



PROGRAM COMPREHENSIVE REPORT

2023-2024

Program Review (S) - STEM Harbor

General Information

Please enter your program's purpose statement.

Project Servingness: Aspiration, Identity, and Learning (S:AIL) in STEM (a U.S. Department of Education Title III, Part F-HSI STEM and Articulation Program) enhances Ventura College's Hispanic Serving Institution (HSI) designation by transforming institutional structures and culture to embrace a serving-minded campus that centers, and builds upon, the cultural and intellectual assets of Latine/a/o STEM students. Project S:AIL in STEM expands institutional capacity and enhances the quality of academic and student support programs that reach all students, and as a result, ensures Latine/a/o and historically marginalized students achieve equitable academic, transfer, and career outcomes in STEM. Through Project S:AIL in STEM, Ventura College will embrace its identity as an HSI by fostering an institution-wide commitment to providing a high quality, equity-minded campus community through the following strategies:

Strategy #1 – Serving: Aspiration. Inspire Hispanic and low-income students to aspire toward degree attainment and transfer in STEM.

Strategy #2 – Serving: Identity. Ventura College will improve its servingness to Hispanic and low-income students in STEM pathways through improved counseling and academic/ non-academic supports which honor cultural wealth and foster a sense of belonging in and out of the classroom.

Strategy #3 – Serving: Learning. Ventura College will increase Hispanic and low-income student access and enrollment in high-wage STEM pathways to completion and transfer. Ventura College will foster an institution-wide commitment to providing a high quality, equity-minded learning environment.

STEM Harbor Goals:

Engage students in a STEM community that centers culturally inclusive messaging and contributes to students' sense of belonging and sense of academic self-concept.

Develop access to resources like tutoring and faculty office hours to support course success and increase degree completion and transfer.

Briefly describe your program and the services that it offers to students.

STEM Harbor is an academic and social space for students registered in STEM courses, STEM majors, or students interested in exploring STEM majors and careers. STEM Harbor is located in Science and Mathematics Building (SCI) 223. Funded through Project S:AIL in STEM, STEM Harbor is accessible to all students in alignment with the U.S. Department of Education's HSI Division's mission of strengthening institutional programs, facilities, and services to expand the educational opportunities for Latine/a/o and other historically marginalized populations.

The STEM Harbor is a community for small group study sessions and meetings with STEM faculty and Navigators (peer mentors) during scheduled or drop-in hours. STEM Harbor intentionally centers student engagement, retention, and course success and cultivates the intrinsic capabilities and assets historically marginalized students bring to STEM. Our supportive, culturally informed, and affirming STEM Success Team is committed to ensuring equitable academic, transfer, and career outcomes for Latine/a/o and historically marginalized STEM students.

Benefits:

- Wrap around peer mentoring
- Office hours with STEM faculty
- Computers with limited free printing
- Facilitated group and 1-1 study/review sessions
- Free snacks in partnership with the Basic Needs Center

Program Planning

Microwave

Refrigerator

Free school supplies

Workshops and social activities in partnership with VC Student Services

How does your program support VC's mission?

The overall goal of Project S:AIL in STEM is to increase the number of Latine/a/o and low-income students who graduate with STEM degrees. All project strategies are proactively designed to remove barriers to success and assure access and participation of historically marginalized students. Project S:AIL in STEM instruction and services are success centered, beginning with redefining the role of students, faculty, and staff as institutional equity agents in a culturally-inclusive Latine-serving institution. S:AIL in STEM, and more specifically, STEM Harbor, supports VC's mission by cultivating a culturally informed and affirming space led by supportive, culturally informed, and affirming students, faculty, and staff committed to ensuring equitable academic, transfer, and career outcomes for Latine/a/o and historically marginalized STEM students. STEM Harbor holistically supports students' STEM learning experience, supporting them in achieving their personal, academic, and career goals.

SWOT Analysis: What are the strengths of your program?

Since re-opening, STEM Harbor has been successful at increasing student engagement with STEM. Unlike other student service programs on campus, we are not restricted to serving specific cohorts of students, we don't have an enrollment process, and non-STEM majors can utilize the STEM Harbor when enrolled in STEM courses or exploring STEM majors. This enables Project S:AIL to truly serve all students. In the spirit of serving students, we are intentional about creating, and sustaining, a culture that is reflective and affirming of our historically marginalized students in STEM. As evident from survey responses, many of the students engaging with STEM Harbor feel the space is welcoming and reflects who they are. Many students report a sense of community where they can intersect their passion for STEM with the identities in a positive and welcoming space. While overall campus wide student retention/persistence rates declined 3.77% from 71.7% in fall 2020 to 69.0% in fall 2021, rates remained stable for STEM majors at 82.6% both fall 2020 and 2021. Project S:AIL in STEM retention efforts have primarily been focused through STEM Harbor.

