

Report of General Education Assessment 2018-2023

August 2023

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 summative composite of data collected from faculty assessments and random sampling of student's artifacts during the 2018-2023 Strategic Planning cycle.

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 identified traditional, online, and hybrid courses.
- 4. Annually, the assessment of the data takes place during fall and spring semesters.
- 5. Annually, the results from the assessments are entered in the College's Unit Plan platform for each area by the department chairs by the end of August.
- 6. Division meetings are held to discuss the results and determine needed changes, if need.
- 7. The division chairs enter the *Use of Results* in the Unit Plans and develop action plans for improvement.
- 8. If a change requires funding beyond the normal operating expenses for the department, a Budget Form B is completed the following spring.

College-Level General Education Student Learning Outcomes

CVCC assesses the 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 outcomes (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 for the writing SLO up until 2020-21 then only major errors for 2021-22 and 2022–23.

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 corequisite learning support course, ENG099, to support the student's success in English 101. Additionally, the newly developed placement guidelines were implemented (See Appendix A for Placement Guidelines).

<u>Assessment Results</u>: 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 sentences, sentence fragments, and subject/verb agreement errors. Table 1 reflects the data collected on the commission of major errors, minor errors, and documentation errors.

Table 1 ENG	101 a	nd ENG	102
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Academic Year	Commission of Major Errors	Commission of Minors Errors	Commission of Documentation Errors
2018-19	30%	89%	21%
2019-20	25%	65%	21%
2020-21	63%	86%	9%
2021-22	63%	*N/A	*N/A
2022-23	63%	*N/A	*N/A

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

<u>Use of Results</u>: Mid-year Review conducted-no changes. The fact that the percentages of major errors in ENG 101 held steady is encouraging as we've experienced increases in the percentage of major errors in years past. Because we have seen the number of errors hold steady, it is clear that students are benefiting from increased in-person classes and the peer revision that goes with it.

<u>Action Taken for Improvement:</u> Composition classes have been further moved on campus, reducing the number of online sections to one per semester. Instructors are continuing to grow opportunities for meaningful feedback through student conferencing and peer review opportunities. EdReady has been made available to all ENG students in order to address weaknesses in grammar and mechanics.

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.

<u>Assessment Results</u>: The random sample of speech rubrics indicated that 85% 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:

Academic Year	Mastery of Organization	Mastery of Verbal Interaction/ Body Language	Mastery of Use of Language	**Conclusion
2018-19	87%	85%	84%	N/A
2019-20	85%	84%	85%	N/A
2020-21	95%	25%	100%	90%
2021-22	*N/A	90%	*N/A	90%
2022-23	*N/A	85%	*N/A	85%

Table 2: Public Speaking 107

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

**Conclusion added to the assessment in 2020-21.

<u>Use of Results</u>: The data demonstrated that the majority of students met the benchmark for verbal and non-verbal communication. This indicated that faculty should continue to provide sample resources, refine instruction, and employ digital learning activities that are focused on delivery.

<u>Action Taken for Improvement</u>: The increased use of digital learning activities and sample videos has aided both hybrid and online learners in learning how to employ various speech delivery techniques in their presentations. While the majority of students met the criteria there is an opportunity to further focus on delivery so that all students can meet the benchmark of proficiency on their individual speech rubrics.

Student Learning Outcome 3: Math

Students will perform mathematical computations and apply mathematical principles and methodologies to be successful in their specific degree programs. 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 fourcredit 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 B 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:

Overall Mastery Results - Fall 2022 was 56% and Spring 2023 was 61.3%

- Completed Mid-Year Analysis and End of Year Analysis
- Question 1 Fall 64% and Spring 71.0%
- Question 2 Fall 60% and Spring 56.5%
- Question 3 Fall 49.3% and Spring 59.7%

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
2018-19	55%	55%	55%
2019-20	50%	86%	64%
2020-21	63%	56%	60%
2021-22	56%	44%	50%
2022-23	56%	61%	59%

<u>Use of Results</u>: Our students continue to struggle with fractions but there was an improvement from last year.

- Continue spending extra class time on this material.
- Emphasize simplifying fractions and radicals as a pre-requisite skill.
- Since our overall results were positive, we will continue our original plan.

