

Form: "PSR 2021 STUDENT SUPPORT Comprehensive Cohort B"

Participating Area: Math Success Center Cohort-B 4932 SS

Show All Possible Responses

* Response is required

1. PROGRAM OVERVIEW

* Program Title & Code

Program Title

Math Success Center
(Max chars: 100)

Program Code

4932
(Max chars: 100)

* 1a. Select the Chaffey Goals that directly relate and are MOST relevant to your program.

Goals are numbered for the purpose of making reference points so that PSR writers can identify and locate which Chaffey Goals relate to their program. Goal numbers do not represent priority numbers.

- Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.
- Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.
- Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.
- Goal 4: Technology--Chaffey College will optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning.
- Goal 5: Efficiency--Chaffey College will efficiently and effectively manage systems, processes, and resources to maximize capacity.
- Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.
- Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

* 1b. Describe how your program aligns with the Chaffey's Goals. Please provide supporting statements and/or examples.

Refer back to the Chaffey Goals marked above (e.g., Goal 4: supporting statements of how program aligns with this goal).

Goal 1: The STEM Success Center supports the goal of equity and success by providing workshops and directed learning activities (DLAs) about Mindset, Neuroplasticity, Study Skills, and Test Taking Skills to specifically address the unique anxiety experienced in math courses. The STEM Success Center seeks to reframe our students' perceptions about success in math courses and build confidence to create a positive learning environment. The STEM Success Center also coordinates with Disability Programs and Services (DPS) to provide equity and accessibility to our students. For example, in Spring 2020, we created a digital form to allow DPS Counselors to send accommodations to the Success Centers. When we noticed that Counselors were submitting accommodations for students who were not connecting to our Center, we setup a process to reach out to the student via email and setup a meeting to schedule appointments and provide the appropriate accommodations. Adding this process to assist our students ensured that our students are seen and assisted with their learning journey and providing the equitable support.

Goal 2: The STEM Success Center supports the goal of learning and completion of students' educational goal by providing Supplemental Learning Activities and free tutoring opportunities. As the Math Success Center, we supported students in their math and physics courses. In the Success Centers PSR attachment, students who clock more than three hours in the Math Success Center have higher rates of Success and Retention compared to all students who visit the Math Success Center. However, students who clock more than three hours in the Math Success Center only consistently have higher rates of Retention when compared to all Chaffey College students and comparable Success rates. Notably, in Spring 2020, students who clock more than three hours in the Math Success Center had higher Success and Retention rates compared to all Chaffey College students, which indicates our support of students in the transition to distance education courses in light of the Covid-19 pandemic.

Goal 6: The STEM Success Center supports the goal of agility by adapting our offerings based on student needs and working to incorporate the Academic and Career Communities into the Success Center activities. AB 705 has changed the enrollment patterns for Chaffey College students, and the STEM Success Center has coordinated with the mathematics program to add Supplement Learning Activity requirements to the Math 25 and Statistics 10 courses. The MathsWay team created additional DLAs to provide students additional learning opportunities. In support for the Academic and

Career Communities, the Math Success Center is now the STEM Success Center and is working to incorporate the student's future academic and professional goals into Supplemental Learning Activities.

PRIOR VIP GOALS STATUS/PROGRESS

1c. Please list the program's VIP Goals from the last PSR cycle, and report on the progress (complete, ongoing, etc.).

VIP Goal 1: The Math Success Center will prepare to meet the needs of math curriculum reform in light of recent legislation.

Results: *Ongoing*. As AB 705 has created new pathways for students to complete their transfer level math course within their first year at Chaffey College, the Math Success Center has coordinated with the mathematics program and MathsWay team to provide additional Supplemental Learning Activities for students in Math 25 and Statistics 10. Starting in Fall 2020, the mathematics program added a Supplemental Learning Activity requirement for the COR for Math 25 and Statistics 10. Transitioning the Math Success Center to a virtual support center for students in Spring 2020 has created challenges to connect our students to the Math Success Center for the tutoring and to adapt Supplemental Learning Activities to a virtual environment. In Fall 2020, we noticed that including "DLA" in the title for a Workshop or Learning Group increased participation in these activities to meet their Supplemental Learning requirement. We are also recreating DLAs to online and mobile friendly formats using Canvas and PlayPosit. Our progress for this goal is ongoing and improving.

VIP Goal 2: Increase the explicit use of metacognitive strategies in all activities in the Center.

