

2023-24 Program Review

Program Name: Integrated Science Center (ISC)

Program Contact: David Locke/Olivia Viveros

Academic Year: 2023/24

Status: In Progress

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INTRODUCTION: WHAT IS PROGRAM REVIEW FOR?

The goal of program review is to assess how well our programs are doing. Program review asks us to:

- Reflect on the state of student learning or support in our disciplines and programs, by discussing:
 - efforts to achieve equity across student populations and modes of delivery;
 - results of assessment activities aimed at improving or researching student learning;
 - new challenges or changes to the program.
- Identify resources that we need to change and improve.

Though program review is tied to accreditation, ultimately, we want program review to be meaningful for us. This means we want to use program review to highlight and celebrate what is working, identify what isn't and to figure out what we can do about it. Program review also provides an opportunity to assess how those things work in practice, and work to improve our practices to be able to serve our students even better. It also serves to create cross-campus understanding and dialogue and make more informed decisions in our teaching and programs. Program review is also an opportunity to advocate for change and for resources by showing need and equity issues that we need additional support to be able to address.

1. Description of Program (200-400 words)

- Provide a brief description of the program and how it supports the following:
 - [CSM Mission and Values Statements](#)
 - [CSM Statement of Solidarity](#)
 - [CSM's Strategic Priorities](#)
 - [SMCCCD's Strategic Goals](#)
 - [CSM Forward 2028 - Education Master Plan](#)
- Identify any factors, including federal, state, or local initiatives, that have impacted the program and the students served

The Integrated Science Center (ISC) supports the College's Mission and Values Statements, its Solidarity Statement, and the college and district strategic plans by creating a learning environment that values the experiences and perspectives of all. In this environment, equity-mindedness matters and is included in the services we deliver. The faculty and staff of the ISC are committed to hiring and training new staff who are dedicated to the deliberate inclusion of diverse competencies in all areas of their work. The ISC staff is committed to providing an open and inclusive environment that is sensitive to and delivers high-quality services to BIPOC student groups of diverse racial and ethnic backgrounds, national origin, sexual identity, religion and spirituality, age, and gender who historically have been marginalized in higher education.

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Services we provide include access to science tutors and science faculty, access to both PC and Mac computers, copies of current science course textbooks for students to use in the center, a kitchenette, and an environment that encourages student collaboration on projects and coursework.

Since Fall 2017, the ISC serves as the College MESA (Math Engineering Science Achievement) center, funded by the Chancellor's Office of California Community Colleges. The MESA program (Mathematics, Engineering, and Science Achievement) serves educationally and economically disadvantaged students to successfully transfer to four-year universities in pursuit of STEM-based (Science, Technology, Engineering, and Math) degrees, and it is California's first state-funded STEM equity program. MESA provides an extensive combination of STEM activities and academic support in a friendly and comfortable space, where students gather to study and engage with others to form an encouraging and supportive STEM community.

2. Results of Previous Program Review (200-500 words)

- a) Describe the results of your previous Program Review's action plan and identified equity gaps.
 - Previous Goals
 - Results Achieved
 - Changes Implemented
 - Plans still in progress
 - Any notable or surprising results and outcomes

- b) Explain any curriculum or programmatic changes since last program review
 - To specific courses, or to any discipline as a whole
 - Includes degree, certificate, or course sequences, program delivery or structure, etc.

The major programmatic change since our last program review is having nearly all of our services return to in-person delivery.

Goals achieved include hiring a new Program Services Coordinator who began working this Fall. We have also been approved for hiring our Retention Specialist.

Regarding our goals of identifying equity gaps in our services, the headcount (addressed in the next section) shows that Hispanic students access our services in a larger percentage than their headcount at the College. In headcount, we do not see much of a gap in gender, first generation students, or students of other ethnicities. It would be helpful in future semesters to gather data of students in STEM courses to compare them to students who visit the ISC to make sure that we are meeting the profile of the students taking STEM courses that we are aiming to serve. Additional data may tell us whether or not there is a gap in student satisfaction of our service delivery.

