
ASSESSMENT OF GENERAL EDUCATION: AN ANALYSIS OF TWO ROUNDS OF DIRECT MEASURES

This report summarizes the direct assessment of General Education since 2018, comparing the direct assessment done in the second round with that done in the first round. As such, it provides evidence of the College's commitment to *One York* Goal 2, Academic Programs, and its objective "to systematize college-wide continuous improvement using assessment findings."

The mission of the General Education Assessment Committee (GEAC) at York College is to oversee a systematic and comprehensive assessment of CUNY's Pathways General Education Program at the College. Its goals are to:

- Systematically assess student learning outcomes for each General Education competency
- Effectively communicate assessment results to stakeholders
- Foster broad and sustainable faculty participation in General Education assessment activities
- Support department/program's efforts to assess the General Education program
- Support department/program's efforts to make changes for improvement

GEAC reports to the Institutional Effectiveness Committee (IEC), co-chaired by the Provost and Vice President for Academic Affairs, and the Vice President for Institutional Effectiveness and Strategic Planning. The committee is composed of ten members from the full-time faculty and staff and is chaired by a faculty member, selected by the committee and confirmed by the co-chairs of the IEC. Members include a representative from the Office of Institutional Effectiveness and Strategic Planning, at least one representative from the Office of Academic Affairs, and faculty drawn from across the programs included in the General Education curriculum.

In Spring 2023, GEAC began its second full cycle of assessment of General Education competencies which are mapped to the Pathways Student Learning Outcomes (SLOs) (this change is discussed in the [Research Brief](#) of November 2022). Throughout this second round, the committee focused on clearly defining each competency, strengthening and refining rubrics, and expanding the disciplines assessed. For example, the IL study in Spring 2024 applied the same, refined rubric to assess artifacts from both Writing and the Library. Several studies, such as the QR study in Spring 2023 and the TC study in Spring 2024 expanded to include additional disciplines. In the 2024-2025 Academic Year, GEAC also began a pilot assessment of Critical Thinking at the senior/capstone level, using a common rubric to assess this competency across programs in all three schools. The seven competencies GEAC assesses are:

- Quantitative Reasoning (QR)
- Oral Communication (OC)
- Information Literacy (IL)
- Technology Competency (TC)
- Critical Thinking (CT)
- Scientific Reasoning (SR)
- Written Communication (WC)

GEAC assessment reports as well as Outcomes Improvement Plans submitted by the disciplines in response to those reports are available on the College's [website](#), along with other resources such as rubrics and schedules. GEAC also shares its work through workshops, at the Senate, and at the yearly Academic Assessment Celebration.

We would like to thank all members of GEAC, past and present, for their many contributions to the assessment of General Education. We would also like to thank the faculty who submitted artifacts, participated in workshops, scored artifacts, and engaged in thoughtful discussions of assessment methods, findings, and next steps.

DIRECT MEASURES OF ASSESSMENT

Quantitative Reasoning (QR)

GEAC evaluated 3 SLOs related to QR:

- **Interpretation:** Ability to obtain information presented in mathematical forms (including equations, graphs, diagrams, tables)
- **Representation:** Ability to convert relevant information into various mathematical forms (including equations, graphs, diagrams, tables)
- **Calculation:** Ability to carry out numerical or symbolic computations to solve various mathematical problems

Results in Spring 2023

GEAC evaluated 119 artifacts, including final exams and lab reports from three different disciplines: Mathematics (MATH 111 and MATH 120), Astronomy (ASTR 141), and Biology (BIO 201). The Math exams were scored for all three SLOs while the Astronomy labs were assessed for the Representation SLO, and the Biology exams for Calculation.

