

General Education Competency Assessment Plan

Lord Fairfax Community College

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This document describes Lord Fairfax Community College's (LFCC) plan for the assessment of general education competencies. The following cycle of assessments is used.

Cycle for General Education Competency Testing

Competency	Cycle 1			Cycle 2		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Critical thinking	2018-19			2021-22		
Civic engagement	2018-19			2021-22		
Quantitative literacy		2019-20			2022-23	
Scientific literacy		2019-20			2022-23	
Written communication			2020-21			2023-24
Professional readiness			2020-21			2023-24

Two competencies are assessed formally each year. For the year in which a competency is assessed, data are collected in the fall and spring, analyzed during the summer, and reported to SCHEV and to the community the following fall.

Competency: Critical Thinking

Definition: Critical Thinking is the ability to use information, ideas and arguments from relevant perspectives to make sense of complex issues and solve problems. Degree graduates will locate, evaluate, interpret, and combine information to reach well-reasoned conclusions or solutions.

Outcomes:

1. Locate – Analyze and integrate information from separate sources to solve a real-world problem.
2. Evaluate - Evaluate how strongly correlational-type data support a hypothesis.
3. Interpret - Provide alternative explanations for observations and/or for spurious relationships.
4. Combine - Identify suitable solutions for a real-world problem using relevant information.

Goals: The results of the spring 2019 administration of the Critical Assessment Test (CAT) developed and maintained by Tennessee Technological University were used to provide a baseline for measuring improvement. LFCC's goals are to meet or exceed the CAT average for community colleges and to meet

or exceed the overall and subscale scores from the college's previous administration of the CAT in 2017. A Graduating Student Survey is conducted annually of current graduates and provides an indirect measure of this competency. The goal for self-assessments in the survey are to meet or exceed the previous year's results.

Methods: The CAT will be used to assess critical thinking. This is part of the LFCC's SACSCOC Quality Enhancement Plan (QEP) about information literacy. The CAT has been administered biennially since 2011. Faculty on the QEP team mapped the four outcomes for this competency to specific questions on the CAT. LFCC uses aggregate data by question to set a baseline and monitor progress over time for each outcome.

The CAT was administered online by LFCC faculty in spring 2019 to a sample of 100 students drawn from several courses across the disciplines, with 82 valid test results. Students were identified to take the CAT who were degree-seeking and had taken at least 30 hours of coursework. These courses were selected to provide a mix of transfer and career and technical education and include associate degree-seeking students from both campuses.

A Graduating Student Survey is conducted annually of current graduates and this provides an indirect measure of this competency. The survey asks students "Compared to when you started at LFCC, rate... your ability to locate, evaluate, interpret, and combine information to reach well-reasoned conclusions or solutions" using a five-point Likert scale. While based on self-assessment, the data from this survey are used to help triangulate the results of the CAT. It is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data were collected in academic year 2018-19 and analyzed in summer 2019. The results are being reported to SCHEV and to the community this fall 2019.

Communication of findings: LFCC hosts a web page on student achievement. This page is being updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

LFCC sent two full-time faculty to CAT training in fall 2018. These faculty will present the results of the CAT to the faculty in January 2020. The CAT report for the year and trends were shared at a fall 2019 meeting of the LFCC Institutional Effectiveness/ Assessment Committee, which is a standing committee of the college's governance structure with representative participation from across the college. These reports were shared in fall 2019 with the QEP team and with the academic dean and faculty in the division which includes English, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: A variety of QEP activities and information sessions are being conducted that relate to critical thinking and information literacy, including disseminating and discussing the CAT results. The analysis of CAT results has been shared with the QEP team as part of its ongoing planning to promote more effective teaching and learning through information literacy, a construct of critical thinking.

Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This same process was done for this competency.

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Competency: Civic Engagement

Definition: Civic Engagement is the ability to contribute to the civic life and well-being of local, national, and global communities as both a social responsibility and a life-long learning process. Civic engagement can take many forms, from individual volunteerism to organizational involvement to electoral participation. For students, this could include community-based learning through service-learning activities, community-based research, or service within the community. Degree graduates will demonstrate the knowledge and civic values necessary to become informed and contributing participants in a democratic society.

