Skyline College

Comprehensive Program Review

2025 - 2026

SKY SS - STEM Center

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Student and Learning Support Services Comprehensive Review

Submitter Name:
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Submission Date:
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BACKGROUND

1.A. DIVISION:
Science, Technology, Engineering, and Mathematics (STEM)

PROGRAM NAME:
STEM Center

1.B. YEAR OF REVIEW:
2025 - 2026

1.C. PROGRAM REVIEW TEAM
Luis Jibaja Prado – Program Services Coordinator, STEM Center
Portia Luong – STEM Retention Specialist
Joren Moreno - Instructional Aide II
Sahil Niwas – Instructional Aide II
Benjamin Mingoa – Instructional Aide II
Benjamin Lam – Instructional Aide II

1.D. CONNECTIONS TO THE COLLEGE MISSION/VISION/VALUES:

i. Describe the program, its purpose, and how it contributes to Skyline College's Mission, "To empower and transform a global community of learners."

The STEM Center was established through the U.S. Department of Education Title V Developing Hispanic-Serving Institutions (HSI) grant awarded in 2018, with the goal of creating a centralized hub to support student success in STEM. Since its inception, the Center has expanded its services and programming to meet the evolving academic needs of Skyline College students, particularly in transferable STEM coursework.
The STEM Center serves as Skyline College's central hub for academic support, collaboration, and engagement in science, technology, engineering, and mathematics . Its purpose is to provide accessible, high-quality learning experiences that empower students to persist and succeed in rigorous STEM coursework while fostering a sense of community and belonging.

Peer Instructional (PI) Leader Program:
Academic support in the STEM Center is primarily delivered through the Peer Instructional Leader (PI) Program. This program is designed to provide structured, course-aligned support that connects students directly to academic resources within and beyond the classroom.

Tutoring is offered through two main modalities synchronous and asynchronous.
Synchronous Support (In-Class)
In the synchronous model, PIs are embedded directly into STEM courses, attending lectures and laboratory sessions in person to provide real-time academic support. During class, PIs assist with problem-solving activities, facilitate group work, clarify concepts, and support faculty in engaging students during instructional time.

Asynchronous Support (Canvas)
In the asynchronous model, PIs are embedded within a course's Canvas shell (not assist to classes), where they post announcements, and monitor course content for workshop preparations. This space is also used to promote and coordinate additional support opportunities, including drop-in tutoring hours offered either in person or virtually.

PI Program Services
Through these two modalities, the PI Program delivers several key services:

1. Embedded Classroom and Laboratory Support
PIs attend lectures and labs to provide real-time assistance, support in-class activities, and facilitate student engagement. This service increases access by reaching students directly within their courses and helps normalize help-seeking behavior.

2. Drop-In Tutoring (In-Person and Virtual)
PIs offer tutoring outside of class through scheduled drop-in hours at the STEM Center, allowing students to receive additional support with coursework, assignments, and exam preparation.

3. Academic Excellence Workshops (AEW)
PIs facilitate structured review sessions focused on key concepts and exam preparation. These workshops provide targeted academic support and reinforce course material.

4. Open Lab
Open Lab provides specialized support for Biology laboratory-based courses, where students complete required TBA hours while receiving guidance from PIs. In this setting, PIs assist with laboratory procedures, materials, and experimental processes, supporting both academic understanding and lab completion.

Collectively, these tutoring services provide support for 37 transferable STEM courses across Biology, Chemistry, Physics, Computer Science, Engineering, and Mathematics with the exception of Statistics. This coverage ensures students have access to consistent support across different STEM pathways from introductory to advanced subjects.

Beyond tutoring, the STEM Center offers study and collaboration spaces where students can work independently, form study groups, and meet with classmates. Faculty often use the space to hold office hours, also the STEM Center's conference room provides an area for student clubs and college teams to meet. The STEM Center has become a hub for academic and social connection through events that foster community across disciplines.
It also collaborates with campus and external partners including MESA, Phi Theta Kappa, the Transfer Center, Strategic Partnership & Workforce Development, Learning Center, and Growth Sector to host events and connect students with internships and professional development opportunities.

By combining academic support, collaborative learning, and community engagement, the STEM Center directly contributes to Skyline College's mission "to empower and transform a global community of learners." It empowers students to achieve academic excellence, transforms their confidence in STEM disciplines, and builds inclusive spaces where learning, mentorship, and opportunity thrive.

ii. Alignment with the College Values:
Open Access
Campus Climate
Student Success and Equity
Academic Excellence
Community Partnership

For each chosen Value, provide a concrete example of how each connects to your program.
Open Access
The STEM Center promotes open access by providing multiple entry points to academic support through in-person tutoring, virtual tutoring, embedded classroom support, and Canvas-based engagement. Students can access services without appointments through drop-in tutoring and open lab hours, ensuring flexibility for those balancing work, family, and academic responsibilities. By offering support across modalities, the STEM Center reduces

barriers and increases accessibility for a diverse student population.

Campus Climate
The STEM Center contributes to a positive campus climate by creating a welcoming, student-centered environment where students feel comfortable seeking help and collaborating with peers. The space encourages respectful interaction, group study, and engagement across disciplines. Events such as the STEM Carnival, Datathon, and workshops with scientists promote a sense of belonging and foster connections among students, faculty, and staff.

Student Success and Equity
The STEM Center advances student success and equity by providing targeted academic support in high-impact STEM courses and monitoring outcomes through data analysis. The program uses disaggregated data to identify equity gaps and assess the effectiveness of tutoring services. Efforts such as embedding PIs in gateway courses and expanding outreach aim to increase usage among underrepresented and first-generation students, ensuring equitable access to resources that support course success.

Academic Excellence
The STEM Center supports academic excellence by aligning tutoring services with course content and faculty instruction. Embedded PIs reinforce key concepts during lectures and labs, while Academic Excellence Workshops provide structured review sessions focused on exam preparation. Open lab support ensures that students in laboratory-based courses can apply theoretical knowledge in practice. These services maintain academic rigor while supporting student learning.

Community Partnership
The STEM Center strengthens community partnerships by collaborating with programs and organizations such as MESA, Phi Theta Kappa, the Transfer Center, and external partners like Growth Sector. These collaborations support events, workshops, and internship opportunities that connect students to academic and career pathways. The STEM Center also serves as a space where students engage with industry professionals and transfer resources, supporting broader community and workforce development goals.

1.E. PROGRAM PERSONNEL

i. Provide the current Full-Time Equivalent (FTE) of each category of personnel:

Full-time Faculty FTE:
0

Adjunct Faculty FTE:
0

Classified Professionals FTE:
3.67

Manager/ Director FTE:
0

Dean FTE (if applicable):
1

ii. Describe any changes in staffing since the last CPR, and how the change(s) have impacted the program. Are there any unmet needs in the program pertaining to program personnel (e.g. staffing, schedule limitations, turnover)? If yes, please specify.
The STEM Center has experienced frequent staffing transitions that directly impacted its ability to sustain operations and meet growing student demand. The Program Services Coordinator (PSC) position has changed hands multiple times, including a six-month temporary appointment before the current PSC began in 2024–2025. During periods without a permanent PSC, core functions such as tutor training, scheduling, event coordination, and data tracking were significantly strained.

The STEM Retention Specialist position has had six different staff members over five years, resulting in recurring disruptions to outreach, faculty communication, and student follow-up. Instructional Aide II staffing was also inconsistent, and a vacancy in Fall 2023 left the Center with no full time IA II support during a period of high usage. Now Spring 2026, STEM Center employs a full time Instructional Aide II and three part-time (10 hour) ones.

Unmet Staffing Needs and Operational Impact:
- Limited capacity for PI training and supervision. High turnover and limited staffing reduce the ability to provide consistent onboarding, coaching, and academic excellence workshop preparation for Peer Instructional Leaders.
- Event and workshop support is constrained. Staffing shortages limit the Center's ability to plan and manage academic, community-building, and professional development events.
- Assessment and data work are under-resourced. Increased demand for evaluation, usage analysis, and equity reporting requires staffing capacity that is currently unavailable.
- Service consistency is affected during turnover. Each staffing change creates temporary gaps in communication, coordination, and student support.

Overall, the STEM Center's growth in student usage has increased the demand for sustained and scalable support. The current staffing structure, including three full-time positions and three part-time Instructional Aide II positions, has improved operational stability. However, ongoing evaluation of staffing capacity is needed to ensure consistent service delivery, coordination of programs, and potential expansion of access and hours.

1.F. PROFESSIONAL DEVELOPMENT

i. Summarize key professional development that the program personnel have engaged in since the last CPR to meet both the mission of the program, and the aim of the College to increase equity.

Full Time staff have involved in the following professional development activities:

- Completed required institutional trainings (Title IX, sexual harassment prevention, workplace violence, cybersecurity) to support a safe and inclusive campus environment
- Participated in equity-focused learning, including the Learning Equity and Growth Series (LEGS), unconscious bias, neurodiversity, and mentoring diverse student populations
- Attended Flex Day and campus workshops on student support programs (EAC, ESL, ISP, UCC), AI tools, student hiring, and institutional processes
- Engaged in retention and student success strategies through sessions such as Cafecito Chat and mentoring best practices
- Developed communication and leadership skills through professional development workshops on managing critical conversations and effective student interaction
- Contributed to institutional service through scholarship application review, Classified Senate, and union participation
- Participated in external professional development, including the Conference of Engineering Diversity at San José State University, to strengthen equity efforts in STEM

ii. Are there any unmet needs pertaining to professional development, and potential ways to address these unmet needs? Please specify.

The STEM Center has identified several areas for continued professional development to strengthen program effectiveness and support equitable student outcomes:

- Data-informed student success and early alert systems to better identify at-risk students and intervene earlier
- Equity and culturally responsive practices to enhance support for underrepresented and disproportionately impacted students
- Academic advising and coaching strategies, including proactive advising and motivational interviewing, to better guide student persistence
- Program development, assessment, and continuous improvement to strengthen evaluation of services and align with institutional goals

- Student success technology platforms (e.g., CRM and case management tools) to improve tracking, coordination, and outreach
- Communication, outreach, and student engagement strategies to increase awareness and usage of services
- Higher education systems, policies, and Guided Pathways to better align services with institutional structures
- Leadership, collaboration, and project management to support program growth and cross-campus coordination

CURRENT STATUS

2.A. ACHIEVEMENTS

Describe the program's achievements since the last CPR.

1. Establishment of the STEM Center as a Core Academic Support Hub
- Transition from grant-funded concept to fully integrated Skyline student service.
- Secured a permanent annual funding allocation of approximately $40,000 (established Fall 2025) to support Peer Instructional Leader (PI) salaries.
- Continued collaboration with MESA, which covers a significant portion of PI salaries each semester, demonstrating shared investment across programs

2. Growth in Student Usage
- Unique student users grew from 87 (Spring 2021) ? 736 (Spring 2023).
- Total visits increased more than 20x over five years.
- Average visits per student increased significantly, peaking at 22.6 visits per student in Spring 2024.
- Consistent high usage across Fall/Spring semesters demonstrates the Center is a trusted academic space.

3. Expansion of Tutoring Modalities
- Synchronous embedded tutoring (in-class and lab support).
- Asynchronous embedded Canvas support.
- Drop-in tutoring (in-person and virtual).
- Academic Excellence Workshops.
- Open Lab (TBA) support for microbiology and anatomy.

4. Support for 37 Transferable STEM Courses
- A full cross-disciplinary support: Biology, Chemistry, CIS, Engineering, Math, Physics.
- Growth in high-demand gateway courses (MATH 251, BIOL 240, CHEM 210, etc.).

5. Development of a Strong Embedded Tutor Program
- Embedded Class support grew dramatically: 13k+ visits in AY 2023–2024.
- Faculty partnership across STEM departments expanded.
- Embedded tutors are now integrated into Canvas shells and classroom structures.
- The program has expanded in scale, with approximately 10 embedded PIs per semester supporting multiple sections across mathematics and chemistry courses in recent semesters.

6. Expansion of Open Lab Support
- BIOL 240, 250, and 260 support has become a major service.
- Open Lab usage for BIOL 240 grew from 2,225 (21–22) to 6,448 (24–25).

7. Establishment of the STEM Center as a Community and Study Space
- Space to Study grew into one of the most-used services (12k+ visits in AY 2022–2023).
- Used by STEM clubs and Learning Communities (ETS/BCS).
- Used by faculty for office hours.
- Regular social and academic activities (boba socials, student meet-ups, workshops).
- Expanded its physical environment to include a designated quieter study space focused on a low-distraction study area and supporting different learning preferences.

8. Strengthening Campus and External Partnerships

- Collaborations with MESA, PTK, Learning Center, Transfer Center, SPWD, Growth Sector.
- Coordination with faculty to align embedded support with course needs.
- Expanded involvement in internship and experiential learning opportunities, including SIREN, Winter Scholars, and Growth Sector programs, connecting students to research and workforce pathways.
- Increased recruitment efforts for Peer Instructional Leaders (PIs) through faculty referrals, and embedded classroom engagement, allowing direct identification of strong student candidates.

9. Creation of a Data-Informed Assessment Infrastructure
- Developed usage tracking across services, courses, and semesters.
- Integrated StudentID tracking for PSLO analysis (course success comparisons).
- Designed and implemented student feedback surveys to assess student experience, confidence, persistence, and sense of belonging in the STEM Center.
- Developed faculty feedback surveys to evaluate the impact of embedded tutoring on student learning, engagement, and classroom environment.

10. Improved Student Engagement and Belonging
- Workshops, academic success events, study groups, Science in Action promotion.
- Growing peer-to-peer connections through PIs and clubs.

2.B. IMPACTS ON PROGRAM

Describe the impacts on your program (positive or negative) by legislation, regulatory changes, accreditation, grantors, community/school partnerships, college-wide initiatives, stakeholders, and/or other factors.

The STEM Center was established through external funding from the U.S. Department of Education Title V Developing Hispanic-Serving Institutions (HSI) grant, “Strengthening Pathways to Success in STEM,” awarded in 2018. The initial goal of the STEM Center was to create a centralized hub to support STEM students, particularly those enrolled in transferable STEM courses. As part of this effort, the Peer Instructional Leader (PI) program was developed to provide academic support through tutoring and open lab services.

During the grant period (2018–Fall 2023), HSI funding supported key personnel positions, including the Program Services Coordinator, Instructional Aide, and Retention Specialist. It also funded student assistant positions for PI Leaders and supported programs such as Winter Scholars, Math Jam, Chem Jam, and Physics Jam. This funding structure allowed the STEM Center to build a strong foundation of services and expand access to academic support.

Following the conclusion of the HSI grant, funding responsibilities shifted. Beginning in Fall 2023, the MESA program took over PI Leader salaries. However, due to state funding restrictions implemented in Spring 2024, MESA funds could only be used to support MESA-eligible students. As a result, the STEM Division began covering a portion of PI salaries to ensure continued service delivery across all student populations.

At the same time, the implementation of AB1705 created additional demand for academic support in calculus level math courses. This legislation increased the need for embedded tutoring. Combined with increased enrollment and sustained high usage of STEM Center services across disciplines, the program required additional staffing and resources.

To meet these needs, the STEM Center began relying on multiple funding sources, including the STEM Division, AB1705 funding, and MESA. This allowed the program to expand support across math, chemistry labs, and high-demand courses such as BIOL 240, which saw increased use of open lab services. As a result, the number of PI positions increased from approximately 18 to 23 per semester beginning in Fall 2023.

With the conclusion of AB1705 funding in Fall 2025, the STEM Center is now primarily dependent on funding from the STEM Division and MESA to sustain PI salaries and services. Overall, external funding, legislation, and institutional partnerships have played a critical role in shaping the STEM Center’s growth, and capacity. While these factors have enabled expansion and increased access to support, they have also introduced constraints that require ongoing coordination and resource alignment to maintain service levels.

ACCESS

3.A. DATA COLLECTION OVERVIEW

What program data about usage or access is relevant to your program, and why? How is it collected?
The STEM Center collects data on student usage, access, and outcomes to evaluate program effectiveness and guide equity-based improvements. The most relevant data for the program include tutoring participation logs, course-level engagement records, and student feedback surveys, which together provide insight into how students use STEM Center services and how these services impact academic performance and persistence.

Tutoring usage data are collected each semester through student sign-ins and session tracking in Accudemia, where each entry records the student ID, course, subject, service type, and total tutoring minutes. These data are categorized by service modality, including in-person tutoring, virtual tutoring, embedded classroom support, and open lab assistance to analyze participation across formats.

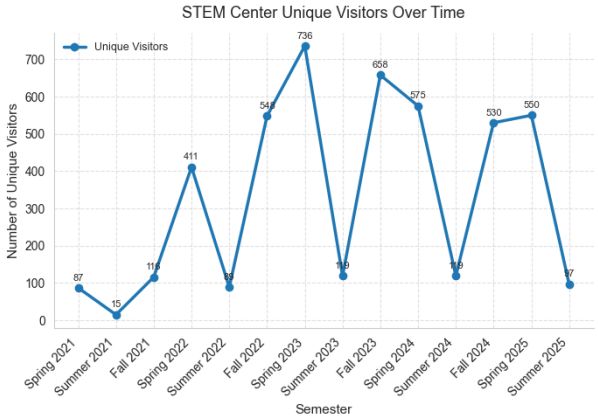
In addition, the STEM Center maintains records of Academic Excellence Workshop attendance and embedded tutoring activity, which capture engagement with Peer Instructional Leaders (PIs).

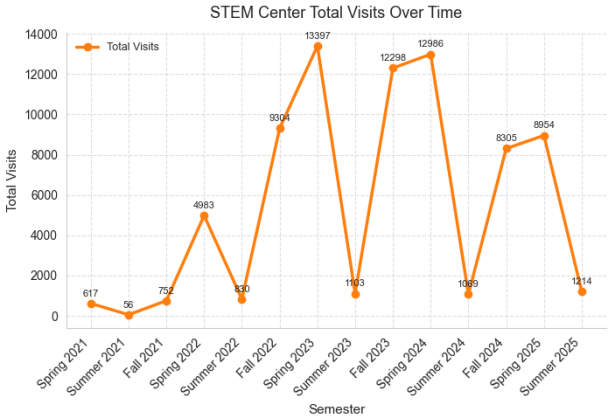
The program collaborates with the Office of Planning, Research, and Institutional Effectiveness (PRIE) to match tutoring usage data with course success, retention, and demographic data using identified student IDs. This allows the STEM Center to compare outcomes for users versus non-users and identify equity gaps across demographic groups and subject areas.

Student feedback is collected through end-of-semester surveys, which capture students' perceptions of how STEM Center services influence their learning, confidence, and sense of belonging. Together, these data sources provide a comprehensive view of how students access and benefit from the Center's academic and community support services.

3.B. USAGE TRENDS

Provide student and/or community usage trends for all major programming over the last five years, by cohort, if applicable.
1. Usage Trends
STEM Center usage has grown substantially over the last five years, both in the number of students served and in overall engagement with academic support services. Two indicators; unique visitors and total visits, show clear upward trends with notable shifts before and after the return to in-person instruction.





Unique Visitors:
Use of the STEM Center increased sharply following the transition back to in-person learning. Unique student users rose from **87 in Spring 2021** (remote instruction) to a peak of **736 in Spring 2023**. Since then, usage

has stabilized between **530–660 students per major (Fall-Spring) semester**, indicating a steady and sustained demand for STEM academic support.

