



Report of General Education Assessment

2019-2022

July 2022

Report on General Education Assessment

Chattahoochee Valley Community College (CVCC) measures the effectiveness of its general education program using multiple direct and indirect assessments. The *Report on General Education Assessment* is a composite of three years of data collected from faculty assessments and random sampling of student's artifacts.

Each fall, division chairs begin the process of creating a general education portfolio for CVCC. The process is as follows:

1. Annually, the five-general education/associate degree outcomes (Writing, Speech, Math, Science, and Technology) are assessed;
2. In the fall, department chairs meet with faculty to ensure there is agreement on the identified student learning outcomes (SLOs) and assessment tools that are in place.
3. The general education faculty members assigned general education SLOs collect the assessment data to the specific course. Additionally, the assessment data is collected from student work in traditional, online, and hybrid courses identified.
4. Annually, the assessment of the data takes place during fall and spring semesters.
5. Annually, the results from the assessment are entered in the College's Unit Plan platform for each area by the department chairs by the end August.
6. Division meetings are held to discuss the results and determine what changes, if any, need to be made.
7. The division chair enters the *Use of Results* in the Unit Plan and develops an action plan for improvement
8. If a change requires funding beyond the normal operating expenses for the department, a Budget Form B will be completed the following spring.

College-Level General Education Student Learning Outcomes

CVCC assesses its General Education Program in the following areas: writing, speech, math, science, and technology. Faculty members teaching general education courses assess the effectiveness of courses in preparing students to master the student learning outcome (SLO).

Student Learning Outcome 1: Writing

Students will write sentences and paragraphs in Standard English that are sequential, logical, and effectively organized. The SLO assesses effective writing skills by evaluating essays for major, minor, and documentation errors in English 101 and English 102.

NOTE: The English curriculum was restructured based on the recommendation of the Alabama Community College System (ACCS) College Readiness Task Force to follow a co-requisite model to increase the number of students entering college-level English. Fall 2018, ACCS eliminated developmental English and Reading courses. Based on the recommendation of the College Readiness Task Force, ENR094 was renamed to ENR098, which integrated writing, and reading into one developmental course and implemented a co-requisite learning support course, ENG099, to support the student’s success in English 101. Additionally, the newly developed placement guidelines were implemented (See Appendix for Placement Guidelines).

Assessment Results: The random sample of ENG 101 papers indicated that only 37% of student essays were free of major errors. This means that over half of our students 63% are struggling to produce writing free of run-on sentence, sentence fragments, and subject/verb agreement errors. Table 1 reflects the data collected on the commission of major errors, minor errors, and documentation errors for the writing SLO up until 2020-21 then only major errors for 2021-22:

Table 1 ENG 101 and ENG 102

Academic Year	Commission of Major Errors	Commission of Minors Errors	Commission of Documentation Errors
2019-20	25%	65%	21%
2020-21	63%	86%	9%
2021-22	63%*	N/A	N/A

- Modified to only assess major errors; therefore, no data for minor errors or documentation errors

Use of Results: Mid-year review was completed. The increase in major errors is disappointing, but not surprising. Many students are demonstrating learning gaps due to the COVID limitations place on their high schools. Because students benefit from in-person composition instruction, we are going to limit our online

offerings for ENG 101, encouraging student to pursue hybrid and traditional courses. The in-person courses allow for peer revision, which is a proven strategy to eliminate major errors in student writing.

Action Taken for Improvement: Composition classes have been moved back on campus for the most part. There are only two online sections of ENG 101 offered. Instructors are implementing additional opportunities for one-on-one feedback using required student conferences. Instructors are also implementing additional forms of accountability such as checklists and sign-off pages. see attached documents for examples

Student Learning Outcome 2: Speech

Students will demonstrate oral communication competencies using unity of thought and logical arrangement of ideas. This SLO focuses on effective oral communication skills in Public Speaking 107 using an oral speech rubric.

Assessment Results: The random sample of speech rubrics indicated that 90% of students met the benchmark for proficiency in the area of delivery verbal and non-verbal communication. Table 2 demonstrates the results of the oral communication SLO:

Table 2: Public Speaking 107

Academic Year	Mastery of Organization	Mastery of Verbal Interaction/ Body Language	Mastery of Use of Language	*Conclusion
2019-20	85%	84%	85%	N/A
2020-21	95%	25%	100%	90%
2021-22	N/A	90%**	N/A	90%

*Conclusion added to the assessment in 2020-21.

**Only assessing verbal citations and verbal/nonverbal communication in Speech

Use of Results: The data demonstrated that the majority of students met the benchmark for verbal and non-verbal communication. This indicates that faculty should continue to employ digital learning activities and further refine their instruction on speech delivery.

Action Taken for Improvement: The increased use of technology has supported both in-person and asynchronous students in understanding how to employ various speech delivery techniques. While the majority of students met the criteria there is an opportunity to implement active learning assignments to increase all student’s proficiency in the area of delivery verbal and non-verbal communication.