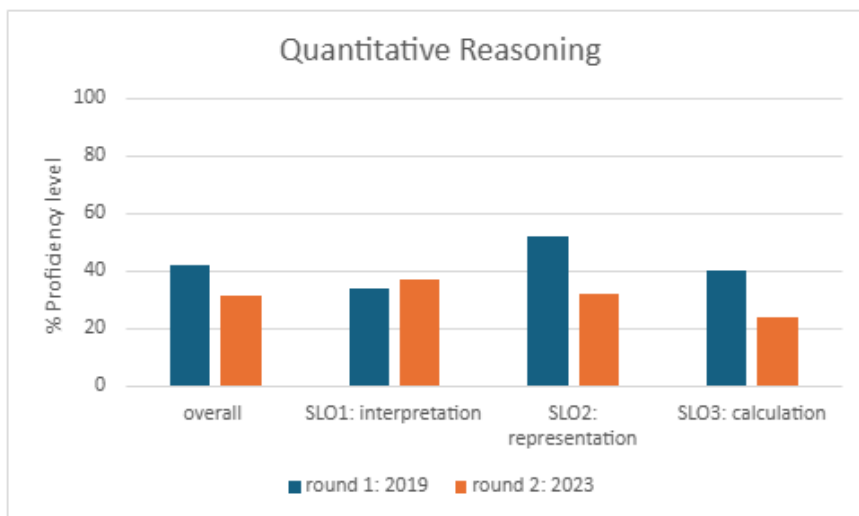
Results for Mathematics

- For Interpretation, 44% of artifacts scored 3 or above
- For Representation, 49% of artifacts scored 3 or above
- For Calculation, 45% of artifacts scored 3 or above

Mathematics artifacts showed a range of 44-49% on the SLOs. Proficiency levels were flatter for Astronomy (28%). Biology artifacts showed a flat distribution (35% proficient) that skewed towards minimally or not proficient.

Comparison with Fall 2019 Study

The 2023 study expanded the range of disciplines and courses assessed using the same rubric, doubling the number of artifacts examined (119 vs 55 in 2019). Direct comparison with the previous study requires disaggregating the scores for Math 120. These showed a lower rate of overall proficiency (31% vs 42%) which the math department believes may have been linked to the pandemic-era shift to online learning modalities.



Examples of Implemented and Planned Changes

Implemented:

- During an initial review of artifacts for the 2019 study, the Department of Math and Computer Science found that of its QR General Education courses, only MATH 120 satisfied all the Pathways QR SLOs. Significant curricula review was begun in 2021 to ensure consistency across sections and inclusion of Pathways SLOs in MATH 111, 120, and 121.
- In response to the 2022 study, the program considered how students are supported academically outside of the classroom.

They have coordinated with the Collaborative Learning Center to identify qualified tutors and requested that the center offer workshops for general education math courses during exam times. Faculty were also encouraged to issue early alerts for students needing additional support (OIP 1/24).

- Biology revised the BIO 201 labs to include a focus on the specific problem students found challenging as well as asking them to demonstrate calculations, to make and interpret graphs, and to explain and interpret their data. Revised materials were shared in Fall 2024. (Follow-up OIP 5/15/25).

Planned:

- Mathematics is trialing supplemental instruction in all Math 120 sections with outcomes to be assessed in Fall 2025 and Spring 2026 (Follow-up OIP 4/29/25). Preliminary analysis with a small pilot showed promise.

Oral Communication (OC)

GEAC evaluated 4 SLOs related to OC:

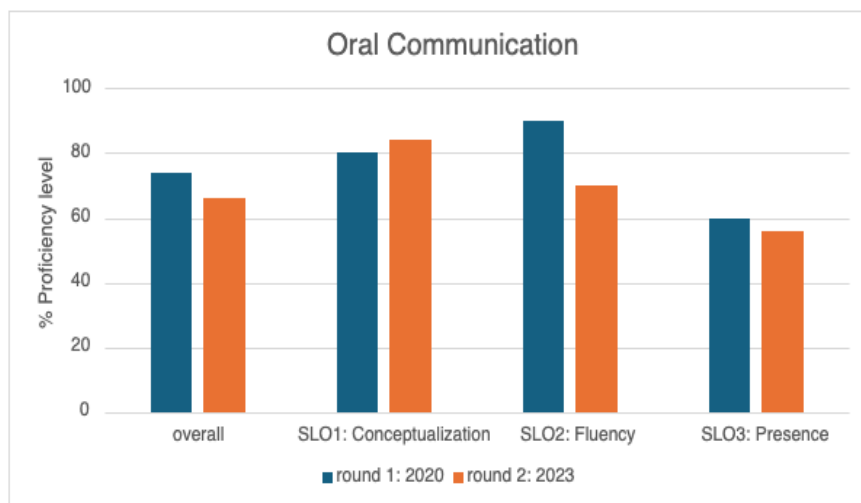
- **Conceptualization/Organization:** Organization of the presentation to facilitate understanding
- **Language Formulation/Fluency:** Sentence flow, word choice, and appropriateness of language for context and audience
- **Vocal and Physical Presence and Rhetorical/Interpretive Skill:** Intentionality, physical bearing, and voice to support thought and meaning of presentation and elicit interest
- **Listening/Speaker's Responsiveness:** Engagement with audience and adjustment to audience comprehension

