

2022-23 Program Review Template

Directions for Lead Writers: Please use this template to complete your Unit's Program Review for this cycle. After you complete this template, please click [here](#) to upload this word document.

Click [here](#) to view our Glossary of Terms.

Other Resources:

[Program Review Handbook](#)

[Acronym Dictionary](#)

[Resource Link Library](#)

[Mesa 2030](#)

[Program Review Archives](#)

DEI Discussions: as part of your reflection with your unit, a workgroup has developed a Diversity, Equity, Inclusion, and Accessibility Discussion Guide. Please use this in your unit-level discussions as we move toward becoming more diverse, equitable, inclusive, and accessible through intentional and ongoing campus-wide reflections and revisions of policies and practices.

View the guide [here](#). Have reflections or feedback to share? Click [here](#).

<i>Program Information & Executive Summary</i>		
Prompt	Guidance	Program Response
Describe the successes and challenges your unit has faced since the last comprehensive review.		<p>One of the major successes we achieved was the acquisition of a Title III HSI grant. This grant not only provided us with additional funding but also validated the value and impact of our STEM program within the community. The grant allowed us to invest in advanced equipment for classrooms, new technology resources, and faculty development opportunities, ultimately enhancing the quality of education and research in STEM disciplines.</p> <p>Another significant success has been the expansion of our peer mentoring services into new disciplines. Recognizing the importance of peer support in student success, we broadened our mentoring program beyond its initial focus on specific STEM fields. By</p>

		<p>incorporating new disciplines such as physics for life science majors (Physics 180 sequence), organic chemistry, and engineering we have created a more comprehensive support system for students pursuing diverse STEM pathways. This expansion has fostered a stronger sense of community among students, increased retention rates, and improved academic outcomes.</p> <p>Furthermore, we successfully expanded the physical space of our STEM center. With the growing demand for STEM education, the previous facility was no longer sufficient to accommodate our expanding student population and program offerings. Through careful planning, collaboration with campus stakeholders, and securing additional funding through Title III and Title V funds, we were able to renovate and expand the STEM center to incorporate LRC 116 in addition to LRC115. The new facility now features state-of-the-art computers, models and kits, collaborative study spaces, and dedicated areas for, STEM counseling, tutoring and peer mentoring.</p>
<p>If applicable, describe any major curricular or service changes your unit has engaged in and the impact of those changes since the last comprehensive review.</p>	<p>Optional</p>	<p>Since the last comprehensive review, our unit has undertaken significant curricular redesign in the areas of chemistry, mathematics, and physics, thanks to the support of our new Title III grant. These changes have had a transformative impact on our program, enhancing the learning experience for students and improving their academic outcomes.</p> <p>With the grant's assistance, we were able to engage in a comprehensive redesign of the curriculum in chemistry, mathematics, and physics. This redesign aimed to modernize and align the content with our four-year partners and emerging trends in STEM fields. Previously, STEM disciplines were often taught as separate entities in their own "silos." However, the redesigned curriculum encourages students to recognize the interconnectedness of these fields and apply knowledge from one discipline to another. This integrated approach nurtures a holistic understanding of STEM subjects and prepared students for the interdisciplinary nature of</p>

		modern scientific research and problem-solving.
If applicable, describe the impact of any new resources (human, fiscal, etc.) on the unit and/or action plan implementation.	Optional	Our new grant's funding has been instrumental in our efforts to redesign our STEM classrooms into smart interactive high-tech learning environments, specifically designed to enhance modern science education. One of the primary impacts of these new resources is the transformation of our STEM classrooms into state-of-the-art, smart interactive spaces. The grant funding has allowed us to invest in cutting-edge technology, including interactive whiteboards, multimedia displays, modular furniture, and specialized software applications. These resources will enhance the learning experience for our students, providing them with immersive and engaging opportunities to explore scientific concepts through hands-on activities, collaborative group work, simulations, and virtual experiments. The interactive nature of the technology encourages active participation, collaboration, and critical thinking among students. By the end of the grant we will have introduced at least four new modern classrooms to our Mathematics & Natural Sciences building.
Please confirm that the department has reviewed the Course Learning Outcomes listed in CurricuNet for each course and verify accuracy.	Select One	<input checked="" type="checkbox"/> Reviewed and accurate (grant objectives) <input type="checkbox"/> Reviewed not accurate, update in progress <input type="checkbox"/> Reviewed not accurate, need support
Data Reflection		
Prompt	Guidance	Program Response
Describe the trends you see in your program/service area's data.	Instructional Data you may consider: enrollment trends, course & program learning outcomes, Institutional Learning Outcomes, course success and retention rates, degree completion, transfer, employment, labor market analysis, other data relevant to your unit's work	<p>We have seen a huge increase in the engagement of students with our various programs including peer mentoring, Path to STEM Success events, and the STEM Center.</p> <p>Peer Mentoring Attendance numbers: Fall 2021 - 117 unique students with 873 occurrences</p>

