

1. Assessment Plan - Four Column



PIE - Humanities & Social Sciences: Makerspace

Narrative Reporting Year

2017-18

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Program Planning Dialog: People learn better when they make something that is connected to their subject. The best maker-driven learning is never just about the making, it's about all of the things that happen around the making: that initial spark of curiosity, the investigation and early tinkering, the planning and research that follow, the inspirations and appropriations from other projects, the prototypes, the failures, the feedback, and, perhaps most importantly, the iterations upon iterations towards a better product. Unfortunately, in today's world the opportunity for young people to make things is limited.

The Mt. SAC MakerSpace is a gym for creators, making 21st century tools available to facilitate ideation and creation. The mission of the Mt. SAC MakerSpace ("Mountie MakerSpace") is to drive student success and innovation by creating an environment where Mt. SAC students, staff and the community can collaborate on the creation of tangible items and entrepreneurial ideas. The MakerSpace serves as a hub for project-based learning across instructional areas by providing the tools, mentors and space to complete practical and artistic projects that emphasize the skills required for 21st century employment.

The underlying culture of MakerSpaces is one of collaboration, sharing, and additive innovation. Sharing one's work with others creates an open community and collaborative culture in which members are excited to assist one another and willingly exchange design knowledge. The diversity of users creates opportunities for members to work with and learn from others who have unique experiences and skills. The existence of these spaces on other campuses has led to many unique collaborations among colleagues who may not have otherwise had the opportunity to work together, including the development of multidisciplinary courses. The open nature of these spaces promotes an intentional collision of random ideas, a design structure that has benefited many maker members and many industries.

The CCCMaker grant year 2 ends May 2019, so new funding sources, including campus funding, are needed to continue operation of MakerSpace and to continue to support Mt. SAC students.

External Conditions, Trends, or Impacts: Our advisory board employers have told us that they want employees and interns who know how to "roll up their sleeves", jump in with a group, then plan and attack a problem in a very functional and effective manner to work towards an appropriate outcome.

Among all private sector industries, manufacturing companies (which by definition create items) have among the highest average tenure of workers, one of the lowest employee turnover rates and the average manufacturing worker in the U.S. earns more than the average employee working in other industries.

The Mountie MakerSpace is at the core of creating a pathway for 21st century employees, providing a place to practice technical skills and also to foster soft skills, like collaboration and project planning.

CCCMaker grant funding expires in May 2019. This means that the MakerSpace will close if additional funding is not found, and the current renaissance of project-based learning and community collaboration will be lost.

Internal Conditions, Trends, or Impacts : The Architecture, Engineering and Engineering Technology programs have designed their curriculum around a project-centered model that has at its heart students collaborating with faculty and the community to make tangible things. Other programs across campus also are implementing project-based learning models where students work on substantial collaborative activities outside of the traditional classroom environment.

Access to a MakerSpace as an independent, open central hub that enables collaborative project-based learning, is essential for students to develop 21st century skills. Teaching objectives can be met via project-based assignments completed in the MakerSpace. Student outcomes can be enhanced by providing a community of practice where students can learn from peers, engage in self-directed learning, and be exposed to mind-sets that foster the more nebulous qualities, such as those of a lifelong learner and effective communicator. The MakerSpace also fills a critical role of helping the community to see Mt. SAC as a valuable resource by providing a location for community-serving programs, including those pushed out from other areas of campus by the pressure of credit programs.

Current demand for MakerSpace utilization from contract ed, continuing ed and credit programs is growing and the MakerSpace staff and resources are having a hard time keeping up with demand. CCCMaker grant funding expires in May 2019. This means that the MakerSpace will close if additional funding is not found, and the current renaissance of project-based learning and community collaboration will have no home.

Critical Decisions Made by Unit: Seeking additional funding sources from Strong workforce, equity and general fund to maintain the makerspace program after funds end in May 2019.

Notable Achievements for Theme A: To Advance Academic Excellence and Student Achievement: More than 600 MakerSpace members from a combination of students, faculty, staff and the community. Hands-on student and community projects (students working in MakerSpace to complete projects), and support students across disciplines, Divisions and majors.

Notable Achievements for Theme B: To Support Student Access and Success: Increased number of student members and increased diversity of majors of student members. More class visits to support project-based learning (students working in MakerSpace to complete projects) and more participation from students across disciplines, Divisions and majors. Began to lay groundwork for integration of internship experience presentations with MakerSpace activities and culture.