Results: *Ongoing*. The STEM Success Center has made significant progress in providing training for the Apprentices about metacognitive strategies by coordinating with all Success Centers to provide training opportunities for the start of the Fall and Spring semesters. The Covid-19 pandemic and need to provide additional training regarding equity and mental health has focused the Success Centers on providing training about cybersecurity, technology, equity, and supporting our students in the online learning environment. Metacognitive strategies are an integral part of the DLAs, and we would like to provide additional support to faculty in the STEM Success Center to more effectively use metacognitive strategies in Workshops, Learning Groups, and Tutoring sessions. Our progress for this goal is ongoing and improving.

VIP Goal 3: Develop a plan for increased use of pedagogically-appropriate technology in the Center.

Results: *Ongoing*. The STEM Success Center has increased our use of pedagogically-appropriate technology and our plan to further utilize technology is continuing to evolve. Prior to our transition to a virtual Success Center in Spring 2020, the Math Success Center obtained iPads, charging stations, and table mounts for the iPads. Each table for one-to-one tutoring has an iPad available for the tutoring session. The iPads provided each student the ability to share online course materials with the tutor and allowed the tutor to share online resources with the student. At the start of Spring 2020, we also acquired document cameras, headsets, and Apple Pencils to setup two tutoring stations to provide online tutoring opportunities on Saturday and Sunday. The early adoption of online tutoring in Spring 2020 assisted the Success Centers in successfully transitioning to a virtual environment. During the transition, we switched our appointment system from WOnline to Cranium Cafe, and we are currently evaluating Accudemia as another option to provide a seamlessly and simple appointment and login system for our students. Our progress for this goal is ongoing and improving.

OTHER RESOURCES REQUESTS

1d.1 At any point during the past PSR cycle (last three years), did you have "other resources requests" that were funded by the Resource Allocation Committee?

If yes, proceed to questions 1d.2. If no, skip to section 2.

Yes

No

1d.2 If yes, did those purchases meet the program's intended purpose. Please explain.

The Math Success Center obtained iPads, charging stations, and table mounts for the iPads. Each table for one-to-one tutoring has an iPad available for the tutoring session. The iPads provided each student the ability to share online course materials with the tutor and allowed the tutor to share online resources with the student. The iPads also allow us to create a digital Tutoring Slip for students to complete to provide feedback for the Success Center to improve our support of students. In Fall 2019, we noticed that the iPads were under utilized in tutoring sessions due the iPads needing to be charged on a regular basis. Thus, we labeled each tutoring table and adopted a protocol for Apprentices to update Center staff with the remaining iPad battery life at the end of their shift. The new process increased use of the iPads during tutoring sessions, which assisted tutors in sharing learning resources with students. Thus, the iPads, charging stations, and table mounts met the program's intended purpose.

2. EVIDENCE-EQUITY

The evidence section comprises of the following three distinct subsections: equity, program data, and student support outcomes.

"Equity" represents the first element of the EVIDENCE component of the PSR evaluation. Equity is a process that contributes to equitable outcomes.

IMPORTANT: This section will ask you to provide specific data to support your answers. Data are distinct pieces that describe information or have a numerical value. Examples of data include survey results, figures, written correspondence, search engine tracks, observation, number of students attending an event, interviews, focus groups, etc.

2a.1 Over the last three years, have the following increased, decreased, or remained the same?

Examine your program's structure (planning, creating frameworks, process facilitation, policies).

Response Legend: 1 = Increase 2 = Decrease 3 = No Change (plus or minus 2%) 4 = No or Insufficient Data Available				
	1	2	3	4
Online support services; remote access vs. face-to-face delivery (e.g., Cranium Cafe, Zoom)	✓			
Equity-minded training or coaching for student support professionals and staff (e.g., micro-aggressions, universal design, culturally sensitive instruction)				✓
Opportunities for students to engage in services (e.g., workshops, applied learning, hands-on activities)	✓			
Opportunities to follow-up with students (e.g., outreach efforts, formalized protocols for monitoring progress, benchmark completion)	✓			
Equity practices or protocols; creating a diverse and inclusive workforce				✓

2a.2 Elaborate on how the program is providing equity in educational opportunities or support to students and/or identify disparities in equity. Provide specific data/evidence that supports your answer.

If there is a disparity in equity, you can address the strategies that the program plans to implement in the STRATEGIC PLANNING section (item 5a).

