outcomes across important domains of student educational experiences and carefully analyzing relevant student work. For example, Lindenwood’s Institutional Learning Outcome 2.3 asserts that “Lindenwood graduates can think critically.”

However, such claims can be very broad in scope, and, in any effort to define and measure the essential elements of student learning, starting with clear and concise outcome statements is crucial. Therefore, Lindenwood University recently adopted Graduate Attributes to replace these outcomes and will begin implementing them in Fall 2022. Many of the attributes were discussed in the Communities of Practice discussions this semester. The attribute of Analytical Thinker was discussed in the Community of Practice for Critical Thinking, Effective Communicator in the Community of Practice for Written Communication, and Global Advocate in the Community of Practice for Diverse Perspectives. Alignment with current rubrics, insights on the attributes, and feedback was gathered as more work continues with the General Education Taskforce and into the next semester.



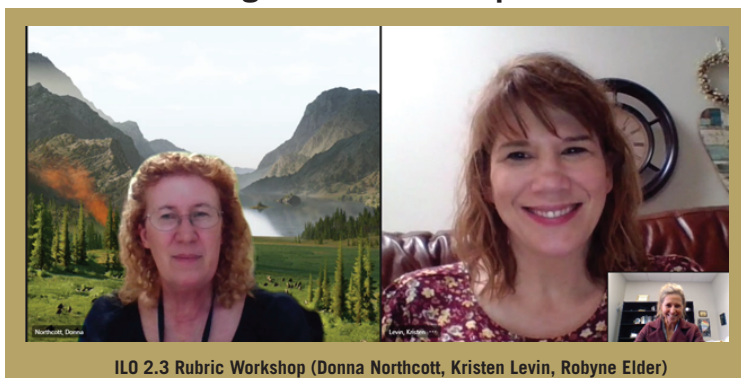
Community of Practice Model of Assessment

A community of practice is a group who has a collective interest in and desire for improvement. This approach to assessment enhances the validity of assessment data, builds an advocacy network across campus, and aligns with national best practices for general education assessment. Five communities of practice have been formed since Fall 2019: 1) ILO 3.1: Written Communication; 2) ILO 3.2: Spoken Communication; 3) ILO 2.5: Diverse Perspectives; 4) ILO 2.6: Civic Responsibility; and 5) ILO 2.3: Critical Thinking.

Planning Session



Community of Practice for Critical Thinking Rubric Workshop

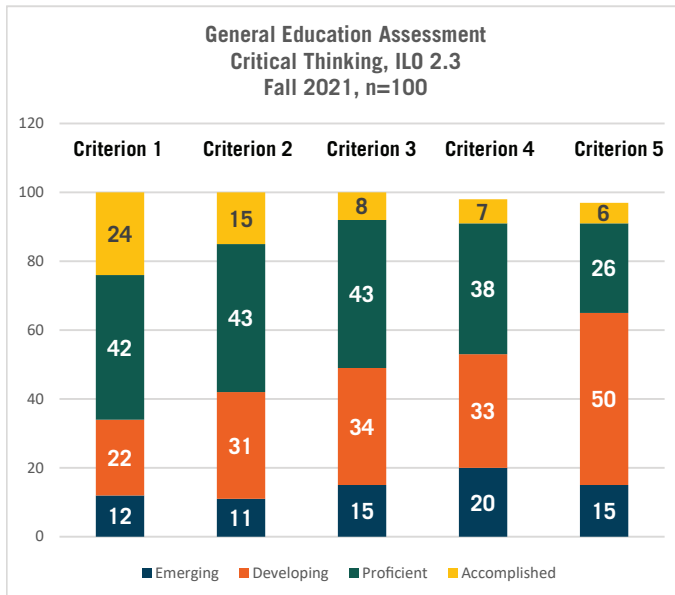


Community of Practice for Civic Responsibility

- Robyne Elder, Director of General Education Assessment
- Larry Acker, Professor, Healthcare Management
- David Brown, Professor, Philosophy
- Ben Cooper, Associate Professor, English
- Melissa Elmes, Assistant Professor, English
- Tawni Hunt Ferrarini, Professor, Economics
- Lynda Leavitt, Professor, Educational Leadership
- Kristen Levin, Assistant Professor, Curriculum & Instruction
- Liz MacDonald, Director, Library Services
- Bob Steffes, Associate Professor, Educational Leadership
- Mitch Nasser, Associate Professor, Educational Leadership
- Dan Plate, Associate Professor, English
- Jeanie Thies, Professor, Political Science
- Graham Weir, Professor, Educational Leadership
- Sherrie Wisdom, Professor, Educational Leadership

FOCUS ON CRITICAL THINKING

Results



Criterion 1-5: 1. Explanation of Issues 2. Evidence 3. Influence of Context & Assumptions 4. Student's Position (\*includes two 0 scores) 5. Conclusions (\*includes three 0 scores)

Methodology

The Sample

A stratified random sample of 103 artifacts from Concepts in the Visual Arts (ARTH 11000), Introduction to Meteorology (ESC 11000), and US History: New Republic World Power (HIST 11200) courses (Spring 2021) were collected from Canvas. Of these, three were used for norming and 100 were used for scoring.