	<p>Service/Admin Area Data you may consider - service usage, service access, demand for services, student service/administrative unit outcomes, types of services offered and used, headcount of services usage, trends in reason for service use, other data relevant to your unit's work</p>	<p>Spring 2022 - 211 unique students with 1,683 occurrences Fall 2022 - 524 unique students with 3,436 occurrences Spring 2023 - 700 unique students with 3,287 occurrences</p> <p>Note: Fall 2022 and Spring 2023 have not been disaggregated yet.</p> <p>We also see an increase in enrollment in the classes that are supported by the various activities of the grant.</p> <p>STEM Center attendance continues to grow both in-person and virtually. In particular, we observed over 18,000 contact hours with students inside the STEM Center in Spring 2023. Typical utilization involved 250-300 contact hours by students - while some peak days exceeded 500 with over 80 students simultaneously taking advantage of services.</p>
<p>Describe any equity gaps you see in these data. Are there differences and/or patterns observed by demographics (e.g. race/ethnicity, gender, age, etc.)?</p>	<p>Equity gaps refer to disparities in educational outcomes and student success metrics across race/ethnicity, socioeconomic status, gender, and other demographic traits and intersectionalities.</p>	<p>Equity gaps exist in enrollment of our STEM courses among Latine students. As this is an HSI grant, this is the group we are required to focus on.</p> <p>Further, although peer mentoring attendance has increased overall, Latine head count only accounts for 34% of the headcount, even though the campus is 39% Latine.</p>
<p>Describe the discussion(s) that took place about the unit's learning outcomes assessment data.</p>	<p>Department Outcomes Coordinators (DOCs) facilitate a department wide discussion on learning outcomes data each year during "Outcomes Across Campus". DOC's may helpful in supporting this section.</p>	<p>The new grant has biweekly meetings with all members of the team including faculty, classified professionals, supervisors, and administration. Data conversations occur regularly at these meetings. The APR is disseminated among team members as well as the campus Executive team. Biannual evaluations with an external evaluator include all team members and campus Executive team. Also, the faculty lead, program director, STEM Center supervisor and research analyst have biweekly meetings to discuss outcomes and further data collection needs.</p>
<p><i>Practice Reflection</i></p>		
<p>Prompt</p>	<p>Guidance</p>	<p>Program Response</p>

Describe current practices your unit has engaged in that you believe impact the above data trends and equity gaps.	Items to consider: new actions specifically focused on issues of equity, major curricular changes, professional learning, policy or process changes, data-informed unit dialogue, community outreach.	Bringing services back to campus as well as the course sections that we serve has been the central factor to increase in engagement. Further, each semester we increase the number of peer mentors that we employ and we have extended the course list that are served. Further, keeping virtual services open as well helps to serve those students that cannot make it to campus for whatever reason. We do see equity gaps among our Latine community, however, the objectives of the grant are being met.
What other factors (internal or external) might also impact the above data trends and equity gaps?	Items to consider: legislative changes, fiscal changes, staffing changes, recruitment, hiring, and retention practices.	The only objectives not met in the first year of the new grant were all based on enrollment. Even though our objectives are based on the Hispanic and Latine community, the overall enrollments of the campus have been trending down, even before the pandemic. Over the past year we have started to see an incline. We will need to watch numbers closely to see if our objectives are trending in the same direction the campus is.

Unit Goals and Action Plans

Prompt	Guidance	Program Response
Unit Goals	Goals should connect to Data and Practice Reflections. Goals should be Specific, Measurable, Attainable, Relevant, and Time-bound.	<p>Goal 1: Expand the STEM Center space and capacity in order to meet the increasing needs and demands of students.</p> <p>Goal 2: Improve and expand STEM tutoring and mentoring services.</p> <p>Goal 3: Improve STEM professional learning across campus.</p>
Mesa2030 Roadmap Strategic Objective (SO) Alignment	Review Mesa2030 and the Roadmap to Mesa2030 , only link to SO's that your goal clearly and intentionally is meant to contribute to, each goal should link to 1 or more SOs	<p>Goal 1:</p> <p>SO: Support students' access to resources to mitigate the impact caused by technological and basic needs insecurity.</p> <p>SO: Establish a college-wide practice and schedule that addresses routine maintenance and renewal of equipment, facilities and technology to ensure access to adequate resources and better serve students.</p> <p>Goal 2:</p> <p>SO: Design and promote programs and services that intentionally target a reduction in equity gaps in completion outcomes</p>

		<p>SO: Expand the use of innovative and high-quality teaching, learning, and support practices that achieve equitable outcomes and increase student success.</p> <p>Goal 3:</p> <p>SO: Expand and prioritize professional learning experiences for all employees that create parity in outcomes across racial/ethnic groups and all disproportionately impacted groups.</p> <p>SO: Remove barriers to equitable participation by developing, incentivizing and creating structures for all employees to engage in and design professional learning.</p>
<p>Identify specific actions your program/service area will engage in to accomplish this goal.</p>	<p>Examples may include: policy or practice changes; unit initiatives, curricular changes, etc.</p>	<p>Goal 1</p> <ol style="list-style-type: none"> 1. Purchase laptops, calculators, software, and other STEM supplies needed for inside and outside the classroom. 2. Follow usage data carefully and identify tables, chairs, and other spatial needs for student use. 3. Work with LRC team to identify needs of students and how the STEM Center can contribute to those needs. <p>Goal 2</p> <ol style="list-style-type: none"> 1. Continue offering peer mentoring on campus and identify spaces where sessions can occur as the program expands. 2. Continue to work with STEM faculty in identifying and hiring a diverse and inclusive team of peer mentoring students. <p>Goal 3</p> <ol style="list-style-type: none"> 1. Support STEM faculty with various professional learning opportunities offered on campus including MOST, FIGs, CEER, and others. 2. Bring ESCALA to campus to offer STEM focused professional learning.
<p>Does this Action Plan require resources</p>	<p>if yes, complete resource request form</p>	<p><input type="checkbox"/> Yes (mostly funded by grants)</p> <p><input type="checkbox"/> No</p>

Lead Writer and Manager Information	
Lead writer Name(s)	Brian Mackus, Toni Parsons
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