Our goal of increased awareness of the ISC among CSM students has been supported by advertisement of ISC and MESA sponsored events, as well as ISC and MESA presence at

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college events. We have not been able to quantify the impact on awareness, because we lack data measuring student awareness.

c) Discipline-level and SLO (Student Learning Outcomes) assessment/Student Services and SAO (Service Area Outcomes) assessment: Describe learning or area assessment plans implemented since last Program Review, including any activities undertaken to address equity or delivery mode gaps. Your summary should explain:

- SLO/SAO
 - What did the assessment focus on?
 - Was it discipline/program/service-specific or interdisciplinary/a collaboration between programs or services?
 - Why was it prioritized (e.g., equity issue, key disciplinary issue, etc.)?
- Assessment results
 - What was the activity or intervention?
 - What were the outcomes?
- Program improvements implemented
 - What did you learn from it?
- What changed?

We had too few responses to digital surveys to draw any conclusions.

We will gather survey data with paper and pencil student surveys this Fall during the week of Oct 30 – Nov 3 and likely again in March 2024 to obtain a larger sample.

3. Current Program Review (200-400 words)

Please use the statistics below, which are college-wide, as a reference. Please refer to the Program Review website for individual program data.

College Stats 2022-23	Ethnicity	First Gen	Age	Gender	Total
Headcount (unduplicated)	Latinx 32% White 26% Asian 20% Filipino 7% Multiracial 7% Black 3% Pacific Islander 2% Unknown 3% Native American 0%	45% of our students are the first in their family to go to college.	66% 24 yrs. and under 18% Ages 25-34 17% over 35 yrs.	49% Female 48% Male 3% Non-disclosed or non-binary	13,180 students
Enrollments (duplicated)	Latinx 35% White 26% Asian 16% Filipino 6% Multiracial 8% Black 3% Pacific Islander 3% Unknown 3% Native American 0%	47% of enrollments were by students who are the first in their family to go to college.	76% 24 yrs. and under 13% Ages 25-34 11% over 35 yrs.	48% Female 50% Male 2% Non-disclosed or non-binary	37,014 enrollments

Integrated Science Center Stats 2022-23	Ethnicity	First Gen	Age	Gender	Total
Headcount (unduplicated)	American Indian/Alaskan Native 0.2% Asian 23.6%, Black - Non-Hispanic 1.1% Filipino, 6.6%, Hispanic, 37.3%, Pacific Islander, 1.5%, White Non-Hispanic, 20.9%, Multiraces, 6.8%, Unknown, 2.3%,	43 % of enrollments were by students who are the first in their family to go to college.	Not Available	48% Female 49% Male 2% Unreported	666

- a) **Student population equity:** Discuss any gaps in student success, persistence, satisfaction, utilization or enrollment across student populations (statistics provided for ethnicity, first-generation, age, gender and total enrollment), or student population served.
- Findings: What has changed from the previous program review?
 - Analysis: What factors do you feel contribute to these gaps?
 - Resources: If you were granted a resource request, please note what that was and the impact it had.

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- Plans to address opportunity gaps: What has your program done to address these gaps? Include information on:
 - interventions implemented
 - any successes in closing gaps
 - ongoing challenges