Notable Achievements for Theme C: Secure Human, Technological, & Financial Resources: Applied for Year 2 funding from Chancellors CCC Maker grant. Arranged for continued staffing with appropriate personnel. Applied for Strong Workforce money. Applied for Equity money. Received donations from other campus areas and from individuals to benefit student members.

Notable Achievements for Theme D: To Foster an Atmosphere of Cooperation and Collaboration: Increased and ongoing outreach to faculty, staff, administrators and students about MakerSpace, including workshops, meet ups, presentations and class visits in MakerSpace. Invitations to participate in planning and for all members to make suggestions. Hosted regional MakerSpace workshop to support development and implementation of MakerSpaces at other institutions. Ongoing outreach to community members, both associated with Mt. SAC in some way and not, including alumni (active participants in Alumni Day activities). Setup partnership with CalPoly Pomona for Entrepreneurship activities.

Contributors to the Report: Martin Mason, Mala Arthur

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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Facilities - Develop an outdoor fabrication area to serve the needs of members and non-credit program participants, providing a working location for equipment (already in MakerSpace possession) which is too large or has ventilation requirements

Partial Funding Requested - Outdoor building area
Describe Plans & Activities Supported: The makerspace will collaborate with architecture, engineering and construction engineering technology to design

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that cannot easily be accommodated inside the MakerSpace. In addition, re-configure the existing layout inside the Space to make equipment usage more effective and to increase the margin of safety. Install outdoor lighting to support outdoor build area. Finally, create outdoor storage for larger-scale materials.

Leveraging our existing space more effectively is key to achieving our project goals. We have an opportunity to work with contract education to provide a high-value welding and manufacturing training program, driven by our welding faculty, that will serve as a pipeline for our students into high paying technical jobs. The construction of the outdoor building area is directly tied to one of our core goals of supporting contract education programs. Without this area, Mt. SAC will lose the opportunity to offer this program.

Status: Active
Goal Year(s): 2018-19
Date Goal Entered (Optional): 05/31/2018

and build an outdoor building area on the west side of building F7. This space will support current makerspace activities, and community ed programs. It will provide a space to locate the 4 donated Industrial lathes to support the contract education water district apprentice program. It will also support the use of the sand blast cabinet, compressor, grinding table, oven and paint booth, plus other equipment as appropriate.

Lead: Mason
Type of Request: Facilities
Planning Unit Priority: High
What would success look like and how would you measure it?: The outdoor build area would be constructed, members could use the equipment there and programs could schedule activities.
Documentation Attached?: No
Partial Funding Requested - Reconfigure the existing makerspace layout.

Describe Plans & Activities Supported: Apply best practices to machine layout. Define safe clearance zones around each machine with paint stripes. These activities support safe use of the makerspace facility by current and future users.

Lead: Mason
Type of Request: Facilities
Planning Unit Priority: High
What would success look like and how would you measure it?: Equipment is moved; the space and

Unit Goals

Resources Needed

Where We Make an Impact: Closing the Loop on Goals and Plans

safe clearance zones are clearly delineated for each.

Documentation Attached?: No

Partial Funding Requested - Create three-wall outdoor material storage area in the eastern area of the makerspace yard, for construction materials to support projects in the space.

Describe Plans & Activities

Supported: Current storage space is up a narrow non-ada compliant staircase which is not accessible to students. Creating an outdoor storage structure would provide safe and convenient storage of project materials (including larger items) and allow the indoor space to be used for makerspace activities.

Lead: Mason

Type of Request: Facilities

Planning Unit Priority: Medium

What would success look like and how would you measure it?:

Construction of an outdoor storage yard in the front portion of the makerspace.

Documentation Attached?: No

Partial Funding Requested - Install outdoor lighting on the north wall of the existing outdoor building area (east side of F7) to support outdoor building activities.

Describe Plans & Activities

Supported: There is high utilization of the east-side outdoor building area in the evening hours, mostly by classes. There is no lighting in this location, which means that students can choose to operate tools with

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insufficient light.
Lead: Mason
Type of Request: Facilities
Planning Unit Priority: Medium
What would success look like and how would you measure it?: Outdoor lighting is installed on the north wall of the eastern side outdoor building area.
Documentation Attached?: No

Digital Badging - Create and award digital badges to members. Badges enable recipients to validate experience and can be posted on job-search sites or listed on CVs, helping the recipient to prove qualifications for work, internship or other aspiration.