Online support services; remote access vs. face-to-face delivery:

Prior to Spring 2020, all Math Success Center support was provided face-to-face. In Spring 2020, the Math Success Center began to provide opportunities for online tutoring sessions on Saturday and Sunday to extend access to our offerings on the weekend. During Spring Break of 2020, all Success Centers transitioned to 100% online student support. The Math Success Center transitioned to the STEM Success Center, and we have utilized Zoom, Canvas, LibChat, LibWizard, PlayPosit, and Cranium Cafe to create a virtual presence to continue to support our students. According to Positive Attendance reports, the Math Success Center has seen a reduction in students visiting the Center. We believe the reduction is related to changes in math courses offered due to AB 705, lower enrollment rates, and a loss of accurate data reporting in the online environment. The Success Centers are evaluating our online presence and processes for tracking student logins in the virtual Success Centers.

A disparity in the online environment is student access to the technology and internet connection necessary to participate in the virtual Success Center activities, including limitations of Chromebooks and students experiencing connection issues during their tutoring session or workshop.

Equity-minded training or coaching for student support professionals and staff:

The STEM Success Center Apprentices participate in training each Fall and Spring semester. Since Fall 2019, Apprentices have participated in these trainings, but we do not have data prior to Fall 2019 to indicate the change in equity-minded training opportunities for student support professionals.

Opportunities for students to engage in services:

Considering the impact of AB 705, the STEM Success Center has coordinated with the mathematics program and MathsWay team to provide additional DLA topics for students in the Math 25 and Statistics 10 courses. Prior to Fall 2019, the Success Center provided twelve DLA topics for students, primarily developed to support the Math 520, Math 450, and Math 420 courses. In Fall 2019, the MathsWay team provided 12 additional DLA topics to support students in Math 25 and Statistics 10. Since the transition to a virtual Success Center, we have extended opportunities for students to complete Supplemental Learning requirements by adapting DLAs to a new PlayPosit format, adding more DLA topic specific workshops, and providing students a more efficient process to request learning groups.

Opportunities to follow-up with students:

The transition to a virtual Success Center has created a multitude of new opportunities for us to follow-up with students. We have created many new forms of communication, and students are now able to communicate with the Success Centers via a live chat, email, Zoom, or by completing a Contact Us form. These new communication pathways have increased our ability to follow-up with

students who indicate they need additional support from our student support staff. One example is the creation of the Success Center Accommodation form that DPS Counselors complete for student accommodations in the Success Centers. The new form has led to the creation of processes where the submission of the Success Accommodation form initiates contact from our staff to create a meeting with the student to provide accommodations.

Equity practices or protocols; creating a diverse and inclusive workforce:

Data prior to Fall 2019 is not available for comparison. Since the transition to a virtual Success Center, we have created pages for our workforce to have access to important information and protocols. The intention of creating these pages is to provide equity and inclusivity for our workforce by ensuring that all student support staff have access to the important documents about Chaffey College's practices and protocols. Working in a virtual environment has led to creative communication practices, including adding weekly meetings with Apprentices to build rapport and support, as well as to ensure that all student support staff is updated weekly on our protocols.

3. EVIDENCE-PROGRAM DATA

"Program Data" represents the second element of the EVIDENCE component of the PSR evaluation. Please keep evidence related to equity in subpoint 2. Please keep program data in subpoint 3.

IMPORTANT: This section will ask you to provide specific data to support your answers. Data are distinct pieces that describe information or have a numerical value.

Examples of data include survey results, figures, written correspondence, search engine tracks, observation, number of students attending an event, interviews, focus groups, etc.

3a. Explicitly identify the areas that your program is doing well to support students. Provide specific data/evidence that supports your answer.

Refer to data/evidence you have from the last three years.

The STEM Success Center is doing well to support students in our efforts to create a positive learning environment and assisting students to develop their own learning process. The STEM Success Center provides a welcoming environment for students and actively listening to student concerns. To obtain data about our students about their learning experiences in tutoring sessions, the STEM Success Center asks students to complete a *Tutoring Slip* survey.

Evidence:

Spring 2019 Tutoring Slip data indicated that 49% of students made a significant connection about their own learning processes and the new processes learned in their interaction with the tutor. More specifically, 11% of students explicitly stated a new learning process to utilize. 32% of students noticed the concepts learned and some knowledge gained as a learner. 19% of student did not respond to the survey questions or the comment was not legible.