The Rubric

During a workshop in October, faculty from Theatre and Curriculum and Instruction courses adapted the VALUE Rubric for Critical Thinking for ILO 2.3 Critical Thinking and discussed the new Graduate Attribute, Analytical Thinker. The revised rubric uses a five-point scale to score five criteria. Further revisions were made after gathering feedback from the Community of Practice for Critical Thinking. All community of practice rubrics can be accessed on the General Education Assessment website.

The Data

Each artifact was scored by two different members of the Community of Practice using the new rubric. In 32% of the cases, the gap between the scores was greater than one so a third member was used to resolve the difference.

CLOSING THE LOOP

Broad Themes from Data Workshops

- 1. Several artifacts lacked conclusions (community participants reflected, 'how often do I discuss conclusions with students?')
- 2. Some artifacts better suited for the rubric than others
- 3. Difficult to debate, offer assumptions, alternating perspectives, on topics that are facts
- 4. Certain artifacts only showed one side of an issue, when there was evidence for an opposing view
- 5. Various artifacts included artwork, pictures, that were enjoyable to view, as well as excellent interpretations
- 6. Criterion 1 (Explanation of issues) & 2 (Evidence) seemed to be where students excelled and showed the clearest evidence
- 7. Artifacts with in-depth text, lengthier responses, seemed to produce higher scores
- 8. Lack of in-text citations in some artifacts
- 9. Importance of providing students rubric and expectations of 'critical thinking'
- 10. Inter-rater reliability should continue to be improved
- 11. Community developed idea of assessing instructors' assignments on how well they align with the outcome of critical thinking

Contact

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Academic Affairs  
relder@lindenwood.edu



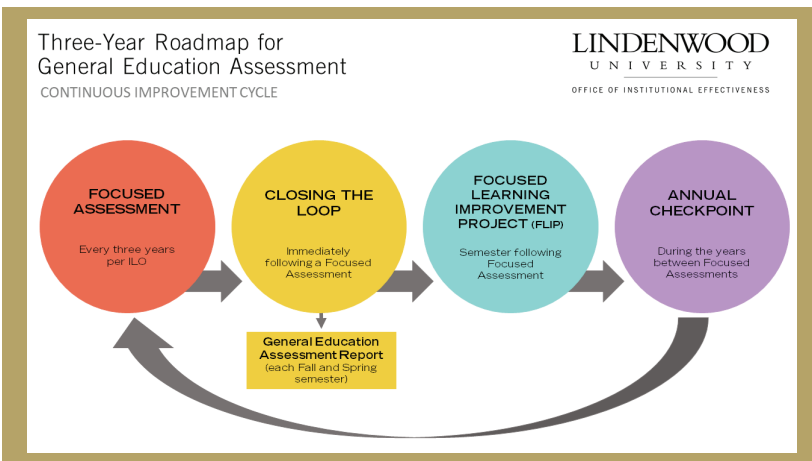
What's Next?

- 1 The Community of Practice for Critical Thinking will score upper- division (300 or 400 level coursework) student artifacts in Spring 2022.
- 2 Results from critical thinking assessment will inform "The Year of Analytical Thinking," a 2021-2022 project that focuses on assessing and improving student learning toward ILO 2.3 and 2.4 and conversations centered on the Graduate Attribute, Analytical Thinker.
- 3 Working with campus partners, an action plan will be developed to address the themes that emerged from the November 2021 data workshops.