The creation of digital badges ties directly to our core goal of developing employable skills by providing a clear indicator of student accomplishment using a particular tool or technique.

Status: Active
Goal Year(s): 2018-19
Date Goal Entered (Optional): 05/31/2018

Partial Funding Requested - Initial purchase of badging equipment is grant funded. However, repairs and supplies will incur some ongoing cost. Both technical, administrative and support staff is needed to oversee the badging program. Initially a half time technician and 1/4 time support person are grant funded to establish the program and start tracking students. These staff resources will be required for it to continue.

Describe Plans & Activities Supported: Badges enable recipients to validate experience and can be posted on job-search sites or listed on CVs, helping the recipient to prove qualifications for work, internship or other aspiration.

Lead: Mason / Roslof
Type of Request: Staffing, Non-Instructional Supplies
Planning Unit Priority: High
What would success look like and how would you measure it?: Digital badging is implemented on multiple hardware platforms and digital badges are awarded to members.

Documentation Attached?: No

<p>Advisory Committee - Formalize the role of an advisory committee to support the MakerSpace with input from faculty, staff, administrators, students and the community.</p> <p>The support of an advisory committee ties to all of our core goals by providing regular input from our campus and external mentors, to better facilitate meeting each of our core goals:</p> <ul style="list-style-type: none"> *Being a hub for project-based learning in instructional programs *Developing employable skills *Enabling collaboration in the creation of tangible things *Support contract ed and non-credit programs *Place to practice technical skills *Raise profile of Mt. SAC in the community *Support entrepreneurship. <p>Status: Active Goal Year(s): 2018-19 Date Goal Entered (Optional): 05/31/2018</p>	<p>Partial Funding Requested - Ongoing campus support for meetings between campus faculty, staff, administrators, students, interested community members and employers to support and enhance the community of practice at the makerspace. Develop and market the space to recruit additional support.</p> <p>Describe Plans & Activities Supported: An advisory committee to support the MakerSpace with input from faculty, staff, administrators, students and the community , including employers</p> <p>Lead: Mason / Arthur Type of Request: Marketing Planning Unit Priority: Medium What would success look like and how would you measure it?: An active makerspace advisory committee.</p> <p>Documentation Attached?: No</p>	
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<p>Publicity - Promote the MakerSpace activities including monthly community events, the art show, open houses, competitions and other special events or projects.</p> <p>The MakerSpace has put on over a dozen community events in 2017/18 including open houses, meetups and an art show, which have been</p>	<p>Partial Funding Requested - Work with marketing department to develop flyers, banners and art assets to support the promotion of the maker space.</p> <p>Describe Plans & Activities Supported: The makerspace works with both the Mt SAC community and the external community to promote collaboration between</p>	
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attended by students, faculty, staff and community members. Our community members serve as advocates to raise the profile of Mt. SAC.

Status: Active

Goal Year(s): 2018-19

Date Goal Entered (Optional): 05/31/2018

students, faculty, staff and community members. There are monthly events to recruit new interest in the space, and occasional special events such as the art exhibit.

Lead: Arthur

Type of Request: Marketing

Planning Unit Priority: Medium

What would success look like and how would you measure it?:
Promotional materials generated to support recruiting membership to the space.

Documentation Attached?: No

No Funding Requested - Work with Marketing, IT and interested people and groups from the Mt. SAC campus and from the community, to reach potential new members with promotional materials. Reach out to employers, members of related groups and encourage existing members to bring friends and other interested people.

Describe Plans & Activities

Supported: The makerspace works with both the Mt SAC community and the external community to promote collaboration between students, faculty, staff and community members. There are monthly events to recruit new interest in the space, and occasional special events such as the art exhibit.

Distribution of marketing and promotional materials via electronic means, including email, social media

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and blogs, and other means. Also distribution of printed materials, especially at local locations including libraries and senior centers.
Lead: Arthur
Type of Request: Marketing
Planning Unit Priority: Medium
What would success look like and how would you measure it?:
 Promotional materials are distributed to new audiences, producing first-time visits to makerspace, resulting in new members
Documentation Attached?: No

Internships - Promote appropriate internships and the establishment of a funded Internship Presentation Day to connect current interns and employers with future interns and employers.