Action Taken for Improvement:

- Spent extra class time on this material.
- Emphasized simplifying fractions and radicals as a pre-requisite skill.
- Students were allowed to retest if needed.
- Review sheets were provided and class time used to help with questions.

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:

Overall Mastery Results - Fall 2022 was 65.5% and Spring 2023 was 60.3%

- Question 1 Fall 58.6% and Spring 65.6%
- Question 2 Fall 65.5% and Spring 61.8%
- Question 3 Fall 69% and Spring 64.9%
- Question 4 Fall 75.9% and Spring 75.6%
- Question 5 Fall 22.4% and Spring 35.1%

Table 4 reflects the percent of mastery for fall, spring and yearly percentages for MTH 112.

Table 4: MTH 112 Mastery					
Academic Vear	Fall Somostor	Spring	Academic		
Academic real	i all Serriester	Semester	Year Totals		
2018-19	47%	67%	57%		
2019-20	55%	89%	77%		
2020-21	63%	70%	66%		
2021-22	53%	65%	59%		
2022-23	65%	60%	63%		

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 B for

placement guidelines).

Use of Results:

- Instructors need to address prerequisite skills of factoring and solving quadratics.
- Instructors need to incorporate more problems with more critical thinking skills.
- We will rearrange the scope and sequence of the course to spend more time on these difficult topics.

Action Taken for Improvement:

Instructors spent more time on the objectives for this unit to help students understand the material. We encouraged students to attend the Tutoring Center for extra help. Instructors used MyLab Math and the resources provided online.

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.

<u>Assessment Results</u>: Student completed labs, custom exams, and TestOut certification exam and demonstrated the skills for managing Microsoft Word, Excel, and PowerPoint. The average pass rates for students who completed the course with a B or above is 51% for Summer 2022, 41% for Fall 2022, and 52% for Spring 2023.

Table 5 shows the overall breakdown of application results in the course through 2022. Table 6 shows the average pass rate for the entire course which is the new measure of success.

Table 5: CIS 146

Academic Year	Word	Excel	PPT	Overall
2018-19	78%	68%	77%	66%
2019-20	75%	70%	76%	67%
2020-21	72%	68%	84%	76%
2021-22	84%	93%	89%	79%

Table 6: CIS 146

	Summer	Fall	Spring
	2022	2022	2023
Average pass rates	51%	41%	52%

<u>Use of Results</u>: The results indicate the number of students who obtained a B or above are well beyond the students who received C and D. This is the first year of this measure of success. Results will be compared annually.

<u>Action Taken for Improvement</u>: Continue working with students closely to ensure they are completing the assignments consistently. Offer more in-person or virtual study sessions or tutoring sessions.

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

<u>Assessment Results</u>: Nineteen of 30 students successfully passed the standard stoichiometry question on the Cumulative Final Exam across Fall and Spring semesters in the 2022-2023 Academic Year

<u>Use of Results</u>: According to results, stoichiometry remains a challenging concept for CHM111 students, but improvement was observed from Fall to Spring. This suggests that instructional improvements are working, but additional instruction is needed to reinforce the concept throughout the course.

<u>Action Taken for Improvement</u>: 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

<u>Assessment Results</u>: Students will be instructed on connections between levels of taxonomy from the domain down to the species level. The order of the levels will be recognized.

<u>Use of Results</u>: According to these results, students are not able to recognize the levels of taxonomy in order. This means each of the levels needs to be explored in more detail with multiple examples of organisms classified from Domain down to Species.

<u>Action Taken for Improvement:</u> More time will be spent on the levels of taxonomy and what their importance is for taxonomy and classification.

Physical Science 111

<u>Assessment Results</u>: PHS 111 students will be instructed on proper water-displacement technique to evaluate the density of an irregular-shaped object. Students will use appropriate laboratory instruments to collect data and report the density to an acceptable accuracy and precision.

<u>Use of Results</u>: Results show that students are still not mastering density determination and confirms that students need reinforcement of the skill.

<u>Action Taken for Improvement</u>: This course will no longer be taught at our institution, so the unit plan will not be continued. However, the results will be factored into the creation of unit plans for courses that replace PHS111.