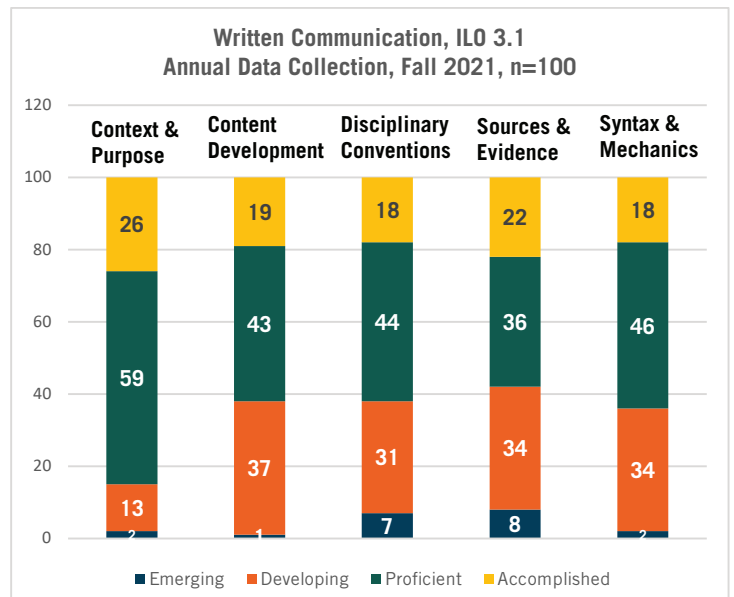
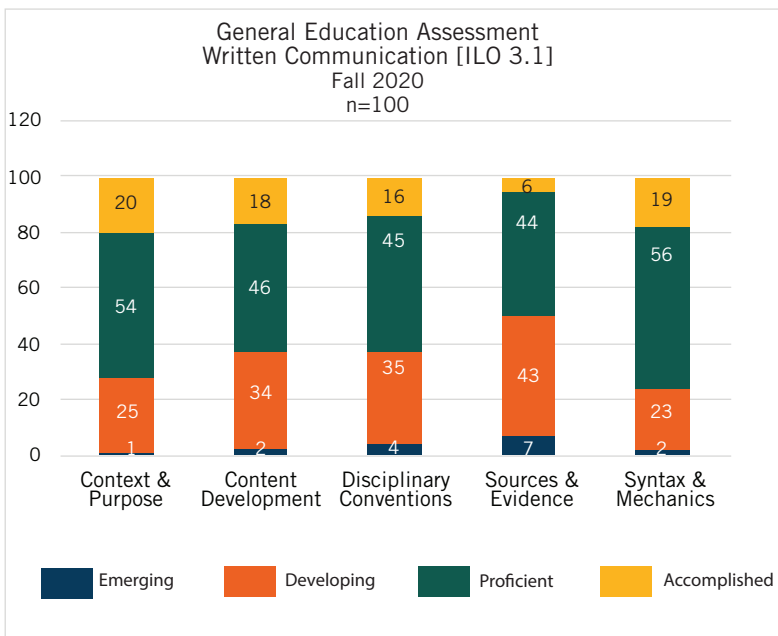
ANNUAL DATA COLLECTION FOR WRITTEN COMMUNICATION

Lindenwood’s Three-Year Roadmap for General Education Assessment calls for annual checkpoints for each ILO. The purpose of the Annual Checkpoint is twofold: 1) to maintain the cohesiveness of the Community of Practice and 2) to collect assessment data for comparison with the Focused Assessment data from the previous year.

