Report on General Education Assessment 2023 – 2025

CHATTAHOOCHEE VALLEY COMMUNITY COLLEGE

General Education Assessment Report 2023–2025

Prepared by:

Division of Strategic Initiatives
Dr. RoseMary Watkins, Director
SACSCOC Institutional Liaison

Report Cycle:

Strategic Planning Cycle 2023–2028
(First Two-Year Results: 2023–2025)

Date:

August 2025

Preface

This report provides a comprehensive review of General Education outcomes at Chattahoochee Valley Community College for the first two years of the 2023–2028 Strategic Planning cycle. It is designed to present results in multiple layers:

- A **Dashboard Performance Summary** gives a visual overview of outcomes across the five General Education learning areas.
- A **Dean's Summary** offers academic leadership perspective on the results and faculty engagement in the assessment process.
- A **DSI Analysis Summary** provides an institutional view, highlighting strengths, concerns, and themes for continuous improvement in alignment with strategic planning and accreditation.
- Finally, detailed **Xitracs Program Reports** supply the supporting evidence and course-level analyses.

Table of Contents

CVCC Report on General Education Assessment: General Education Outcomes Dashboard & Analysis Summaries (2023–2025)

Introduction and Assessment Process

General Education courses at CVCC help ensure a broad background of various academic disciplines and help to prepare students to pursue additional education and perform more effectively in the workplace. In addition, General Education courses help students begin to think critically about the world around them and engage in critical thought and synthesis, which will not only better prepare them for their ultimate academic goals but better prepare them to be well-rounded contributors to society in general. General Education courses do not narrowly focus on skills, techniques, and/or procedures of a specific occupation or profession. General Education core requirements for AA, AS, and AAS degrees adhere and align to common and acceptable practices within Higher Education.

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 2023-2028 Strategic Planning cycle. The headings have been revised to align with the new Xitracs System format.

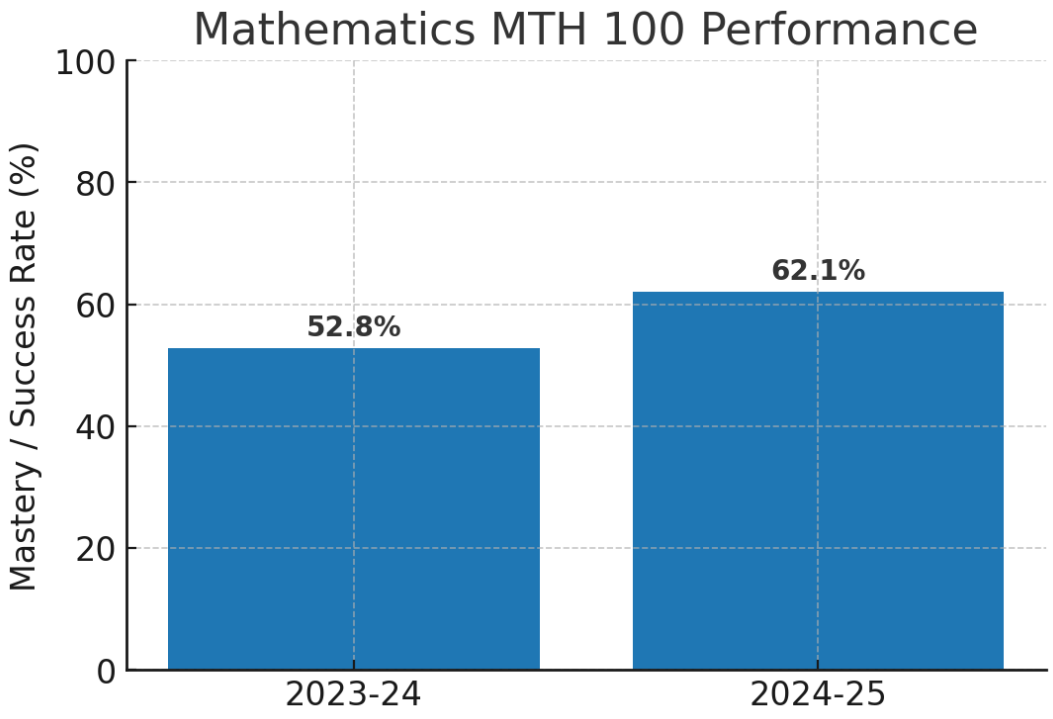
Each fall, division chairs begin the process of creating a general education portfolio for CVCC. The process is as follows:

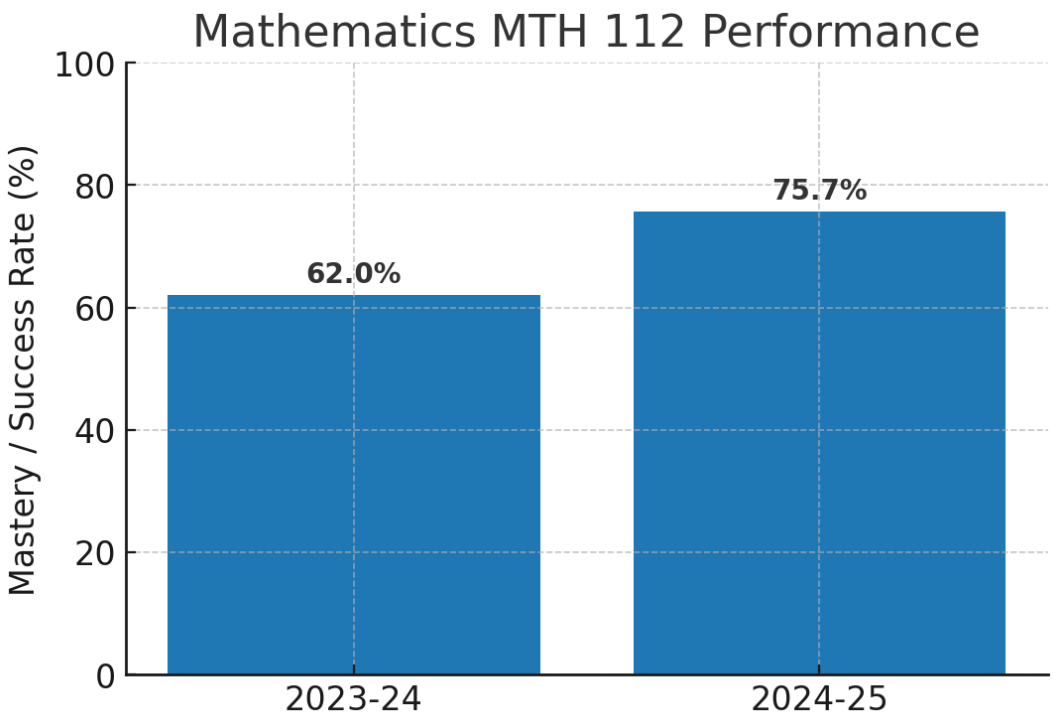
1. Annually, the five-general education/associate degree outcomes (Writing, Speech, Math, Science, and Technology) are assessed.
2. In the fall, department chairs meet with faculty to ensure there is agreement on the identified student learning outcomes (SLOs) and assessment tools that are in place.
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 needed.
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 request is completed the following spring.