Outcomes:

1. Civic Identity: Reflect on personal social/civic identity and how that identity differs from others in their communities.
2. Civic Discourse: Deliberate on issues and problems to advance or achieve a civic aim.
3. Civic Responsibility: Consider and respond to civic, social, environmental, or economic challenges at local, national, or global levels.
4. Multiple Perspectives: Acquire knowledge and apply that knowledge when taking into account multiple viewpoints on a civic issue.

Goals: Fall 2018 voting rates are used as a baseline for measuring improvement. Participation rates in academic and extracurricular activities related to civic engagement are calculated, with the number of students participating in 2018-19 as the baseline. Two surveys are conducted annually of students and current graduates that provide indirect measures of this competency. LFCC's goals are to: (1) meet or exceed voting rates at peer institutions; (2) meet or exceed the voting rate baseline in future years; (3) meet or exceed annual, total participation rates in civic engagement activities; and (4) meet or exceed the previous year's results for the two surveys.

Methods: Two direct measures and several indirect measures are used. First, LFCC participates in the National Study of Learning, Voting, and Engagement (NSLVE) administered by Tuft University's Institute for Democracy and Higher Education. NSLVE helps the college learn about its student registration and voting rates and the climate for political learning and engagement. LFCC is able to compare its data nationally and statewide through the NSLVE data portal and by sharing peer reports with Piedmont Virginia Community College, Germanna Community College, and other institutions in the Virginia Community College System that participate.

A second measure involves participation in civic engagement activities. For 2018-19, these included a series of Town Hall events held at Shenandoah University. Participation was monitored by LFCC faculty facilitating these activities.

Indirect measures are provided by two, annual, student surveys. The Current Student Survey is administered in the fall semester and has an average response rate of 30% with approximately 2,000 respondents. Starting in fall 2018, the LFCC Current Student Survey asked students (1) "Have you

participated in the last year in any kind of civic or political activity (i.e. donation, campaigning, protest, rally, writing, etc.)?” and (2) “If you are eligible to vote in the current general elections, did you/will you vote?”

The Graduating Student Survey is a requirement of graduation and is administered in the fall and spring semester to all degree-seeking students. The survey asks students “Compared to when you started at LFCC, rate... How well LFCC is helping you to become an informed and contributing participant in a democratic society?” using a five-point, Likert scale. While based on self-assessment, the data from these two surveys help triangulate the results of direct assessments. The results are representative of LFCC’s program award levels, race/ethnicity, gender, age group, and locations for degree-seeking students. The Graduating Student Survey is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data were collected in academic year 2018-19 and analyzed in summer 2019. The results are being reported to SCHEV and to the community this fall 2019.

Communication of findings: LFCC hosts a web page on student achievement. This page is being updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

The results for this competency were shared at a fall 2019 meeting of the LFCC Institutional Effectiveness Committee, which is a standing committee of the college’s governance structure with representative participation from across the college. These reports were shared in fall 2019 with the academic dean and faculty involved in the assessments, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This process was followed for this competency.

Additional institutional contact(s): Dr. Karen Kellison (kkellison@lfcc.edu), Dr. Jay Gillespie (JGillespie@lfcc.edu), and Dr. Margaret Cecere (MCecere@lfcc.edu).

Competency: Quantitative Literacy

Definition: Quantitative Literacy is the ability to perform accurate calculations, interpret quantitative information, apply and analyze relevant numerical data, and use results to support conclusions. Degree graduates will calculate, interpret, and use numerical and quantitative information in a variety of settings.

Outcomes:

1. Perform accurate calculations by solving real-life problems requiring conversion of units using dimensional analysis, interest and loan formulas or proportional reasoning.
2. Interpret quantitative measurements and data gathered (possibly through surveys, internet, etc.) into tables, displays, charts, and simple graphs.