Academic Year	Mastery of CHM111	Mastery of BIO103	Mastery of PHS111
2018-19	50%	54%	80%
2019-20	68%	58%	87%
2020-21	58%	60%	71%
2021-22	60%	52%	33%
2022-23	63%	51%	17%

Table 7: Science

Summary

The data reveals there were fluctuations in success rates for various General Education courses. In an effort to enhance and improve student outcomes in these key subjects, the College will continue to use a comprehensive approach that includes tailored instruction, active learning methodologies, continuous assessment practices, effective feedback mechanisms, and the provision of supplementary resources to facilitate effective external learning beyond the traditional classroom.

The Dean of Instruction along with Division Chairs responsible for reporting general education outcomes will continue to rely on data to make informed decisions to optimize learning experiences for students. The data can guide decisions on how classes should be offered (hybrid, traditional, virtual) and help the College continually assess the effectiveness of each modality in terms of student outcomes and engagement. Assessing the relationship between student performance, teaching effectiveness, as well as the need for curriculum overhaul involves a comprehensive analysis of academic performance data, student course evaluation tools, faculty teaching observation tools, and professional development.

Improving student outcomes will continue to be an ongoing process that requires collaboration among faculty, students, and institutional effectiveness.

APPENDIX

MODIFIED CVCC English Placement Chart (Effective Fall 2021) Take Next Generation/ Accuplacer Next Gen/ACC (Writing) ACT English Score HS GPA No No ≤ 5 years old? No \leq 5 years+old & \geq 17? \leq 5 years old & \geq 2.75 **ACT English Score** 1-16 will go to the Yes Yes Yes next screening level. A or B in C in ≥ 18 17 ≥5 4 0 - 3 **English IV** English IV ENG 101 ENG 099 & 101 ENG 101 ENG 099 & 101 ENR 098 ENG 101 ENG 099 & 101 Student's Name: _____ Student #: ____ HS GPA (Unweighted): _ HS English 12 Grade: ____ English placement is: ENG 101, ENG 099 (with ENG101), or ENR 098 Determined using: ACT, HS GPA, Accuplacer, or Next Gen Placement analyzed by: ___ Signature Date Revised 7/01/2021 SCA

Appendix B:

Math Placement Guideline (Effective Fall 2022)

MATH Placement Guidelines					
SC:	SCREENING LEVEL 1 SCREENING LEVEL 2			SCRE	ENING LEVEL 3
	ACT	High School GPA and Math Grade		ACCUPL	ACER Placement Test
Score*	Course Placement	GPA/Math Grade*	Course Placement	Score*	Course Placement
≤16	See SCREENING LEVEL 2	< 2.75 GPA	See SCREENING LEVEL 3	QAS 200-242	MTH 098
17	MTH 100 with MTH 099	> 2.75 (CDA 4.600) Made	MTH 100 with MTH 099	QAS	MTH 100 with MTH 099
= 17	MTH 110 with support	≥ 2.75 GPA and "C" in Math	MTH 110 with support	243-252	MTH 110 with support
	MTH 100		MTH 100	QAS 253-266	MTH 100
18-19	MTH 110	≥ 2.75 GPA and "A" or "B" in Math	MTH 110		MTH 110
	MTH 112 with support		MTH 112 with support		MTH 112 with support
				OAS	MTH 110
	HS Math Completed	Course P	lacement	267-300	MTH 112
	Alesher I	MTH	1100		•
	Algebra I	MTH110 w	ith support		
		MTH 110	MTH 231		
> 20	Algebra II	MTH 112	MTH 232		
≥ 20	Algeora II	MTH 113	MTH 265		
		MTH 115			
		MTH 110	MTH 125		
	Pre-Calculus	MTH 112	MTH 231		
	or Calculus	MTH 113	MTH 232		
	or curvatus	MTH 115	MTH 265		
		MTH 120			

*Scores may be used for placement up to five years from the date of test. Math grade and GPA may be used for placement up to five years from the high school graduation date. Math grade must be from Algebra II, <u>Elements of College Math</u>, Algebra II with Trigonometry, Pre-Calculus, or Calculus.