Dashboard Performance Summary (2023–2025)

Mathematics

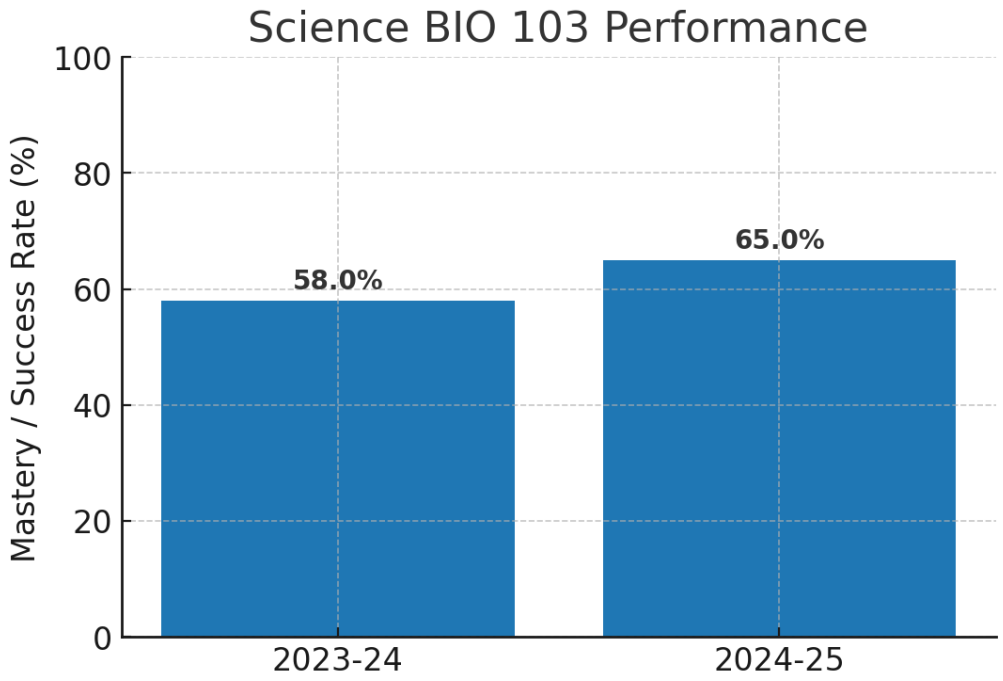
- **MTH 100 (Quadratic Equations):**
  Mastery improved from **52.8% (2023–24)** to **62.1% (2024–25)**. While progress is evident, the 75% benchmark was not met. Persistent struggles remain with factoring, quadratic formula use, and simplifying radical/complex fractions. Attendance and retention also limited overall performance.
- **MTH 112 (Logarithmic/Exponential Equations):**
  Results improved from **62% mastery (2023–24)** to **75.7% (2024–25)**, meeting the benchmark overall. However, performance still lags on specific items—especially complex logarithmic problems (Question 5, only 38.1% mastery).
- **Overall Analysis:** Math demonstrates steady improvement, particularly in MTH 112, where targeted instruction and tutoring support appear effective. However, foundational algebra skills remain a systemic challenge, and engagement/retention issues persist.

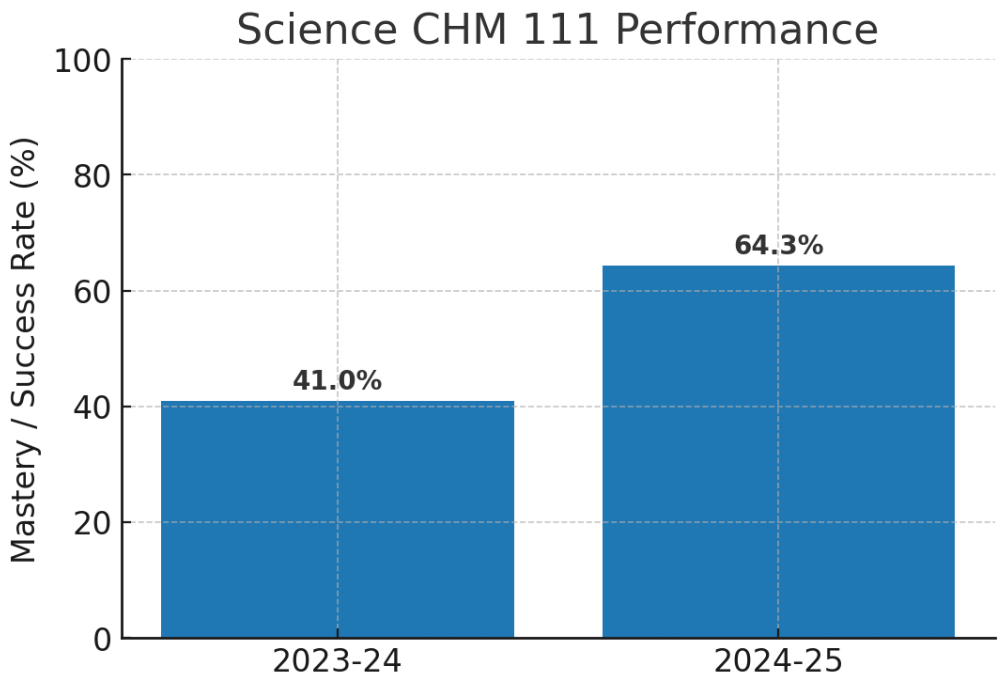


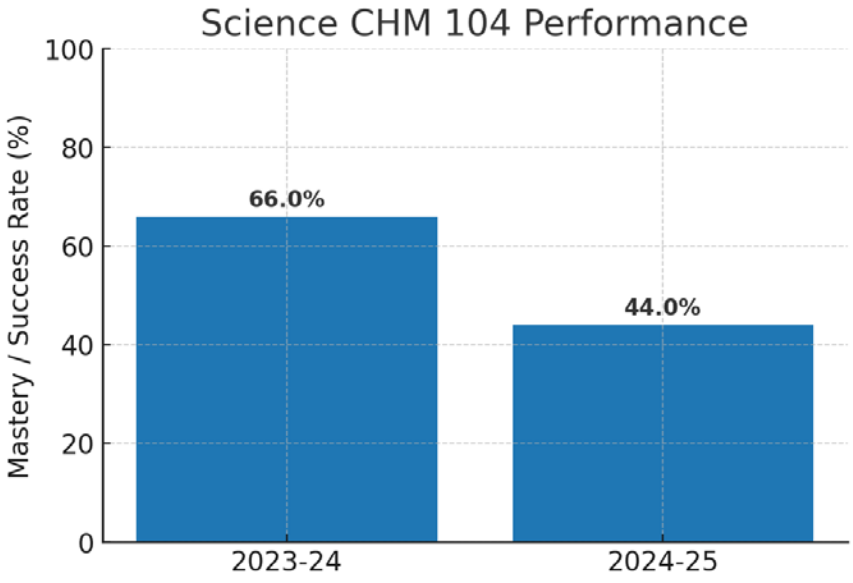

Mathematics MTH 112 Performance
Mastery / Success Rate (%)
100
80
60
40
20
0
62.0%
75.7%
2023-24
2024-25

Science

- **Biology 103:** Results improved from **58% (2023–24)** to **65% (2024–25)**, but both years fell short of the 70–75% benchmarks.
- **Chemistry 111:** Outcomes remained low—**41% (2023–24)** and **64.3% (2024–25)**—still not meeting expectations.
- **Chemistry 104:** Performance declined, from **66% (2023–24)** to **44% (2024–25)** mastery. Stoichiometry and problem-solving skills continue to be key challenges.
- **Overall Analysis:** Science consistently failed to meet benchmarks, with particular weakness in chemistry. While Biology showed incremental progress, Chemistry outcomes highlight deeper instructional and student preparation issues. Additional instructional time, problem-solving practice, and structured tutoring are needed.