3. Analyze relevant numerical data by solving real-life problems requiring interpretation and comparison of complex numeric summaries that extend beyond simple measures of center.
4. Develop valid conclusions based on analysis of real world advertisements, consumer information, government forms and news articles containing quantitative information.

Goals:

Data from scoring course-embedded assessments for each of the outcomes will be collected in spring 2020. A Graduating Student Survey is conducted annually of current graduates and provides an indirect measure of this competency. The goal for the course-embedded scoring of artifacts is 70% success. The goal for self-assessments in the survey are to meet or exceed the previous year's results.

Methods: Most degree-seeking students at LFCC take one of three math courses to meet general education requirements, including MTH 154, MTH 155, and/or MTH 245. According to faculty, MTH 154 "Quantitative Reasoning" is closely aligned to the definition of quantitative literacy. This course was recently redesigned as part of a VCCS-wide initiative to make math course objectives more updated, consistent, and uniform.

Several math faculty worked together in academic year 2018-19 to identify key assignments in this course that can be mapped to the outcomes. Data were collected in a pilot study in spring 2019 in the two sections taught by full-time faculty. Math faculty reviewed the results and revised the outcomes and measures, based on the pilot.

A Graduating Student Survey is conducted annually of current graduates and this provides an indirect measure of this competency. The survey asks students "Compared to when you started at LFCC, rate... your ability to calculate, interpret, and use numerical and quantitative information in a variety of settings," using a five-point Likert scale. While based on self-assessment, the data from this survey will be used to help triangulate the results of the CAT assessment. The Graduating Student Survey is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data are currently being collected in academic year 2019-20 and will analyzed in summer 2020. The results will be reported to SCHEV and to the community in fall 2020.

Communication of findings: LFCC hosts a web page on student achievement. This page will be updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

The results for this competency will be shared with all faculty who teach MTH 154, with the discipline leads for math at both campuses, and with other math faculty. They will be shared at a monthly meeting of the LFCC Institutional Effectiveness Committee, which is a standing committee of the college's governance structure with representative participation from across the college. These reports will be shared with the academic dean and faculty in the division which includes math, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: The faculty leads for this competency will work with other full-time faculty who teach this class to plan improvements based on the results.

Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This same process will be done for this competency.

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Competency: Scientific Literacy

Definition: Scientific Literacy is the ability to apply the scientific method and related concepts and principles to make informed decisions and engage with issues related to the natural, physical, and social world. Degree graduates will recognize and know how to use the scientific method, and to evaluate empirical information.

Outcomes:

1. Critically interpret scientific data in various formats.
2. Apply/Show proficiency in scientific problem-solving skills.
3. Recognize methods of inquiry that lead to scientific knowledge.
4. Understand basic scientific principles

Goals:

A locally-developed version of LFCC's science exit exam will be administered in two, high enrollment, core science classes where these competencies are taught. The 2019-20 results by outcome will be used as a baseline. A Graduating Student Survey is conducted annually of current graduates and provides an indirect measure of this competency. The goals for the science exam results and for self-assessments in the survey are to meet or exceed the previous year's results for each outcome.

Methods:

A locally-developed science exam will be modified for this purpose and used in two core science classes. This test is currently administered as a pre-/post- in selected biology courses. The questions and scoring are being refined by full-time LFCC science faculty and mapped to the outcomes. In fall 2019, there are 465 students enrolled in BIO 101 (General Biology I) and 559 in BIO 141 (Human Anatomy and Physiology I), representing 1,024 potential assessments.

A Graduating Student Survey is conducted annually of current graduates and this provides an indirect measure of this competency. The survey asks students "Compared to when you started at LFCC..., Rate your ability to use the scientific method and to evaluate empirical information," using a five-point Likert scale. While based on self-assessment, the data from this survey will be used to help triangulate the results of the science exit assessment. The Graduating Student Survey is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data will be collected in academic year 2019-20 and analyzed in summer 2020. The results will be reported to SCHEV and to the community in fall 2020.