Spring 2020 Tutoring Slip data indicated that 65% of students had positive feeling about their learning experience, 16% of students had a negative feeling about their about learning experience, and 18% had mix of positive and negative feelings.

Fall 2020 Success Centers Satisfaction Survey data indicated that on average, students attending tutoring sessions strongly agree with the statements: "The tutor was friendly" and "The tutor was respectful." The data also indicated that on average, students who responded most strongly agreed with the statements: "I feel the Success was friendly and welcoming." and "The front desk person in the virtual Success Center was friendly." Most notably, 95.8% of students agreed or strongly agreed with the statement: "I feel the Success Center changed the way I approach academic success."

According to Table 1 and Table 10 of the Spring 2021 Success Centers report, the STEM Success Center has a positive impact on student persistence in that the Retention Rate for students who visit the Math Success Center for more than three hours is consistently higher than the Retention Rate for all Chaffey College students.

3b. Explicitly identify specific areas in which the program can improve over the next three years. Provide specific data/evidence that supports your answer.

Refer to data you have from the last three years.

The STEM Success Center will improve on translating the student's positive learning experience in the Success Center to higher Success Rates in their courses, especially Math 25 and Statistics 10. The STEM Success Center will also improve our ability to assess knowledge gained by participating in Supplemental Learning Activities and tutoring sessions.

Evidence:

According to Table 1 and Table 10 of the Spring 2021 Success Centers report, beginning in Fall 2018, the Success Rates for students who visited the Math Success Center for more than three hours were consistently lower than the Success Rates for all Chaffey College students. However, in Spring 2020, the Success Rates for these students was 80% compared to 76% for all Chaffey College students.

4. EVIDENCE--STUDENT SUPPORT OUTCOMES

"Student Support Outcomes" represents the third element of the EVIDENCE component of the PSR evaluation.

*** 4a. Please identify which of the following MANDATORY components have been completed by checking the appropriate boxes.**

The Outcomes and Assessment Committee will verify if mandatory components have been fulfilled.

If you have any questions about Student Support Outcomes, please refer to Chaffey College's Outcomes and Assessment website or email Jo Alvarez at jo.alvarez@chaffey.edu

- Current Student Support Outcomes have been entered into the "Student Support Outcomes Workspace" in Taskstream.
- Current Student Support Outcomes have been mapped to Institutional Learning Outcomes in the "Student Support Outcomes Workspace" in Taskstream.

*** 4b. Have you uploaded a current Chronological Assessment Plan (CAP) into your Student Support Outcomes Workspace?**

A CAP is a learning outcomes assessment schedule.

"Current" is defined as two assessment cycles. This means CAPs should project out at least SIX YEARS.

Yes

No

Comment:

*** 4c. Do you evaluate all Student Support Outcomes within the three-year period?**

Yes

STUDENT SUPPORT ASSESSMENT REFLECTION

Look over your Student Support Outcomes assessment results for your program before answering the questions.

*** 4d. Based on Student Support Outcomes assessment results, explicitly identify program strengths. Provide specific data that supports your answer.**

Pay special attention to Student Support Outcomes that HAVE been met.

The STEM Success Center's strengths are reflected in our ability to meet the goals of SSO1 and SSO3. The STEM Success Center creates a positive and welcoming learning environment for students. Students most frequently participate in tutoring sessions and directed learning activities (DLAs). To assess SSO1, we utilized responses to the Analysis questions in the Mindset DLA. To assess SSO3, we utilized responses to Tutoring Slips completed at the end of tutoring sessions.

SSO1: Students will understand the facets of learning and will activate this understanding to evaluate and create their own learning process.

Assessment:

I used the responses to the Analysis questions for the 143 completed Directed Learning Activity (DLA) for Growth Mindset. The DLA for Growth Mindset was available for students to complete as a PlayPosit. The Analysis questions are:

- What personal benefits do you think you would receive from having a growth mindset?
- What advice would you give someone (including yourself!) who says they aren't smart enough to do something?
- How do these ideas of mindset and neuroplasticity affect the way that you will take your math courses?

I created a scoring scale to assess this part of the DLA. (found in Fall 2020 SSO1)

- 0 - This score is given when nothing is written, or nothing is relevant to the Analysis questions.

- 1 - This score is given when the response demonstrates some notice of the learning process in the "personal benefits" and "advice" questions, and in the "ideas" question, demonstrates some plan to implement in math course.
- 2 - This score is given when the student makes a connection between the "personal benefits", "advice", and "ideas" questions.
- 3 - This score is given when the answers for the "personal benefits" and "advice" questions lead to an explicit plan in the response to the "ideas" question.