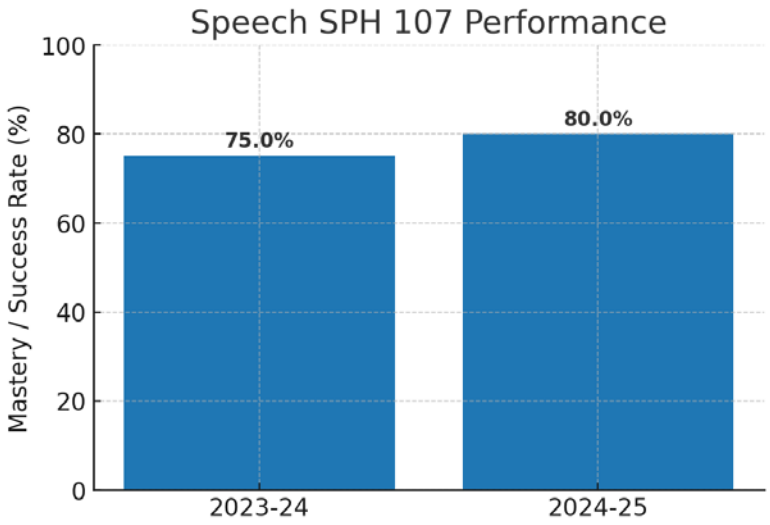



Science CHM 111 Performance
Mastery / Success Rate (%)
100
80
60
40
20
0
41.0%
64.3%
2023-24
2024-25


Science CHM 104 Performance
Mastery / Success Rate (%)
100
80
60
40
20
0
66.0%
44.0%
2023-24
2024-25

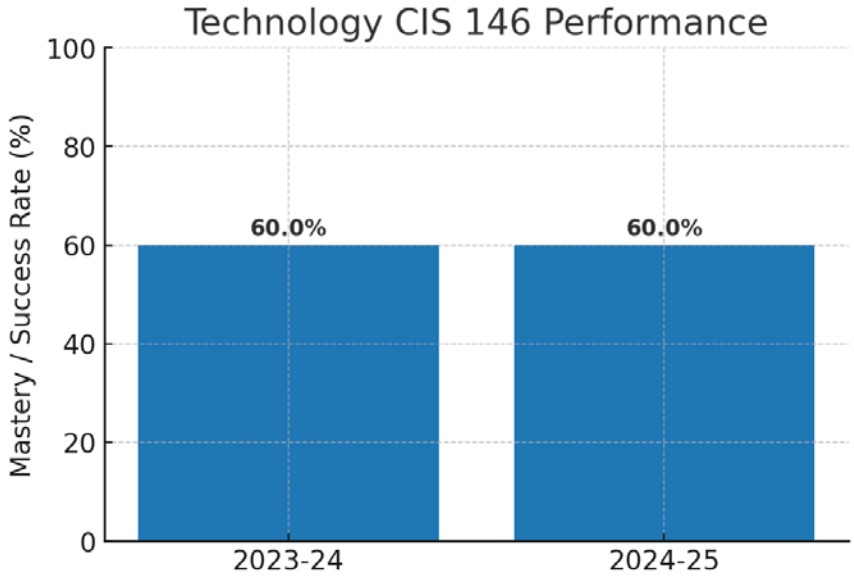
Speech

- **SPH 107 (Informative Speech Rubric):**
  Proficiency was **75% in 2023–24** and improved to **80% in 2024–25**, consistently exceeding the 60% benchmark.
- **Overall Analysis:** Speech is a program strength. Results improved slightly in the second year, with in-person delivery and additional online instructional support contributing to stronger outcomes. The variance between online and in-person students highlights the need for continued resource development for online learners.



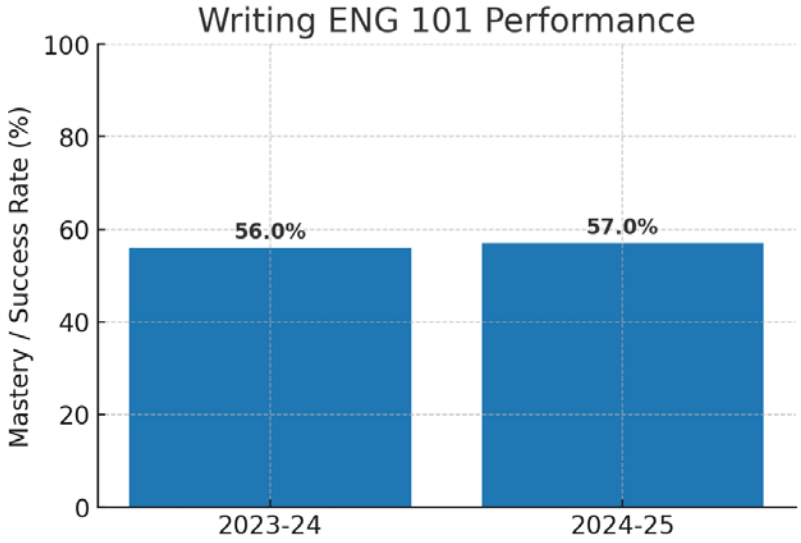
Technology

- **CIS 146 (Microsoft Applications / TestOut Exam):**
  In both years, outcomes hovered around **60% achieving A or B**, far below the 75% benchmark. No significant improvement occurred between 2023–24 and 2024–25.
- **Overall Analysis:** Technology is underperforming with persistent low mastery. Few classes exceeded the 60% threshold, suggesting that students struggle broadly with applied computer skills and certification exam preparation. Stronger use of practice exams, targeted lab support, and perhaps curriculum restructuring will be necessary to raise outcomes.