 Supporting internships fits with our core goal of promoting employability of our students.
Status: Active
Goal Year(s): 2018-19
Date Goal Entered (Optional): 05/31/2018

Partial Funding Requested - Marketing and campus communication. Mt. SAC has a number of resources to support students completing internships. The MakerSpace will help to connect students with existing opportunities and provide a resource for students to develop useful skills for their internship and for future success in their lives. Will encourage non-participating students to find an internship, and will encourage local employers to offer internships to Mt. SAC students.
Describe Plans & Activities Supported: Annual internship support conference to bring together employers, students and internship completes in addition to campus community.
Lead: Arthur
Type of Request: Marketing
Planning Unit Priority: Medium
What would success look like and

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how would you measure it?:
 Successful internship presentation conference.
Documentation Attached?: No
Full Funding Requested -
 Refreshments for Internship Presentation Day event
Describe Plans & Activities
Supported: Refreshments for participants and audience at Internship Participation Day, an annual internship support conference to bring together employers, students and internship completes in addition to campus community.
Lead: Arthur
Type of Request: Non-Instructional Supplies
Planning Unit Priority: Medium
What would success look like and how would you measure it?:
 Internship Presentation Day has many happy and gratified participants, both presenters and audience.
Documentation Attached?: No

Mentorship - Promote mentor relationships between experienced and new members, between entrepreneurial experts and makers wanting to sell products or services, and between employers and potential employees or interns.

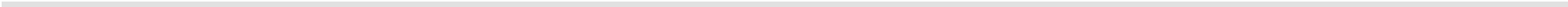
The MakerSpace has a core goal to enable collaboration in the creation of tangible things, but in the process of working together there are countless side benefits to developing

No Funding Requested - Use MakerSpace facilities to support collaborative events with Cal Poly Pomona ILab to bring Mt. SAC, Cal Poly and community members together to support regional entrepreneurial activity.
Describe Plans & Activities
Supported: Co-host a collaborative event with Ilab in the fall.
Lead: Arthur
Type of Request: Facilities
Planning Unit Priority: Medium

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<p>the soft skills that our employers request.</p> <p>Status: Active</p> <p>Goal Year(s): 2018-19</p> <p>Date Goal Entered (Optional): 05/31/2018</p>	<p>What would success look like and how would you measure it?: Co-host collaborative meeting</p> <p>Documentation Attached?: No</p>	
<p>Curriculum Integration - Continue outreach to faculty through professional development and visits to department meetings. Publicize successful models.</p> <p>The MakerSpace is the hub for project-based learning in instructional programs. The MakerSpace has already had a transformative effect on curriculum in engineering, engineering technology and architecture and is seeing integration into curriculum in diverse areas such as music, oceanography and industrial design.</p> <p>Status: Active</p> <p>Goal Year(s): 2018-19</p> <p>Date Goal Entered (Optional): 05/31/2018</p>	<p>No Funding Requested - Ongoing professional development presentations at Flex days, for the new faculty seminar and other interested staff and faculty groups.</p> <p>Describe Plans & Activities</p> <p>Supported: Host makerspace orientations and curriculum workshops as professional development activities to support faculty and staff.</p> <p>Lead: Mason</p> <p>One-Time Funding Requested (if applicable): 0</p> <p>On-Going Funding Requested (if applicable): 0</p> <p>Type of Request: Facilities</p> <p>Planning Unit Priority: High</p> <p>What would success look like and how would you measure it?: Multiple professional development activities hosted in the Makespace to support faculty use of makerspace resources in their classrooms and staff use to support their areas.</p> <p>Documentation Attached?: No</p>	
	<p>No Funding Requested - Ongoing visitations to department and division meetings to support faculty curriculum integration into the makerspace.</p> <p>Describe Plans & Activities</p> <p>Supported: Makerspace lead faculty</p>	

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member will visit department meetings across campus to share how the makerspace can be useful to programs.
Lead: Mason
One-Time Funding Requested (if applicable): 0
On-Going Funding Requested (if applicable): 0
Type of Request: Staffing
Planning Unit Priority: High
What would success look like and how would you measure it?: Visits to department meetings increase engagement of campus faculty with the makerspace.
Documentation Attached?: No



Data Collection - Track and analyze the membership usage of the space, detailed information about what tools and equipment is used and by what types of users.