The data indicated that 67% of the students not only internalized the personal benefits of a growth mindset, but also utilized this facet of learning to create meaningful advice and initiate ideas to succeed in their math course. 17% of the students extended their understanding of mindset to develop an explicit plan for the way they will approach their math course and overcome failures. 14% of the students demonstrated some acknowledgement of how a growth mindset will impact their learning process and demonstrated some plan or mindset to succeed in their math course. 2% of the students did not respond or provided nonrelevant responses.

SSO3: Students will develop their positive learning identity.

Assessment:

I used a sample of 475 Math Success Center tutoring slips from Spring 2020. The tutoring slips were completed at the end of the session with the tutor. The last page of the slip asks, "Right now, I feel..." using a likert scale of 1) not at all, 2) somewhat, 3) moderately, 4) very much for the following feelings: Content, Stressed, Confident, Anxious, and Calm. I created the following scoring scale (found in Spring 2020 SSO3):

- 2 - Very positive feelings about their learning experience and identity.
- 1 - Moderately positive feelings about their learning experience and identity.
- 0 - Neither feeling about their learning experience and identity.
- -1 - Somewhat negative feelings about their learning experience and identity.
- -2 - Very negative feelings about their learning experience and identity

The data indicated that 65% of the students had moderately or very positive feelings about their learning experience and identity. 16% of students had moderately or very negative feelings about their learning experience and identity. 18% of the students indicated a mix of feelings that were neither consistently positive or negative. The scores of 0 typically occurred for students who not only indicated high marks for Content, Confident, and Calm, but also indicated high marks for Stressed and Anxious. Thus, we are inconclusive on the experience for 18% of the students.

4e. Based on Student Support Outcomes assessment results, explicitly identify areas in which your program can improve. Provide specific data that supports your answer.

Pay special attention to Student Support Outcomes that HAVE NOT been met.

The STEM Success Center can improve on our ability to assess and obtain our goals in SSO2 and SSO4. While the STEM Success Center has evidence of progress and some success in assisting students to become more literate in discipline-specific courses, the data was inconclusive. The data collection for SSO4 was also somewhat inconclusive, as many respondents did not answer the portion of the Tutoring Slip that was used to assess the outcome.

SSO2: Students will become more literate in discipline-specific courses and general college work.

Assessment:

I used a sample of 348 Math Success Center tutoring slips from Fall 2018. The tutoring slips were completed at the end of the session with the tutor. The last three questions ask the student about what they gained. These questions are:

- What concepts I gained from today's session...
- What I gained from today's session about myself as a learner and /or how I learn:
- Comments/Suggestions

I created a scoring scale to assess this part of the tutoring slip.

- 0 - This score is given when nothing is written, or nothing is relevant to the "what I gained..." questions.
- 1 - This score is given when the student identifies a concept learned or a technique to reinforce the success in course work.
- 2 - This score is given when the student describes the concepts that were learned and connects to a plan for learning.
- 3 - This score is given when the student describes higher level understanding of course concepts and explicitly connects the learning process to a meaningful plan of action for continued success.

The data was inconclusive, because 41% of the student did not respond to the assessed questions. The data indicated that 9% of the students displayed a high level of understanding and explicitly connected their learning process to create a meaningful plan for success. 27% of the students were able to clearly describe the concepts that were learned and connected the concept to a plan. 23% of the students were able to identify the concept learned or a technique to reinforce success. The assessment method was not sufficient to determine if students actually became more literate in discipline-specific courses.

A promising note is that Spring 2020 data, provided by IR, indicated that student who visited the STEM Success Center for three or more hours had a Success Rate of 80%, compared to 76% for all Chaffey College students.

SSO4: Students will notice others' ways of thinking and appropriate them into their own schema.

Assessment:

I used a sample of 440 Math Success Center tutoring slips from Spring 2019. The tutoring slips were completed at the end of the session with the tutor. The last three questions ask the student "what I gained..." These questions are:

- What concepts I gained from today's session...
- What I gained from today's session about myself as a learner and /or how I learn:
- Comments/Suggestions

I created a scoring scale to assess this part of the tutoring slip.