Results in Fall 2023

GEAC members assessed a total of 90 artifacts: both persuasive speeches from SPCH 101 and oral final exams from SPCH 160. These speeches were observed in person at the end of both the Spring and Fall 2023 semesters. The artifacts showed an overall proficiency rate of 74%, with higher proficiencies for Conceptualization/Organization vs. Presence and Response.

Comparison with Fall 2020 Study

The first round of Oral Communication assessment was done during the COVID era and so required the use of recorded rather than live speeches, precluding the assessment of the Response SLO. The circumstances also narrowed the scope: only 20 artifacts could be assessed. In the original study, Vocal Presence and Rhetorical Skill were separate SLOs; the 2023 revised rubric combined them into one (Presence) and the rubric was refined accordingly. While the studies are not directly comparable, the overall proficiency rates of the first three SLOs do show some equivalence (overall 74% in 2020 vs. 66% in 2023, a drop most attributable to the fluency SLO).



Examples of Implemented and Planned Changes

Implemented:

- To increase the scaffolding for speeches in SPCH 101 after the 2020 study, the discipline made three pedagogical changes: creating separate rubrics for the Informative, Concept, and Persuasive speeches, limiting the use of notecards and implementing critical peer feedback journals.
- The program, per their 4/23/25 Follow-up OIP, found that the clarification of expectations created by the revised rubrics increased levels of proficiency of SPCH 101 artifacts. Proficiency levels on Vocal/Physical Presence and Listening/Responsiveness for these artifacts ranged from 68 to 80%, meeting the proficiency target the program identified of 70-80%.

Planned:

- In response to the 2023 study, Speech will make pedagogical changes to place particular attention on the Presence and Response SLOs (low stakes peer review workshops and an assignment to record and self-analyze a speech). To build Oral Communication across the college, they will reach across disciplinary lines by stressing specific communication goals for a variety of majors. As part of this effort, Oral Communication will be one of the competencies discussed at the GEAC Symposium (10/16/25). Follow-up assessment is planned for Fall 2025 (Follow-up OIP 4/23/25).

Information Literacy (IL)

GEAC evaluated 4 SLOs related to IL:

- **Determine and access** the tools necessary to discover appropriate information
- **Evaluate information** critically
- **Use information** effectively to accomplish a specific purpose
- **Incorporate** retrieved information responsible and ethically

Results in Spring 2024

Two separate studies were conducted using the same rubric. The library looked at 36 tests taken by students in BIO 201 in conjunction with the Library’s Instructional Workshops. They found an overall proficiency rate of 77% post-test compared to 75% pre-test. The Department of English, in conjunction with GEAC, assessed 34 research proposals and final papers from the WRIT 301/302/303 classes, finding an overall proficiency rate of 55%. GEAC noted the gap between some of the findings, noting for example that while the Library tests demonstrate student awareness of the importance of ethical incorporation of sources, the proposals and papers examined in the WRIT study suggest that applying this knowledge in their work remains challenging.