Data collection serves to inform all of our goals by providing the critical information about accomplishments at any given time, and how best to move forward to address our core goals.

Status: Active
Goal Year(s): 2018-19
Date Goal Entered (Optional): 05/31/2018

Partial Funding Requested - Ongoing IT support to integrate the Mountie MakerSpace data collection with campus records.
Describe Plans & Activities Supported: We currently use web based resources to look up each member as they log in to determine that they are currently enrolled. These resources are not always online so we can't always do real time verification of student status.
Lead: Mason / Roslof
Type of Request: IT Support
Planning Unit Priority: Low
What would success look like and how would you measure it?: Effective links to campus databases to determine student status.
Documentation Attached?: No

Full Funding Requested - Ongoing internet backbone services

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Describe Plans & Activities
Supported: Since the MakerSpace relies on both on campus and off campus network infrastructure, reliable internet access is a key component to accurate tracking.
Lead: Mason / Roslof
One-Time Funding Requested (if applicable): 0
On-Going Funding Requested (if applicable): 0
Type of Request: IT Support
Planning Unit Priority: Medium
What would success look like and how would you measure it?:
 Continued reliable internet connection
Documentation Attached?: No

Institutionalization - Plan for the MakerSpace and its associated costs to be supported on a continuing basis once grant funding ends in May 2019.

With the CCCMaker grant ending in May 2019, it is critical that the MakerSpace find other funding sources in order to continue to serve as a hub for project-based learning on campus. 2017/18 saw more than 600 members join the space and contribute nearly 10,000 hours. This level of utilization shows that the MakerSpace is an important part of the campus community. Our goal for 2018/19 is to double our number of user hours to 20,000 which will show how valued it is by the campus population.

Status: Active

Full Funding Requested - Full-Time Technician support

Describe Plans & Activities
Supported: In order for the MakerSpace to stay open as the grant ends in May 2019, the staff who supervise the space need to be funded from some other source. We have identified equity, strong workforce and general campus funds as potential funding sources to support the ongoing mission of the Mountie MakerSpace. The full-time technician will provide about 35 hours of open time in the MakerSpace (one hour of prep or cleanup per day for 5 days) The part-time technician will provide about 15-18 hours of open time in addition, perhaps with some overlap for especially busy times (such as

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<p>Goal Year(s): 2018-19 Date Goal Entered (Optional): 05/31/2018</p>	<p>when two classes will be working in the MakerSpace or other special events) Optimally the MakerSpace will be open 50 hours/week including some daytime hours.</p> <p>Technician will:</p> <ul style="list-style-type: none"> *research new equipment and the appropriateness and cost of acquisition *plan any changes to the layout of the MakerSpace to facilitate safer, easier and more effective use *do the re-organization *plan activities and then manage student workers who clean, install and repair items in the building *assemble hardware for machines *manage, maintain and/or build software and database to monitor, measure and record the use of machines with RFID cards *maintain, adjust and execute a way for RFID cards to be personalized by staff as needed by members, including a way to label them individually *implement the database to track machine usage both for MakerSpace records and for badging *work with Lead Faculty and Director to activate new badges and setup awarding system for members *update current member database to reflect new requirements for reporting *repair and maintain existing equipment, provide safety upgrades and write use and maintenance memos 	

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*install and service newly acquired equipment, provide training for staff and write use and maintenance memos

*plan for activities, including monthly meetup activities, cooperative workshops, Regional Meetings, CalPoly iLab workshops, Open House activities, Flex Day and new faculty tour activities, robot fighting competitions, other activities TBD including class visits

*present information at Steering Committee meetings, other special workshops or meetings including Flex

Day, new Faculty Tour, Regional Meetings and possibly Board meetings (Trustees and/or Foundation) if appropriate

*plan for and implement monthly maintenance for each piece of equipment, write documentation and train staff

*plan for standardized safety tests for equipment in yellow and red levels, especially for new equipment; train rest of staff on how to do

*attend MakerSpace-related workshop or conference if appropriate

Lead: Mason

One-Time Funding Requested (if applicable): 0

On-Going Funding Requested (if applicable): 45000

Type of Request: Staffing

Planning Unit Priority: High

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Where We Make an Impact: Closing the Loop on Goals and Plans