- 0 - This score is given when nothing is written, or nothing is relevant to the "what I gained..." questions.
- 1 - This score is given when the student notices the concept gained in the session and notices some knowledge gained as a learner.
- 2 - This score is given when the student makes a connection between the concepts gained and "how I learn".
- 3 - This score is given when the student explicitly states the tutors role in the concepts gained and state a plan to appropriate "what I gained..." into their learning process.

The data indicates that 38% of students made a connection between the concepts gained in a tutoring session and "how I learn" and 11% of the students explicitly stated the tutors role in the concepts gained and stated a plan to adjust their learning process. 32% of students show the ability to notice the concept learn or an aspect of the learning process. 19% of the students did not respond to the assessed questions. The data indicates that the tutoring sessions are meeting the outcome for some students, but a better assessment model and response rates will be necessary for future assessment. The data collected was inconclusive about SSO4.

5. STRATEGIC PLANNING

To help answer 5a, review the following subsections:

Subsection 2: EVIDENCE--Equity

Subsection 3: EVIDENCE--Program Data

Subsection 4: EVIDENCE--Student Support Outcomes

5a. What is your program's plan to make improvements? An effective plan is descriptive and has well-defined steps.

If there is a disparity in equity (item 2a.2), the strategies for implementation should be included in the plan.

Items 3b and 4e asked you to identify what are the areas of improvement. Item 5a is asking you to put a plan together for the intended actions the department or program should take to achieve objectives for the process of improvement.

Year 1 (Fall 2021 to Spring 2022)

Since the start of the Covid-19 pandemic, the STEM Success Center has been supporting students in an online environment, which has emphasized disparities in our students' ability to access the necessary technology and internet speed to engage in our support services. The Fall 2020 Student Satisfaction Survey indicates over 59% of the respondents prefer the online Success Center to the face-to-face Success Center. Thus, the STEM Success Center plans to continue to provide our support in an online environment for Fall 2021, and reinvision the space in the Math Success Center to create hubs for students to connect to the online STEM Success Center activities. Fall 2021 will also serve as a time to plan for the STEM Success Center to offer Hyflex Supplemental Learning activities in Spring 2021.

As Makerspace is no longer in Math 121G, the STEM Success Center plans to utilize the room to create spaces for Apprentices and Instructional Specialists to host online tutoring and create Supplemental Learning activities, such as PlayPosit DLAs. The STEM Success Center also plans to update Math 121E and Math 121F to contain technology necessary to implement Hybrid and Hyflex workshop opportunities for students.

The STEM Success Center will utilize Fall 2021 to create meaningful assessment opportunities and update our Tutoring Slip. The new assessment and Tutoring Slip will be used in Spring 2022 to obtain data to plan for the next academic year. The Tutoring Slip will emphasize reflection on metacognitive strategies. We will also develop training opportunities for Apprentices and Instructional Specialists to address technology needs and the pedagogy related to Hybrid and Hyflex student support.

Year 2 (Fall 2022 to Spring 2023)

Starting in Fall 2022, all tutoring and Supplemental Learning Activities will be accessible to students in multiple modalities to provide increased access and enhanced learning opportunities. The Spring 2022 data will be utilized to schedule Apprentices and Instructional Specialists to support students.

In Fall 2022, the STEM Success Center will research strategies to provide additional social learning opportunities for students in the various modalities to implement in Spring 2023. The Center will also develop an assessment survey to assess social learning. The STEM Success Center will utilize data to develop initiatives and campus partnerships to create learning activities and outreach that will close achievement gaps.

The STEM Success Center will continue to cultivate support for all STEM courses and will use the 2022-2023 academic year to coordinate with programs to create additional Supplemental Learning Activities. The STEM Success Center will review the effectiveness for the Hyflex, Hybrid, and Online offering and provide continual training for faculty and apprentices.

Year 3 (Fall 2023 to Spring 2024)

Starting in Fall 2023, the STEM Success Center will implement the plans developed during the 2022-2023 academic year. By Fall 2023, the STEM Success Center plans to broaden the Directed Learning Activities offered for all STEM courses, such as Physics and Chemistry.

The STEM Success Center will utilize the 2023-2024 academic year to research and learn about innovative approaches to continue to support students in successful completion of STEM courses, especially completing transfer-level math courses in their first year of study.

Inter-Program Collaboration

5b. Identify specific inter-program collaboration that would improve student services.