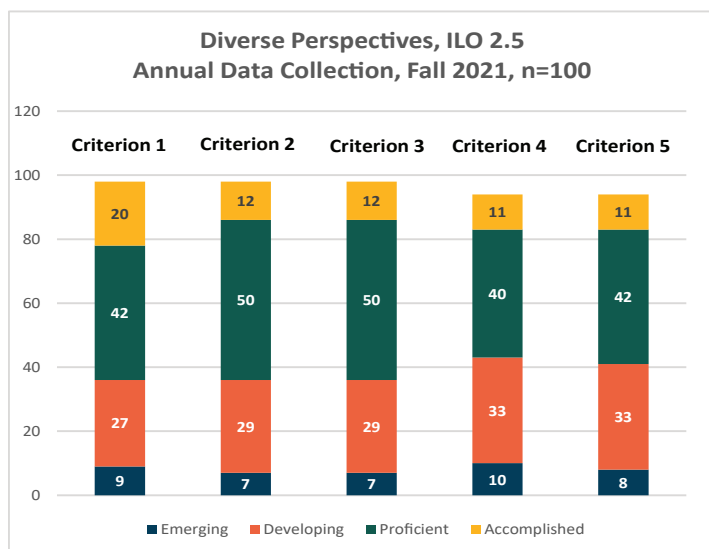
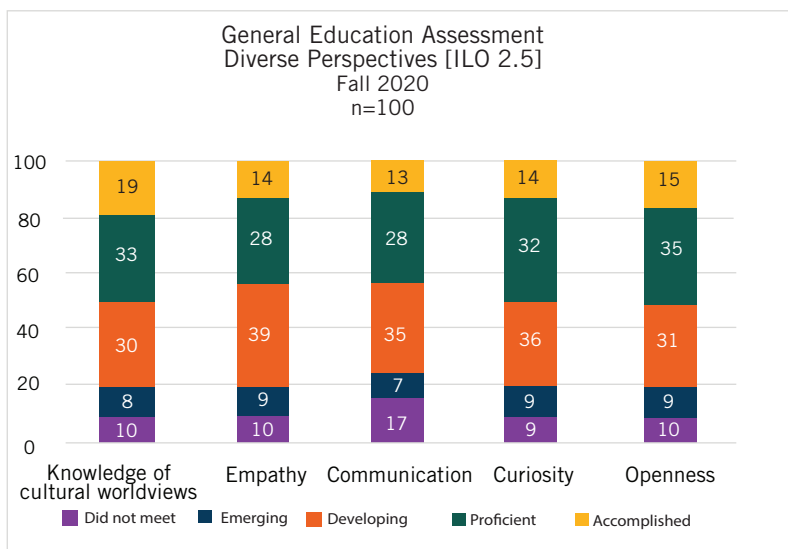
Pictured from left to right, top to bottom row: Aaron Shilling, Sue Edele, Lauren Wehmer-Callahan, Josh Neely, Andrew Millans, Lauren McCoy, Elizabeth Fleitz, Liz MacDonald, Peter Weitzel, Lynda Leavitt, Robyne Elder



In October, participants from the Community of Practice for Written Communication were able to reconvene, discuss the Graduate Attribute of Effective Communicator, and score artifacts for an annual data collection for ILO 3.1. This data collection aligned with Written Communication’s FLIP, spearheaded by Sue Edele and Liz MacDonald which involves embedding a research librarian and a writing specialist into ENGL 17000 sections to offer enhanced support. One-hundred artifacts were scored by two members of the community. In 17% of the cases, a gap between the scores was greater than one so a third rater was used.



## ANNUAL DATA COLLECTION FOR DIVERSE PERSPECTIVES



Criterion 1-5: 1. Knowledge-Knowledge of Cultural Worldview Frameworks (includes two 0 scores) 2. Skills-Cultural and Historical Empathy (includes two 0 scores) 3. Skills-Articulation of One's position (includes two 0 scores) 4. Attitude-Curiosity (includes six 0 scores) 5. Attitude-Openness (includes two 0 scores)

### Diverse Perspectives



Pictured from left to right, top to bottom row: Melissa Qualls, Mitch Nasser, James Hutson, Melissa Elmes, Billi Patzius, Graham Weir, Michiko Nohara-LeClair, Robyne Elder; other members of the Community of Practice for Diverse Perspectives (not pictured): Emilie Johnson, Jeanie Thies, Ben Cooper, Nichole Torbitzky, Dan Sweeney, Annie Alameda

In October, participants from the Community of Practice for Diverse Perspectives were able to reconvene, discuss the graduate attribute of Global Advocate, and score artifacts for an annual data collection for ILO 2.5. The community adopted a FLIP involving signature assignments, including implementation of such assignments by Nichole Torbitzky in her courses aligning to ILO 2.5 and a workshop offered to faculty and staff by Robyne Elder in the fall of 2021. One-hundred artifacts from Philosophy, History, and Geography courses were scored by two members of the community. In 26% of the cases, a gap between the scores was greater than one so a third rater was used.

### Diversity in Fall 2021 Community Artifact Samples

To examine diversity in the data for the communities of practice, Aaron Shilling, Analyst, Research and Evaluation for Institutional Effectiveness, analyzed several categories for each sample of artifacts. For critical thinking, diverse perspectives, and written communication outcome samples, the distributions of students across categories for gender, ethnicity, and Pell demographic variables were highly similar to their respective Fall 2021 undergraduate census distributions (all differences near or below 10%). Prior academic success, as measured by high school grade point average, appeared to be highly comparable between each sample and the census comparison, with means ranging within approximately a tenth of a point. Likewise, for all three outcome samples, the academic college/division distributions were representative of the census distribution of colleges (all differences near or below 10%). With respect to college level, there were noticeable biases towards lower-level students in the samples. However, upper-level students were heavily represented in two of the samples, making up around 40% of the critical thinking sample, 44% of the diverse perspectives sample, but only 8% of the written communications sample.