Total Visits:

Total interactions grew even more dramatically, demonstrating deeper and repeated engagement with services. Visits increased from **617 in Spring 2021** to more than **13,400 in Spring 2023**, representing the highest volume in the five-year period. Fall and Spring semesters consistently show higher activity, while Summer terms have predictably lower engagement.

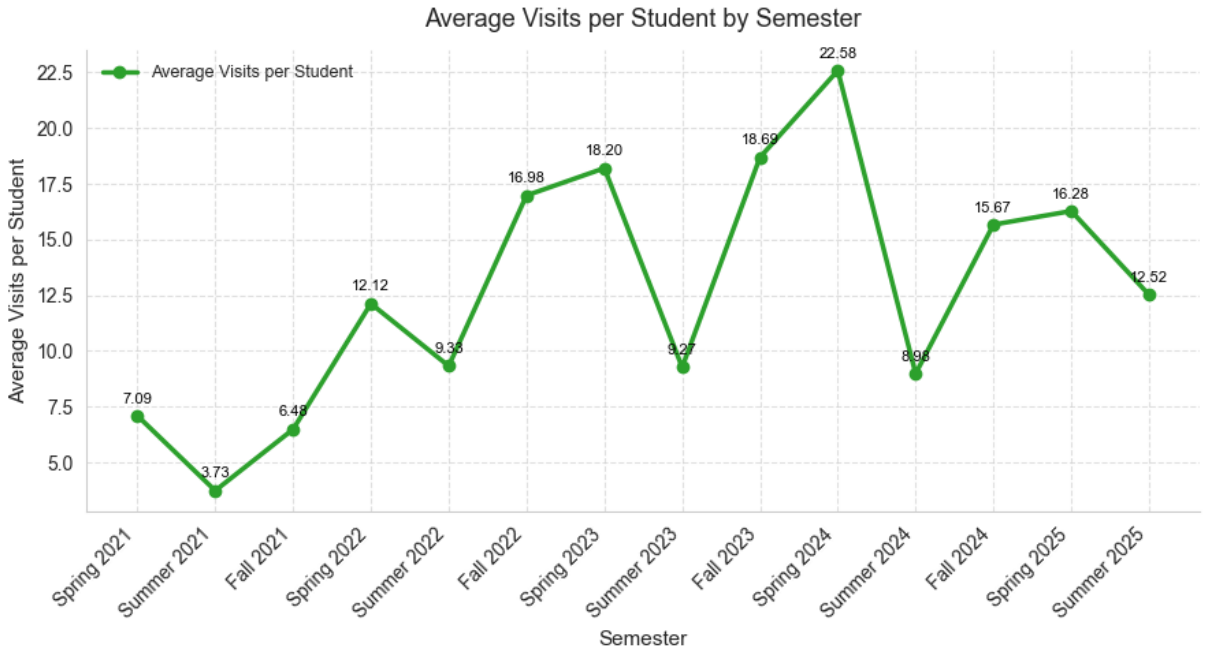
Key Changes Over Time:

- **2021–2022:** Gradual recovery from pandemic restrictions, with strong growth beginning Spring 2022.
- **2022–2023:** Major expansion in usage; both unique visitors and total visits reached their highest levels.
- **2023–2025:** Sustained high demand, with consistently strong usage each major semester and continued increases in repeated visits.

From Fall 2023 to Fall 2024 we observe a decline in unique visitors while the total visits increase in the same time period, reflecting a higher retention of unique students using the STEM Center

Overall, the data show that the STEM Center has become a central academic resource for STEM students, with significant growth in both reach and depth of engagement over the last five years.

2. Average Visits per Student



Average visits per student increased substantially over the five-year period, showing that students not only used STEM Center services in greater numbers but also returned more frequently throughout the semester. After low activity during remote instruction in **Spring 2021 (7.09)** and **Summer 2021 (3.73)**, the average steadily increased as in-person support resumed.

A significant rise occurred beginning in **Fall 2022 (16.98)** and continued through **Spring 2023 (18.20)**, indicating stronger engagement with tutoring, open lab, embedded support, and study-space services. The highest level of repeated engagement was reached in **Spring 2024**, with an average of **22.58 visits per student**, representing the peak depth of usage during the review period.

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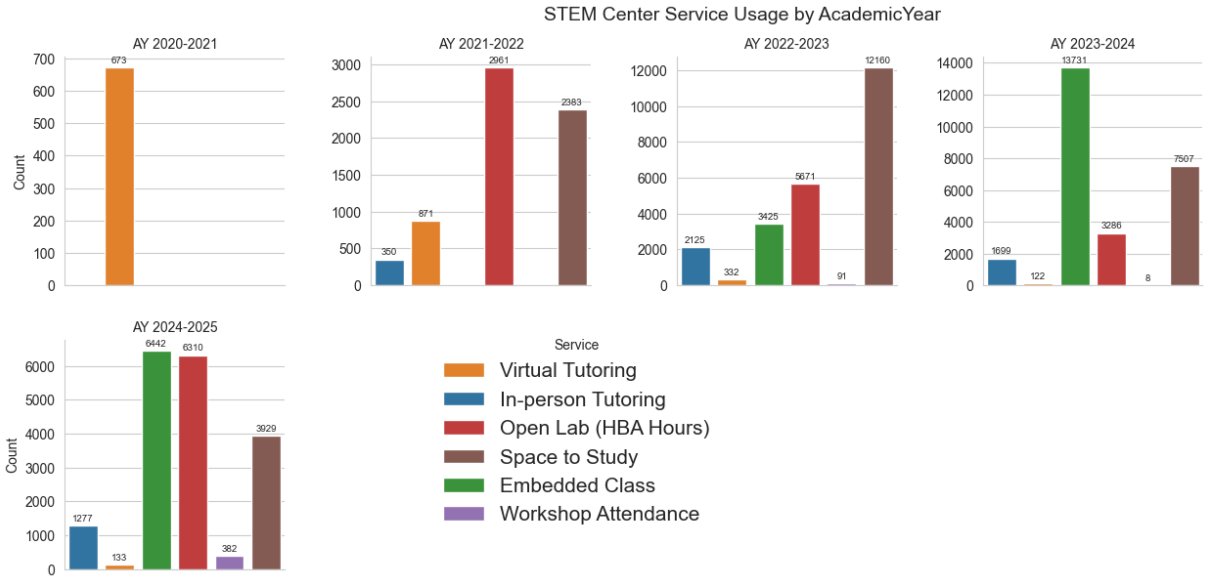
Although **Summer terms** consistently show lower averages due to lower enrollment and reduced course intensity, major semesters after 2022 consistently maintain averages between **15 and 22 visits per student**, demonstrating sustained, repeated utilization of STEM Center support services.

3. Service Usage Trends by Academic Year

Service usage across academic years shows a major shift in how students engage with STEM Center resources as instruction transitioned from remote to fully in-person and as embedded and open-lab support expanded. Clear notice that STEM Center start functioning from Spring 2021.



AY 2020–2021 (Remote Instruction):

Usage was overwhelmingly concentrated in **Virtual Tutoring**, reflecting limited access to in-person support during the pandemic. Other services remained minimal or inactive due to campus restrictions.

AY 2021–2022 (Return to Campus):

With the reopening of the STEM Center, **Open Lab (HBA Hours)** and **Space to Study** rapidly became high-demand services, generating **2,961** and **2,383** visits respectively. Virtual tutoring remained active (**871** visits), but in-person usage began to reestablish itself.

AY 2022–2023 (Expansion Phase):

This year shows the most dramatic increase in service usage.

- **Space to Study** surged to **12,160** visits, indicating that the STEM Center became a primary academic hub for students.
- **Embedded Class** support expanded significantly (**3,425** visits), demonstrating growth in classroom-integrated support.
- **Open Lab** also reached a high level (**5,671** visits), reflecting strong demand for hands-on biology and science support.

AY 2023–2024 (Stabilization at High Levels):

- **Embedded Class** peaked at **13,731** visits, becoming the most utilized service.
- **Space to Study** usage remained strong (**7,507**), continuing to serve as a core function of the center.
- **Open Lab** remained central with **3,286** visits.

Overall, services stabilized at high post-pandemic demand levels.

AY 2024–2025 (Current Year):

Patterns remain consistent, with:

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- **Embedded Class: 6,442** visits
- **Open Lab: 6,310** visits
- **Space to Study: 3,929** visits
- Resurgence in **Workshop Attendance** (**382**) and growing **In-Person Tutoring** (**1,277**)

These trends indicate a broadening of student engagement across multiple modalities rather than reliance on a single service.

Open Lab — Service Overview and Usage Context

Background and Development

Open Lab support predates the current STEM Center structure and originated as a response to instructional needs in biology laboratory courses specifically starting with BIOL 240 Microbiology. Following increased course difficulty and student performance challenges, faculty identified the need for additional structured lab time outside of class. In response, STEM Center Peer Instructional Leaders (PIs) were integrated into lab environments to provide academic support during these extended hours.

Over time, this support expanded, particularly in courses such as BIOL 250 and BIOL 260, where demand for hands-on assistance increased. By Spring 2022, Open Lab evolved into a regularly scheduled service with consistent weekly support due to sustained student participation and faculty collaboration.

Nature of the Service and PI Role

Open Lab differs significantly from traditional tutoring. PIs supporting this service are required to have specific lab skills and subject knowledge proficiency:

Responsibilities include:

- Supporting students across different lab procedures simultaneously
- Assisting with experimental setup, materials, and cultures
- Monitoring lab safety practices under faculty and lab coordinator supervision
- Reviewing lab work and guiding students through experimental processes
- Proactively checking in with students to provide support

This role requires a higher level of technical skill, adaptability, and responsibility compared to general tutoring, as PIs must respond to varied and complex lab scenarios in real time.

Access and Data Collection

Open Lab usage is captured through multiple access points:

- Scheduled STEM Center Open Lab hours staffed by PIs
- Faculty office hours held within lab spaces where students may also receive PI support
- TBA (To Be Arranged) hours required for certain courses

The integration of TBA requirements has contributed to sustained and repeated student engagement with Open Lab services, as students return regularly to complete required lab hours.

Explaining High Usage Trends

The high level of Open Lab usage observed across academic years is driven by several factors:

1. **Course Requirements (TBA Hours)**
   Open Lab serves as a structured environment for completing required lab hours, leading to consistent and repeated student attendance.
2. **Hands-On Academic Need**
   STEM lab courses require physical space, materials, and supervision that cannot be replicated outside of the lab environment, making Open Lab essential for course completion.

3. **Integrated Academic Support**

   PIs are not only tutoring but actively supporting lab execution, troubleshooting experiments, and assisting with course-specific tasks.

As a result, high usage reflects not only demand for tutoring, but also the multifaceted role of Open Lab as both an academic support service and an extension of instructional time.

Embedded Tutoring — Service Overview and Usage Context

Background and Development

Embedded tutoring originated in response to faculty needs for in-class academic support, particularly during the transition to remote instruction. During the pandemic, PIs supported instruction by facilitating breakout rooms, assisting with group work, and helping faculty manage classroom technology.

Following the return to in-person instruction, this model was sustained and expanded. Faculty continued requesting embedded support due to its effectiveness in increasing student engagement and providing real-time academic assistance during lectures and labs. Over time, embedded tutoring became a core STEM Center strategy, particularly in transferable STEM courses.

Service Design and Coordination

Embedded tutoring is implemented through ongoing coordination between STEM Center staff and faculty. Each semester, staff work closely with faculty to identify courses where embedded support can have the greatest impact, prioritizing courses with active coursework and collaborative learning environments.

As a result, embedded PIs are placed in both lecture or lab settings across multiple disciplines. In Spring 2026, a total of 12 PIs are embedded across mathematics and chemistry courses, including calculus sequences and general and organic chemistry lectures and labs. PIs may support multiple sections depending on faculty requests and scheduling availability.

Nature of the PI Role

Embedded PIs provide real-time academic support during class by:

- Assisting students during in-class/lab activities and problem-solving
- Facilitating group work and collaborative learning
- Providing immediate clarification of concepts
- Supporting faculty with classroom logistics and student engagement
- Prepare and lead Academic Excellence Workshops in the STEM Center

Unlike traditional tutoring, embedded PIs are integrated directly into the instructional environment and remain available beyond class time through STEM Center services. This model allows PIs to support a broader student population both inside and outside the classroom.

Access and Data Collection

Usage for embedded tutoring is primarily captured through session logs based on student interactions and roster attendance during class. Because PIs are present within the classroom, students have immediate access to support without needing to seek out tutoring independently.

It is important to note that embedded usage reflects access and exposure to support, rather than one-to-one tutoring sessions. While not all students may directly interact with the PI, all students benefit from the presence of in-class support and the opportunity to engage when needed.

Explaining High Usage Trends

The high number of embedded tutoring visits is driven by several key factors:

1. **Classroom-Based Access**

   Embedded support reaches a high number of students enrolled in a course.

2. **Integration into Instruction**

   PIs are actively engaged during lectures and labs, supporting coursework in real time.

3. **Faculty-Driven Demand**

   Ongoing faculty collaboration has expanded embedded support across multiple courses and sections, particularly in high-demand STEM disciplines.

Bridge to STEM Center Services

By introducing PIs in the classroom, students become more familiar with the STEM Center and are more likely to utilize in-person and virtual tutoring services outside of class.

4. Faculty Survey Analysis

A faculty survey was conducted during Spring 2026 to assess the impact of embedded Peer Instructional Leaders (PIs) on student learning, engagement, persistence, and classroom environment. The survey included Likert-scale questions (1 = Strongly Disagree to 5 = Strongly Agree) aligned with program outcomes, as well as open-ended questions to capture faculty observations. A total of 8 faculty members who hosted embedded PIs responded.

Impact on Student Learning

All faculty respondents reported that PIs supported the development of problem-solving strategies, and nearly all observed that students who interacted with PIs appeared more prepared for coursework. These findings suggest that embedded tutoring is effective in reinforcing course material and supporting student understanding during both lecture and lab activities.

Questions:

Q1. The PI helped students develop problem-solving strategies for course assignments or exams.
Q2. Students who interacted with the PI appeared more prepared for coursework.

Key Results

- **100% (8/8)** of faculty *strongly agreed* that PIs helped students develop problem-solving strategies
- **87.5% (7/8)** *strongly agreed* and **12.5% (1/8)** *agreed* that students appeared more prepared for coursework

Q3. *Please describe one way the PI supported student learning in your course. Free Response*

Faculty responses consistently highlighted the following contributions of PIs:

- *"Provided real-time feedback during class and lab activities"*
- *"Supported group work and guided problem-solving strategies"*
- *"Assisted with exam preparation through review sessions and materials"*
- *"Helped students feel more comfortable asking questions"*
- *"Proactively checked in with students during activities"*
- *"Contributed to improved understanding of course concepts"*
- *"Supported specialized tasks such as lab work and research assignments"*

Student Confidence and Persistence

Most faculty observed that students were more likely to ask questions and seek support when a PI was present, while all faculty reported that students who interacted with PIs remained engaged and were encouraged to persist through challenging course material.

Questions:

Q4. Students were more likely to ask questions or seek help when the PI was present.
Q5. Students who interacted with the PI appeared more likely to remain engaged throughout the semester.
Q6. The PI helped encourage students to persist when they struggled with course material.

Key Results

- **75% (6/8)** *strongly agreed*, **12.5% (1/8)** *agreed*, and **12.5% (1/8)** *neutral* that students were more likely to ask questions or seek help
- **100% (8/8)** *strongly agreed* that students appeared more engaged throughout the semester
- **100% (8/8)** *strongly agreed* that PIs encouraged students to persist when struggling

Q7. In your observation, how did the PI influence student persistence in your course? Free Response
Faculty responses highlighted several ways PIs supported persistence:

- *"Increased student confidence in asking questions and seeking clarification"*
- *"Provided encouragement that led to sustained effort and persistence"*
- *"Served as relatable role models who shared strategies for success"*
- *"Reinforced help-seeking behaviors and promoted use of STEM Center services"*
- *"Supported students during labs and coursework by checking understanding and progress"*
- *"Contributed to improved course completion and performance among engaged students"*

Community and Collaboration
Most faculty reported that PIs helped facilitate peer interaction and made students more comfortable engaging with one another during course activities. All faculty respondents agreed that the presence of a PI contributed to a more supportive classroom environment and strengthened students' connection to the STEM Center.
Questions
Q8. The PI helped foster collaboration among students in my course.
Q9. Students appeared more comfortable engaging with peers during course activities when supported by the PI.
Q10. The presence of the PI helped create a more supportive learning environment.
Q11. The PI contributed to building a stronger connection between students and the STEM Center.

Key Results

- **75% (6/8)** *strongly agreed* and **25% (2/8)** *agreed* that PIs fostered collaboration among students
- **62.5% (5/8)** *strongly agreed*, **25% (2/8)** *agreed*, and **12.5% (1/8)** *neutral* that students were more comfortable engaging with peers
- **100% (8/8)** *strongly agreed* that PIs created a more supportive learning environment
- **100% (8/8)** *strongly agreed* that PIs strengthened students' connection to the STEM Center

Faculty Suggestions for Improvement
Faculty feedback indicates strong satisfaction with the embedded tutoring model, with most responses emphasizing that the current structure is effective and should be maintained. At the same time, several areas for improvement were identified:

- **Maintain and expand embedded support**
  The faculty expressed a strong desire to continue and increase access to PIs, highlighting their value in supporting instruction and student engagement.
- **Improve visibility of tutoring schedules**
  The Faculty noted the need for clearer information on when subject-specific tutors are available in the STEM Center to better guide student referrals.

SKY SS - STEM Center

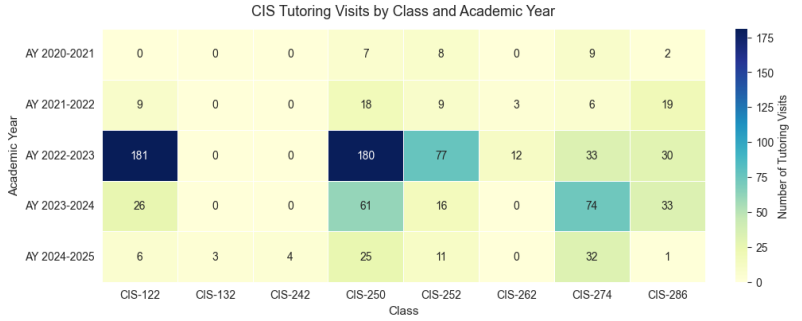
- **Strengthen coordination and communication**

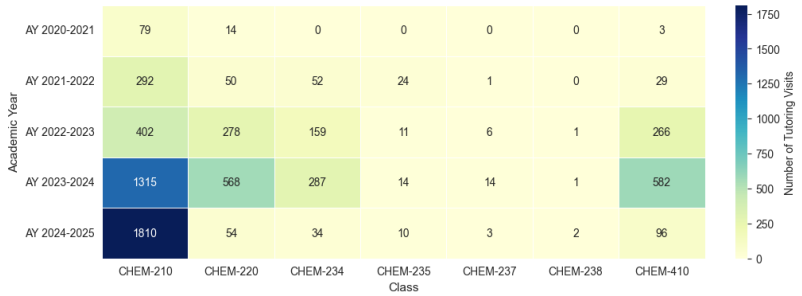
  Continued collaboration between faculty and PIs was identified as a strength, particularly for aligning workshops, course support, and student needs.