Student Learning Outcome 3: Math

Students will perform mathematical computations and apply mathematical principles and methodologies to be successful in their specific degree program. The mathematical skills are assessed in MTH 100 Intermediate College Algebra and MTH 112 Precalculus Algebra.

NOTE: The math curriculum was restructured based on the recommendation of the ACCS College Readiness Task Force to follow a co-requisite model to increase the number of students entering college-level math.

Based on the recommendation of the College Readiness Task Force, ACCS eliminated developmental math courses MTH080, MTH090, MTH091 and MTH 092. MTH 098 Elementary Algebra transitioned to a four-credit hour developmental math course. ACCS implemented a co-requisite learning support courses for Math 100 and Math 112 to support student success in these math courses. The math placement guidelines with the co-requisites MTH 099 and MTH 111 were offered beginning in fall 2019 (see Appendix for placement guidelines).

Math 100:

Students will be able to solve quadratic equations. This Student Learning Outcome (SLO) will focus on Q1 - solving quadratic equations with rational roots, Q2 – solving quadratic equations with irrational roots, and Q3 – solving quadratic equations with imaginary roots. Three common SLO questions will be included on the comprehensive final exam. The math department’s goal is 75% of the students taking the final exam will answer two out of three questions correctly.

Assessment Results:

Fall 2021 overall mastery was 56.3%.

- 169 students were enrolled in MTH 100 and 126 students took the final exam. Therefore, only 74.6% of the students took the exam.

Spring 2022 overall mastery was 44.1%.

- 87 students were enrolled in MTH 100 and 59 students took the final exam. Therefore, only 67.8% of the students took the exam.

Results for SLO questions:

- Question 1 - Fall 56.3% and Spring 33.9%
- Question 2 - Fall 54.8% and Spring 45.8%
- Question 3 - Fall 52.4% and Spring 50.8%
- Overall mastery - Fall 56.3% and Spring 44.1%

Table 3 reflects the percent of mastery for fall, spring and yearly percentages for MTH 100.

Table 3: MTH 100 Mastery

Academic Year	Fall Semester	Spring Semester	Academic Year Totals
2019-20	50%	86%	64%
2020-21	63%	56%	60%
2021-22	56%	44%	50%

Use of Results: Completed Mid-year review. The following adjustments were made in the Spring based on an analysis of the data collected.

- Instructors will provide more instruction on this learning outcome.
- Instructors will address skills on factoring, simplifying radicals, and the quadratic formula.

Action Taken for Improvement: Instructors provided more instruction on these objectives. Instructors allowed students to retest on this unit. More examples were used during class instruction. The quadratic

formula was given to the students on the final exam.

Math 112:

Students will be able to apply concepts of exponential and logarithmic functions. This Student Learning Outcome (SLO) will focus on Q1 - solving an exponential equation using the one-to-one property, Q2 – solving an exponential equation using logarithms, Q3 – solving an exponential equation with a base of e , Q4 – solving a basic logarithmic equation, and Q5 – solving a logarithmic equation requiring the product property of logarithms. Five common SLO’s questions will be included on the comprehensive final exam. The math department’s goal is 75% of the students taking the final exam will answer three out of five questions correctly.

Assessment Results:

Fall 2021 overall mastery was 52.5%.

- 83 students were enrolled in MTH 112 and 61 students took the final exam. Therefore, only 73.5% of the students took the exam.

Spring 2022 overall mastery was 64.8%.

- 149 students were enrolled in MTH 112 and 122 students took the final exam. Therefore, 81.9% of the students took the exam.

Results for SLO questions:

- Question 1 - Fall 60.7% and Spring 62.3%
- Question 2 - Fall 49.2% and Spring 68%
- Question 3 - Fall 54.1% and Spring 62.3%
- Question 4 - Fall 70.5% and Spring 76.2%
- Question 5 - Fall 18.0% and Spring 29.5%
- Overall mastery - Fall 52.5% and Spring 64.8%

Table 3 reflects the percent of mastery for fall, spring and yearly percentages for MTH 112.

Table 3: MTH 112 Mastery

Academic Year	Fall Semester	Spring Semester	Academic Year Totals
2019-20	55%	89%	77%
2020-21	63%	70%	66%
2021-22	53%	65%	59%

The math curriculum was restructured based on the recommendation of the ACCS College Readiness Task Force to follow a co-requisite model to increase the number of students entering college-level math. ACCS implemented a co-requisite learning support course, MTH111, to support student success in MTH 112. The co-requisite course, MTH111 was offered fall 2019 and had a pass-rate of 75%. (See Appendix for placement guidelines).

Use of Results: Completed Mid-year review. The following adjustments were made in the Spring based on an analysis of the data collected from fall.

- Instructors will provide more instruction on these objectives.

- Instructors will address skills on factoring.
- Instructors will add questions from this unit to tests on future units.

Action Taken for Improvement:

- Instructors provided more instruction on these objectives.
- Instructors addressed skills on factoring a trinomial when a is not equal to 1.
- If an instructor gave this assessment early in the semester, they added questions from this unit to subsequent tests.
- Instructors allowed students to retest on this unit.