Communication of findings: LFCC hosts a web page on student achievement. This page will be updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

The results for this competency will be shared at a monthly meeting of the LFCC Institutional Effectiveness Committee, which is a standing committee of the college's governance structure with representative participation from across the college. These reports will be shared with the academic dean and faculty in the science division, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This same process will be done for this competency.

Additional institutional contact(s): Dr. Karen Kellison (kkellison@lfcc.edu), Dr. Ia Gomez (igomez@lfcc.edu), and Dr. Elizabeth Dingess (edingess@lfcc.edu).

Competency: Written Communication

Definition: Written Communication is the ability to develop, convey and exchange ideas in writing, as appropriate to a given context and audience. Degree graduates will express themselves effectively in a variety of written forms.

Outcomes:

1. Purpose and Focus: Fulfill the assignment in a fresh and mature manner; reveals a controlling sense of purpose and a strong understanding of purpose.
2. Content: Thoroughly develop ideas.
3. Composition: Achieve a level of prose that is clear, readable, and occasionally memorable.
4. Language: Reveal a command of formal edited English and is mostly free from errors in grammar and mechanics.

Goals:

Results from scoring course-embedded artifacts with a rubric will provide a baseline for comparison. A Graduating Student Survey is conducted annually of current graduates and provides an indirect measure of this competency. The goals for scoring writing artifacts and for self-assessments in the survey are to meet or exceed the previous year's results.

Methods: A variety of writing assessments are conducted at LFCC and a locally-developed rubric has been used for annual discipline-based assessment. Prior to fall 2018, this involved faculty scoring of a stratified, random sample of research essays written by approximately 100 students in ENG 111/112 classes. This course-embedded assessment was recently changed to examine 200 level ENG courses.

To examine how well students are prepared in this competency, English faculty will score approximately 100 research-based essays from a stratified, random sample of students who pass ENG 241, 242, 243, 244, 251, or 252 courses in the Spring semester. Over time, LFCC hopes to sample research essays in other disciplines, such as history. However, the labor intensive nature of faculty scoring with the rubric precludes a large sampling frame. Based on the courses sampled, these students are representative of degree-seeking students in their second year who have taken general education.

A Graduating Student Survey is conducted annually of current graduates and this provides an indirect measure of this competency. The survey asks students “Compared to when you started at LFCC, rate your knowledge, skills, and ability now... to express yourself effectively in a variety of written forms,” using a five-point Likert scale. While based on self-assessment, the data from this survey will be used to help triangulate the results of the writing assessment. The Graduating Student Survey is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data will be collected in academic year 2020-21 and analyzed in summer 2021. The results will be reported to SCHEV and to the community in fall 2021.

Communication of findings: LFCC hosts a web page on student achievement. This page will be updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

After the data are compiled each year, the English faculty review the results of this discipline-based assessment at a department meeting. This information is then used to plan improvements to courses. The results for this competency will be shared at a monthly meeting of the LFCC Institutional Effectiveness Committee, which is a standing committee of the college’s governance structure with representative participation from across the college. These reports will be shared with the academic dean and faculty in the division which includes English and other humanities and social science courses where written communication is taught, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This same process will be done for this competency.

Additional institutional contact(s): Dr. Karen Kellison (kkellison@lfcc.edu), Dr. Jay Gillespie (JGillispie@lfcc.edu), Dr. Kim Lewis (kLewis@lfcc.edu), and Dr. Margaret Cecere (MCecere@lfcc.edu).

Competency: Professional Readiness

Definition: Professional Readiness is the ability to work well with others and display situationally and culturally appropriate demeanor and behavior. Degree graduates will demonstrate skills important for successful transition into the workplace and pursuit of further education.

Outcomes:

1. Oral Communication: Maintain open, effective, and professional communications
2. Ethical Reasoning: Assess ethical issues in a variety of settings using multiple viewpoints to develop and defend one's own moral values
3. Leadership: Discern and describe their personal leadership style, strengths, and limitations
4. Cultural awareness and sensitivity: Recognize their own multiple identities, experiences and biases

Goals:

Data from scoring course-embedded assessments with rubrics for each of the four outcomes will be collected, starting with a pilot in 2019-20. These will be aggregated across course sections to serve as a baseline for comparison in 2020-21. The goal is to meet or exceed the baseline. A Graduating Student Survey is conducted annually of current graduates and provides an indirect measure of this competency. The goal for self-assessments in the survey are to meet or exceed the previous year's results.