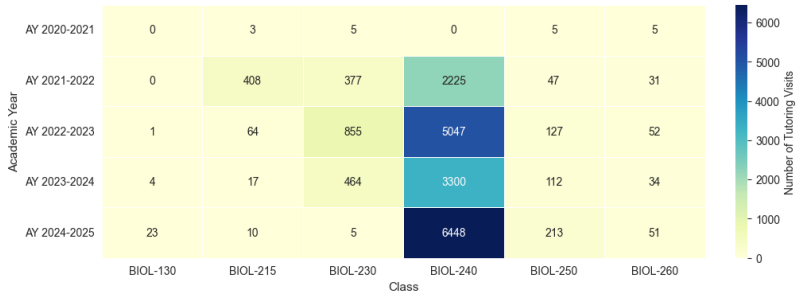
5. Subject-Level Tutoring Usage Trends

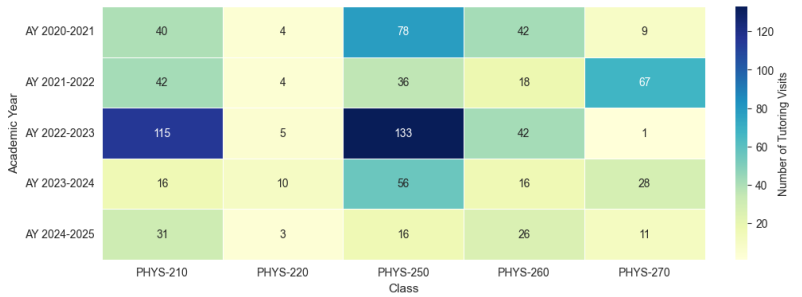
Subject-level tutoring data, beginning in **Spring 2021**, show clear growth across all STEM areas as the Center transitioned from remote to in-person support. Across the review period, usage patterns reflect increasing demand for foundational STEM coursework, expanded embedded and open-lab services, and the formal transition of **COMP** courses into **CIS** beginning in AY 2022–2023.

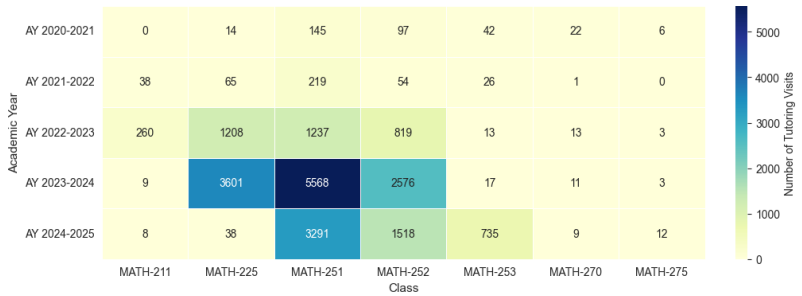
SKY SS - STEM Center

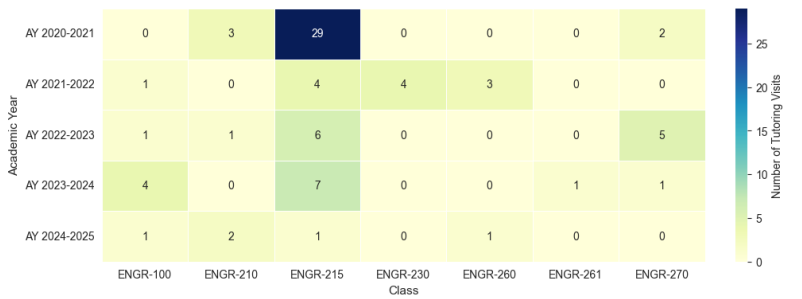












MATH

- MATH saw the most dramatic expansion in tutoring usage outside biology.
- After modest usage in AY 2020–2022, demand surged in **AY 2022–2023**, especially in the calculus sequence.
- **AY 2023–2024 shows the highest math demand**, with extremely high engagement in **MATH 251 (5,568 visits)** and **MATH 252 (2,576 visits)** due to expanded embedded support and strong course enrollment.
- High usage continues in AY 2024–2025 with sustained demand in MATH 251 and MATH 252.

CHEM

- CHEM support expanded steadily as in-person lab courses resumed.
- **CHEM 210 and CHEM 220** show increasing demand every year, with strong growth in AY 2022–2023 and AY 2023–2024.
- The highest demand appears in **CHEM 210**, reaching **1,315 visits in AY 2023–2024** and **1,810 in AY 2024–2025**, reflecting both course difficulty and reliance on in-person lab-based support.

BIOL

- BIOL shows some of the strongest, most consistent growth due to the popularity and difficulty of anatomy, physiology, and microbiology pathways.
- **BIOL 240 (Microbiology)** is the highest-demand class in the entire dataset.
- **BIOL 250 (Physiology)** also shows steady increases each year.

PHYS

- Physics demand remained moderate across academic years, with consistent engagement in **PHYS 210, PHYS 220, and PHYS 250**.
- AY 2022–2023 shows the highest usage across all PHYS courses, with peaks in **PHYS 210 (115 visits)** and **PHYS 250 (133 visits)**.
- Usage in later years remains steady, aligning with enrollment patterns.

CIS (formerly COMP)

- Tutoring demand was limited before full in-person return, with modest activity in AY 2020–2022.
- A major shift occurred in **AY 2022–2023**, when the COMP prefix transitioned to **CIS**, and usage increased sharply in gateway programming courses such as **CIS-122, CIS-250, and CIS-286**, reaching peaks of **180–181+ visits**.
- Usage decline in intro major CIS courses since **AY 2022-2023**, similarly generative AIs platforms became public and got a high acceptance by public usage since Fall 2022.

ENGR

- Engineering courses show consistent but smaller-scale usage compared to other subjects.
- **ENGR 215** had the highest demand, particularly in AY 2021–2022 and AY 2022–2023.
- Support remains steady each year, reflecting smaller course sizes but continuous need for discipline-specific tutoring.

Growth is most pronounced in high-impact STEM courses such as **MATH 251**, **MATH 252**, **BIOL 240**, **CHEM 210**,

3.C. DISAGGREGATION OF PROGRAM PARTICIPANT DATA

Disaggregate the data from 3.B. and compare it to the overall College population; choose disaggregations which are most relevant to programming decisions (e.g., ethnicity, gender, age, enrollment status, and/or modality). Work with PRIE to disaggregate any data collected via student IDs.

PROGRAM PARTICIPANT DATA

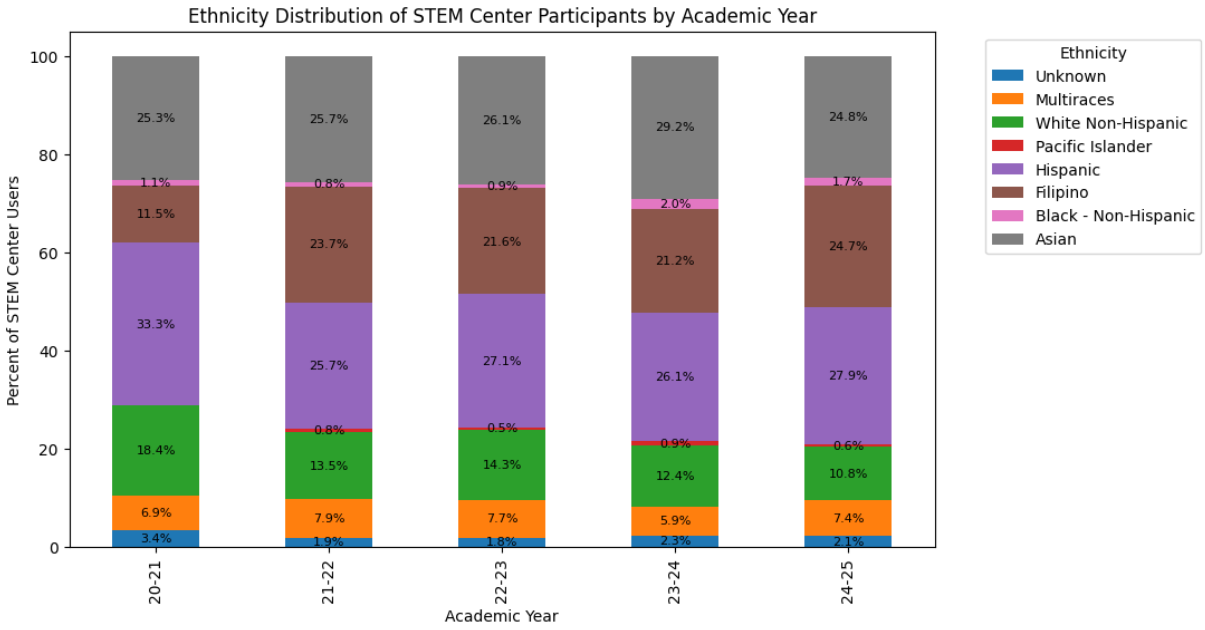
This section examines the demographic composition of STEM Center participants using disaggregated student-level data to better understand program access and inform program planning and outreach strategies. Demographic variables analyzed include race/ethnicity, gender, age group, enrollment status, first-generation status, and low-income status.

To provide a clearer view of trends over time, participant data were organized by **academic year**, spanning **2020–2021 through 2024–2025**. Academic years were defined as the combination of **summer, fall, and spring terms** within the same academic cycle (e.g., Summer 2022, Fall 2022, and Spring 2023 are categorized as Academic Year 2022–2023). Because the dataset begins in Spring 2021, Academic Year **2020–2021 includes only Spring 2021 records**, which represents the earliest available data for this analysis. Summer 2025 data were excluded because they represent the beginning of Academic Year **2025–2026**, for which a full academic cycle is not yet available.

The original dataset provided by PRIE is structured at the student–course–term level, meaning that students enrolled in multiple courses may appear multiple times within the same term. To ensure that demographic analyses reflect unique student participation rather than course enrollments, records were unduplicated by student ID and academic year prior to analysis.

STEM Center participant demographics are compared with the demographic composition of students enrolled in the **STEM division**, providing institutional context that more closely reflects the population most likely to utilize STEM Center services.

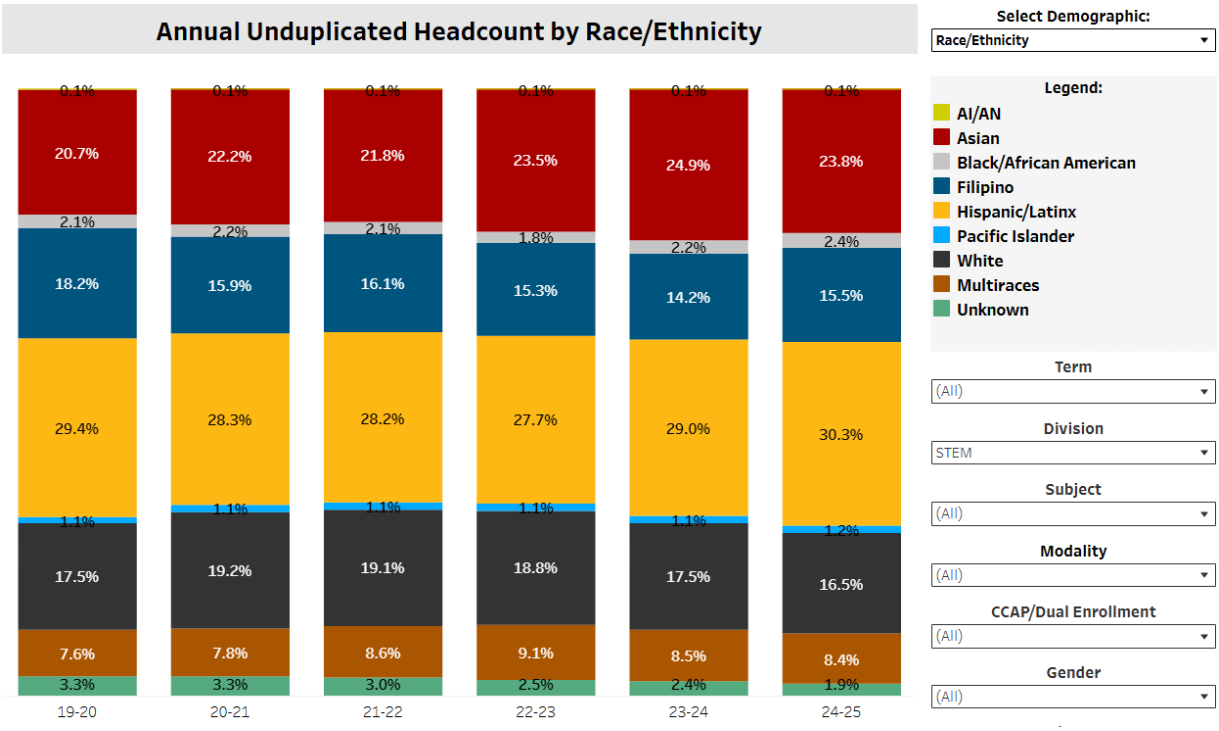
Race/ethnicity Analysis:



The distribution of STEM Center participants by race and ethnicity shows relatively stable patterns across academic years 2020–2021 through 2024–2025. Hispanic students consistently represent the largest proportion of STEM Center users, ranging from approximately 25.7% to 33.3% of participants across the five-year period. Asian students also represent a substantial portion of users, ranging from approximately 24.8% to

29.2%. Filipino students make up another significant group, representing between approximately 21.2% and 24.7% of participants.

White Non-hispanic students represent a smaller but consistent share of participants, generally ranging between approximately 10.8% and 18.4% depending on the academic year. Students identifying as multiracial, Black/African American, Pacific Islander, and unknown categories represent smaller proportions of program participants.



When comparing trends between STEM Center participants and STEM division, several patterns emerge:

- **Hispanic students:**
  While Hispanic students represent the largest group in both datasets, the STEM division shows a steady increase (30.6% - 33.2%), whereas STEM Center participation declined sharply between 2020–2021 and 2021–2022 (-7.6 points) before gradually increasing again in later years.

- **Asian students:**
  Participation in the STEM Center increased between 2020–2021 and 2023–2024 (+3.9 points) before declining in 2024–2025, while division enrollment shows a steady upward trend across the same period.

- **Filipino students:**
  STEM Center participation remains relatively stable (21–25%), while division data shows a slight downward trend, suggesting Filipino students continue using STEM Center services at rates similar to or slightly higher than their presence in the division.

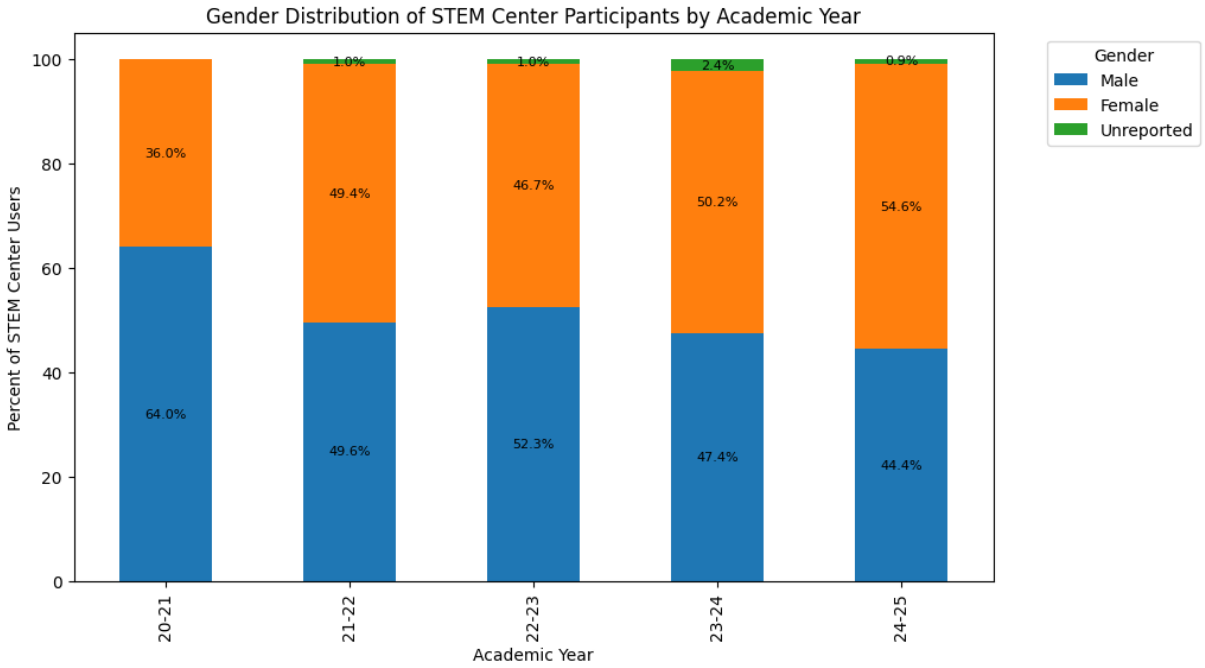
- **White Non-Hispanic students:**
  White student participation in the STEM Center declines noticeably over time (-7.6 points), while the division population remains relatively stable. This divergence suggests white students utilize tutoring

services at lower rates relative to their representation in STEM courses.

- **Smaller racial groups:**
  Black/African American, Pacific Islander, and Multiracial students represent small proportions in both datasets, and year-to-year changes remain minimal.

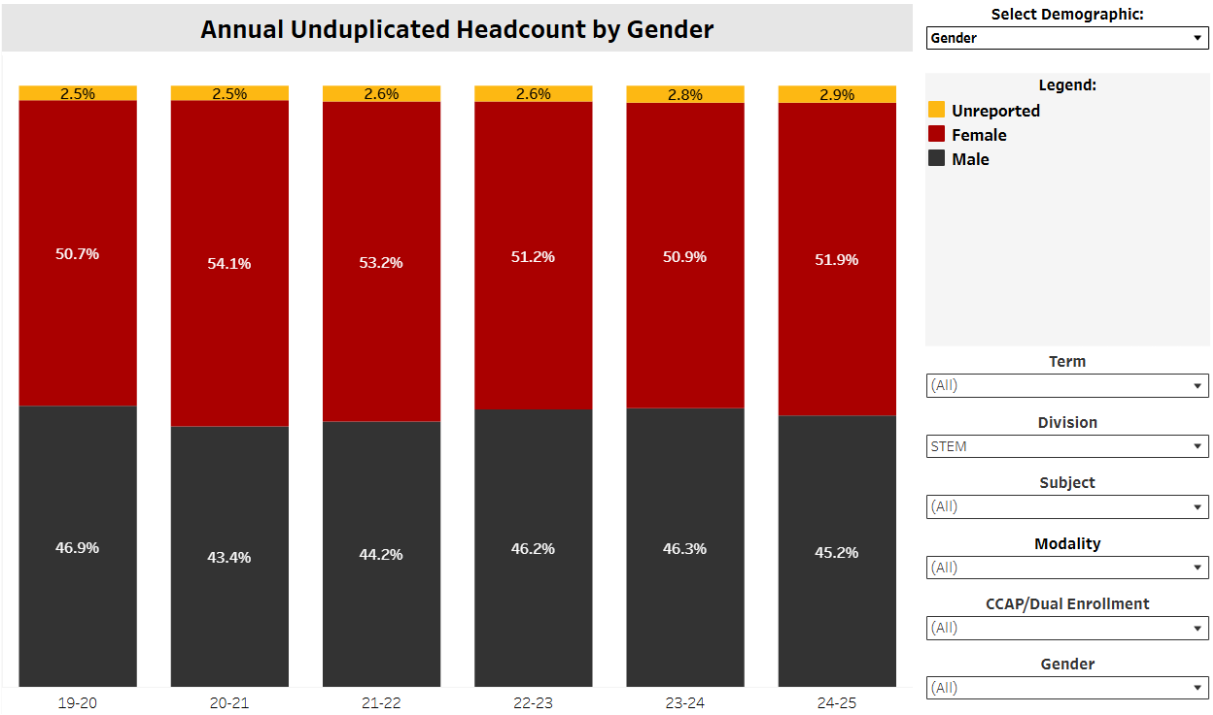
These patterns help the STEM Center monitor whether tutoring services are reaching the primary student groups enrolled in STEM courses and identify groups that may benefit from additional outreach or engagement strategies.