Library Study SLOs	Determine And Access	Evaluate	Use Effectively	Incorporate Ethically	Overall
Pre-Test	58%	77%	71%	96%	75%
Post-Test	56%	84%	72%	96%	77%

WRIT 300 Study SLOs	Determine and Access	Evaluate	Use Effectively	Incorporate Ethically	Overall
Means	3.01	2.93	2.73	2.53	2.79
% ≥3	65%	65%	47%	41%	55%

Comparison with Spring 2021 Study

In the 2021 studies, separate rubrics were applied to the Library tests and to bibliographies from ENG 125, ENG 126, and WRIT 301/302/303. The Library study, which used a consistent set of artifacts and provides a comparable measure of overall proficiency showed a small improvement in 2024 (77%) from 2021 (75%). The English study focused on formatting correctness (overall proficiency of 36%, with a higher proficiency level of 70% for the smaller number of artifacts drawn from WRIT 300

classes). The adoption of a new rubric for the 2024 study, designed to provide more targeted assessment of SLOs on source usage and evaluation (rather than formatting correctness) means that the two studies cannot be directly compared.

Examples of Implemented and Planned Changes

Implemented:

- After the 2021 assessment, the Department of English conducted follow-up assessment on final papers from WRIT 300 courses in Spring 2022 to look at Source Usage (mappable to “Use Effectively” on the current Rubric), finding that only 24% of the artifacts demonstrated proficiency in that area. English accordingly focused WRIT 300 faculty development workshops around the goal of stressing these skills. The stronger results in the 2024 study (47% proficiency on “Use Effectively”) suggest that this focus had a positive impact.
- After the 2024 assessment, English revised the SLOs in WRIT 300 courses to better align with the new IL rubric (completed Spring 2025). The Library’s follow-up assessment in Spring 2025 found that 74% of students who took a minimum of 3 hours of Library workshops correctly answered a question about Boolean operators, an area students showed lower levels of proficiency on during the 2024 study (Follow-up OIP 6/4/25).

Planned:

- With revised SLOs in place for WRIT 300 courses, English will revise course assignments to incorporate those SLOs in 2025-2026.
- The Library will aim to increase the number of sections of first year composition courses (ENG 125 and 126) that come to the Library for IL sessions and will modify tests for 2025-2026 to be able to better assess individual SLOs.

Technology Competency (TC)

GEAC evaluated the following SLO related to TC:

- **Fluency** – what they should all *know*: based on existing skills and knowledge, the ability to move between similar platforms and utilize comparable digital tools (e.g., given proficiency with Word, the ability to create a PowerPoint presentation may be assumed)

Results in Spring 2024

A total of 96 artifacts from physics (PHYS 113) and chemistry (CHEM 109) introductory labs were scored for two measures of fluency: functionality (proper and efficient utilization of Excel functions) and data plotting. Most students, 79%, showed proficiency in both areas. While the proficiency scores were high, it was recognized that the exercises were simplistic, and the Excel usage in the assignments was prescribed.

Comparison with Spring 2021 Study

The initial assessment of TC only used PHYS 113 lab artifacts and showed very similar results of high proficiency (66-77%). The expansion of the study in 2023-24 to include Chem 109 artifacts corroborated the earlier results using nearly triple the number of artifacts.

Examples of Implemented and Planned Changes

Implemented:

- Chemistry collaborated with instructors to add additional elements and tasks for the labs with the aim of both reinforcing students’ ability to effectively use Excel while also developing their critical data interpretation skills (OIP 11/7/24).

Planned:

- Physics will include instruction on broad utilization of Excel at the start of the semester, with fewer instructor-designed templates as the semester progresses as part of larger curricular changes to PHYS 113 (Follow-up OIP 5/12/25).
- Both disciplines aim to collect labs from a later point in the semester to provide better assessments of students’ culminating proficiency.