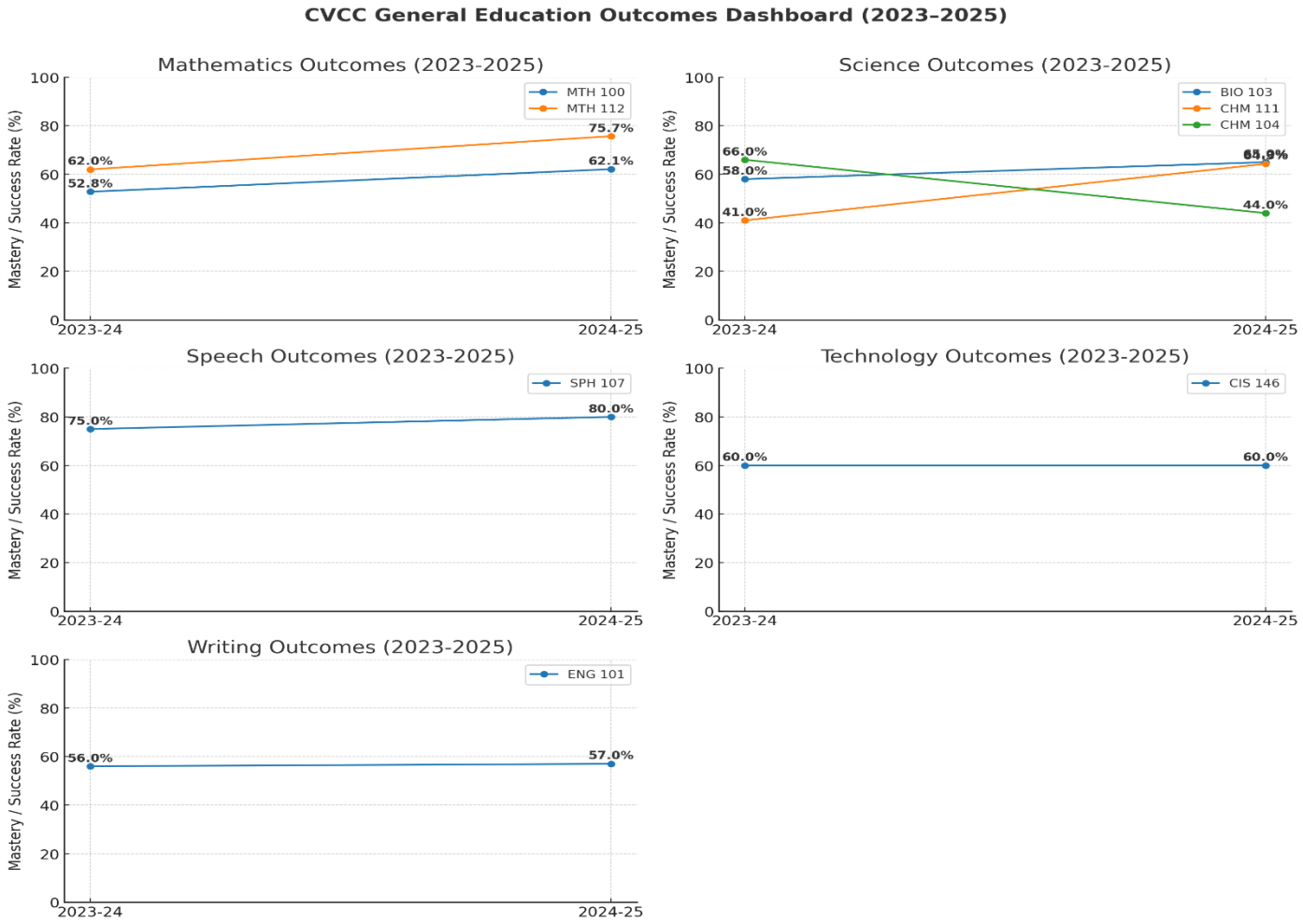
Writing

- **ENG 101 (Essay 4 Major Errors):**
  Performance improved over the two years: from **56% error-free (2023–24)** to **43% with major errors (2024–25)**—a **14% improvement**. Despite gains, results remain well below the 70% benchmark.
- **Overall Analysis:** Writing outcomes show encouraging downward trends in major errors, suggesting that enhanced peer review, tutoring, and in-person supports are effective. Still, student writing proficiency remains below expectations, reflecting reduced prior writing preparation and the need for continued instructional scaffolding.



Combined Program Analysis

- **Strengths:** Speech is consistently above benchmarks, while Math shows meaningful progress, especially in MTH 112. Writing outcomes demonstrate encouraging improvement trends.
- **Challenges:** Science and Technology consistently fail to meet benchmarks, with Chemistry and CIS courses representing the largest gaps. Math 100 remains below the desired standard despite improvement.
- **Themes:**
    - Foundational skills (algebra, scientific problem-solving, writing mechanics, applied computer skills) remain the biggest challenge areas.
    - Attendance, retention, and student preparedness strongly influence outcomes.
    - Interventions such as tutoring, peer review, and practice exams show some effectiveness but require broader, systematic application.



Dean's Analysis Summary:

Mathematics

Overall Findings

- Steady improvement across math courses
- MTH 112 success linked to targeted instruction + tutoring
- Foundational algebra weaknesses persist, limiting MTH 100 outcomes
- Engagement and retention remain significant challenges

Recommended Next Steps

- Expand tutoring and supplemental instruction for algebra fundamentals
- Provide faculty development on strategies for algebra readiness
- Strengthen early alert and retention strategies for attendance/persistence
- Scale up successful interventions from MTH 112 to MTH 100

Science

Overall Findings

- Science outcomes remain below benchmarks across all courses.
- Biology shows incremental progress, suggesting strategies are helping but need reinforcement.
- Chemistry is the most pressing concern, with inconsistent results and steep declines in Chemistry 104.
- Instructional gaps, student preparation levels, and limited problem-solving practice are recurring issues**.**

Recommended Next Steps

1. Enhance Instructional Support
    - Integrate more class time on stoichiometry, problem-solving, and applied practice.
    - Expand use of active learning strategies (labs, problem-based learning).
2. Strengthen Tutoring and Supplemental Instruction
    - Provide structured, mandatory tutoring for at-risk Chemistry students.
    - Implement peer-led study groups to reinforce difficult concepts.
3. Faculty Development
    - Offer targeted professional development on teaching complex problem-solving and supporting underprepared students.
4. Student Preparation and Retention
    - Establish diagnostic assessments to identify math/science readiness early.
    - Strengthen early alert and intervention systems to address attendance and persistence barriers.

Speech

Overall Findings

Speech is a program strength, with student outcomes exceeding benchmarks for two consecutive years.

- Continued improvement in 2024–25 demonstrates the effectiveness of targeted instructional support.
- Online students underperform compared to in-person learners, suggesting gaps in engagement and access to resources.

Recommended Next Steps

1. Expand Online Support
    - Develop additional digital resources and interactive modules tailored to online learners.
    - Increase access to virtual workshops and speech practice sessions.
2. Leverage In-Person Success Strategies
    - Adapt high-impact classroom practices for online and hybrid formats.
    - Use recordings of model speeches as examples for online students.
3. Faculty Collaboration & Training
    - Share best practices among faculty for building student confidence and presentation skills.
    - Provide professional development on online communication pedagogy.

4. Monitor Variance
    - Continue disaggregating results by delivery format to measure progress in narrowing the gap

Technology

Overall Findings

- Technology outcomes are underperforming, with persistent low mastery across CIS 146.
- Few sections exceeded the 60% success threshold, indicating systemic gaps in applied computer skills and exam readiness.
- Performance suggests that current instructional and assessment strategies are not adequately supporting student mastery.

Recommended Next Steps

1. Strengthen Exam Preparation
    - Expand use of practice exams, review sessions, and test-taking strategies.
    - Integrate low-stakes assessments to build familiarity with certification-style questions.
2. Enhance Lab-Based Learning
    - Increase structured, hands-on lab activities for applied skills practice.
    - Provide guided practice time with instructor or tutor support.
3. Curriculum Review and Alignment
    - Evaluate CIS 146 curriculum for alignment with certification exam expectations.
    - Consider modular restructuring to focus on skill mastery before advancing.
4. Targeted Student Support
    - Implement early intervention strategies for students struggling in the first few weeks.
    - Expand peer tutoring and supplemental instruction focused on applied computer skills.

English

Overall Findings

- Writing outcomes show an encouraging reduction in major errors, reflecting positive impact from peer review, tutoring, and in-person supports.
- Despite gains, overall writing proficiency remains below expectations, suggesting students enter ENG 101 with insufficient prior preparation.
- Continued emphasis on instructional scaffolding and early skill development is needed to close the gap.