Findings	Analysis	Resources	Plans to Address Opportunity Gaps
<p>1. Compared to the College Headcount, the ISC sees a greater proportion of Hispanic students accessing our services. The same is true for Asian students. Other student ethnicities access the center in comparable proportions to the College or are low proportions in both the College and Center Headcounts. The exception is white students, who access the center in a lower proportion than the College Headcount.</p>	<p>We need better comparison data. Rather than comparing to only the College as a whole, it would make sense for us to compare to the student headcount in the STEM courses we serve. It is possible that we see a greater proportion of Asian students simply because a greater proportion of Asian students may be enrolled in STEM courses.</p>	<p>We need to ask for additional data from PRIE to compare to. Likely, unduplicated headcount data from combined STEM fields.</p>	<p>There do not appear to be gaps according to the data provided. We will seek the further data listed under resources to further determine if gaps exist.</p>
<p>2. Unduplicated Headcount by gender and for 1st generation college students is comparable between the center and college.</p>	<p>We need better comparison data. Rather than comparing to only the College as a whole, it would make sense for us to compare to the student headcount in the STEM courses we serve. It is possible that we see a greater proportion of Asian students simply because a greater proportion of Asian students may be enrolled in STEM courses.</p>	<p>We need to ask for additional data from PRIE to compare to. Likely, unduplicated headcount data from combined STEM fields.</p>	<p>There do not appear to be gaps according to the data provided. We will seek the further data listed under resources to further determine if gaps exist.</p>

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b) **Modes of Delivery equity:** Discuss any gaps in student success, persistence, satisfaction, utilization or enrollment, and student population served across different delivery modes. Please comment on in person services/instruction vs hybrid services options/instruction vs completely online services/instruction.

- Changes since last Program Review: What has changed, in terms of gaps, since last program review?
- Analysis of gaps: What factors do you feel contribute to these gaps?
- Plans to address opportunity gaps: What has your program done to address these equity gaps? Include information on:
 - interventions implemented
 - any successes in closing gaps
 - ongoing challenges

There are no courses associated with the center. Only a few tutoring options have remained online. All other services are in-person only.

Our satisfaction surveys had too few responses to detect a difference across modes of service.

Changes since last Program Review	Analysis of Gaps	Plans to Address Opportunity Gaps
1. Better data needed. Will be collected in both Fall 2023 and Spring 2024.		
2.		
3.		

(c) **Challenges and Opportunities:** Describe any **other** particular challenges, opportunities, or other factors that impact the success of your program (e.g., natural or health disasters, assessing whether a degree program is meeting its learning outcomes, developing new degree programs or courses, adapting to a changing student population, keeping a flagging program alive, starting a learning community, resources, etc.).

Over the past three years, the MESA Community College Program has undergone transformative changes that promise to promote equity among first-generation, low-income STEM Transfer students at CSM. These changes, driven by a substantial increase in MESA allocation funds, are geared towards enabling colleges to bolster their capacity to support students while aligning with the core objectives and components of the grant. Additionally, the passage of Bill (SB) 444 by the legislature (awaiting the Governor's signature) represents a key moment in the program's history. The Bill incorporates MESA into the education code, providing much-needed stability to the program and ensuring continued funding for all MESA Community College Programs across the state.

The increased funding and the program's new stability have paved the way for the administration at CSM to greenlight the creation of a Retention Specialist position, funded through the grant. This addition will allow us to better serve our students and facilitate the program's growth. However, it also highlights the challenge of accommodating the additional personnel, along with the implementation of drop-in counseling hours, within our current center setup.

In response to this challenge, we have identified a solution in the form of the reconfiguration of the computer room located at the rear of the ISC (Room 110A). The existing configuration, including 20 desktop computers, has become obsolete as most of our students now have personal laptops. We are requesting an evaluation from the district projects department to provide recommendations on configuration options to better align with the evolving needs of our program and our student's requirements.

These positive changes within the MESA Community College Program allow us to implement a robust MESA program, one that plays a pivotal role in supporting STEM-transfer pathways for our underrepresented students.