Inter-program collaborations that would improve student services in the STEM Success Center are collaborations with the Math and Science Department, EOPS, and DPS. Since STEM Success Center now supports the Biology and Chemistry courses, the Center needs a representative to regularly attend the Biology and Chemistry department meetings. The STEM Success Center also would benefit from additional faculty support in the Biology and Chemistry courses. The STEM Success Center would benefit from having a representative attend the EOPS and DPS Counselor first and last meeting each semester.

5c. How has your program specifically benefited from inter-program collaboration?

In Spring 2020, the Success Centers collaborated with DPS to create the Success Center Accommodations form. The form allows DPS Counselors to share student accommodation needs and how the Success Centers can support the student. The STEM Success Center has utilized the Success Center Accommodations form to initiate contact with each student. Our staff send each student an email to invite to student to connect to the Center for a consultation to schedule their appointments. Considering the impact of Covid-19 in Spring 2020, the collaboration with DPS and creation of the Success Center Accommodations form provides equity to our students and has increased the number of contact hours for students with accommodations.

The Instructional Specialist for the STEM Success Center collaborates with the Math department. The STEM Success Center is a regular guest at the Math department meetings and is a regular report item at the meetings. Collaboration with the Math department assists the STEM Success Center in providing an accurate reflection of the department's expectations for student learning, ensure academic integrity, and allows for coordination to support students.

The STEM Success Center presents at the EOPS and CalWorks orientations. The presentations for EOPS and CalWorks provide students with information on how to connect or find the Success Center, how to make appointments, and welcomes students to our Center. The STEM Success Center also collaborates with EOPS to offer Mindset workshops for students.

5d. What types of professional development workshops or training could assist as you implement future plans?

Type N/A in the response field if you are not making any recommendations for professional development.

Information will be forwarded to the Faculty Success Center for future professional development planning. NO SCORE is assigned.

Sexual Harrassment Training, Cybersecurity

6. VIP GOALS

6a. What are your Three-Year Visionary Improvement Plan Goals (1-3 goals recommended)?

Perhaps the most important piece in the PSR process is the creation of the Visionary Improvement Plan (VIP). The VIP is an opportunity for all program members (not just primary writers) to get together to analyze data, discuss the overall self-study, and identify program improvement goals for the next three years.

VIP Goals should align with the Chaffey Goals, and should be clear, specific, measurable, action-oriented, realistic, and time bound.

VIP Goal 1: Considering the impact of AB 705, the STEM Success Center will support the student needs in math, statistics, and chemistry by developing Hyflex Supplemental Learning activities.

VIP Goal 2: Increase the explicit use of metacognitive strategies in all activities in the Center.

VIP Goal 3: Develop and initiate a plan for increased use of pedagogically-appropriate technology in the Center.

6b. Select the Chaffey Goals that directly relate and are MOST relevant to your VIP GOALS (please select all that apply):

VIP goals should relate to Chaffey Goals.

- Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.
- Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.
- Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.
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- Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.
- Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

6c. Explain the rationale that led your program to develop each VIP Goal. How does each VIP Goal align with the Chaffey Goals?

VIP Goal 1--Rationale and how it aligns with Chaffey Goal(s)

VIP Goal 2--Rationale and how it aligns with Chaffey Goal(s)

VIP Goal 3--Rationale and how it aligns with Chaffey Goal(s)

VIP Goal 1: Developing Hyflex Supplemental Learning activities for math, statistics, and chemistry students will provide increased access to the STEM Success Center activities and allow us to incorporate universal design for learning to enhance each student's learning experience. VIP Goal 1 aligns with Chaffey Goal 1 by providing equity in access. VIP Goal 1 aligns with Chaffey Goal 2 by enhancing the learning experience to lead to increased Success Rates. VIP Goal 1 aligns with Chaffey Goal 6 by fostering our adaptability to our students' academic and career needs.

VIP Goal 2: Increasing the explicit use of metacognitive strategies will promote a positive and impactful learning environment for students. VIP Goal 2 aligns with Chaffey Goal 2 by integrating learning strategies in all activities to ensure that students complete their educational goals.

VIP Goal 3: Finalizing and implementing a plan for increased use of pedagogically-appropriate technology will provide equity to students by increasing access to the technology needed to succeed in their courses and by ensuring that the technology has a positive impact on the student learning experience. VIP Goal 3 aligns with Chaffey Goal 1 by promoting equity in access to technology. VIP Goal 2 aligns with Chaffey Goal by intentionally selecting and utilizing technology to create an impactful learning activity.