Recommended Next Steps

1. Expand Writing Support
    - Increase availability of writing center tutoring and integrate required visits for at-risk students.
    - Strengthen peer review workshops with structured rubrics.
2. Curriculum and Instructional Strategies
    - Provide faculty training on scaffolding complex writing tasks.
    - Incorporate incremental writing assignments that build toward major essays.
3. Early Preparation and Intervention
    - Pilot a writing readiness diagnostic for incoming students to identify gaps before ENG 101.
    - Offer supplemental writing labs or co-requisite support courses for students with lower placement indicators.
4. Ongoing Monitoring
    - Track progress on error reduction trends annually.
    - Disaggregate results by delivery method (online vs. in-person) to target additional support where needed.

DSI Analysis Summary

Strengths:

- Speech exceeded benchmarks both years, improving from 75% to 80%.
- Mathematics (MTH 112) achieved benchmark mastery in 2024–25.
- Writing outcomes improved, with fewer major errors in ENG 101 essays.

Challenges:

- Science remained below benchmarks; Chemistry was particularly weak.
- Technology (CIS 146) plateaued at 60%, below the 75% target.
- Mathematics (MTH 100) improved but still below expectations.

Key Themes for Continuous Improvement:

- Foundational skills remain the largest barrier across math, science, writing, and technology.
- Student engagement, retention, and preparedness strongly influence results.
- Tutoring, peer review, and practice exams show promise but need wider adoption.
- Strengthening online supports is critical to ensuring equitable outcomes.

Conclusion:

While strengths are evident in Speech and improvement is seen in Math and Writing, Science and Technology outcomes highlight areas requiring greater focus in the next three years.

Xitracs Programs Report
Mathematics Gen Ed (107.1.c) [107.1.c]
Science Gen Ed (107.1.e) [107.1.e]
Speech Gen Ed (107.1.b) [107.1.b]
Technology Gen Ed (107.1.d) [107.1.d]
Writing Gen Ed (107.1.a) [107.1.a]

Program Name: Mathematics Gen Ed (107.1.c) [107.1.c]
Program Cycle: #1 Aug 1, 2023 to Jul 31, 2024

5 Expected Outcome 23-24_107.1.c_E01

Students who complete a General Education Program will be able to solve a quadratic equation at 60% accuracy.
75% of the students taking MTH 100 Intermediate College Algebra will be able to solve 3 our of 5 quadratic equations on the departmental final exam.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

SLO 5: Solving Quadratic Equations
Total students enrolled: 253
Total students taking the exam: 159 (62.8%)
Q1: 42.8% (Solve a quadratic equation using the square root property)
Q2: 57.9% (Solve a quadratic equation by factoring)
Q3: 51.6% (Solve a quadratic equation with rational roots)
Q4: 58.5% (Solve a quadratic equation with irrational roots)
Q5: 47.2% (Solve a quadratic equation with imaginary roots)
Mastery in the Fall was 49.5% (46 out of 93) and Spring was 57.6% (38 out of 66)
Overall Mastery was 52.8% (84 out of 159)

MTH 100 Data Table Fall 2023 - Spring 2024 Yearly [XLSX 13 KB JUN 20, 2025]

MTH 100 SLOs Fall 2023 - Spring 2024 [DOCX 26 KB JUN 20, 2025]

MTH100 Final Exam SLO Questions FALL 2023-Spring 2024 [PDF 278 KB JUN 20, 2025]

5.9 Analysis of Results

There was an increase in mastery on questions 1, 3, 4, and 5 and a slight decrease on question 2 from fall to spring. Students are struggling to solve quadratic equations by factoring, using the quadratic formula, and the square root property. Attendance and retention continue to be a problem in these classes.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

Not applicable

5.10 Use of Results for Continuous Improvement

The department will continue to use MyLab Math homework assignments. Instructors will include factoring on each subsequent test. Students will be referred to the Tutoring Center for remediation and SENSE for success coaching as determined by the instructor. The department will meet and development a plan of instruction for next year to include departmental tests and a final exam.

6 Expected Outcome 23-24_107.1.c_E02

Students who complete a General Education Program will be able to solve a logarithmic and exponential equation at 60% accuracy.
75% of the students taking MTH 112 Precalculus Algebra will be able to solve 3 out of 5 logarithmic and exponential equations on the departmental final exam.

6.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

6.8 Actual Results

SLO 3: Apply concepts of exponential and logarithmic functions
Total students enrolled fall and spring: 199
Total students taking the exam fall and spring: 163 (81.9%)
Q1: 62.0% (Solve an exponential equation using the one-to-one property)
Q2: 62.0% (Solve a basic exponential equation)
Q3: 58.9% (Solve a basic exponential equation with a base of e)
Q4: 73.6% (Solve a basic logarithmic equation)
Q5: 33.1% (Solve a logarithmic equation requiring the product property of logarithms)
Mastery in the Fall was 67.8% (40 out of 59) and Spring was 58.7% (61 out of 104)
Overall Mastery was 62.0% (101 out of 163)

MTH 112 Data Table Fall 2023 - Spring 2024 Yearly [XLSX 13 KB JUN 20, 2025]

MTH 112 SLOs Fall 2023 - Spring 2024 [DOCX 24 KB JUN 20, 2025]

MTH112 Final Exam SLO Questions Fall 2023 with answers [PDF 191 KB JUN 20, 2025]

6.9 Analysis of Results

There was a slight increase in the overall mastery from last year. Last year Fall was 65.5%, Spring was 60.3%, and Overall Mastery was 61.9%. Students continue to struggle with solving logarithmic and exponential equations. We did not meet our 75% mastery on any of the questions this academic year. Question 4 was our highest at 73.6%. Question 5 continues to be our lowest percentage of mastery of 33.1%. This question requires solving a quadratic equation either by factoring or the quadratic formula, both skills that were originally learned in a previous math course. Not all students take our MTH 100 Intermediate College Algebra course due to placement. Students seem to have an issue with solving a more complex problem that requires previously learned skills.

6.9.1 Outcome Met or Not Met

Not Met

6.9.1.1 In Progress Explanation

Not applicable

6.10 Use of Results for Continuous Improvement

The department will meet and development a plan of instruction for next year to include departmental tests and a final exam. Instructors will refer students to the Tutoring Center for remediation for those students that did not take our MTH 100 Intermediate College Algebra course and were placed into the MTH 112 course. Therefore, they can work on pre-requisite skills needed to succeed in this course. Instructors will spend extra class time covering this material.