4. Planning

a) **Discipline-level and SLO (Student Learning Outcomes) assessment/Student Services and SAO (Service Area Outcomes) assessment for 2023-2025:** Describe learning or area assessment plans for this Program Review cycle, **including any activities planned to address equity or delivery mode gaps.** Your summary should explain:

- SLO/SAO
 - What will your assessment focus on?
 - Is it discipline/program/service-specific or will it be interdisciplinary/a collaboration between programs or services?
 - Why is it prioritized (e.g., equity issue, key disciplinary issue, etc.)?
- Assessment plan
 - What is the planned activity or intervention?
 - Describe next steps and the timeline for your SLO/SAO assessment
- Resources for SLO/SAO assessment
 - What resources will you need to assess changes (i.e., PRIE support in the form of specific data, surveys, etc.)?

SLOs/SAOs	Assessment Plan	Resources for SLO/SAO assessment
<p>1. The Center SLOs were assessed in Spring 2023 via electronic survey.</p>	<p>Response to the electronic survey was very low. A paper survey will be conducted the week of Oct 30-Nov3 and again in March 2024.</p>	<p>The survey will be printed on paper and given to students at the center.</p>
<p>2. Assessment survey questions for MESA members.</p>	<p>Assessment questions were included in the electronic survey given in Spring 2023. However, the survey response was low to consider. We will give a paper survey in early November, hopefully increasing survey completion.</p>	<p>The survey will be printed on paper and given to students at the center.</p>
<p>3.</p>		

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b) Program goals

Based on your current review of your program’s equity gaps, learning assessments and challenges and opportunities, identify specific goals and plans. Please note that whereas SLOs/SAOs involve assessing and measuring a specific skill or knowledge students will be able to do/understand upon successful completion of a course, program, service, and/or degree/certificate, program goals reflect overall aspects of your program or service you hope to improve.

Please note that closing equity gaps is a College-wide priority. If there are significant equity gaps in student success, persistence, satisfaction, utilization or enrollment, and student population served in your program, these should be addressed in at least one of your goals (see 3a and 3b).

For each goal, you should include:

- A brief description of the issue being addressed (equity gap, etc.)
- What actions you plan to take
- What measurable outcomes you hope to achieve
- A timeline
- Who is responsible
- What support do you anticipate needing in order to achieve your goals and plans, including:
 - Professional development activities
 - Institutional support
 - Collaborations
 - Training
 - Resources

Goal	Actions	Measurable Outcomes	Timeline	Responsible Party	Support Needed
1. Reconfigure Room 110A to meet current program needs.	We are in the process of requesting an evaluation from the District Projects Department to provide recommendations on configuration options to better align with the evolving needs of our program and our student's requirements.	Having a space to accommodate our expanded personnel to better serve students.	Dependent on District Projects Department. Ideally, beginning in December or January.	Olivia Viveros	District Projects Department scheduling.

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2. Continue to offer learning support through peer tutoring	Recruit and hire tutors each semester to provide quality learning support in both STEM major courses and other science GE courses.	Increase in student success and retention in courses where tutoring is offered.	Ongoing	Olivia Viveros	Instructional Aide, Increase in tutor funding, support from faculty in recruiting peer tutors.
3. Track usage and collect survey data from students in the ISC.	Print and use paper surveys to gather survey data.	Student awareness of ISC services and student satisfaction with services provided in the ISC.	Have students complete surveys the week of Oct 30-Nov3 and again in March 2024. Analyze data in late Spring 2024	David Locke	Instructional Aide

5. CE Only

- a) Review the program's available labor market data, as applicable, and explain how the program meets a documented labor market demand. Here are two relevant links:
 - [State of California Employment Development Department, Labor Market Information Division](#) (the official source for California Labor Market Information):
 - [Employment data](#) (by Program Top Code) from the State Chancellor's Office
- b) Summarize student outcomes in terms of degrees and certificates. Identify areas of accomplishments and areas of concern.
- c) Review and update the program's Advisory Committee information. Provide the date of most recent advisory committee meeting and outcomes of the meeting (updates, changes, new members, etc.).
- d) What strategies have you discussed in your recent Advisory Committee's meetings to meet the needs and challenges of getting people retrained and back to work?