SWOT Analysis: What are the weaknesses of your program?

STEM Harbor is a grant funded service. While Project S:AIL in STEM is a 5 year grant award, each year is contingent upon a continuation award year that is dependent upon federal appropriations. What this means is that while funding is secured for 5 years, it isn't guaranteed and can be reduced annually at the discretion of the U.S. Department of Education. As a federally funded grant program, we are very limited as to how our funds can be used and the amount allocated annually to STEM Harbor on a very prescribed award. Funds can be used for instructional supplies, materials, and equipment. However, we are not allowed to use grant funds to purchase basic needs for students such as water, snacks, cleaning supplies, tissues, or the like.

SWOT Analysis: What are some opportunities for your program?

Since it's re-opening to in person services fall 2022, STEM Harbor continues to increase the number of students it serves each semester. There has been a significant increase in daily engagement and it is rapidly becoming apparent that we are very close to outgrowing the physical STEM Harbor space. Slated for spring 2024 is the planned relocation and mini-expansion of the STEM Harbor. Currently 700 SF, the upgraded STEM Harbor will be approximately 735 SF and will be part of a larger 2,800 SF modular construction that will also include a new science lab and expanded cadaver room. This construction will enable us to serve hundreds of STEM students leading to timely degree completion which is essential to the retention and completion of STEM graduates. STEM Harbor has the potential to continue to strongly contribute to the retention, persistence, and transfer rates of STEM students. Within its first year of implementation, Project S:AIL in STEM met, and in some cases, exceeded goals for fall to fall retention, 3-year transfer rates, and fall to spring retention.

SWOT Analysis: What are some threats to your program?

In the spirit of an asset minded perspective there are no perceived threats to S:AIL in STEM nor the STEM Harbor. Rather, there are unique opportunities to be intentional about partnerships and collaboration across campus, as well as the significant opportunity for Ventura College to institutionalize STEM Harbor beyond the

Program Planning

grant which concludes September 30, 2026. Without continued institutional support beyond the grant, STEM Harbor will no longer be able to support STEM students at the capacity it currently does. Currently, S:AIL in STEM contributes over \$20,000 annually in funding to compensate peer mentors for their work, nearly \$5,000 annually to provide instructional supplies, materials, and the upgrade of technology and equipment for student use in the STEM Harbor, and \$12-13,000 annually in professional development training for STEM faculty. Project S:AIL in STEM has invested heavily in supporting the STEM Harbor, and without continued support, Ventura College will miss the opportunity to continue to equitably serve disproportionately impacted students.

Service Usage

How many total student contacts occurred in your program in the previous year?

435

Describe the trend in usage over the past two years?

Pre-COVID, the total student contacts was 3.5 times more in 2019-2020 than in 2022-2023. However, prior to re-engaging Starfish to track engagement in 2022-2023, we were tracking student services usage via a Google Form from 10/17/2022 - 02/09/2023. Combining our data collected prior to Starfish, our student headcount was 261 and our total student contact contact was 883 for 2022-2023. There were only 4 total student contacts in 2021-2022 due to COVID closure of STEM Harbor. STEM Harbor services were not offered virtually during COVID. The rate at which student contact is increasing in 2023-2024 tell us that the usage is anticipated to meet, or exceed, that of pre-COVID engagement this academic year.

Are there any student gender groups more than 5 points lower than the overall VC student population?

No

Student Gender Groups: If yes, please describe.

41% of VC students are male, however 36% of the students who utilize STEM Harbor are male. While this is not more than a 5% gap, I would be remiss to not acknowledge that any gap is an equity gap. In alignment with the Student Equity Plan, STEM Harbor will develop an objective that intentionally addresses this gap as it also contributes to aligning with, and addressing, goals and objectives of the SEP.

Are there any student ethnic groups more than 5 points lower than the overall VC student population?

No

Briefly describe what your program has done to close equity gaps in students accessing your program?

Since re-opening, Project S:AILin STEM staff and student workers dedicated the 2022-2023 academic year to conducting intentional outreach to students historically excluded in representation in STEM areas to invite them to engage with STEM Harbor. This outreach was conducted by way of classroom presentations, cultural clubs (specifically MEChA, SACNAS, and SHPE), tabling at campus wide events, email communications, posts in campus wide communications (i.e. Pirate Post). Within the STEM Harbor space, we also intentionally redesigned the space to reflect STEM professionals from historically minoritized backgrounds and have been intentional about the colors, decor, and messaging used within the space to be inclusive diverse communities.

Six Factors Survey

Which of the six factors did your program score the highest on?

Connected

Why do you think your program scored the highest on this factor?