Gender Analysis:



Male students represent the largest share of STEM Center participants in most academic years. Participation declined from 64.0% in 2020–2021 to 49.6% in 2021–2022 (-14.4 percentage points), followed by fluctuations between 44.4% and 52.3% in subsequent years. Female participation increased from 36.0% in 2020–2021 to 49.4% in 2021–2022 (+13.4 points) and continued to increase gradually, reaching 54.6% in 2024–2025. The proportion of students with unreported gender remains minimal across all academic years, ranging from 0.9% to 2.4%.

SKY SS - STEM Center



When comparing trends between STEM Center participants and the STEM division, several patterns emerge:

Female students:

Female representation in the STEM division remains relatively stable, ranging between 50.7% and 54.1% across academic years. In contrast, female participation in the STEM Center shows a steady increase from 36.0% in 2020–2021 to 54.6% in 2024–2025, eventually aligning with or slightly exceeding the proportion of female students enrolled in STEM courses.

Male students:

Male representation in the STEM division remains relatively consistent, ranging between 43.4% and 46.9% across academic years. STEM Center participation among male students shows greater fluctuation, with a sharp decrease between 2020–2021 and 2021–2022 (-14.4 points) followed by smaller changes in later years.

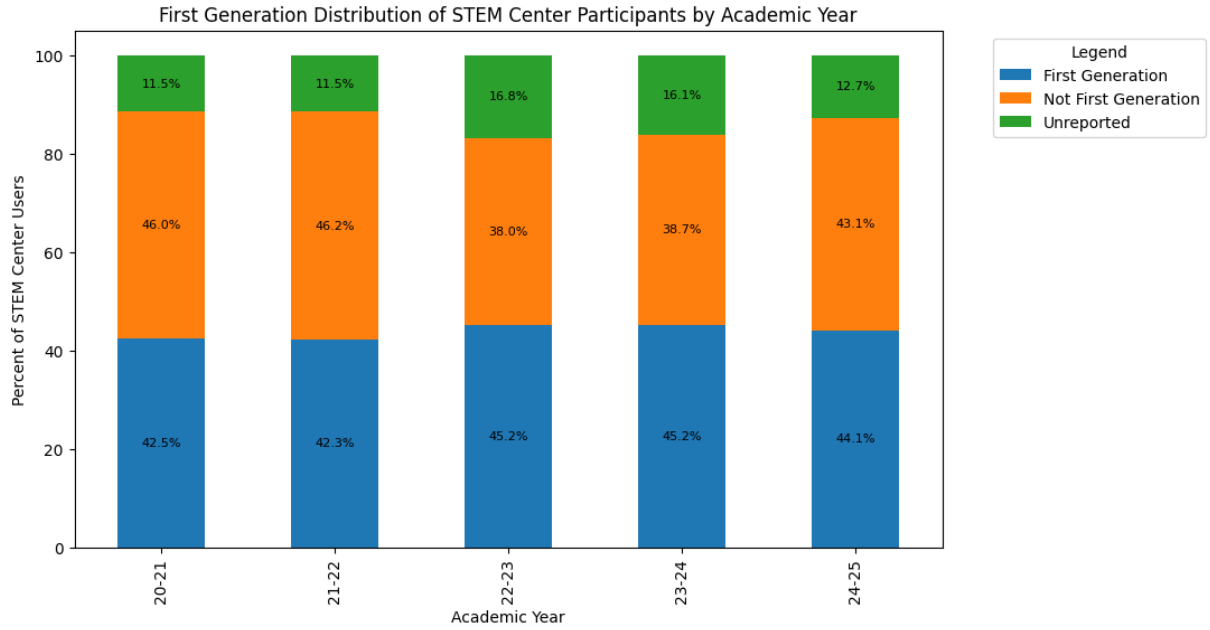
Unreported gender:

Students with unreported gender represent a small proportion in both datasets. In the STEM division, unreported gender ranges between 2.5% and 2.9%, while STEM Center participation remains slightly lower, generally between 0.9% and 2.4%.

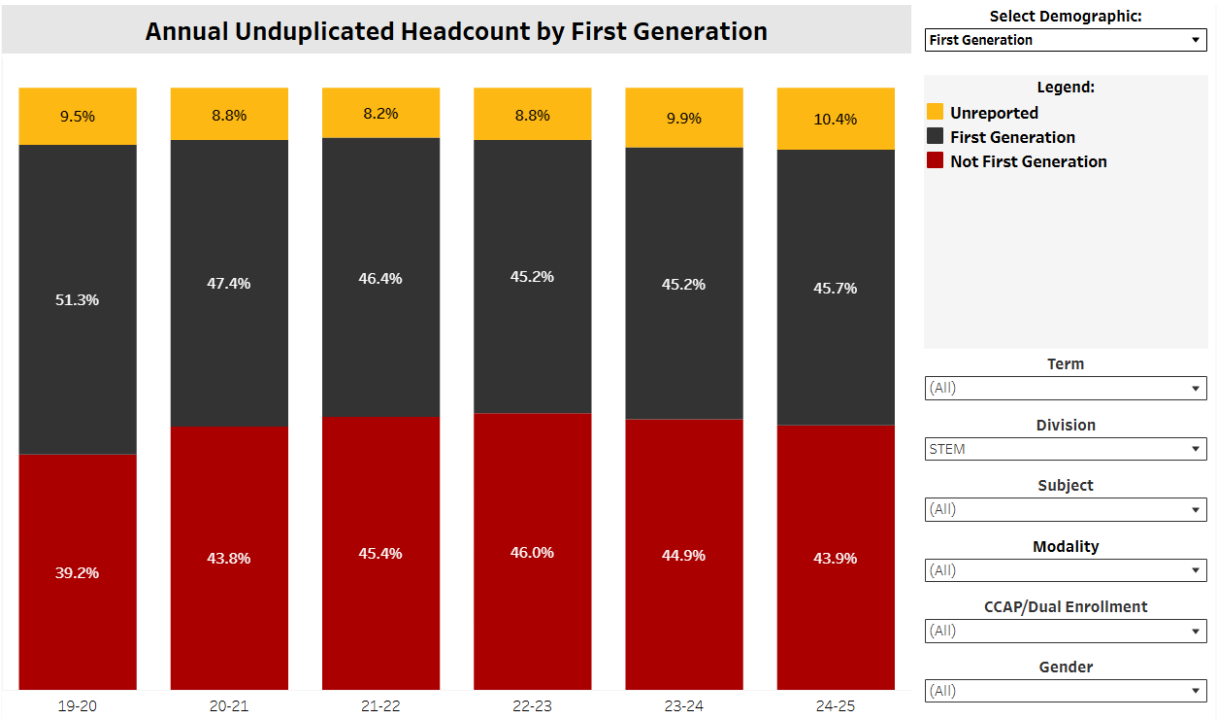
Overall, the gender composition of STEM Center participants increasingly reflects the gender distribution of students enrolled in STEM courses over time, particularly with the growth in female participation in tutoring services.

First-Generation Status Analysis:

SKY SS - STEM Center



First-generation students consistently represent a substantial portion of STEM Center users, ranging between approximately 42.3% and 45.2% of participants across the five-year period. Students who are not first-generation represent a similar proportion, ranging from approximately 38.0% to 46.2%. Students with unreported first-generation status represent a smaller share of participants, generally ranging between 11.5% and 16.8%.



First-generation students:

First-generation students represent a slightly larger proportion of the overall STEM division population, ranging between 45.2% and 51.3% across academic years. Participation in the STEM Center is slightly lower but remains relatively stable, ranging from 42.3% to 45.2%. This indicates that first-generation students consistently utilize STEM Center services at rates comparable to their presence in STEM courses, though slightly below division representation in some years.

Not first-generation students:

Students who are not first-generation represent 39.2% to 46.0% of the STEM division population. In the STEM

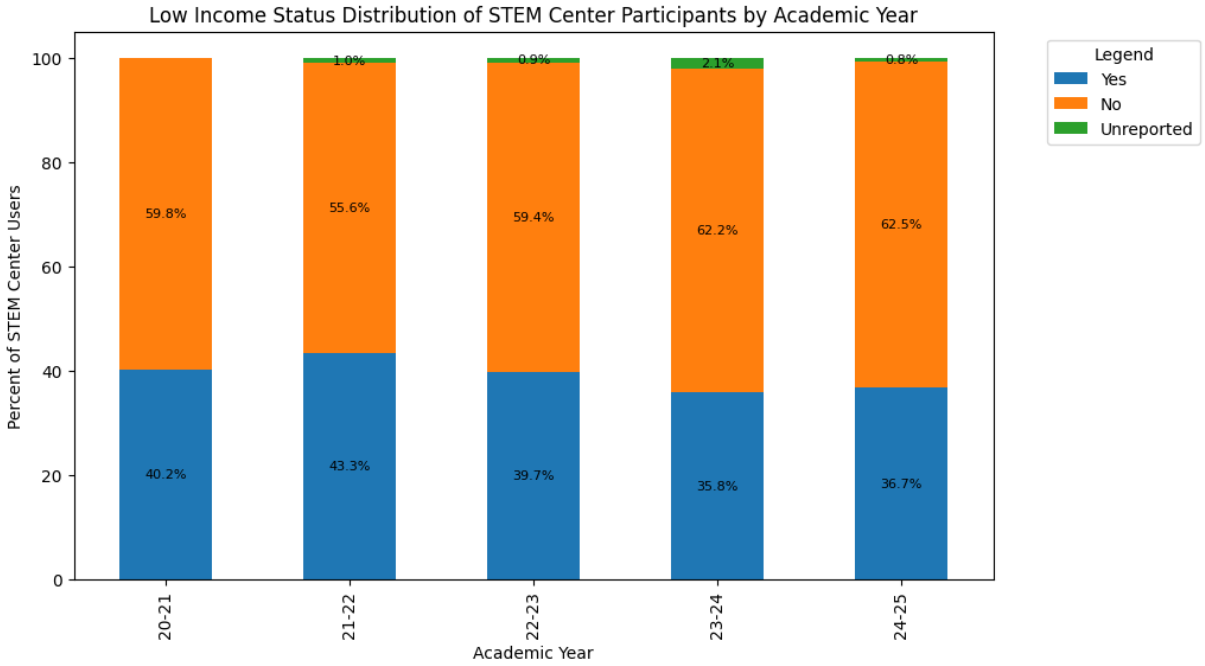
Center, participation among non-first-generation students fluctuates between 38.0% and 46.2%, showing patterns that generally mirror division trends with only small differences across years.

Unreported first-generation status:

Students with unreported first-generation status represent a slightly larger proportion of STEM Center participants compared to the STEM division. In the STEM Center, unreported status ranges between 11.5% and 16.8%, while in the STEM division it ranges between 8.2% and 10.4%.

Overall, the proportion of first-generation students participating in STEM Center services closely reflects their presence within the STEM division across academic years, indicating that tutoring services are reaching a substantial portion of students who may benefit from additional academic support.

Low-Income Status Analysis:



Students identified as low-income represent a substantial proportion of STEM Center users, ranging between 35.8% and 43.3% of participants across the five-year period. The highest proportion occurs in 2021–2022 (43.3%), followed by a gradual decline to 35.8% in 2023–2024, with a slight increase to 36.7% in 2024–2025.

Students who are not classified as low-income represent the majority of STEM Center participants across all academic years, ranging from approximately 55.6% to 62.5%. Participation among this group shows moderate increases in the later years, particularly between 2022–2023 and 2024–2025 (+3.1 percentage points).

Programming decisions

1. **Barrier-Free Academic Support**
   - The availability of free tutoring, and a study space ensures that students are not limited by their ability to pay for external academic support or private study environments.
   - These services are especially critical for low-income students who may lack quiet or adequately equipped study spaces outside of campus.

2. **Material and Resource Access**
   - The STEM Center's loaner calculators, chemistry and anatomy models, and other instructional materials reduce out-of-pocket costs associated with exam preparation and course supplies.

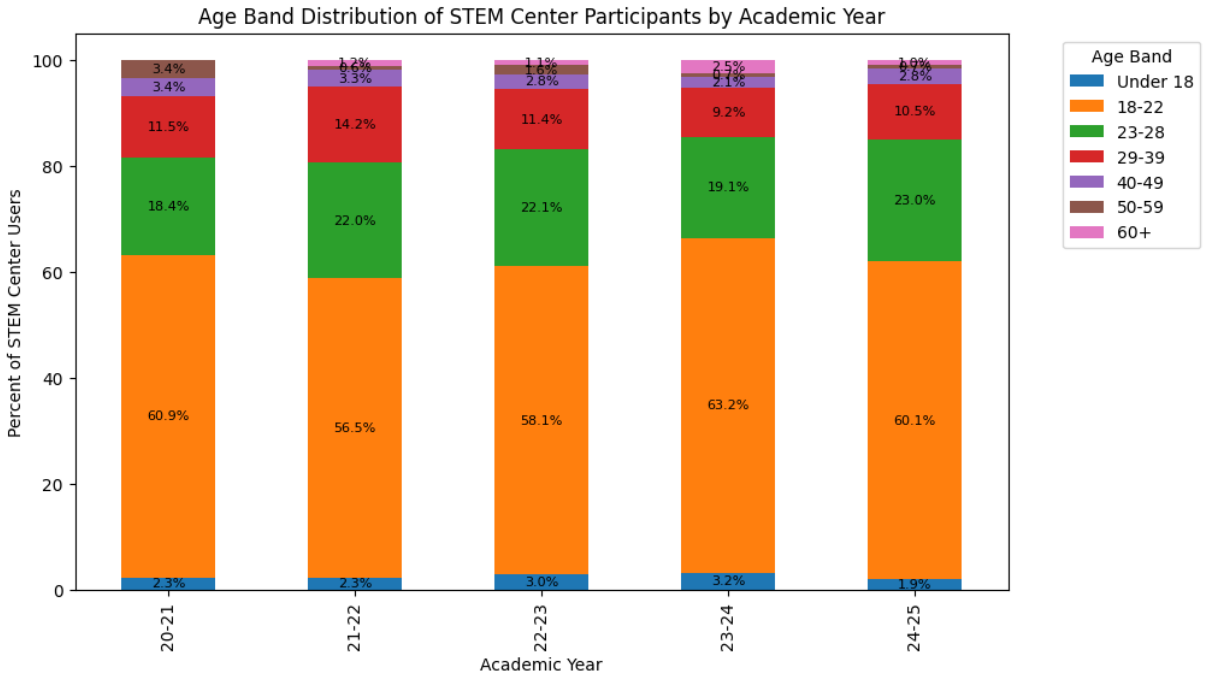
3. **Basic Needs and Student Persistence**

- The provision of free snacks, in coordination with SparkPoint, supports students' basic needs and encourages longer, more sustained engagement with tutoring services.
- Access to a kitchen space, allowing students to store food while on campus supports longer study time and sustained use of tutoring services, contributing to student persistence.
- Addressing food insecurity and financial stress supports persistence, particularly during high-demand academic periods.

4. **Flexible and Virtual Service Delivery**

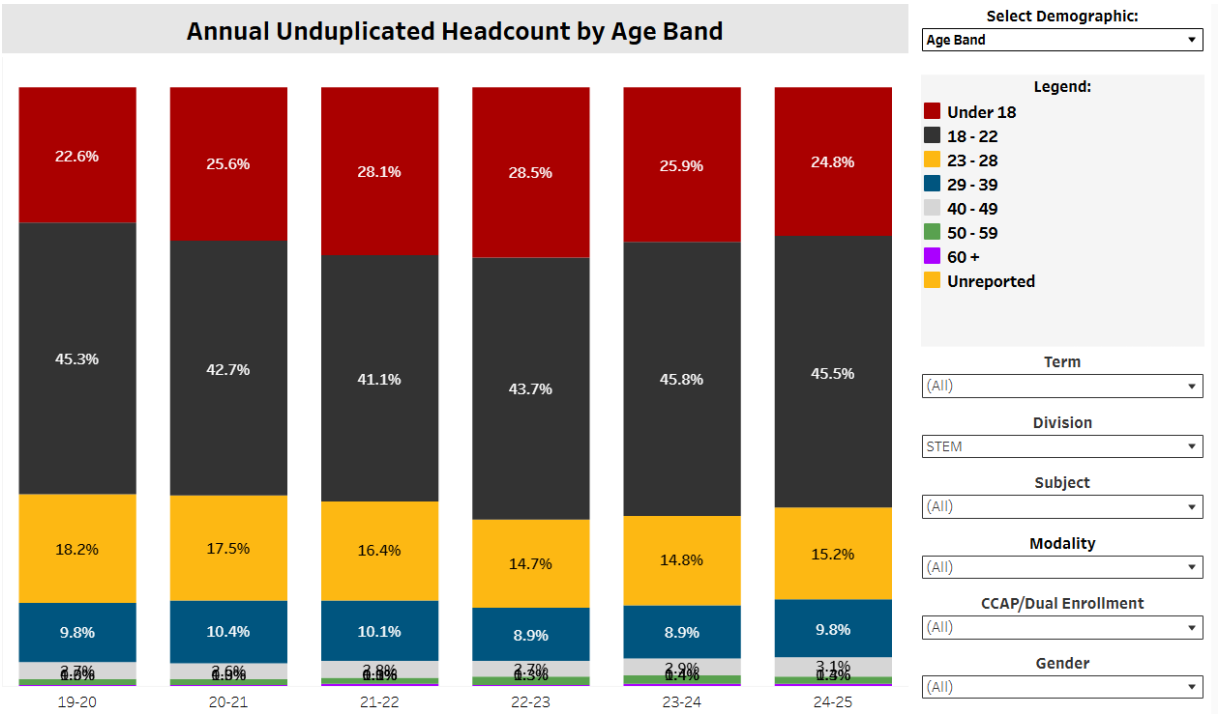
- In-Person and virtual tutoring options support low-income students who face transportation challenges, work obligations, or caregiving responsibilities.
- Offering multiple modalities ensures that access to academic support is not constrained by external circumstances.

Age Band Analysis:



Students aged 18–22 consistently represent the largest proportion of STEM Center users, ranging from approximately 56.5% to 63.2% across the five-year period. Students aged 23–28 represent the second largest group, ranging between 18.4% and 23.0% of participants.
Participation among older age groups is smaller. Students aged 29–39 represent between 9.2% and 14.2% of STEM Center users across academic years, while students aged 40–49 generally represent between 2.1% and 3.4% of participants. Students aged 50–59 and 60+ represent very small proportions of STEM Center users each year.

SKY SS - STEM Center



Students aged 18–22:
Students in this age group represent the largest proportion of both STEM Center participants and STEM division enrollment. Participation in the STEM Center ranges between 56.5% and 63.2%, closely reflecting the division population where this group ranges between 41.1% and 45.8%. This indicates that the STEM Center primarily serves traditional-age college students.