Critical Thinking (CT)

GEAC evaluated 5 SLOs related to CT:

- **Evaluation of Issue:** Statement, description, and clarification of the issue/problem under consideration
- **Evidence:** Selection of evidence and interpretation and analysis of that evidence to investigate issue/problem
- **Influence of Context and Assumptions:** Identification of relevant contexts and questioning of assumptions
- **Student’s Position:** Perspective/thesis/hypothesis that considers the complexity of the issue/problem
- **Conclusions and Related Outcomes:** Conclusion tied to evidence and informed evaluation/analysis

Results in Fall 2024

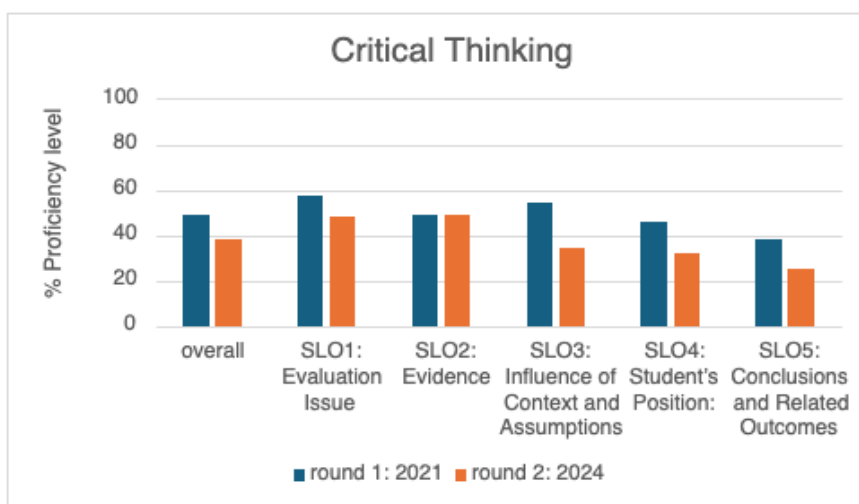
GEAC evaluated 78 student artifacts drawn from Behavioral Sciences (POL 241, SOC 235), History/Philosophy/Anthropology (BLST 103), and English (ENG 200). Assessment results show that students demonstrated higher proficiency in Explanation of Issues and Evidence, but lower proficiency in Context, Student’s Position), and Conclusions, with overall proficiency at 38%.

	N SLOs	Explain	Evidence	Context	Position	Conclusion	Overall
Scores ≥ 3	154	62.3%	58.9%	49.7%	44.2%	43.8%	51.8%
Averages ≥ 3	71	47.9%	49.3%	33.8%	32.4%	25.4%	37.7%

GEAC was also provided with 34 scores from a PHIL 202 mid-term assessment that is also used as a screen for the Teacher Education program. Overall proficiency, based on the total scores, was 71%. Despite this higher level of overall proficiency, the individual SLO proficiency rates showed similar patterns to GEAC’s study: higher for Evidence (94%) and lower for Student’s Position and Conclusions (47%).

Comparison with Spring 2021 Study

In comparison to the 2021 study, these results show consistently – though only slightly – lower rates of proficiency for four out of five SLOs, as well as a persistent consistency in already noted gaps between the first two SLOs and the last three. As in the previous study, student proficiency continues to be higher for Explanation and Evidence vs. Context, Student’s Position, and Conclusions. Only the proficiency rate for Evidence remained steady at just under 50%. These outcomes highlight ongoing challenges in analysis, synthesis, and drawing conclusions.



Examples of Implemented and Planned Changes

Implemented:

- Both Sociology and Political Sciences added low stake writing assignments in alignment with critical thinking in SOC235 and POL268 in Fall 2023 and Spring 2024. Essay prompts were revised to include critical thinking as part of the assignment in SOC235, and the Political Science Program also provided writing models.
- After the 2021 assessment, PHIL 202 implemented a new rubric; this was applied when scoring the mid-terms for the 2024 study.

Planned:

- Sociology and Political Science will continue their work with low stakes writing and models. They also plan to share the Critical Thinking rubric with instructors to foster awareness of the SLOs. Artifacts will be assessed in Fall 2026 (5/22/25 OIP).
- PHIL 202, according to their Follow-up OIP (5/12/25) plans several pedagogical changes including focusing study questions on locating the author's and counter positions, revising class participation to include work on conclusion/position and adding a workshop/debate (Follow-up OIP 5/12/25).
- BLST 103 plans to include instructional materials on critical thinking, and to assign low stakes and high stakes writing assignments. Rubrics will be made available for the high stakes assignments. The final paper will be scaffolded.