Program Name: Mathematics Gen Ed (107.1.c) [107.1.c]
Program Cycle: #2 Aug 1, 2024 to Jul 31, 2025

5 Expected Outcome 24-25_107.1.c_E01

Students who complete a General Education Program will be able to solve a quadratic equation at 60% accuracy.
75% of the students taking MTH 100 Intermediate College Algebra will be able to solve 3 out of 5 quadratic equations on the departmental final exam.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

SLO 5: Solving Quadratic Equations
Total students enrolled: 278
Total students taking the exam: 169 (60.8%)
Q1: 50.3% (Solve a quadratic equation using the square root property)
Q2: 58.6% (Solve a quadratic equation by factoring)
Q3: 52.1% (Solve a quadratic equation with rational roots)
Q4: 62.1% (Solve a quadratic equation with irrational roots)
Q5: 54.4% (Solve a quadratic equation with imaginary roots)
Mastery in the Fall was 62.7% (52 out of 83) and Spring was 61.6% (53 out of 86)
Overall Mastery was 62.1% (105 out of 169)

MTH 100 Data Table 24-25 Yearly [XLSX 20 KB JUN 24, 2025]

MTH 100 SLOs Fall 2024 - Spring 2025 [DOCX 23 KB JUN 24, 2025]

MTH100 Final Exam SLO Questions FALL 2024-Spring 2025 [PDF 278 KB JUN 24, 2025]

5.9 Analysis of Results

There was a modest increase in mastery across all assessment questions. Overall student mastery improved from 52.8% in the previous year to 62.1%, indicating positive progress. However, students continue to demonstrate gaps in foundational algebraic skills, particularly in solving quadratic equations.

Itemized Analysis:

- **Question 1:**
  Students demonstrated an understanding of the square root property, but many failed to include both the positive and negative solutions, which are required when taking the square root of both sides of an equation.
- **Question 2:**
  Common errors included selecting an inappropriate method to solve the equation, failing to first set the equation equal to zero, or making sign errors when factoring.

- **Question 3:**
  Students generally applied the quadratic formula correctly, but many did not fully simplify their answers to fractional form, resulting in incomplete or partially correct responses.
- **Question 4:**
  Difficulties arose with simplifying both the radical and the final fractional expression. Students often struggled to correctly reduce or rationalize radical expressions involving fractions.
- **Question 5:**
  This item proved especially challenging. It required students to simplify a radical expression involving a negative number and then simplify the resulting fraction. Multiple types of errors were observed, including incorrect treatment of negative radicands and improper simplification of complex fractions.

Despite the overall improvement in scores, students continue to struggle with solving quadratic equations using factoring, the quadratic formula, and the square root property. These persistent difficulties indicate a need for reinforced instruction and targeted practice in these core areas. Attendance and student retention remain significant concerns. Only 63% of enrolled students completed the final exam, which may have impacted overall performance data and suggests the need for interventions to improve course engagement and completion rates.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

Not applicable

5.10 Use of Results for Continuous Improvement

The math department did not meet the expected performance benchmarks for this Student Learning Outcome (SLO) from the previous year. In response, a multi-tiered plan of intervention and curriculum adjustment will be implemented to address the identified gaps.

Instructional Response:

- Instructors will incorporate additional graded worksheets and low stake quizzes specifically targeting this SLO to reinforce student understanding prior to the upcoming unit test and the final examination.
- Class time will be restructured to allow for more in-depth coverage and guided practice related to this objective. Instructors will place a stronger instructional emphasis on the underlying concepts and skills where students demonstrated difficulty.

Curricular Adjustments:

- The department will review and revise the scope and sequence of this topic within the course curriculum for the following academic year. The goal is to introduce the content earlier or allow more time for instruction and practice, based on data analysis of student performance trends.

Student Support Strategies:

- Students will be strongly encouraged to utilize academic support resources, including the campus Tutoring Center.
- Instructors will promote and expand access to office hours, with particular emphasis on offering targeted support to students struggling with this SLO.
- Communication with students will stress the importance of early intervention and consistent engagement with available academic support services.

This action plan reflects the department’s commitment to continuous improvement in instructional effectiveness and student achievement.

6 Expected Outcome 24-25_107.1.c_E02

Students who complete General Education Program will be able to solve a logarithmic and exponential equation at 60% accuracy.
75% of the students taking MTH 112 Precalculus Algebra will be able to solve 3 out of 5 logarithmic and exponential equations on the departmental final exam.

6.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

6.8 Actual Results

SLO 3: Apply concepts of exponential and logarithmic functions
Total students enrolled fall and spring: 203
Total students taking the exam fall and spring: 181 (89.2%)
Q1: 77.3% (Solve an exponential equation using the one-to-one property)
Q2: 69.1% (Solve a basic exponential equation)
Q3: 70.2% (Solve a basic exponential equation with a base of e)
Q4: 82.3% (Solve a basic logarithmic equation)
Q5: 38.1% (Solve a logarithmic equation requiring the product property of logarithms)
Mastery in the Fall was 75.0% (84 out of 112) and Spring was 76.8% (53 out of 69)
Overall Mastery was 75.7% (137 out of 181)

MTH 112 Data Table Yearly [XLSX 20 KB JUN 20, 2025]

MTH 112 SLOs Fall 2024 - Spring 2025 [DOCX 16 KB JUN 20, 2025]

MTH112 Final Exam SLO Questions Fall 2024-Spring 2025 (Long) [PDF 254 KB JUN 20, 2025]

6.9 Analysis of Results

Students continue to experience difficulty with solving logarithmic and exponential equations, despite an overall improvement in mastery compared to the previous year. Performance increased on all Student Learning Outcome (SLO) questions from the previous year, indicating progress in overall comprehension. Specifically, students met the 75% benchmark on Questions 1 and 4 only.
Although overall mastery for this SLO reached the 75% benchmark, our goal is to achieve at least 75% mastery on each individual question, not just the combined average across all five questions. Currently, Questions 2, 3, and 5 fall below this target and require focused attention:

- Question 2: Solving a basic exponential equation
- Question 3: Solving a basic exponential equation with a base of *e*
- Question 5: Solving a logarithmic equation requiring use of the product property of logarithms

Question 5 remains a particular concern. While there was a modest improvement on Question 5—from 33.1% to 38.1%—performance on this item remains significantly below average. and the lowest of all items. Question 5 is particularly challenging because it requires the integration of multiple skills, as well as accurate interpretation of the final solution. It requires conceptual understanding of logarithmic properties, and it continues to challenge a significant number of students. Prerequisite skills are taught in an earlier math course; however, not all students complete that course due to placement variations. As a result, some students may be able to complete the procedural steps correctly but fail to interpret the final answer accurately, which negatively impacts overall performance.

6.9.1 Outcome Met or Not Met

Met

6.9.1.1 In Progress Explanation

Not applicable

6.10 Use of Results for Continuous Improvement

The department has developed standardized unit tests and a common final exam to improve consistency and alignment across all sections. While we successfully met our overall goal for the Student Learning Outcome (SLO) related to solving logarithmic and exponential equations, continued efforts are needed to strengthen student performance on individual assessment items.

Instructional Response:

- Instructors will incorporate additional graded worksheets and quizzes specifically targeting this SLO to reinforce student understanding prior to the upcoming unit test and the final examination.
- Class time will be restructured to allow for more in-depth coverage and guided practice related to this objective. Instructors will place a stronger instructional emphasis on the underlying concepts and skills where students demonstrated difficulty. More emphasis will be placed on conceptual understanding, procedural fluency, and correct interpretation of results, particularly for the more complex items.

Curricular Adjustments:

- The department will review and revise the scope and sequence of this topic within the course curriculum for the following academic year. The goal is to introduce the content earlier or allow more time for instruction and practice, based on data analysis of student performance trends.
- Data collection and analysis will continue to monitor progress on individual questions and inform instructional adjustments.

Student Support Strategies:

- Students will be strongly encouraged to utilize academic support resources, including the campus Tutoring Center.
- Instructors will promote and expand access to office hours, with particular emphasis on offering targeted support to students struggling with this SLO.
- Communication with students will stress the importance of early intervention and consistent engagement with available academic support services.