Students aged 23–28:
Students aged 23–28 represent the second largest group in the STEM Center, ranging between 18.4% and 23.0%, which is slightly higher than their representation in the STEM division. This suggests that students in this age group may be utilizing tutoring services at rates comparable to or slightly above their representation in STEM courses.

Older students (29+):
Students aged 29–39, 40–49, and older represent smaller proportions of STEM Center participants. While these groups are also smaller within the STEM division population, their participation in tutoring services remains comparatively limited.

Programming Considerations

Several program strategies address the needs and participation patterns observed among different age groups.

Flexible Tutoring Modalities

- Virtual tutoring was initially expanded during the COVID-19 pandemic to maintain academic support during campus closures.

Support for Non-Traditional Students

- Virtual tutoring provides flexibility for students who balance coursework with employment, caregiving responsibilities, or commuting constraints, which are more common among older students.

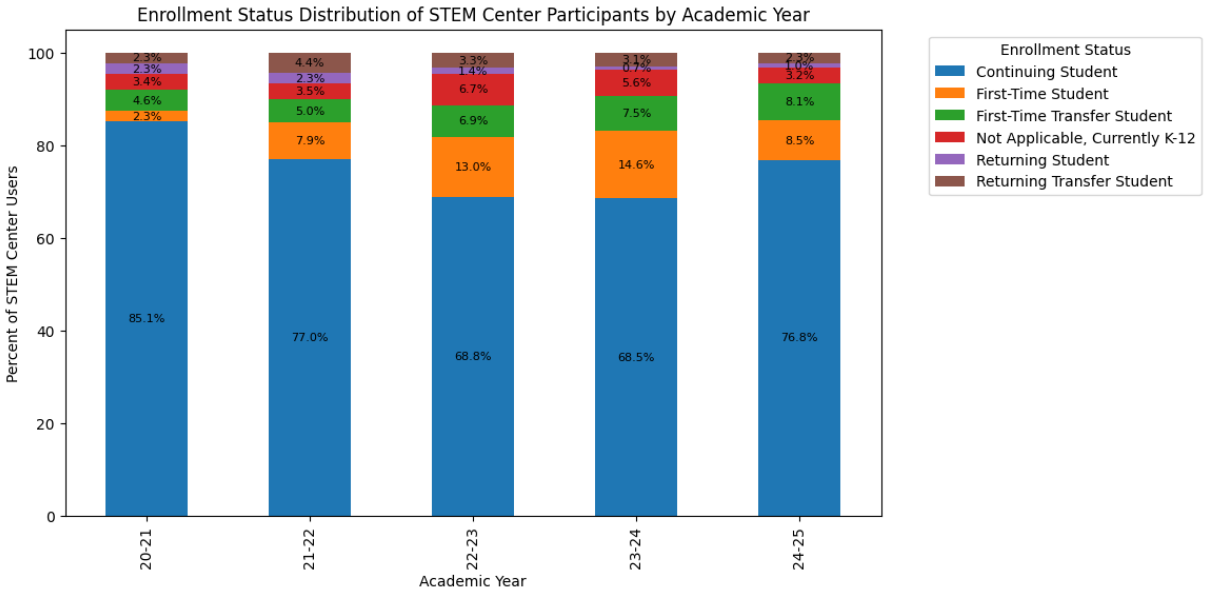
Operating Hours and Access

- Compared to the overall college population, older students are underrepresented among STEM Center users.
- Historically, the STEM Center offered late evening access; however, staffing turnover has resulted in a more limited operating schedule.

SKY SS - STEM Center

- Reduced hours may limit access for students enrolled in evening courses, full-time workers, and those with caregiving responsibilities.

Enrollment Status Analysis:



Continuing students represent the largest share of STEM Center participants across academic years 2020–2021 through 2024–2025, ranging from 68.5% to 85.1% of users. Participation declined between 2020–2021 (85.1%) and 2022–2023 (68.8%), followed by an increase to 76.8% in 2024–2025.
First-time students represent a smaller but consistent proportion of participants, ranging between 2.3% and 14.6%, with participation increasing between 2020–2021 and 2023–2024. First-time transfer students also show gradual growth, increasing from 4.6% to 8.1% across the five-year period.
Other enrollment categories including returning students, returning transfer students, and students classified as Not Applicable (currently K–12) represent small proportions of participants each year.

Programming Considerations

- **Sustained academic support**
  - Because most participants are continuing students, the STEM Center emphasizes tutoring support across multiple semesters of STEM coursework.???????
- **Career and transfer preparation**
  - **???????**Support events such as **Science in Action**, organized with **MESA**, connect students with STEM professionals and introduce academic and career pathways.
- **Technical workshops**
  - **???????**Organize workshops led by scientists and professionals to promote industry pathways for students in transfer pathways.
- **Internship and scholarship awareness**
  - The STEM Center maintains a **curated resource bank** on its website highlighting internships, scholarships, and research opportunities to support students' persistence and transition beyond Skyline College.

3.D. EQUITABLE ACCESS TO THE PROGRAM

Provide an analysis of how students, particularly historically disadvantaged students, are able to access the program. Specific questions to answer in your response:

i. What usage trends do you observe, and what may account for these trends?

Usage trends among STEM Center users show that engagement is highest in courses with embedded support and structured services, particularly in gateway STEM courses such as mathematics, chemistry, and biology. Students enrolled in these courses are more likely to access in-person/virtual tutoring regularly, suggesting that direct integration of services within coursework is a primary driver of usage.

Analysis of STEM Center user data **(3.C)** indicates that students who engage with services tend to be those already connected to STEM pathways or support programs. However, this also suggests that access may be uneven for students who are not enrolled in supported courses or who face external barriers such as scheduling constraints or limited awareness of available services.

Findings from PSLO assessment results **(3.B)** reinforce the effectiveness of these services among users. Across Fall 2025 and Spring 2026, a high proportion of students reported agreement (ratings of 4 or 5) with all PSLO outcomes, including academic skill development, increased confidence and persistence, and overall positive experience. Additionally, 95% of students rated their overall experience as “Excellent” or “Good” (55.5% Excellent, 39.5% Good), indicating strong satisfaction among those who access the STEM Center.

This highlights the need to expand outreach and access points to ensure that historically disadvantaged students who are not currently engaged in supported courses can also benefit from these services. Analysis from **3.C** indicates that while many students from historically underserved groups, including Latino/a/x students, first-generation college students, and low-income students, are represented among STEM Center users

ii. How do your program demographics compare to that of the College as a whole, and what differences, if any, are revealed?

Comparison of STEM Center user demographics is first conducted against the STEM Division, as this provides a more accurate representation of the population enrolled in STEM coursework. Overall, STEM Center users reflect the demographic composition of the STEM Division, including strong representation of historically disadvantaged students such as Latino/a/x, first-generation, and low-income students. This suggests that the STEM Center is effectively reaching students who are most impacted by barriers in STEM pathways.

When compared more broadly to the division population, some groups, particularly older and part-time students, are underrepresented among STEM Center users. These differences may be explained by structural barriers such as work obligations, caregiving responsibilities, and scheduling constraints. The reduction in evening operating hours due to staffing limitations may further limit access for students enrolled in evening courses or balancing external responsibilities.

Despite these differences, the STEM Center has implemented several program structures that reduce barriers to access. Free tutoring, study space, and instructional materials help mitigate financial barriers for low-income students. Virtual tutoring and multiple service modalities increase accessibility for students with transportation or time constraints. Additionally, resources such as snacks and basic needs support contribute to sustained engagement, particularly for students experiencing financial stress.

iii. What are the implications for how you will provide services and conduct outreach for your program?

These findings have direct implications for how the STEM Center will continue to provide services and conduct outreach. Since access for historically disadvantaged students is often linked to structured pathways, the STEM Center will continue to strengthen partnerships with programs such as MESA, Promise, TRIO, Umoja-ASTEP, and Puente. These collaborations support early awareness, referrals, and sustained engagement, particularly for first-generation and underrepresented students.

To address barriers faced by low-income students, the STEM Center will maintain barrier-free academic support through free tutoring, access to materials, and basic needs resources. Continued investment in both in-person and virtual tutoring will ensure that students facing transportation, work, or caregiving challenges can access services through flexible modalities.

In response to underrepresentation of certain groups, including older and part-time students, the STEM Center will

evaluate service hours and explore strategies to expand access beyond traditional schedules where feasible. Increasing outreach in evening courses and improving awareness of virtual services may help address these gaps.

Finally, given that many participants are continuing and transfer-oriented students, the STEM Center will continue integrating academic support with career and transfer preparation. Programming such as Science in Action events, technical workshops, and promotion of internships and scholarships will support long-term student persistence and success beyond Skyline College.

EFFECTIVENESS

4.A. PROGRAM STUDENT LEARNING OUTCOMES (PSLOs)

i. How frequently were PSLOs assessed for the last five years?

PSLOs were formally developed and implemented during the 2025–2026 academic year as part of the STEM Center's comprehensive program review process. Moving forward, PSLOs will be assessed on an annual basis.

ii. What have you learned from reviewing the PSLO results? What may account for these results? What are their implications for your programming?

The STEM Center has conducted an initial review of PSLO results using student survey data collected during the 2025–2026 academic year. At this stage, analysis has focused on student perceptions of tutoring, study space, and community engagement. A more comprehensive analysis incorporating course success and persistence data is currently in progress and will be completed at the end of the current academic year.

iii. Are the PSLOs still relevant to your program? If not, what changes might be made?

The PSLOs remain relevant and aligned with the STEM Center's mission to support student success in STEM courses. They effectively capture key areas of impact, including academic skill development, independent learning, and community connection. As assessment efforts continue, minor refinements may be made to further clarify measurement approaches and strengthen alignment with institutional priorities, particularly in areas such as equity and student engagement.

Preliminary findings from survey results indicate that students report strong positive outcomes across all PSLO areas. Students consistently indicated that tutoring supports their understanding of STEM concepts, helps them apply problem-solving strategies, and increases their confidence in approaching complex coursework.

Additionally, students reported that access to the STEM Center space helps them stay focused and supports independent learning. Survey results also show that students feel comfortable seeking help and experience a sense of connection to peers and the broader STEM community.

Implications for programming include the need to continue services through the Peer Instructional program to further support students in applying problem-solving strategies and to enhance structured opportunities for peer collaboration.

iv. Please check the boxes to indicate that the following tasks have been completed.

Submitted a current assessment calendar to the Office of Planning, Research, and Institutional Effectiveness
No

Updated the Improvement Platform with new and/or changed PSLOs after approval by the appropriate person(s).
Yes

Updated the program website with new and/or changed PSLOs after approval by the appropriate person(s)
Yes

4.B. ADDITIONAL DATA DEMONSTRATING EFFECTIVENESS

i. Briefly describe and upload additional data that is relevant to evaluating your program's effectiveness (e.g., reports to the federal or state government, grantors, etc.). Disaggregate when possible.

Course Success

The primary analyses included comparisons of course success rates between students who received tutoring support **(defined as at least one hour of engagement)** and those who did not, as well as comparisons of GPA

outcomes between these groups. These analyses are presented across multiple STEM subjects, including Biology, Mathematics, Chemistry, and are disaggregated by course and semester when possible.

It is important to note that tutoring support reflected in these analyses represents a combination of multiple service modalities offered by the STEM Center. For subjects such as Mathematics and Chemistry, tutoring outcomes are influenced by integrated support structures, including embedded tutoring, workshops, in-person tutoring, and virtual tutoring. As a result, the observed success rates reflect the collective impact of these services rather than a single intervention.

Data Limitations:

The course success data used in this analysis are based on PRIE reporting definitions, where students are classified as “tutoring” only if they have participated in at least one hour of tutoring. This definition does not fully capture the range of support provided by the STEM Center. Many tutoring interactions occur through drop-in formats, including open lab, in-person tutoring, and quick support sessions, where students may engage for shorter periods (e.g., 10–15 minutes) without accumulating a full hour of recorded time. As a result, a portion of students who received meaningful academic support may be categorized within the non-tutoring group. This limitation should be considered when interpreting differences between tutoring and non-tutoring outcomes, as the comparison may underestimate the full impact of STEM Center services.

There are inconsistencies in data reporting across semesters and subjects. In some cases, complete reports were not available despite data requests, and variations in how tutoring participation was recorded may affect comparability over time. Despite these limitations, the data presented offer valuable evidence of the relationship between tutoring participation and student success. These findings support ongoing efforts to strengthen tutoring services, and improve data collection processes.

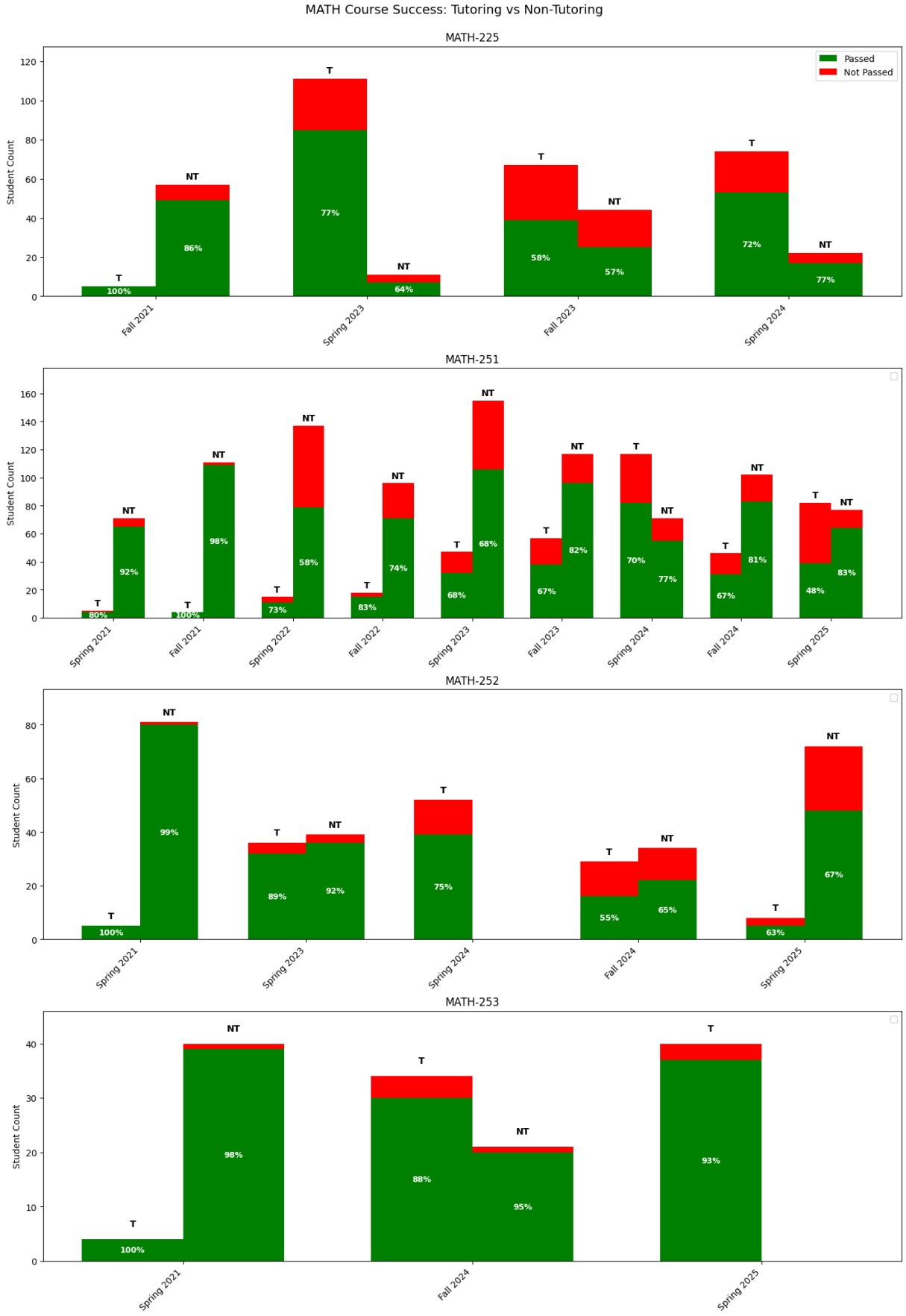
Interpretation:

The figures included in this section display course-level success rates using both percentages and student counts to provide a more complete interpretation of outcomes. In particular, the visualizations highlight differences between tutoring (T) and non-tutoring (NT) student groups, while also accounting for variations in sample size across semesters. This approach allows for a more accurate understanding of program impact beyond percentage comparisons alone.

Subject Analysis:

The following figures illustrate these patterns by course and semester, highlighting both success rates and the distribution of students across tutoring and non-tutoring groups.

SKY SS - STEM Center



MATH-225

SKY SS - STEM Center

- Spring 2023: Tutoring exceeded non-tutoring by 13 points, with a large tutoring population, indicating a strong positive pattern.
- Fall 2023: Minimal difference (1 point), suggesting similar outcomes between groups.
- Spring 2024: Tutoring fell below non-tutoring by 5 points, indicating a slight shift in performance.

MATH-251

- Spring 2022: Tutoring exceeded non-tutoring by 15 points, during a lower-performing term overall.
- Fall 2022: Positive difference of 9 points, suggesting continued benefit during this period.
- Fall 2023: Tutoring dropped below non-tutoring by 15 points, marking a shift in trend.
- Spring 2025: Largest gap observed, with tutoring lower by 35 points, indicating a substantial decline in outcomes for this group.