One of the most important aspects of Project S:AIL in STEM, and more specifically, STEM Harbor, is creating a culturally relevant space that nurtures sense of belonging and engagement for historically minoritized students in STEM. Our supportive, culturally informed, and affirming STEM Harbor team has worked diligently to ensure students feel connected, welcomed, and engaged with STEM. From these survey responses it is apparent we are meeting our STEM Harbor goal and also truly being intentional with our student servingness.

Program Planning

Which of the six factors did your program score the lowest on?

Focused

Why do you think your program scored the lowest on this factor?

STEM Harbor can continue to improve upon developing ways to ensure students remain enrolled in their STEM major/courses. This upcoming academic year we are focusing on increasing presence of academic support services in the Harbor including STEM counseling hours, study skills and success workshops, and investing in additional training for our peer mentors (STEM Navigators).

SUOs

Briefly describe the results of your SUO assessments.

Our SUO results indicate we closely met our target for both SUO 1 and SUO 2 at 92% and 96% respectively. Our satisfactory results reflects that student experience a service that is highly supportive of STEM student success and provides a positive and nurturing learning environment.

Which SUO initiative(s) had the greatest impact on improving outcomes for your program?

STEM Harbor's holistic academic, social, and collaborative environment has largely contributed to improving SUO outcomes. Our small group study sessions, faculty office hours, and peer mentors (STEM Navigators) intentionally facilitate skill development and a positive learning environment for our students. Our supportive, culturally informed, and affirming STEM Harbor team ensures equitable academic, transfer, and career outcomes for our students.

Course Success Rate - COUN, EAC & EOPS only

Objective

5 -Year Objective

Decrease units attempted by STEM program degree completers from 94 units to 85 units (baseline: 94; target: 85)

What specific actions will you take to meet this objective?

Engage the STEM Success Team to provide active cohort management, advising, timely referrals to programs and services, and peer mentoring. Our STEM Counselor will increase advising to students to ensure they are enrolling in the appropriate courses and completing a course load that is in alignment to the manageability of students' schedules.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 4: Transfer, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Increase students' career/transfer self-concept

What specific actions will you take to meet this objective?

Expand experiential and work-based learning opportunities (internship, research project, community projects) in collaboration with industry and transfer partners to connect Hispanic students to applied experiences that augment learning.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 2: Increase our community's access to transfer, workforce preparation, and basic skills education

Which of the following Student Equity Plan Goals does this objective align with?

Goal 4: Transfer

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Increase CSU transfers by 20% (baseline: 928; target 1,115); maintain Hispanic student representation at 63% of CSU transfers.

What specific actions will you take to meet this objective?

Increase the presence of University Transfer Center in STEM Harbor. Host transfer workshops specifically geared towards STEM major unique needs in the transfer process.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 2: Increase our community's access to transfer, workforce preparation, and basic skills education, Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 4: Transfer

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Increase UC transfers by 35% (baseline: 134; target: 181); close Hispanic student UC transfer gap from 49% to 60% (baseline: 110, target: 181).

What specific actions will you take to meet this objective?

Increase the presence of University Transfer Center in STEM Harbor. Host transfer workshops specifically geared towards STEM major unique needs in the transfer process.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps, Goal 2: Increase our community's access to transfer, workforce preparation, and basic skills education

Which of the following Student Equity Plan Goals does this objective align with?

Goal 4: Transfer

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Improve campus-wide fall-to-fall retention (baseline: 58.2%; target: 62%) and STEM program of study students (baseline: 60.5%; target: 65%).

What specific actions will you take to meet this objective?

STEM Success Team (specifically STEM Navigators and Counselor) will work to case manage the students enrolled in their pathway, ensure they develop an academic plan with predictable schedules, monitor their progress, and intervene when needed.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 1: Access and Successful Enrollment, Goal 2: First-Term to Second-Term Persistence, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Resource Requests

Resource Request Status

Active

Request Year

2023- 2024

Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)

STE2302

Description of Resource Request

Starfish Ergotron mobile computer kiosk for student sign in to track student usage.

Estimated Cost

\$1,500

Do you have categorical funds available to fund this request? If yes, please enter the FOAP below.

No

Type

Technology

New/Replacement

New

Priority

02

Primary Contact For This Resource Request

Adrienne Arguijo-Morgan

Administrator, Faculty, or Staff Request

Equipment, Technology, or Facilities Request

Pirate's Code

mizzen

Please explain how critical this request is to your program's goals.

Having an accessible and mobile system in place for students to sign in when they utilize STEM Harbor services is critical to engagement as well as tracking of our student engagement. Currently, our sign in kiosk is located on a desk that eliminates a usable desk space and takes away accessibility to our students and faculty. Having a mobile kiosk will enable one additional space to serve students particularly during peak service hours when space is limited.