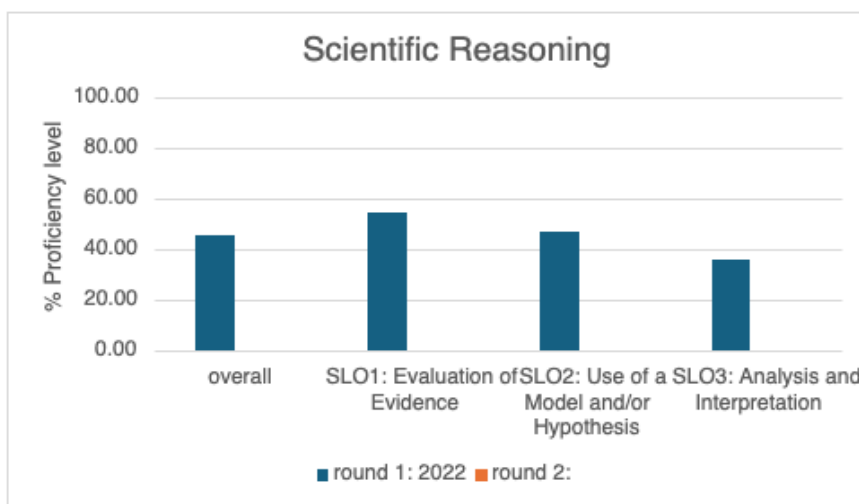
Scientific Reasoning (SR)

GEAC evaluated 3 SLOs related to SR:

- **Evaluation** of Evidence
- **Use of a Model** and/or Hypothesis
- **Analysis** and Interpretation

Results in Spring 2023

A total of 85 artifacts were scored from BIO140 and ASTR141 lab assignments. Approximately 50% of artifacts demonstrated proficiency in Evidence and Model-related SLOs, while only one-third met proficiency in Analysis. The overall proficiency rate across all three categories was 46%.



Comparison with Spring 2018 Study

The results from Spring 2018 were part of the initial round of GEAC's work that focused on assessing domains. Changes made to the methodology as our experience evolved problematizes direct comparisons between these studies. The 2018 study examined the Life and Physical Sciences Core and included 23 lab reports collected from BIO 140. The proficiency level was 56% on the SLO used to evaluate those artifacts ("Gather, analyze, and interpret data and present it in an effective written laboratory/fieldwork

report.”). The lower proficiency levels on analysis in 2022 may have been connected to the shift in modality to fully asynchronous courses, as students lacked immediate feedback and collaborative opportunities. Scientific Reasoning will get a second round of study in Spring 2026.

Examples of Implemented and Planned Changes

Implemented:

- Biology revised instructional materials and lab templates for BIO 140 and shared them with all instructors in Fall 2023 (OIP 12/7/23).
- Astronomy has adjusted course delivery to allow students additional class periods to work on data analysis (Follow-up OIP 5/12/25).

Planned:

- Biology will add more instruction and practice of evaluating evidence, analyzing and interpreting data and constructing and testing scientific hypotheses. The lab template will include questions designed to help students examine whether their hypothesis was supported by their data (OIP 12/7/23).

Written Communication (WC)