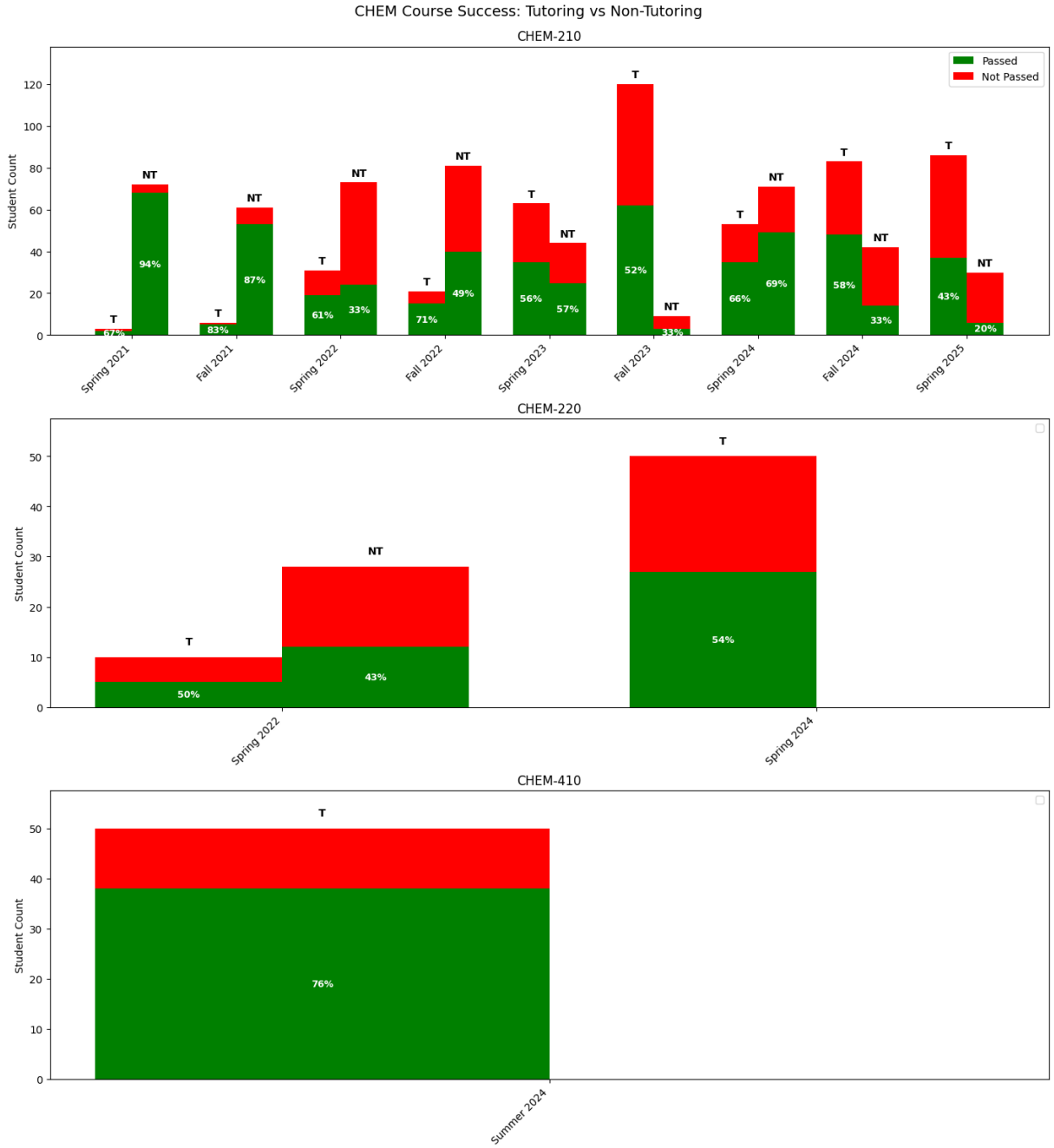
MATH-252

- Spring 2023: Minimal difference (3 points), indicating similar performance across groups.
- Fall 2024: Tutoring was lower by 10 points, with both groups showing reduced success.
- Spring 2025: Small difference (4 points), indicating comparable outcomes.

MATH-253

- Fall 2024: Tutoring was lower by 7 points, though both groups maintained high success rates.
- Spring 2025: Tutoring shows strong performance, but no non-tutoring comparison is available.

SKY SS - STEM Center



CHEM-210

- Spring 2021: Non-tutoring exceeded tutoring by 27 points, though the tutoring group is very small.
- Spring 2022: Tutoring exceeded non-tutoring by 28 points, indicating a strong positive shift.
- Fall 2022: Tutoring higher by 22 points, continuing the positive trend.
- Fall 2023: Largest gap observed, with tutoring exceeding non-tutoring by 19 points, though the non-tutoring group is small.
- Spring 2024: Non-tutoring exceeded tutoring by 3 points, showing similar performance.
- Fall 2024: Tutoring exceeded non-tutoring by 25 points, indicating a strong positive difference.

SKY SS - STEM Center

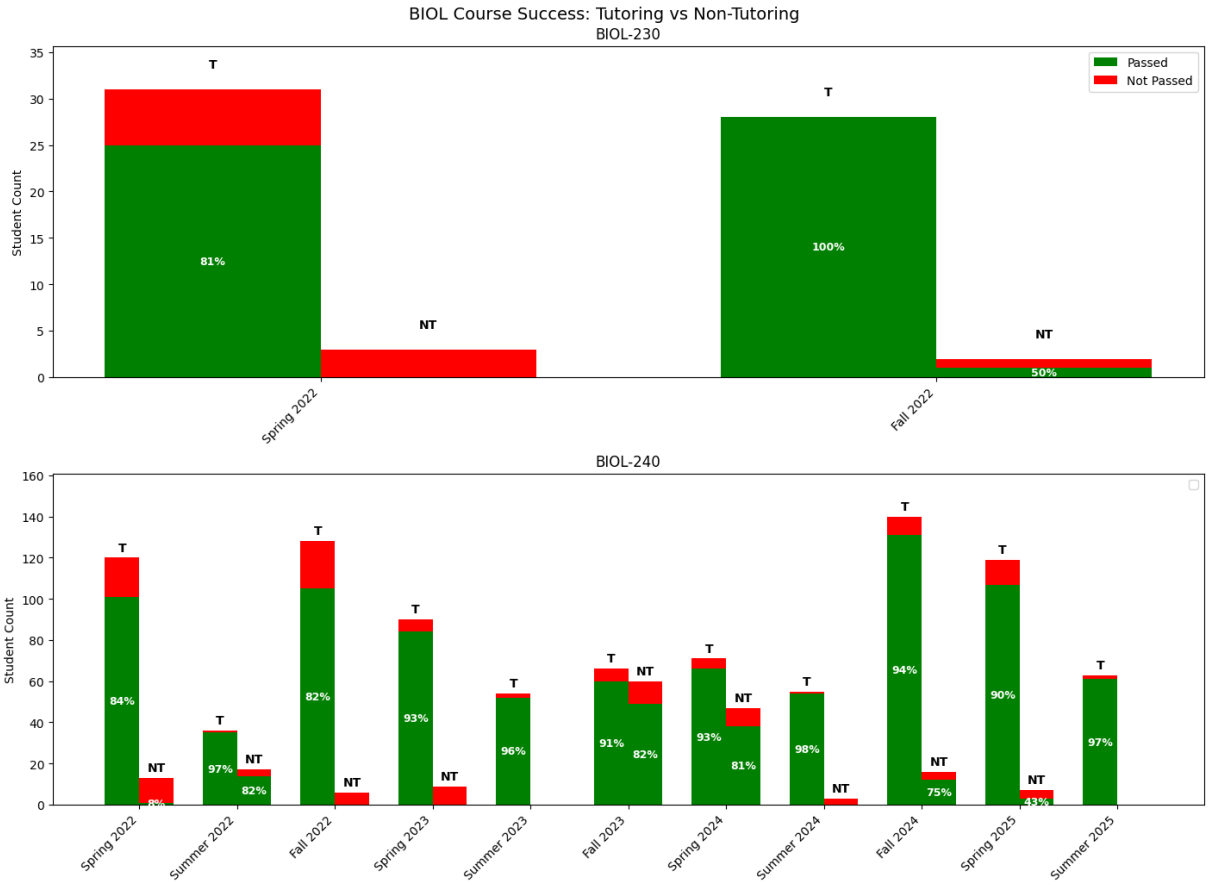
- Spring 2025: Largest negative shift, with tutoring lower by 23 points, indicating a notable decline in tutoring outcomes.

CHEM-220

- Spring 2022: Tutoring exceeded non-tutoring by 7 points, though both groups show moderate success rates.
- Spring 2024: Tutoring group shows 54% success, but no non-tutoring comparison is available.

CHEM-410

- Summer 2024: Tutoring shows 76% success, with no non-tutoring comparison available, limiting interpretation.



BIOL-230

- Spring 2022: Tutoring exceeded non-tutoring by 81 points, though the non-tutoring group is very small.
- Fall 2022: Largest gap observed, with tutoring exceeding non-tutoring by 50 points, but again with a very small non-tutoring sample.

BIOL-240

- Spring 2022: Tutoring exceeded non-tutoring by 76 points, showing a strong difference.
- Fall 2022: Tutoring exceeded non-tutoring by 82 points, one of the largest gaps observed.
- Spring 2023: Tutoring exceeded non-tutoring by 84 points, continuing a strong trend.

- Fall 2023: Tutoring higher by 9 points, indicating similar performance between groups.
- Spring 2024: Tutoring exceeded non-tutoring by 12 points, showing a moderate difference.
- Fall 2024: Tutoring exceeded non-tutoring by 19 points, maintaining a positive difference.
- Spring 2025: Largest positive gap, with tutoring exceeding non-tutoring by 47 points.

Biology courses, particularly BIOL-240, show the most consistent positive differences favoring tutoring, with several semesters demonstrating substantial gaps in success rates. Mathematics presents a more mixed pattern, where tutoring is often associated with improved outcomes in some semesters, but not consistently across all courses or terms. Chemistry shows the greatest variability, with some semesters reflecting strong positive differences while others indicate comparable or lower outcomes for tutoring students.

While course-level success rates provide insight into outcomes within individual classes, they do not fully capture broader academic performance. To better understand the overall impact of STEM Center engagement, the following section examines differences in cumulative GPA between students who utilized tutoring services and those who did not.

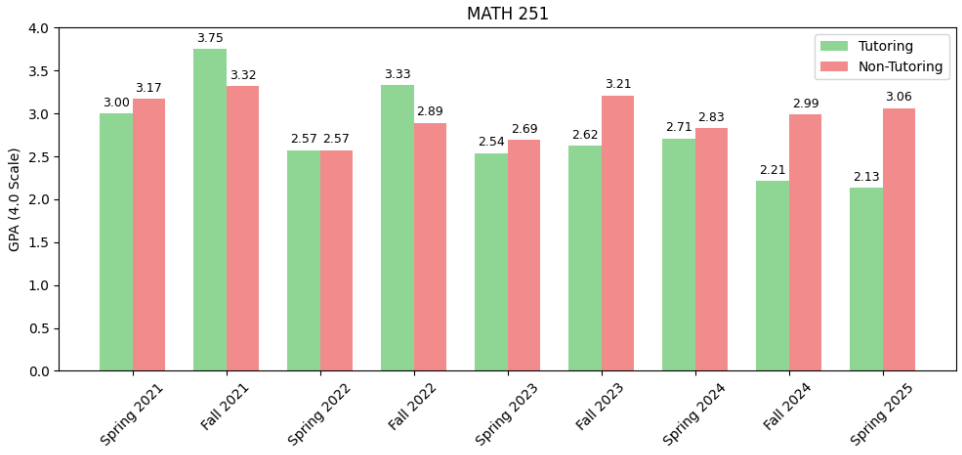
Definition of Course Success and GPA

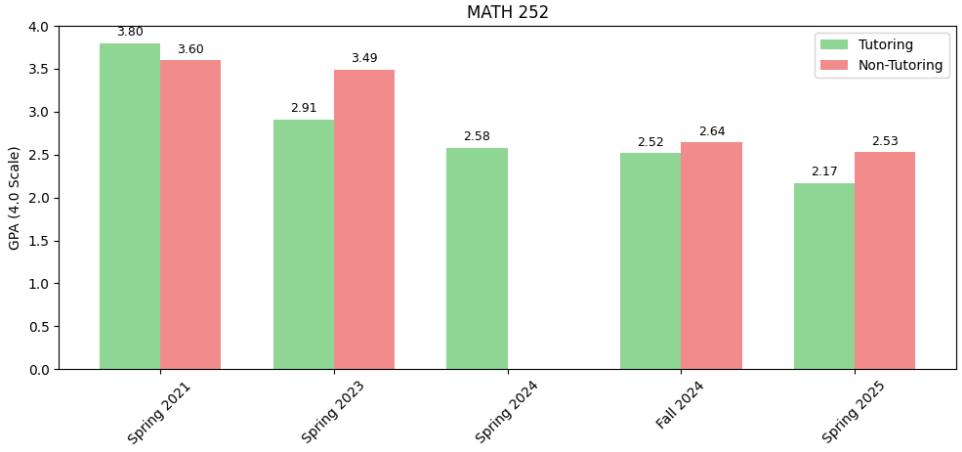
Course success is defined as earning a final grade of A, B, C, or Pass, while unsuccessful outcomes include grades of D, F, or Withdrawal. Grade Point Average (GPA) is calculated on a 4.0 scale, where A = 4, B = 3, C = 2, D = 1, and F = 0, and excludes withdrawals and incomplete grades. These metrics provide complementary perspectives on student outcomes, with success rates capturing course completion and GPA reflecting overall academic performance.

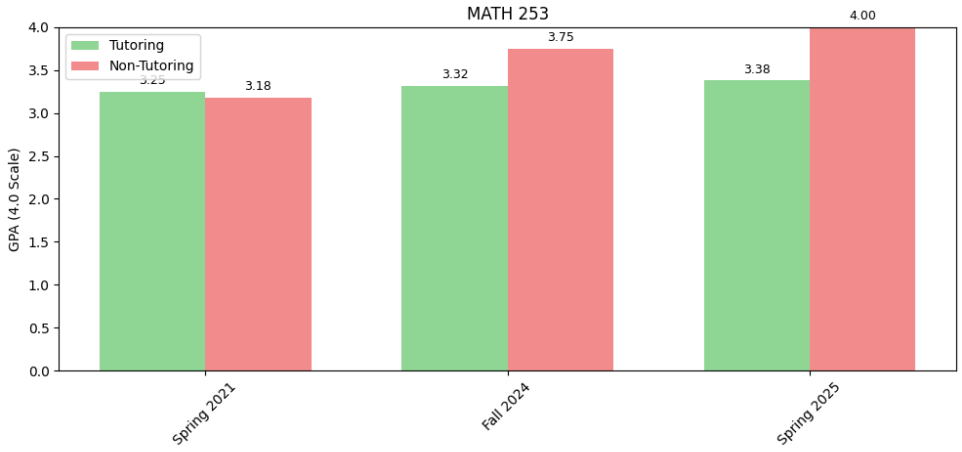
Mean Final Grade (4-point Scale) Analysis Tutoring vs Non-Tutoring Attendees:

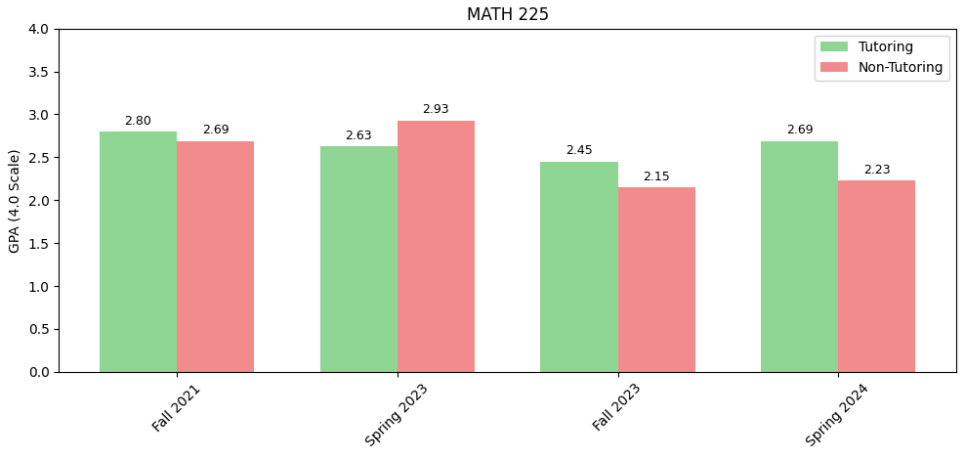
SKY SS - STEM Center

MATH GPA Comparison: Tutoring vs Non-Tutoring









SKY SS - STEM Center

MATH 251

- Fall 2021: Tutoring higher by +0.43, one of the strongest positive differences.
- Fall 2022: Tutoring higher by +0.44, consistent improvement across consecutive fall terms.
- Fall 2024: Largest negative gap, with tutoring lower by −0.78, indicating a notable drop.
- Spring 2025: Tutoring lower by −0.93, the most significant negative difference observed.

MATH 252

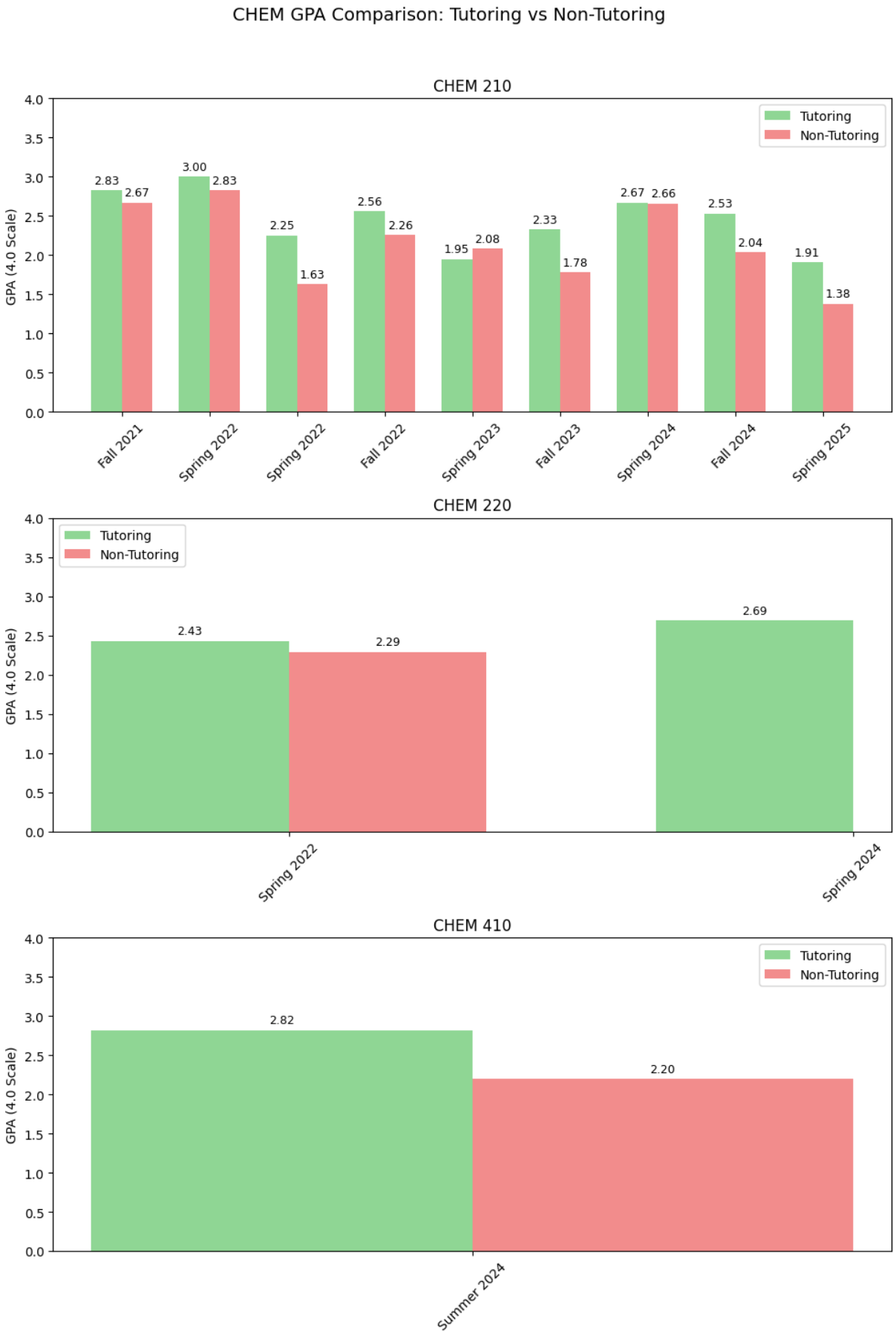
- Spring 2021: Tutoring higher by +0.20, modest positive difference.
- Spring 2023: Tutoring lower by −0.58, one of the larger negative gaps.
- Spring 2025: Tutoring lower by −0.36, continuing a downward trend.

MATH 253

- Fall 2024: Tutoring lower by −0.43, indicating a clear negative difference.
- Spring 2025: Largest gap, with tutoring lower by −0.62.