What would success look like and how would you measure it?: Full time makerspace technician hired in June 2019

Documentation Attached?: No

Full Funding Requested - Half time Technician support

Describe Plans & Activities

Supported: In order for the MakerSpace to stay open as the grant ends in May 2019, the staff who supervise the space need to be funded from some other source. We have identified equity, strong workforce and general campus funds as potential funding sources to support the ongoing mission of the Mountie MakerSpace. The full-time technician will provide about 35 hours of open time in the MakerSpace (one hour of prep or cleanup per day for 5 days) The part-time technician will provide about 15-18 hours of open time in addition, perhaps with some overlap for especially busy times (such as when two classes will be working in the MakerSpace or other special events). Optimally the MakerSpace will be open 50 hours/week including some daytime hours.

Technician will:

- *research new equipment and the appropriateness and cost of acquisition

- *plan any changes to the layout of the MakerSpace to facilitate safer, easier and more effective use

- *do the re-organization

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- *plan activities and then manage student workers who clean, install and repair items in the building
- *assemble hardware for machines
- *manage, maintain and/or build software and database to monitor, measure and record the use of machines with RFID cards
- *maintain, adjust and execute a way for RFID cards to be personalized by staff as needed by members, including a way to label them individually
- *implement the database to track machine usage both for MakerSpace records and for badging
- *work with Lead Faculty and Director to activate new badges and setup awarding system for members
- *update current member database to reflect new requirements for reporting
- *repair and maintain existing equipment, provide safety upgrades and write use and maintenance memos
- *install and service newly acquired equipment, provide training for staff and write use and maintenance memos
- *plan for activities, including monthly meetup activities, cooperative workshops, Regional Meetings, CalPoly iLab workshops, Open House activities, Flex Day and new faculty tour activities, robot fighting competitions, other activities TBD including class visits
- *present information at Steering

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Committee meetings, other special workshops or meetings including Flex
 Day, new Faculty Tour, Regional Meetings and possibly Board meetings (Trustees and/or Foundation) if appropriate
 *plan for and implement monthly maintenance for each piece of equipment, write documentation and train staff
 *plan for standardized safety tests for equipment in yellow and red levels, especially for new equipment; train rest of staff on how to do
 *attend MakerSpace-related workshop or conference if appropriate
Lead: Mason
One-Time Funding Requested (if applicable): 0
On-Going Funding Requested (if applicable): 24000
Type of Request: Staffing
Planning Unit Priority: High
What would success look like and how would you measure it?: Half time makerspace technician hired in June 2019.
Documentation Attached?: No
Full Funding Requested - Supply budget
Describe Plans & Activities
Supported: The MakerSpace is a high utilization laboratory facility and has ongoing costs associated with keeping the equipment supplied. In order for the MakerSpace to stay open as the

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grant ends in May 2019, the supply budget needs to be funded from some other source. We have identified equity, strong workforce and general campus funds as potential funding sources to support the ongoing mission of the Mountie MakerSpace.

Lead: Mason/Wilson

One-Time Funding Requested (if applicable): 0

On-Going Funding Requested (if applicable): 10000

Type of Request: Instructional Supplies

Planning Unit Priority: High

What would success look like and how would you measure it?: Ongoing supply budget established and is able to be spent starting in June 2019.

Documentation Attached?: No

Full Funding Requested - Student Workers (1-SW5, 4-SW3)

Describe Plans & Activities

Supported: In order for the MakerSpace to stay open as the grant ends in May 2019, the staff that supervises the space needs to be funded from some other source. We have identified equity, strong workforce and general campus funds as potential funding sources to support the ongoing mission of the Mountie MakerSpace.

Under supervision of Technicians and Director, Student Workers:
*assist MakerSpace members with the use of equipment and materials to create items, as needed

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Where We Make an Impact: Closing the Loop on Goals and Plans

- *clean MakerSpace and put items away
- *maintain and repair the hardware for each machine, including RFID equipment
- *provide safety upgrades as needed
- *install and service newly acquired equipment, provide training for other staff as appropriate
- *write usage memos for members as needed
- *assist in any other tasks as requested by any of the other staff

Lead: Mason

One-Time Funding Requested (if applicable): 0

On-Going Funding Requested (if applicable): 15000

Type of Request: Staffing

Planning Unit Priority: High

What would success look like and how would you measure it?: Student worker budget is established and student workers are able to be paid from it starting in June 2019

Documentation Attached?: No

Full Funding Requested - Repair budget

Describe Plans & Activities

Supported: The Mountie MakerSpace has a significant investment in equipment that, with the work of the expert technical staff, can function for years to come with a small budget to support the purchase of repair parts. In order for the MakerSpace to stay open as the grant ends in May 2019, the repair parts need to be funded from a non-grant source. We have identified

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equity, strong workforce and general campus funds as potential funding sources to support the ongoing mission of the campus makerspace.