MyLab Math will be used for homework assignments to include videos and other instructional material online. Students will be referred to the tutoring center for additional help with difficult concepts. The MTH111 co-requisite will continue to be offered to support students who meet the placement guidelines in both MTH 112 and MTH111.

Student Learning Outcome 4: Technology

Student will demonstrate knowledge of basic computer skills through the use of current computer technology and applications to develop computer literacy for academic setting and lifelong learning. The SLO is assessed in CIS146.

Assessment Results: Students completed the TestOut Office Pro certification exam that encompassed Microsoft Word, Excel, and PowerPoint. The average success rate for obtaining the TestOut Office Pro certification was 80% for fall 2021 and 77% for spring 2022 academic year. The overall scores the fall and spring is 78.5% which is slightly up from the 20/21 academic year. Overall Breakdown of individual application results Excel - 82.89% of students demonstrated competency Word - 83.89% of students demonstrated competency PowerPoint - 88.66% of students demonstrated competency. Table 5 gives an overall breakdown of application results in the course:

Table 5: CIS 146

Academic Year	Word	Excel	PPT	Overall
2019-20	75%	70%	76%	67%
2020-21	72%	68%	84%	76%
2021-22	84%	93%	89%	79%

Use of Results: The results indicate the number of students attempting the TestOut Office Pro certification exam increased from 166 to 227, a 7% increase from the 20/21 year. Pass rates for 21/22 increased by 1% over the previous academic year.

Action Taken for Improvement: Continue working with students closely to ensure they are prepared for the certification exam. Offer more in-person or virtual study sessions or tutoring sessions. CIS faculty will meet to discuss options for a new outcome goal in the 22/23 academic year.

CIS faculty will continue to promote the certification and the correlation of showing Microsoft Office

competencies to future employers. Additionally, faculty will incorporate the practice exam into the course and encourage student to complete it prior to taking the certification exam.

Student Learning Outcome 5: Science

Students will demonstrate scientific literacy through factual knowledge, understanding theoretical concepts, and fundamental principles in natural sciences and the application of scientific principles and methodologies to solve scientific problems.

The SLO assesses scientific knowledge in three courses: Chemistry 111, Biology 103, and Physical Science 111. All science courses are the first course in a science sequence. The general education science requirement is eight credit hours in a science laboratory course.

Chemistry 111

Assessment Results: The chemistry faculty established a 70% benchmark for mastery of the chemistry SLO. Only 60% or 12 out of 20 students successfully passed the standard stoichiometry question on the Cumulative Final Exam; therefore, the expected outcome was not met.

Use of Results: According to results, stoichiometry remains a challenging concept for CHM111 students. This suggests that additional instruction is needed to reinforce the concept throughout the course.

Action Taken for Improvement: Stoichiometry problems will be assigned in all four major units of CHM111. Frequent assessment will be utilized to monitor comprehension of stoichiometry throughout all units of the course.

Biology 103

Assessment Results: The biology faculty established a 70% mastery for the Biology 103 SLO. Data shows 52% of students were able to correctly identify the levels of taxonomy on the Biology 103 final exam.

Use of Results: Instructors will continue to discuss levels of taxonomy during teaching of classification and use the taxon names in discussion to help students identify the levels in order.

Action Taken for Improvement: Additional classification activities to identify the process used to group organisms into taxon and show how the taxon size changes from domain to species.

Physical Science 111

Assessment Results: The physical science instructor established a 70% mastery identified questions to demonstrate scientific literacy in physical science. Only 33% or 14 out of 43 students passed the assessment measure; therefore, the expected outcome was not met.

Use of Results: Assessment of the water-displacement skill was newly implemented this year in PHS 111 and results show that it has not been mastered by students. Results confirm that students require more reinforcement of this skill.

Action Taken for Improvement: Water-displacement and density problems will be increased in PHS 111 and frequent assessment will be employed to monitor progress throughout the duration of the course. Table 6 is a composite of the data collected for the Science general education SLOs:

Table 6: Science

Academic Year	Mastery of CHM111	Mastery of BIO103	Mastery of PHS111
2019-20	68%	58%	87%
2020-21	58%	60%	71%
2021-22	60%	52%	33%

Summary

The 2019-22 data has provided a road map for an in-depth analysis of the general education core competencies. The results are used to engage general education faculty in professional development that will focus on instructional and assessment strategies to improve student learning in general education courses. A thorough review of general education student learning outcomes with general education faculty was done to make needed modifications and identify professional development needs for faculty.

As the data reveals, students clearly mastered the technology student learning outcomes. Science General Education unit plans were rewritten for Fall 2021-Spring 2022 to increase the specificity needed to note areas of improvement more readily. There was improvement in Chemistry but not in Biology or Physical Science. For English General Education, modifications were made to assess only major errors. In Speech, only verbal citations and verbal/nonverbal communication was assessed. Percentage results remained the same in both English and Speech from the previous year. For Math, students did not attain mastery and results were down from the previous year.

It is expected that the 2021-2022 revisions to the unit plans will result in improvements in general education disciplines year-over-year to meet and surpass the established benchmarks.

APPENDIX