MATH 225

- Fall 2023: Tutoring higher by +0.30, strongest positive difference for this course.
- Spring 2024: Tutoring higher by +0.46, largest positive gain observed.
- Spring 2023: Tutoring lower by −0.30, showing a moderate negative difference.


CHEM GPA Comparison: Tutoring vs Non-Tutoring
CHEM 210
GPA (4.0 Scale)
Tutoring
Non-Tutoring
2.83
2.67
3.00
2.83
2.25
1.63
2.56
2.26
1.95
2.08
2.33
1.78
2.67
2.66
2.53
2.04
1.91
1.38
Fall 2021
Spring 2022
Spring 2022
Fall 2022
Spring 2023
Fall 2023
Spring 2024
Fall 2024
Spring 2025
CHEM 220
GPA (4.0 Scale)
Tutoring
Non-Tutoring
2.43
2.29
2.69
Spring 2022
Spring 2024
CHEM 410
GPA (4.0 Scale)
Tutoring
Non-Tutoring
2.82
2.20
Summer 2024

CHEM 210

SKY SS - STEM Center

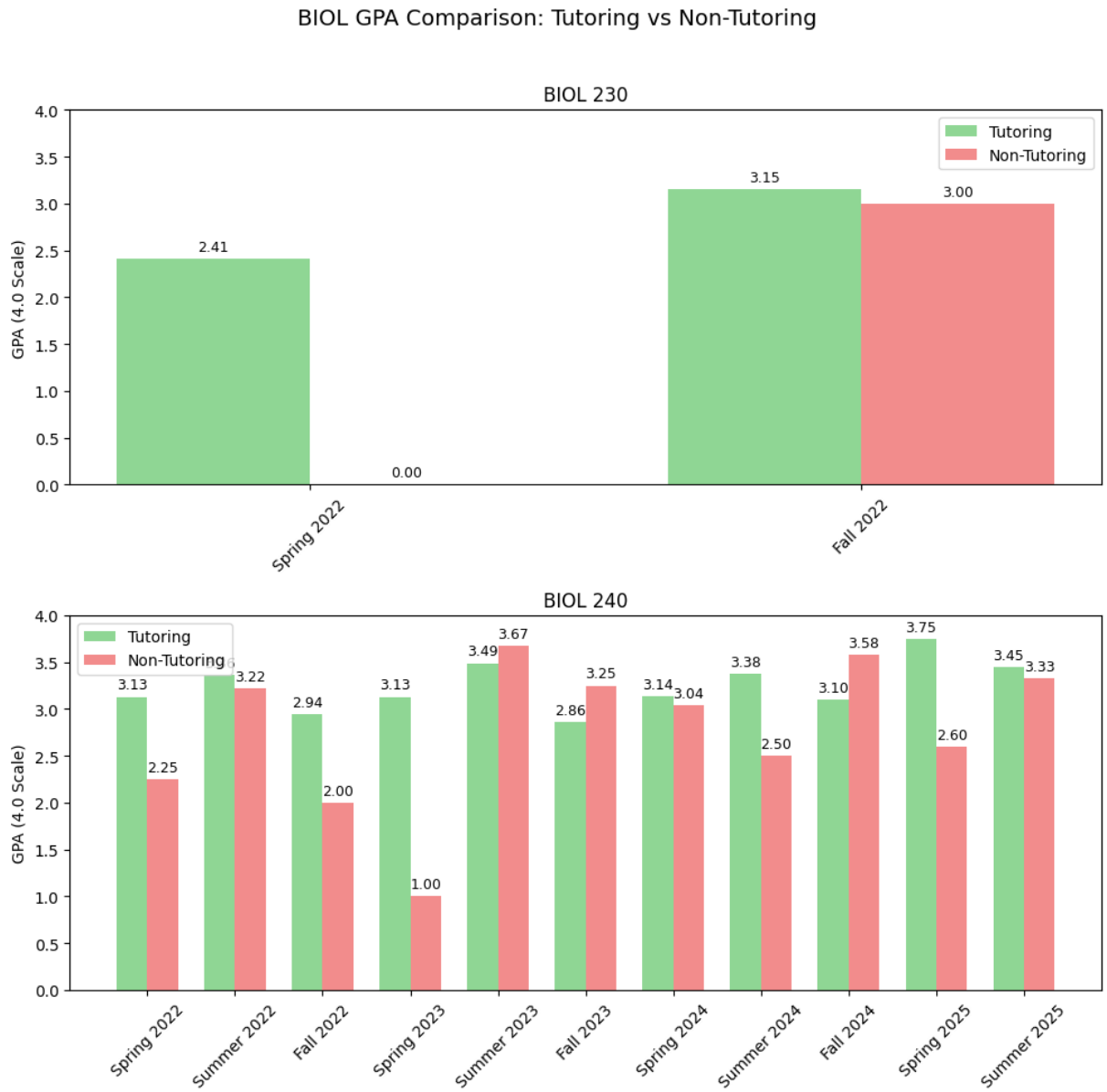
- Spring 2022: Tutoring higher by +0.62, one of the strongest positive differences.
- Fall 2022: Tutoring higher by +0.30, consistent positive gap.
- Fall 2023: Tutoring higher by +0.55, another strong positive difference.
- Fall 2024: Tutoring higher by +0.49, sustained improvement in later terms.
- Spring 2025: Largest gap, with tutoring higher by +0.53.

CHEM 220

- Spring 2022: Tutoring higher by +0.14, modest positive difference.

CHEM 410

- Summer 2024: Tutoring higher by +0.62, one of the largest positive gaps across chemistry courses.



BIOL 230

- Fall 2022: Tutoring higher by +0.15, small positive difference.

BIOL 240

- Spring 2022: Tutoring higher by +0.88, one of the largest positive gaps observed.
- Fall 2022: Tutoring higher by +0.94, strongest early-term difference.
- Spring 2023: Tutoring higher by +2.13, largest gap across all subjects and semesters.
- Summer 2024: Tutoring higher by +0.88, sustained strong difference.
- Spring 2025: Tutoring higher by +1.15, another major positive gap.
- Summer 2023: Tutoring lower by −0.18, minor negative difference.
- Fall 2023: Tutoring lower by −0.39, moderate negative gap.
- Fall 2024: Tutoring lower by −0.48, one of the larger negative differences.

Cross-Subject GPA Insights (Math + Chem + Bio):

- Biology shows the largest and most consistent positive GPA differences, making it the strongest evidence of effectiveness.
- Chemistry demonstrates moderate but stable positive gains (typically +0.3 to +0.6), indicating consistent benefit.
- Mathematics shows the greatest variability, with both positive and negative differences, and some of the largest negative gaps.
- GPA results appear more consistent than course success rates, suggesting GPA may better capture the impact of tutoring.

4.C. STUDENT FEEDBACK

If student feedback was not addressed in 4.A. or 4.B., describe how and when feedback was solicited from students, whether qualitative or quantitative, and what the results reveal. If feedback was scant, describe the attempts made and speculate why. Upload feedback results.

Student feedback for the STEM Center was systematically implemented beginning in Fall 2025, concurrent with the finalization of the Program Student Learning Outcomes (PSLOs). This timing allowed the Center to intentionally design assessment tools that directly align with each PSLO and its corresponding success criteria. As a result, the STEM Center has collected student feedback data across Fall 2025 and Spring 2026, providing an initial dataset to evaluate student perceptions of program effectiveness.

The feedback instrument was developed to measure key dimensions of the PSLOs, including academic skill development, independent confidence, and community connection. The survey included a series of Likert-scale items using a **5-point scale (1 = Disagree, 2 = Somewhat Disagree, 3 = Neutral, 4 = Somewhat Agree, 5 = Agree)**, as well as open-ended questions to capture qualitative student experiences.

Feedback was collected through an Formstack survey distributed to students who utilized STEM Center services. Participation was voluntary, and responses reflect both quantitative ratings and qualitative insights. In addition, faculty feedback was collected through a separate survey focused on embedded Peer Instructional Leader (PI) support, providing an additional perspective on student learning, engagement, and persistence within the classroom environment.

The following section presents survey results organized by PSLO, including analysis of individual questions, and evaluation of whether established success criteria were met.

Student Survey Results:

PSLO 1: Academic Skill and Critical Thinking Development

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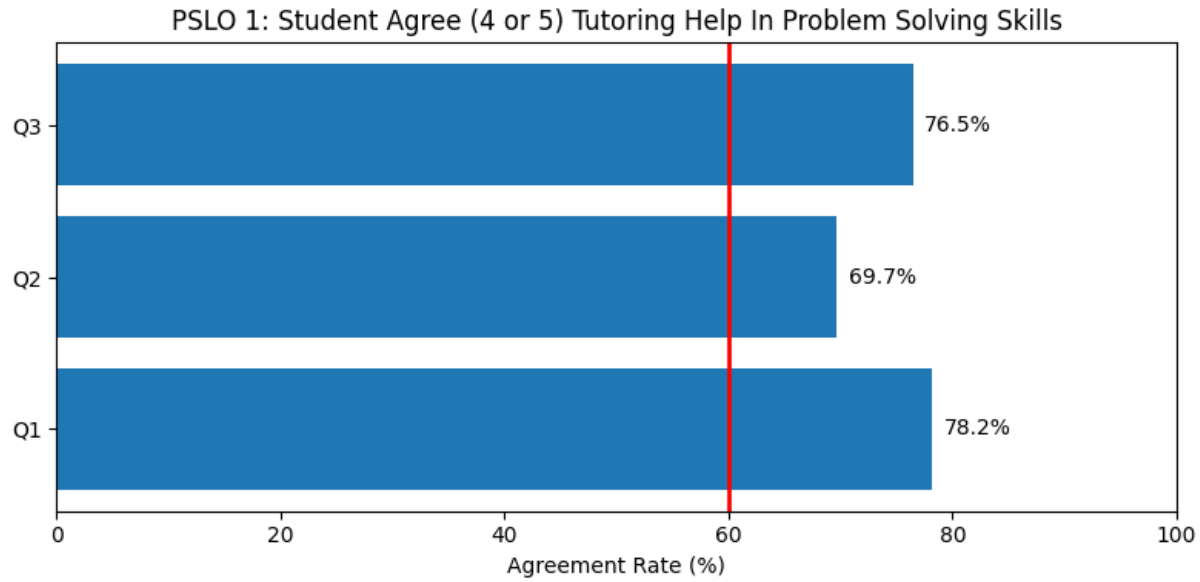
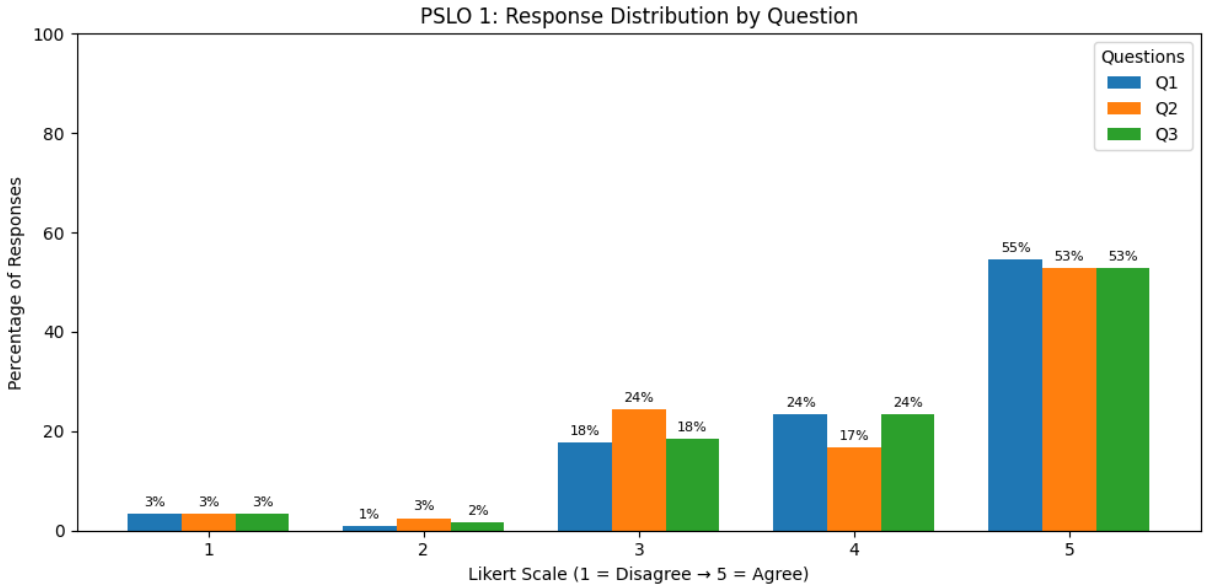
To assess PSLO 1, the questions were designed to measure different dimensions of academic skill development:

- Q1: Tutoring helped me better understand STEM concepts in my courses
- Q2: Tutoring sessions helped me apply new problem-solving strategies
- Q3: I feel more confident breaking down complex STEM problems after using tutoring





All three questions exceeded the 60% success criterion, indicating that students perceive tutoring as beneficial for academic skill development.

- **Q1 shows the highest perceived impact:**
  - With 78.2% agreement, students most strongly reported that tutoring improved their understanding of STEM concepts.
- **Q2 meets criterion but is comparatively lower:**
  - At 69.7% agreement, suggests that applying problem-solving strategies may require more targeted or sustained support.

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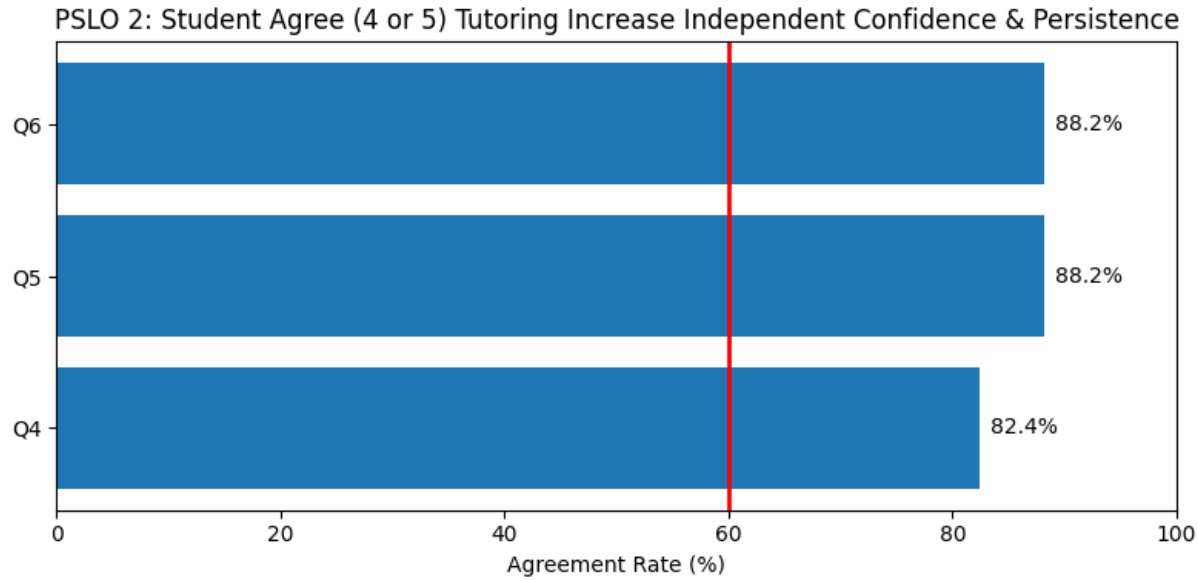
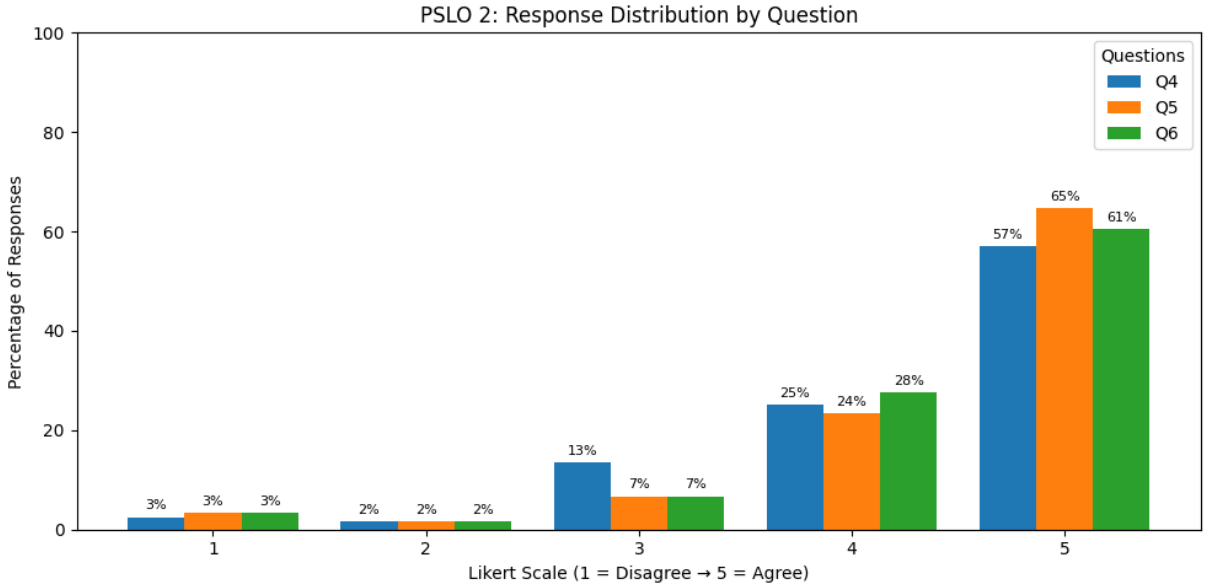
- **Q3 indicates strong gains in confidence:**
    - With 76.5% agreement, students reported increased confidence in breaking down complex problems skills.
- **Responses are concentrated in 4 and 5:**
    - Across all questions, the majority of responses fall within Somewhat Agree (4) and Agree (5), indicating consistent positive perceptions rather than neutral or mixed experiences.

PSLO 2: Independent Confidence and Persistence in STEM Coursework

These questions were designed to measure students' confidence and ability to work independently after using STEM Center services:

- Q4: Using the STEM Center helped me feel more confident completing my STEM coursework independently
- Q5: The study space helped me stay focused when working on assignments or studying for tests
- Q6: I feel more comfortable tackling STEM coursework on my own after spending time in the STEM Center





- **Q5 and Q6 show the highest impact:**
  - ???????Both items reached 88.2% agreement, suggesting that the study environment and overall STEM Center experience play a key role in supporting focus and independent engagement with coursework.
- **Balanced contribution of space and services:**
  - Results show that both academic support (Q4, Q6) and physical study space (Q5) contribute to student success, highlighting the importance of maintaining multiple service modalities.