This action plan reflects the department’s commitment to continuous improvement in instructional effectiveness and student achievement. This targeted approach aims to raise performance on each SLO item and ensure that students are consistently mastering all required skills.

Program Name: Science Gen Ed (107.1.e) [107.1.e]
Program Cycle: #1 Aug 1, 2023 to Jul 31, 2024

5 Expected Outcome 2023-2024_107.1e_E01

Students who complete General Education Program will be able to apply biological principles and methodology to solving biological problems at 70% accuracy. 75% of students will be able to correctly solve 10 of 14 biological problems on the cumulative final exam.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results 2023-2024_107.1e_E01

101 out of 174 students successfully passed 10 out 14 questions on the cumulative final exam.

Unit_Plan_Data_BIO 103 Final Exam (1) [PDF 191 KB MAY 6, 2025]

5.9 Analysis of Results 2023-2024_107.1e_E01

Only 58% of BIO103 passed the assessment therefore, the expected outcome was not met.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation 2023-2024_107.1e_E01

Not applicable

5.10 Use of Results for Continuous Improvement 2023-2024_107.1e_E01

More time in the lecture portion of the class will be dedicated to solving biological problems.

6 Expected Outcome 2023-2024_107.1.e_EO2

Students who complete General Education Program will be able to apply scientific principles and methodology to solving chemistry problems at 70% accuracy. 75% of students will be able to correctly solve 6 of 8 chemistry problems on the cumulative final exam for CHM 111.

6.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome

CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

Institutional Goal 1
To offer high-quality educational programs.

6.8 Actual Results 2023-2024_107.1e_E02

11 out of 27 students successfully passed the assessment questions on the Cumulative Final Exam.

6.9 Analysis of Results 2023-2024_107.1e_E02

Only 41% of CHM111 passed the assessment, therefore, the expected outcome was not met.

CHM111 Unit Plan Data 2023_2024 [PDF 132 KB MAY 6, 2025]

6.9.1 Outcome Met or Not Met

Not Met

6.9.1.1 In Progress Explanation 2023-2024_107.1e_E02

Not applicable

6.10 Use of Results for Continuous Improvement 2023-2024_107.1e_E02

More time in the classroom will be dedicated to solving chemistry problems.

7 Expected Outcome 2023-2024_107.1e_E03

Students who complete General Education Program will be able to apply scientific principles and methodology to solving chemistry problems at 75% accuracy. 75% of students will be able to correctly solve 10 of 14 chemistry problems on the cumulative final exam in CHM 104.

7.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures 2023-2024_107.1e_E03

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

Institutional Goal 1
To offer high-quality educational programs.

7.8 Actual Results 2023-2024_107.1e_E03

21 out of 32 students successfully passed the standard stoichiometry question on the Cumulative Final Exam.

CHM104 Unit Plan Data 2023_2024 [PDF 134 KB MAY 6, 2025]

7.9 Analysis of Results 2023-2024_107.1e_E03

66 % of CHM104 passed the standard stoichiometry question, therefore, the expected outcome was not met.

7.9.1 Outcome Met or Not Met

Not Met

7.9.1.1 In Progress Explanation 2023-2024_107.1e_E03

Not applicable

7.10 Use of Results for Continuous Improvement 2023-2024_107.1e_E03

More time for problem-solving will be dedicated in the classroom and in online tutorials.

Program Name: Science Gen Ed (107.1.e) [107.1.e]
Program Cycle: #2 Aug 1, 2024 to Jul 31, 2025

5 Expected Outcome 2024-2025_107.1.e_EO1

Students who complete General Education Program will be able to apply biological principles and methodology to solving biological problems at 75% accuracy. 75% of students will be able to correctly solve 10 of 14 biological problems on the cumulative final exam.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures 2024-2025_107.1.e_EO1

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

Institutional Goal 2
To provide diverse educational and support programs that promote student success.

5.8 Actual Results 2024-2025_107.1.e_EO1

79 out of 121 students successfully passed 10 out 14 questions on the cumulative final exam.

BIO 103 Final Exam Final Dataset 2024-2025 [PDF 181 KB MAY 8, 2025]

5.9 Analysis of Results 2024-2025_107.1.e_EO1

65% of students successfully passed the questions on the final exam, which means the expected outcomes were not met.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation 2024-2025_107.1.e_EO1

Not applicable

5.10 Use of Results for Continuous Improvement 2024-2025_107.1.e_EO1

More time in the lecture portion of the class will be dedicated to solving biological problems.

6 Expected Outcome 2024-2025_107.1.e_EO2

Students who complete General Education Program will be able to apply scientific principles and methodology to solving chemistry problems in CHM 111 at 75% accuracy. 75% of students will be able to correctly solve 6 of 8 chemistry problems on the cumulative final exam.

6.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures 2024-2025_107.1.e_EO2

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

Institutional Goal 2
To provide diverse educational and support programs that promote student success.

6.8 Actual Results 2024-2025_107.1.e_EO2

27 out of 42 students successfully passed the questions on the cumulative final exam for CHM 111.

CHM 111 2024-2025 Final Data Set [PDF 46 KB MAY 8, 2025]

6.9 Analysis of Results 2024-2025_107.1.e_EO2

64.28% of students were successful in answering the questions on the cumulative final exam, therefore the expected outcomes were not met.

6.9.1 Outcome Met or Not Met

Not Met

6.9.1.1 In Progress Explanation 2024-2025_107.1.e_EO2

Not applicable

6.10 Use of Results for Continuous Improvement 2024-2025_107.1.e_EO2

More time in the classroom and lecture will be dedicated to solving chemistry problems.

7 Expected Outcome 2024-2025_107.1.e_EO3

Students who complete General Education Program will be able to apply scientific principles and methodology to solving chemistry problems at 75% accuracy. 75% of students will be able to correctly solve 10 of 14 chemistry problems on the cumulative final exam in CHM 104.

7.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures 2024-2025_107.1.e_EO3

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

Institutional Goal 2
To provide diverse educational and support programs that promote student success.

7.8 Actual Results 2024-2025_107.1.e_EO3

22 out of 50 students successfully passed the questions on the cumulative final exam in CHM 104.

CHM 104 2024-2025 Final Data Set [PDF 51 KB MAY 8, 2025]

7.9 Analysis of Results 2024-2025_107.1.e_EO3

44% of students were successful in answering the questions on the cumulative final exam, therefore the expected outcomes were not met.

7.9.1 Outcome Met or Not Met

Not Met

7.9.1.1 In Progress Explanation 2024-2025_107.1.e_EO3

Not applicable

7.10 Use of Results for Continuous Improvement 2024-2025_107.1.e_EO3

More time for problem-solving will be dedicated in the classroom and in online tutorials.

Program Name: Speech Gen Ed (107.1.b) [107.1.b]
Program Cycle: #1 Aug 1, 2023 to Jul 31, 2024

5 Expected Outcome 24-25_107.1_EO1 (speech)

Students will demonstrate 60% proficiency in the area of delivery verbal and non-verbal communication while performing informative speeches in SPH 107

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

The random sample of SPH 107 Informative speech rubrics indicated that 75% of the students met the benchmark for proficiency in the area of delivery verbal and non-verbal communication.