Lead: Mason/Wilson

On-Going Funding Requested (if applicable): 6000

Type of Request: Instructional Supplies

Planning Unit Priority: High

What would success look like and how would you measure it?: Repair budget established to support repairs of equipment, and that budget can be used for repairs in 2019

Documentation Attached?: No

Full Funding Requested - Director position; at least half-time.

Describe Plans & Activities

Supported: Provide overall leadership and direction for the makerspace. Interface with faculty, students, staff, administration, employers, and the community.

*write the year-end narrative report to describe MakerSpace successes. Confirm analysis by Administrative Aide of the fiscal data, and provide to appropriate Office.

*working with Lead Faculty, plan for the achievement of next year goals, ensuring that items and staff necessary for achieving those goals are put into place before fall semester begins. This also includes planning training for any new employees

*arrange, track and modify as needed the schedules of technicians,

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admin assistant and student workers
*put into place the rubrics and structures necessary to track information that reporting requires
*plan and manage acquisition of equipment, software, guidelines/rules and training necessary to implement new procedures or activities, so that all MakerSpace employees are prepared and able to help members with issues or questions and to be sure that members follow the guidelines
*document the changes, improvements and additions with photos, videos and written descriptions for inclusion in articles, blog entries and other PR materials; update current PR materials
*update regularly the LinkedIn group for Mountie MakerSpace and publicize, especially the badging options
*plan for and help implement the badges and achievements that our RFID system will activate, the limits for each of those and strong descriptions and graphical representations of each
*plan for and help implement the data structure necessary for tracking machine use by members, both as far as the limitations and requirements of our database and RFID equipment, and the requirements of the administering Division/Department and the badging companies

Unit Goals

Resources Needed

Where We Make an Impact: Closing the Loop on Goals and Plans

- *assist in the re-organization of and planning for any future expansion of the MakerSpace, in light of current and expected future uses
- *publicize the changes in the Space, expected activities for next year to students, faculty, staff and community members in addition to other community colleges who have MakerSpaces
- *plan and implement monthly meetup activities, cooperative workshops, Regional Meetings, CalPoly iLab workshops, Open House activities, Flex Day and new faculty tour activities, robot fighting competitions and/or other activities TBD including class visits
- *continue to write a MakerSpace Blog
- *continue to update the administrators with information upon request
- *plan and implement changes for the MakerSpace sub-web page on mtsac.edu
- *assist the Faculty Lead in reaching out to faculty, staff and departments to increase participation at the MakerSpace
- *work with the Foundation to continue to facilitate the system which enables purchase of materials by members at the MakerSpace
- *work with the Foundation to plan for Alumni Day in Fall
- *work with the Foundation to involve the Foundation Board in the MakerSpace
- *plan for the MakerSpace Team to

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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present progress to the Board of Trustees at a convenient meeting
 *work with campus sources to acquire funding for MakerSpace
 *present to President about progress of and potential funding needed for MakerSpace
 *setup Steering Committee meetings as needed, arrange agendas and food items, invite people and document attendance
 *attend workshops or conferences about MakerSpaces in Education as appropriate

Lead: Mason
On-Going Funding Requested (if applicable): 35000
Type of Request: Staffing
Planning Unit Priority: High
What would success look like and how would you measure it?:
 Makerspace leadership is provided for at least 20 hours/week throughout the entire calendar year
Documentation Attached?: No
Full Funding Requested -
 Administrative assistant support for the makerspace
Describe Plans & Activities
Supported: A part time Administrative Assistant to support the MakerSpace Director and Technicians in compliance with safety regulations, student data tracking and reporting to administrators as required.