PSLO 3: Community Connection and Collaboration
These questions were designed to measure students' sense of belonging, comfort, and engagement with peers and the broader STEM community:

- Q7: I feel connected to other students through the STEM Center
- Q8: I feel comfortable asking tutors or staff for help
- Q9: The STEM Center helps me feel more connected to the STEM community at Skyline College
- Q10: I have collaborated or studied with peers because of the STEM Center

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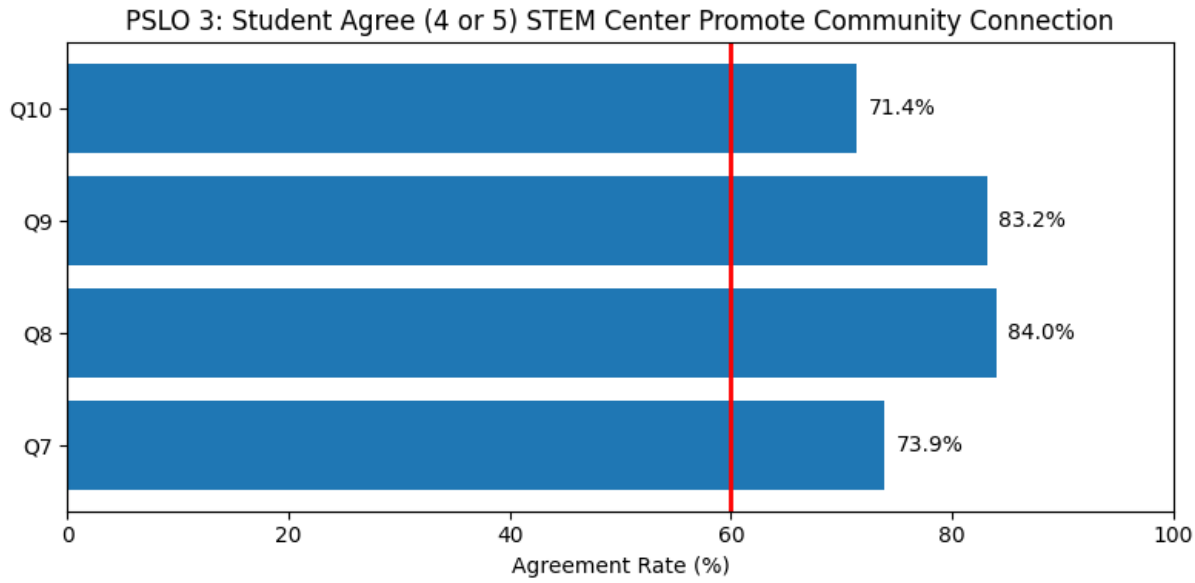

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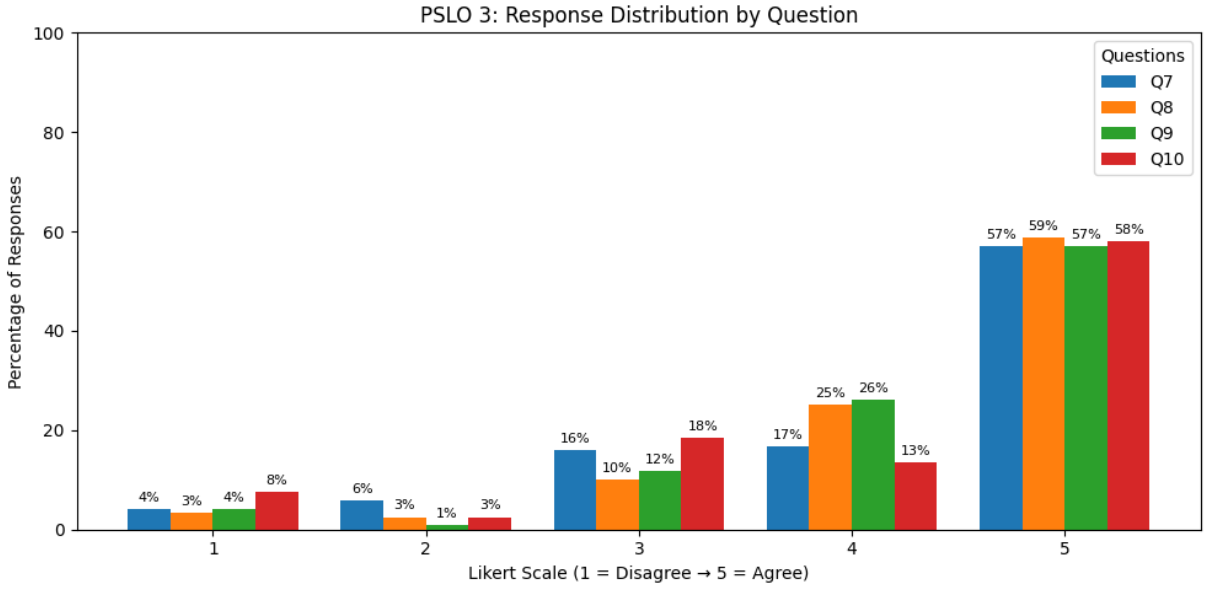

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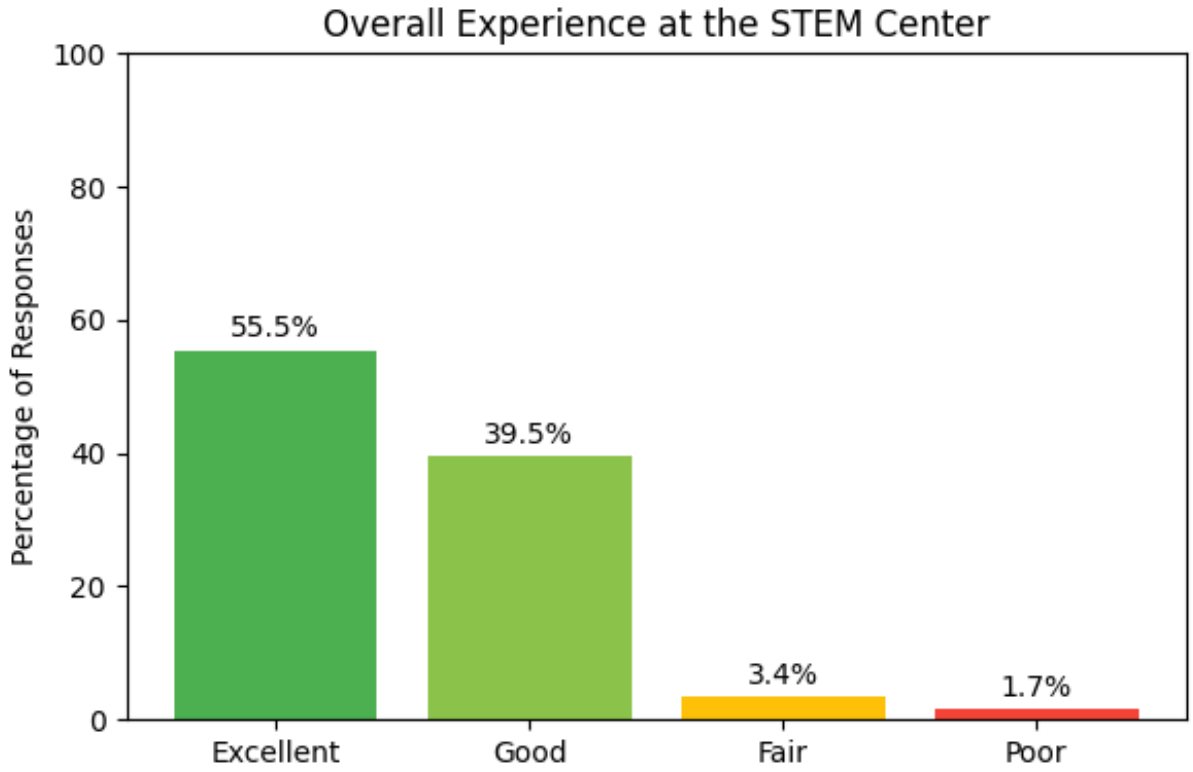
- **Q8 and Q9 show the strongest outcomes:**
  - ???????With 84.0% and 83.2% agreement, students report high comfort in asking for help and strong connection to the STEM community, indicating that the STEM Center provides a supportive and welcoming environment.
- **Q7 and Q10 indicate solid peer connection and collaboration:**
  - Q7 (73.9%) shows that most students feel connected to peers.
  - Q10 (71.4%) suggests that the STEM Center promotes collaboration, though at slightly lower levels compared to other items.

Overall Student Experience



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Students reported highly favorable experiences, with 55.5% rating their experience as Excellent and 39.5% as Good, resulting in 95% of responses in the top two categories.

Validation of integrated support model: The high satisfaction rates reflect the combined impact of tutoring services, study space, and peer interaction opportunities, reinforcing the effectiveness of the STEM Center's holistic support approach.

Limited negative feedback: The very low percentage of Fair and Poor responses suggests that dissatisfaction is minimal and not widespread.

Student Feedback Highlights

- *"The STEM Center is the reason I'm successful in my STEM classes."*
- *"My embedded tutor is amazing."*
- *"Great experience and support from tutoring."*
- *"More practice problems and study materials would be helpful."*

4.D. COHORT RETENTION, SUCCESS, AND/OR PERSISTENCE RATES

Identify cohorts and upload reports on the relevant success metrics for the program. Provide analysis of the data. Specific questions to answer in your response:

i. What have you learned from reviewing the cohort retention, success, and/or persistence data?

N/A

ii. How do the cohorts' results compare to the overall College's results?

N/A

iii. What factors may be contributing to these outcomes?

N/A

Using key findings based on the analysis from this CPR cycle, develop a multi-year plan designed to improve program effectiveness and promote student learning and achievement. Commit to three-to-five new and/or ongoing goals total. Enter goals via Step 2: Goals and Resource Requests.

5.A. CHALLENGES AND CONCERNS

Considering the results of this year's CPR assessment, identify challenges, concerns, and areas in which further action is needed. Reference relevant sections of the CPR that provide further insight.

Identified Challenges:
- Fluctuations in Tutoring Usage and Engagement: Student usage varies by semester, course, and modality. While outcomes for students who use services remain strong, participation is inconsistent across courses and student populations (see Sections 3.C and 3.D).
- Equity Gaps in Access and Outcomes: Disaggregated data shows that some student groups, particularly underrepresented and first-generation students, are not accessing services at the same rate, despite demonstrated benefits.
- Capacity and Staffing Limitations: Growth in embedded tutoring and open lab services has increased demand for Peer Instructional Leaders (PIs). Current staffing levels limit the ability to expand support across all STEM courses.
- Sustainability of Funding: Although a permanent funding allocation has been secured, the program continues to rely on multiple funding sources to sustain PI staffing, creating ongoing concerns for long-term stability.
- Awareness and Student Engagement: Some students remain unaware of available services or do not consistently utilize them, indicating a need for improved outreach and integration within courses.
- Emerging Use of Artificial Intelligence (AI) by Students: Students are increasingly using AI tools as a primary form of academic support. While this can support learning, it may also reduce engagement with tutoring services for subjects such as computer information science, engineering, and mathematics.

Action Plan:
- Stabilize and Sustain Funding: Continue advocating for increased institutional funding while maintaining partnerships to ensure long-term program sustainability and service continuity.
- Increase Access and Usage: Expand embedded tutoring in high-impact courses and implement targeted outreach strategies to increase participation by at least 2 percentage points annually among key student populations.
- Advance Equity in Service Utilization: Use disaggregated data to identify gaps and implement culturally responsive outreach and support strategies aimed at increasing usage among underrepresented and first-generation students.
- Strengthen PI Recruitment and Staffing Capacity: Expand recruitment efforts through faculty referrals, embedded course pipelines, and campus outreach to maintain a strong pool of qualified PIs and meet growing demand.
- Adapt to Emerging AI Trends in Learning: Explore strategies to integrate AI into tutoring practices, including training PIs to guide students in effective use of AI tools while reinforcing critical thinking and problem-solving skills.

Goals & Resource Requests

Campus Collaborations

Increased performance in self-efficacy PSLO, where STEM Center staff will be familiar with on-campus resources and feel comfortable connecting students of need with necessary program.

Year Initiated
2021 - 2022

Goal Status
Inactive

Implementation Step(s) and Timelines
Collaborate with parallel student support programs (The Learning Center, SparkPoint, EOPS, TRiO, Promise Scholars Program, Middle College, etc) on trainings and conduct a minimum of two collaborative trainings per semester.

UPDATE

Goal Update Date
03/01/2023

Academic Year Updated
2022 - 2023

Goal Update
On Schedule

Goal Update Narrative
Joint training established with TLC for ongoing Student Assistant professional development

Enhanced STEM Course Success and Completion through Targeted Academic Support.

The STEM Center aims to improve course success and completion in STEM by offering accessible and tailored academic support through the Peer Instructional Leader program. This program provides tutoring for 37 transferable STEM courses, including Mathematics, Biology, Chemistry, Engineering, Computer Information Science, and Physics, through a variety of tutoring formats: in-person, virtual, embedded, and open lab. The desired impact on students is to increase course pass rates by enhancing students' understanding of complex STEM material and ensuring that all students are aware of and able to access these valuable resources, meeting them where they are in their academic journey.

Year Initiated
2024 - 2025

Goal Status
Inactive

Implementation Step(s) and Timelines

Goals & Resource Requests

- Expand the number of STEM courses supported by embedded tutors, prioritizing high-enrollment courses, particularly in Mathematics, to address the needs of students impacted by AB 1705 legislation.

- Provide tailored support for students impacted by AB 1705 legislation through analytical skill workshops, Academic Excellence Workshops (AEWs), designed to help provide them with contextualized math support in transferable STEM courses such as engineering, chemistry, biology, physics, computer science, and mathematics.

- Expand Open Lab accessibility by scheduling dedicated lab hours staffed with specialized, trained tutors to provide targeted support for students.

- Expand in-person tutoring hours focusing in a drop-in/subject specific model to accommodate students with varying schedules.

- Provide virtual tutoring sessions tailored to online STEM courses, ensuring students can access help from home or on-campus study spaces.

- Conduct training sessions for tutors focused on effective communication, cultural competency, and strategies to actively engage students in their learning. Offer an orientation at the beginning of each semester, followed by a mid-semester training to reinforce skills and address emerging needs.

Mapping

- SKY Strategic Goals: *(X - Highlight Selected)*

- **Antiracist and Equitable Institution:** Be an antiracist and equitable institution (**X**)
- **Student Support and Resources:** Ensure that all students have the support and resources needed to achieve their educational goals (**X**)
- **Thriving Environment:** Foster a thriving learning and work environment (**X**)

Increase Course Success in Math, Chemistry, Biology, CIS, and Engineering by 5% through tutoring usage and Improve Retention of PI-Service Users by 3% by Spring 2027

The STEM Center goal is to increase course success in Math, Chemistry, Biology, CIS, and Engineering by 5% for students using the tutoring services and improve retention of students who use PI services by 3% by Spring 202. Ensuring that students continue receiving high-quality, peer-supported academic assistance in courses where they experience the most challenges. Stable support from trained PIs during peak hours will allow more students to get the help they need at the moment they need it.

By increasing the availability and consistency of support, students will:
- Receive timely guidance before falling behind.
- Strengthen skills in foundational STEM courses.
- Feel more confident when approaching difficult concepts.
- Experience greater belonging and comfort seeking help.
- Persist in their STEM pathways and complete required course sequences.

Year Initiated
2026 - 2027

Goal Status
Active

Implementation Step(s) and Timelines

Goals & Resource Requests

Summer 2026
- Recruit PIs in high-demand subjects to ensure consistent availability during peak hours.

Fall 2026
- Provide PI professional development focused on tutoring strategies, communication, and culturally responsive support for first-generation and underrepresented students.
- Increase reliability of PI coverage, reducing gaps and ensuring at least one PI is available at all designated hours in core subject areas.
- Launch semester academic support, providing structured help sessions during the Fall semester.
- Coordinate closely with faculty to align PI support with course content, assignments, and exam timelines.
- Evaluate mid-year progress by comparing PI-user success and retention rates with the previous year.

Spring 2027
- Refine PI scheduling using insights from PRIE data to place more support at times where student outcomes show the most improvement.
- Strengthen collaboration with faculty through structured communication (Canvas shares, weekly check-ins, coordinated exam prep).
- Promote PI support more actively, addressing student feedback.
- Evaluate end-year progress by comparing PI-user success and retention rates with the previous year.

Mapping

- SKY Strategic Goals: *(X - Highlight Selected)*

- **Increased Student Enrollment:** Increase student enrollment by being responsive to communities we serve (**X**)
- **Student Support and Resources:** Ensure that all students have the support and resources needed to achieve their educational goals (**X**)
- **Thriving Environment:** Foster a thriving learning and work environment (**X**)

Resource Request

Division Name
Science, Technology, Engineering, and Mathematics (STEM)

Year of Request
2025 - 2026

Resource Type
Student, Aides, Hourly, or Temporary Workers

Resource Name
Peer Instructional Leader Program Support Funding

Resource Description
This funding will support tutor salaries and benefits to ensure adequate coverage for tutoring hours, embedded class support, and open lab assistance.

Funds Type – Mark all that apply.
One-time Cost

Briefly explain how this request helps to advance the goals and priorities of your program, the College, the District, and/or the California Community College Chancellor's Office.
This request advances our program goal to increase course success and retention by ensuring reliable tutoring and academic support across high-demand STEM courses. It supports the College and District priorities of improving student achievement and closing equity gaps, particularly in STEM pathways. It also aligns with the California Community College Chancellor's Office goals to increase completion and strengthen learning support services statewide.

Cost
100,000

Goals & Resource Requests

Level of need, with 1 being the most pressing
1
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Increase the number of students enrolled in CIS courses to use STEM Center services by 10%.

This goal supports CIS students by encouraging them to build foundational problem-solving skills through active learning rather than relying primarily on AI tools. The Datathon data analysis and coding competition will provide an applied, collaborative, hands-on experience that builds coding confidence, increases belonging, and motivates students to seek support consistently throughout the semester.

Year Initiated
2026 - 2027

Goal Status
Active

Implementation Step(s) and Timelines
Fall 2026
- Run a workshop series in data analytics and programming where students work on problems with peer support.
- Develop targeted outreach to stem students highlighting alternatives of hands-on activities to develop coding skills.
- Partner with CIS faculty to promote the Datathon in classes.
- Host the Fall Datathon as the primary engagement event to bring new CIS students into the STEM Center.
- Collect student sign-ins and track how many Datathon participants continue using STEM Center services.

Spring 2027
- Evaluate CIS tutoring usage rates and compare them to confirm progress toward the 10% increase.
- Use PRIE data to refine outreach strategies and identify which CIS courses benefit most from tutoring.

Mapping
- SKY Strategic Goals: *(X - Highlight Selected)*

- **Student Support and Resources:** Ensure that all students have the support and resources needed to achieve their educational goals (**X**)
- **Thriving Environment:** Foster a thriving learning and work environment (**X**)

Resource Request

Division Name
Science, Technology, Engineering, and Mathematics (STEM)

Year of Request
2025 - 2026

Resource Type
Other

Resource Name
Funding for Fall Datathon Student Engagement Materials

Resource Description
This funding will cover essential event costs such as food, prizes, certificates, and swags to student engagement and participation.

Funds Type – Mark all that apply.
One-time Cost

Briefly explain how this request helps to advance the goals and priorities of your program, the College, the District, and/or the California Community College Chancellor's Office.

Goals & Resource Requests

This request supports our goal to increase CIS student engagement by responding to the clear decline in CIS tutoring usage after AY 2022–2023, where visits dropped from over 180+ per course to fewer than 30 in most classes. Funding the Datathon will re-engage CIS students through hands-on, collaborative problem-solving and connect them back to STEM Center services. This aligns with College, District, and CCCCO priorities to strengthen STEM pathways, improve learning outcomes in high-demand fields, and increase equitable access to academic support.

Cost

2,000

Level of need, with 1 being the most pressing

1

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