5.9 Analysis of Results

Students proficiency in verbal and non-verbal communication decreased by 10% from the previous academic year.

5.9.1 Outcome Met or Not Met

Met

5.9.1.1 In Progress Explanation

This is an ongoing speech objective because results vary so much from semester to semester. These are skills that are challenging for students, and things we are continuously working to better.

5.10 Use of Results for Continuous Improvement

This academic year there were more online offerings of SPH 107. The decrease in proficiency indicates that more examples and visual resources should be included in course shells. In-person students will continue to have the opportunity to have real-time practice and instruction on how to engage the audience through delivery. Online learners will be offered more opportunities to practice this skill before a major speech assessment.

Program Name: Speech Gen Ed (107.1.b) [107.1.b]
Program Cycle: #2 Aug 1, 2024 to Jul 31, 2025

5 Expected Outcome 24-25_107.1.b_EO1 (SPH 107)

Students who complete General Education Program will be able to demonstrate delivery of verbal and non-verbal communication while performing informative speeches at 60% accuracy.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

The random sample of SPH 107 Informative speech rubrics indicated that 80% of the students met the benchmark for proficiency in verbal and non-verbal delivery.

2024-2025_Spring_SPH107_SpeechDelivery [XLSX 10 KB APR 21, 2025]

5.9 Analysis of Results

Students' proficiency in verbal and non-verbal communication increased by 5% from the previous academic year.

5.9.1 Outcome Met or Not Met

Met

5.9.1.1 In Progress Explanation

This is an ongoing speech objective because results vary so much from semester to semester. It is a skill that is always a challenge for students, and something that we are continuously working to better.

5.10 Use of Results for Continuous Improvement

This academic year, there were more in-person offerings of SPH 107, which contributed to students meeting the benchmark for proficiency in verbal and non-verbal delivery. Additionally, Canvas shells for in-person and online learners had a variety of examples and resources to support students in enhancing their delivery skills.

Program Name: Technology Gen Ed (107.1.d) [107.1.d]
Program Cycle: #1 Aug 1, 2023 to Jul 31, 2024

5 Expected Outcome 23_24_107.1.d_EO#9

Students who complete General Education Program will be able to demonstrate the skills for managing Microsoft Word, Excel, and PowerPoint on labs, custom exams, and TestOut Certification Exam. at 75% accuracy.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results 23_24-107.1.d_EO#9

Data collected for Fall 2023, Spring 2024, and Summer 2024 show that outcome has not been met. Close to 60% of students achieved A or B during Fall 2023, Spring 2024, and Summer 2024 classes.

CIS_146_Grades_23_24 [XLSX 10 KB MAY 27, 2025]

5.9 Analysis of Results 23_24_107.1.d_EO#9

Most of the classes are close to reach 60% of students who achieved A or B. Few classes had 20% to 30% of students who achieved A or B.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

Not applicable

5.10 Use of Results for Continuous Improvement 23_24_107.1.d_EO#9

Keep monitoring the classes, encouraging students to complete required work, and using practice exams to help students to prepare for the TestOut Certification Exam.

Program Name: Technology Gen Ed (107.1.d) [107.1.d]
Program Cycle: #2 Aug 1, 2024 to Jul 31, 2025

5 Expected Outcome 24_25_107.1.d_EO#9]

Students who complete General Education Program will be able to demonstrate the skills for managing Microsoft Word, Excel, and PowerPoint on labs, custom exams, and TestOut Certification Exam. at 75% accuracy.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results 24_25_107.1.d_EO#9

Assessment data from Fall 2024 and Spring 2025 indicate that the outcome has not been met. While approximately 60% of students earned an A or B during these terms, most classes had results at or below this threshold. Only a few sections reached or slightly exceeded 60% of students achieving an A or B.

CIS_Grades_24_25_Wang_data_request_05282025 [XLSX 14 KB JUN 24, 2025]

5.9 Analysis of Results 24_25_107.1.d_EO#9

While approximately 60% of students earned an A or B during these terms, most classes had results at or below this threshold. Only a few sections reached or slightly exceeded 60% of students achieving an A or B.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

Not applicable

5.10 Use of Results for Continuous Improvement 24_25_107.1.d_EO#9

Keep monitoring the classes, encouraging students to complete required work, and using practice exams to help students to prepare for the TestOut Certification Exam.

Program Name: Writing Gen Ed (107.1.a) [107.1.a]
Program Cycle: #1 Aug 1, 2023 to Jul 31, 2024

5 Expected Outcome 23-24_107.1_EO1(Gen ed English)

Students who complete General Education Program will be able to write their Essay Four in English 101 free of major errors at 70% accuracy.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

Only 56% of ENG 101 Essay 4s were free of major errors.

ENG 101 Unit Plan Tally Sheet -23-24 [PDF 33 KB APR 11, 2025]

5.9 Analysis of Results

This is a decrease in major errors by 19% from 22-23, which is excellent news; however, students continue to struggle with major errors in their writing, likely due to a continued reduction in previous writing experience.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

This is an ongoing writing goal for students. Major errors have always been a challenge and will always be a challenge in student writing.

5.10 Use of Results for Continuous Improvement

Instructors will increase peer review sessions in class and offer additional digital peer review sessions in online sessions through programs such as TEAMS, ZOOM, and Collaborate. With the switch to Canvas, we hope to expand these efforts with the new LMS. In addition to continued increased in-person offerings of ENG 101 and required in-person offerings of ENG 099,the ENG 099 course will continue to be run through the tutoring center to help with intensive revisions and correcting major, minor, and citation errors. Instructors will continue to use an email (sent out before classes start) to educated students on what online courses require.

5 Expected Outcome 24-25_107.1.a_EO1 (ENG 101) Major Errors

Students who complete General Education Program will be able to write their Essay Four in English 101 free of major errors at 70% accuracy.

5.5 Unit Plan Links: Institutional Goal, Focus Area Outcomes, Strategies, Measures

Plan Links

2. 2023-2025 CVCC Strategic Plan

FA1-Direct Measure 1
75% of students will demonstrate mastery of individual Student Learning Outcomes (SLOs)

FA1-Outcome
CVCC will enable students to succeed in accomplishing their goals by providing quality education and training as evidenced by data. We will provide a supportive teaching and learning environment, accompanied by an effective array of support services.

FA1-Strategy 1
Provide excellent instruction, as evidenced by data, that meets the needs of our diverse student body and enables them to accomplish their goals.

Institutional Goal 1
To offer high-quality educational programs.

5.8 Actual Results

43% of essay 4 had major errors.

eng 101 - unit plan tally 24-25 [PDF 45 KB MAY 7, 2025]

5.9 Analysis of Results

This is a decrease in major errors by 14% from 23-24, which is excellent news; however, students continue to struggle with major errors in their writing, likely due to a continued reduction in previous writing experience.

5.9.1 Outcome Met or Not Met

Not Met

5.9.1.1 In Progress Explanation

This is an ongoing writing goal for students. Major errors have always been a challenge and will always be a challenge in student writing.

5.10 Use of Results for Continuous Improvement

Instructors have done a great job of improving major errors in instruction and offering in-class examples and support through the recovery process. Instructors will offer additional visual learning aids, such as maps, outlines, reading guides, checklists, etc. Students are proving that they need more hands-on, hand written engagement.

End of report