 *collect and monitor all invoices, packing slips and other ordering

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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information to track expenditures

- *collect, analyze, correct and verify timecards, deliver to appropriate Office and then if needed take to Payroll or other Office
- *analyze and present data as needed for reports to Deans, Administration, grant managers and BOT
- *at request of Faculty Lead, Director and/or Project Experts, create new documents for management of space, management of grant etc and have printed for use by members or staff and/or placed online
- *add new members and interested persons to email lists as appropriate, manage those members whose email addresses change, are bad or members wish to change status
- *assist to train new staff in how to use existing equipment
- *create signs and instructional sheets for equipment in space
- *help plan and administer special events, including sign-in sheets, related purchases
- *track, record and store membership agreements (paper)
- *track, record and store membership level agreements and proof of testing (paper)
- *track, record and store data about non-members who spend time in the space at events, workshops etc
- *manage, update and correct member database
- *collect data in new ways depending on needs of reporting
- *equipment database maintenance and support including documenting

Unit Goals

Resources Needed

Where We Make an Impact: Closing the Loop on Goals and Plans

equipment in our database (donations and purchased), for web page and for RFID/badging project including serial numbers, make and model, tech manuals online etc
*create illustrations and text for future website page illustrating equipment available in space
*consult with Director and Project Experts on MakerSpace activities
*assist with monthly meet up activities, cooperative workshops, Regional Meeting, CalPoly iLab workshops, Open Houses, Flex Day and new faculty tour activities, other activities TBD including class visits
*manage RFID fobs or other login devices for members

Lead: Arthur

On-Going Funding Requested (if applicable): 22000

Type of Request: Staffing

Planning Unit Priority: High

What would success look like and how would you measure it?:

Administrative assistant is hired

Documentation Attached?: No

Full Funding Requested - Release Time for Faculty Lead

Describe Plans & Activities

Supported: Faculty Lead provides general oversight and design of usage of MakerSpace, especially with regard to making most effective for students success.

Also:

*outreach by attending various department meetings throughout the campus Divisions

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
	<ul style="list-style-type: none"> *encourages faculty to tour the MakerSpace, especially with their classes *offers assistance to faculty in incorporating making into the curriculum *Designs and implements "Flex Day" development activities each semester, and New Faculty workshops each semester *supports once-a-month faculty get-togethers to discuss issues and solutions for implementing project-based learning *invites administrators to visit MakerSpace, to create in the Space, to hold meetings in Space *keeps Board of Trustees and Foundation informed about activities and details, invites them to the MakerSpace *work with campus sources to acquire funding for MakerSpace *present to President about progress of and potential funding needed for MakerSpace *setup Steering Committee meetings as needed, arrange agendas and food items, invite people and document attendance *as appropriate and needed, provide outreach via social media <p>6 LHE per semester plus 3 LHE for summer or winter maintenance/repairs/upgrades. Currently, 6 LHE/semester paid by grant and 3 LHE for summer paid by College.</p>	

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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Below \$ amount reflects summer 2019, plus fall and spring 2019/20
Lead: Mason
On-Going Funding Requested (if applicable): 23857
Type of Request: Staffing
Planning Unit Priority: High
What would success look like and how would you measure it?: Faculty Lead is able to plan and implement MakerSpace activities during two semesters of fiscal year, and is able to plan and guide improvements etc for MakerSpace during summer term
Documentation Attached?: No

<p>Sustainability - Recycle and reuse items from campus and from members, providing materials to make items and preventing those items from entering the landfill.</p> <p>Having sustainable programs on campus helps to both promote collaboration and to show that we are good members of our larger community.</p> <p>Status: Active Goal Year(s): 2018-19 Date Goal Entered (Optional): 05/31/2018</p>	<p>Partial Funding Requested - Drop off area integrated into the makerspace to recycle goods and raw materials from other campus areas. Describe Plans & Activities Supported: Build on the ongoing relationship with the theater, architecture and welding departments (and others as appropriate) to recycle used material from campus programs into MakerSpace and student projects. Develop a covered drop off and sorting area proximate to the dumpster to allow for processing of donated materials. Develop method for pickup of excess materials as needed. Lead: Arthur One-Time Funding Requested (if applicable): 5000 Type of Request: Facilities , Non-Instructional Supplies Planning Unit Priority: Medium</p>	
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Unit Goals

Resources Needed

Where We Make an Impact: Closing the Loop on Goals and Plans

What would success look like and how would you measure it?: Material sorting area established and appropriate campus personnel notified.

Documentation Attached?: No