How many students will be impacted by this request?

Up to 1,000 annually

What, if any, ongoing maintenance and licensing costs will your request require?

Basic IT computer support.

Have you identified funding sources to cover ongoing costs?

No ongoing costs anticipated.

How will this resource improve the current learning environment, campus services, or operating conditions on campus?

Obtaining a mobile kiosk will enable Project S:AIL in STEM to collect student usage of the STEM Harbor data more efficiently and effectively for reporting purposes. The usage data collected through this mobile kiosk will enable Project S:All to review student level and disaggregated data about student engagement leading to more equitable services, intentional outreach and engagement with retention efforts, and also provide timely referrals to students for student support services via the STEM counselor and Navigators. The mobile kiosk will enable one additional desk space to be freed for student or faculty use in an already limited space, creating a more welcoming and inviting space for students who enter a full space.

Objective

5 -Year Objective

Increase students' resourcefulness.

What specific actions will you take to meet this objective?

The STEM Success Team (Specifically STEM Navigators and Faculty) will introduce students to opportunities in STEM. Peer Mentors will follow up on early alerts, promote educational and career pathways, connect students to events, career fairs, and industry leaders.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps, Goal 2: Increase our community's access to transfer, workforce preparation, and basic skills education

Which of the following Student Equity Plan Goals does this objective align with?

Goal 1: Access and Successful Enrollment, Goal 2: First-Term to Second-Term Persistence, Goal 3: Completion of Transfer-Level English and Math, Goal 4: Transfer, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Decrease STEM program of study median time to completion (in years) (baseline: 3.5, target: 3).

What specific actions will you take to meet this objective?

Engage the STEM Success Team to provide active cohort management, advising, timely referrals to programs and services, and peer mentoring. Our STEM Counselor will increase advising to students to ensure they are enrolling in the appropriate courses. Faculty and STEM Navigators will ensure timely academic support to support students with successful course completion.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 1: Access and Successful Enrollment, Goal 2: First-Term to Second-Term Persistence, Goal 3: Completion of Transfer-Level English and Math, Goal 4: Transfer, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Objective

5 -Year Objective

Increase STEM program course success rate (baseline: 77%; target: 82%).

What specific actions will you take to meet this objective?

Faculty and STEM Navigators will ensure timely academic support to support students with successful course completion.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 1: Access and Successful Enrollment, Goal 3: Completion of Transfer-Level English and Math, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027

Resource Requests

Resource Request Status

Active

Request Year

2023- 2024

Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)

STE2301

Description of Resource Request

11x14 dry erase boards, dry erase markers, mobile dry erase board for study sessions, academic advising, and faculty exam review sessions.

Estimated Cost

Total request: \$760 (11x14 boards: \$15/each @ 30 boards) (markers: \$30/each @ 2 boxes), (mobile dry erase board: \$250/each @ 1 board)

Do you have categorical funds available to fund this request? If yes, please enter the FOAP below.

No

Type

Other (Not Prioritized)

New/Replacement

New

Priority

01

Primary Contact For This Resource Request

Adrienne Arguijo-Morgan

Administrator, Faculty, or Staff Request

Equipment, Technology, or Facilities Request

Please explain how critical this request is to your program's goals.

STEM student rely heavily on dry erase boards for studying and preparing for exams. Many of the courses utilize formulas, equations, or calculations that are conducive to the utilization of dry erase boards. Our students have requested to have access to additional mobile and hand held personal dry erase boards for their studies.

How many students will be impacted by this request?

Up to 1,000 annually

What, if any, ongoing maintenance and licensing costs will your request require?

None are anticipated.

Have you identified funding sources to cover ongoing costs?

Future grant funds.

How will this resource improve the current learning environment, campus services, or operating conditions on campus?

Access to dry erase boards will enable students to have adequate access to resources and materials needed for their studies and exam preparation, leading to higher incidences of successful course completion.

Objective

5 -Year Objective

Increase STEM student completion of transfer-level math in the first year (baseline: 37%; target: 45%).

What specific actions will you take to meet this objective?

Faculty and STEM Navigators will ensure timely academic support to support students with successful course completion. Timely referrals to Tutoring Center. Math learning communities within STEM Harbor.

Which of the following Educational Master Plan Goals does this objective align with?

Goal 1: Increase the success of our students while closing equity gaps

Which of the following Student Equity Plan Goals does this objective align with?

Goal 1: Access and Successful Enrollment, Goal 3: Completion of Transfer-Level English and Math, Goal 4: Transfer, Goal 5: Degree/Certificate Completion

Review Type

Comprehensive

Program Review Cycle

2023 - 2027

Objective Status

Active

Completion Date

08/14/2027