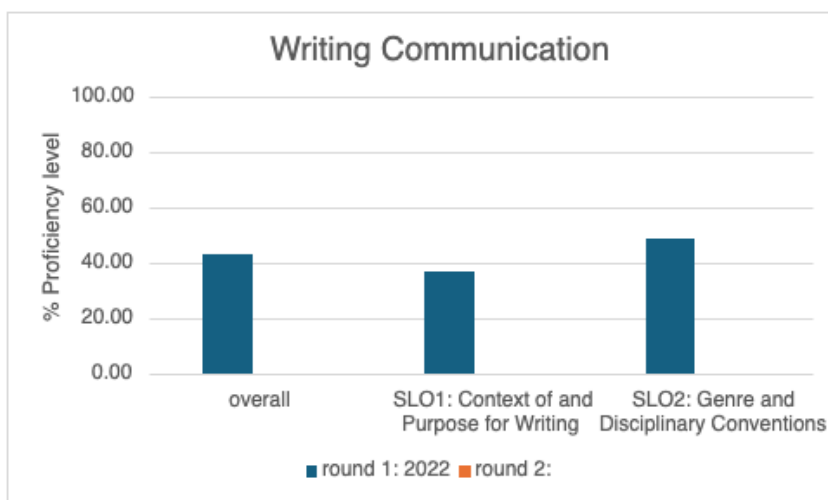
GEAC evaluated two student learning outcomes (SLOs) related to WC:

- Context of and Purpose for Writing: Understanding of context, audience, and purpose that is responsive to the assigned (tasks) and focuses elements of the work.
- Genre and Disciplinary Conventions: Attention to and execution of a range of conventions particular to a specific discipline and/or writing task(s) including organization, content, and stylistic choices.

Results in Fall 2022

GEAC collected 100 artifacts from four different disciplines: Cultural Diversity (CLDV 100), Economics (ECON 102), English (ENG 200), and Humanities (HUM 221).

- For Context and Purpose for Writing, 37% scored 3 or above.
- For Genre and Disciplinary Conventions, 49% scored 3 or above.



Comparison with Spring 2019 Study

The first assessment of Written Communication focused on the domain of First Year Composition (ENG 125 and 126) and measured two different SLOs (Supporting a Thesis and Writing Clearly). When GEAC moved to assessing competencies rather than domains, the committee aimed to broaden their examination of written communication beyond first year composition and

therefore adjusted the SLOs to allow for a wider range of artifacts with differing purposes and contexts. For this reason, the results are not directly comparable.

Examples of Implemented and Planned Changes

Implemented:

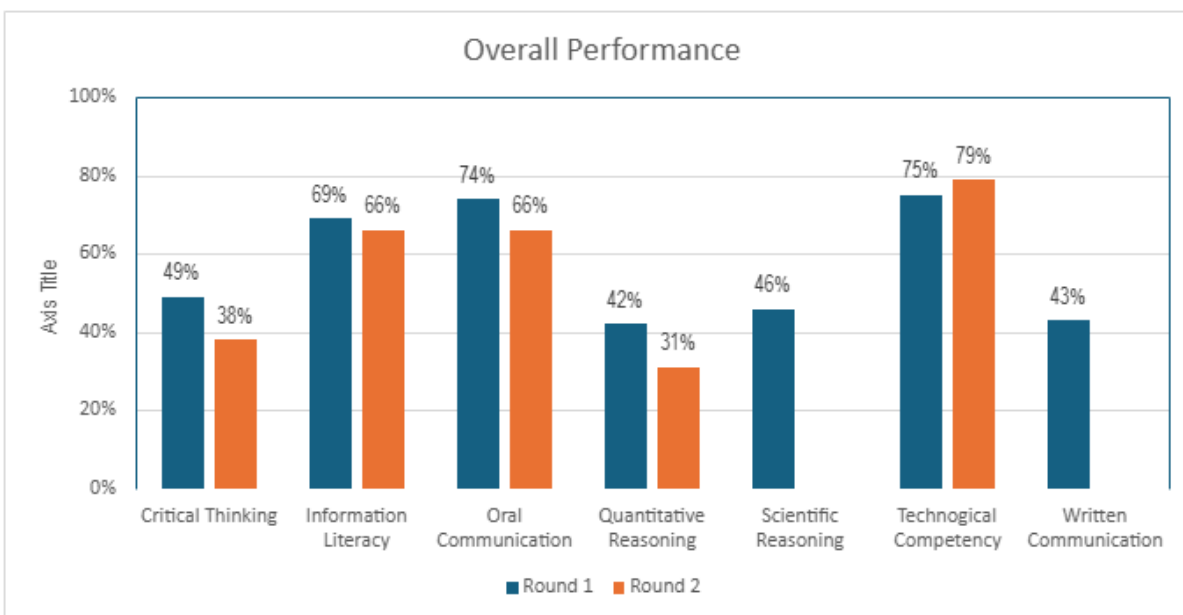
- A small follow-up study to the Spring 2019 assessment was done in English after one section of ENG 126 trialed including an additional paper, but no change was found in proficiency levels. English accordingly shifted its efforts to faculty development with a focus on scaffolding the development and support of a thesis.
- After the Fall 2022 study, Economics implemented chapter-based writing assignments to encourage students to interpret and analyze economic data with precision and thoroughness (Follow-up OIP 10/25)
- In response to the Fall 2022 study, English instituted faculty development sessions specifically for ENG 286 faculty. Subsequent assessment in Fall 2024 on artifacts drawn from all sections of the course found similar levels of competency on context and genre compared to the original study (37% overall). Because the proficiency rates varied greatly by section and prompt, a SharePoint site for ENG 286 prompts was created to allow instructors to share prompts for feedback (Follow-up OIP 5/25).