Methods:

These outcomes are being mapped by faculty to courses where they are taught, such as CST 100 for oral communication, ethics for ethical reasoning, and several sociology courses. Course-embedded assessments will be identified for each of the four outcomes. Faculty will create and use locally-developed grading rubrics to score artifacts. The full-time faculty member who teaches ethics is reviewing other sources of course-embedded assessment data about the ethical reasoning outcome which could be used.

In fall 2018, there were nine sections of the PHI 220 Ethics course with 208 students. In spring 2019, there are eight sections with 225 students. It is expected that this course-embedded assessment for ethics could be done with 400 students per year. The CST 100 Principles of Public Speaking course had 23 sections with 509 students in fall 2018 and 19 sections with 427 students in spring 2019. This course-embedded assessment could be done with approximately 800 students per year.

A Graduating Student Survey is conducted annually of current graduates and this provides an indirect measure of this competency. The survey asks students "Compared to when you started at LFCC, rate your knowledge, skills, and ability now... for successful transition into the workplace and pursuit of further education," using a five-point Likert scale. While based on self-assessment, the data from this survey will be used to help triangulate the results of the course-embedded assessments. The Graduating Student Survey is required for the entire population of degree-seeking, graduating students and the results are representative of associate degree graduates.

Schedule: Data will be collected in academic year 2020-21 and analyzed in summer 2021. The results will be reported to SCHEV and to the community in fall 2021.

Communication of findings: LFCC hosts a web page on student achievement. This page will be updated to include the results of general education competency assessments, with annual updates based on the cycle of data collection and reporting.

The results for this competency will be shared at a monthly meeting of the LFCC Institutional Effectiveness Committee, which is a standing committee of the college's governance structure with representative participation from across the college. These reports will be shared with the academic dean and faculty in the division which includes career and technical education, as well as with the President, Vice President for Academic and Student Affairs, and other academic and student services leaders.

Use of findings: Per SACSCOC standards, general education competency outcomes are treated like program student learning outcomes. Faculty in related disciplines are involved in collecting the data and in designing improvements based on results, as well as reporting on the status of the improvements one year later. This same process will be done for this competency.

Additional institutional contact(s): Dr. Karen Kellison (kkellison@lfcc.edu) and Dr. Margaret Cecere (MCecere@lfcc.edu).

Additional Information

Capacity

LFCC has the capacity to conduct these competency assessments and analyze the results for reporting and to support decision-making. Some of this work aligns well with the college's SACSCOC Quality Enhancement Plan (QEP) about information literacy, which runs through 2023. Some of the data collection mechanisms are already in place, such as the CAT critical thinking test; course-embedded, discipline-based assessments; and pre-/post- exams. The annual Current Student Survey and Graduating Student survey have been administered for many years and were expanded in fall 2018 to collect self-assessments about general education competencies.

LFCC has experienced and highly qualified personnel in its institutional research and assessment functions. The college's Institutional Effectiveness committee meets monthly and has been involved in all aspects of developing this plan. LFCC recently conducted a four-year U.S. Department of Labor grant to develop competency-based education and, as a result, there is increased awareness, knowledge, and interest in the language of competencies. Senior leaders have been involved in developing the plan and are very supportive of these new assessments to improve teaching and learning.

LFCC will examine competency results in terms of equity for low-income (Pell eligible), first generation, ESL, under-represented, adult learner, and minority students where possible, given response rates and the sampling frame. This is restricted to some extent by the number of artifacts scored with rubrics, by testing, and by student participation in documented activities. Equity reporting requires the collection of student identifiers to match with PeopleSoft Student Information System variables for the relevant student characteristics. LFCC routinely analyzes progression rates based on these kinds of risk factors.