Planned:

- Additional faculty development sessions are planned for instructors of ENG 125, ENG 126, and ENG 286. Follow-up assessment of ENG 125 and 126 is scheduled as part of the next round of WC in Spring 2026.

SUMMARY

The second full cycle of direct assessment of student competencies in the Gen Ed will be completed by the end of Spring 2026 with WC and QR. As of Fall 2025, 24% of the active courses in our Pathways curriculum have been assessed. Among the competencies assessed in both rounds, there are some declines in performance — from a +3 percentage point decrease in Information Literacy to an -11 percentage point decrease in Critical Thinking and Quantitative Reasoning, possibly due to COVID-era challenges and changes to modalities. Some improvement was observed in Technological Competency (+4 percentage points).



Note: WC and QR will be assessed in Spring 2026, completing the second full cycle of direct assessment of student competencies in the Gen Ed.

IMPLICATIONS/NEXT STEPS

This report is part of GEAC's comprehensive review, a reflective process the committee implemented in Spring 2025 to allow us to pause, consider, and share, through the Fall 2025 GEAC Symposium and other efforts, what we know about the current state of proficiency levels in York's General Education curriculum. Going forward, a comprehensive review will take place after every two rounds of assessment.

Several larger issues have emerged from the committee's assessment and review that suggest areas the college-wide community might consider when looking at the General Education program.

- First, how do we address these competencies as a program rather than simply within the disciplines? If Critical Thinking, for example, shows lower levels of proficiency than we would like, how might we address this as a program?
- Second, two of the studies noted decreases in levels of proficiency that may have been linked to shifts, during the COVID era, to fully online modalities. How might we consider these findings as a General Education program?
- Third, two of the competencies are less explicit parts of the wider program curriculum than others. Oral Communication, while clearly mastered within the Speech classes, is not an explicit part of SLOs outside of those classes, which enroll only a small portion of the student population. GEAC has also found it challenging to measure Technological Competency as few courses within Pathways include assignments that directly demonstrate it (rather than assuming that students have Excel or Word competency, for example.) What is the role and value of these competencies within the General Education program?
- Fourth, GEAC has since its beginning encouraged programs to set their own proficiency targets (the percentage of artifacts scoring 3 or above on the 4-point rubric) for these competencies; however, as we consider competencies across the General Education program, this may become less effective. At the same time, the assumption that they be set to 70%, especially for courses at the introductory level of the curriculum, seems inappropriate as we have adopted modified AAC&U rubrics where a 4 is considered capstone level. One suggestion has come from English: matching proficiency targets to the level of the course on the curriculum map. Courses at the Introductory level (I) could target 40%; those at the Reinforcement level (R) 55%; and those at the Mastery level (M) 70%. Sliding proficiency targets also allow the same rubric to be used across levels.
- Last, what can we learn about how to tackle assessment of the General Education competencies in the upper division courses from the Critical Thinking pilot now underway?

GEAC COMMITTEE 2025-2026

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