

## PLP Innovation and Technology Opportunity Grant Program Application

Library Name: CSUMB Tanimura and Antle Family Memorial Library

Project Title: Making for All

Select category you are applying under:

Category A: Innovation and Technology Opportunity Grant

Category B: Grant Replication Program

If Category B is selected, enter the name of the grant you are replicating:

1. Please provide a one paragraph project summary.

Run a cohort of student assistants and participants through *Making for All*, an online course for self-paced Maker learning, the development of critical thinking, and guidelines for tools and materials usage. In addition to clearly defined guidelines for tools and materials, this course builds skills through hands-on activities built around Maker Kits, an assortment of project based materials, which will be mailed to participants or available in the Makerspace by request. This online course incorporates feedback from student employees and general participants to modify course content for the maximum experience of the Makerspace participant and refine the training components for greatest ease of equipment, materials, and technology use for beginner to advanced participants.

2. Explain how this project fits with the library's strategic directions.

### [Library Mission and Values](#)

#### **Mission**

*Making for All* directly meets the library's mission: the CSUMB Library provides information resources, user-centered services, and an inviting, collaborative environment to foster intellectual curiosity, sustain scholarship and creativity, and inspire lifelong learning for the diverse community we serve.

## Values

### Access

- *Making for All* provides training for student employees who are able to amplify their skills and knowledge, thereby increasing the equitable access to tools and resources available within the Makerspace.

### Learning

- Individuals create, develop skills, and learn to use specialty equipment under the facilitation of and supervision of a team of Maker Leaders who provide support in a positive environment.

### Service

- *Making for All* provides a greater level of service for participants by informing participants of the requirements of and timeline required in using technology and equipment.

### Innovation

- Participants' capacity to innovate and educate themselves in *Making for All* expands beyond the participants' visits to the Makerspace.

### Student success

- The capacity to access equipment through an online platform encourages participants' use of the technology and streamlines the manufacturing process for employees.

### Stewardship

- Each successive *Making for All* course will incorporate feedback, continue improvements, and facilitate understanding and appreciation of the stewardship of the CSUMB community and opportunities.

### Diversity, equity and inclusion

- *Making for All* will be open to the campus community, a diversity of majors, ethnicities, backgrounds, and academic levels.

### Service to the greater community

- Makerspace activities and this course will create a strong workforce of emerging professionals to integrate into the community upon earning their degrees.

### Intellectual inquiry

- This course encourages intellectual inquiry of individuals, by giving them the independence to develop their own skills with the built in capacity to get assistance when or if needed.

### Continuous improvement

- *Making for All* reinforces our values by utilizing the peer feedback of student employees to refine and strengthen this course with our target audience - the students on campus.

3. Please provide a detailed description of the proposed project including the population served and the demographics of that population.

**Project description:**

Provide scholarships to pay tuition for 10-25 student employees and participants to attend the online *Making for All* course. This will provide employees with structured training and employees will be asked for feedback on how to expand this course to best benefit Makerspace participants.

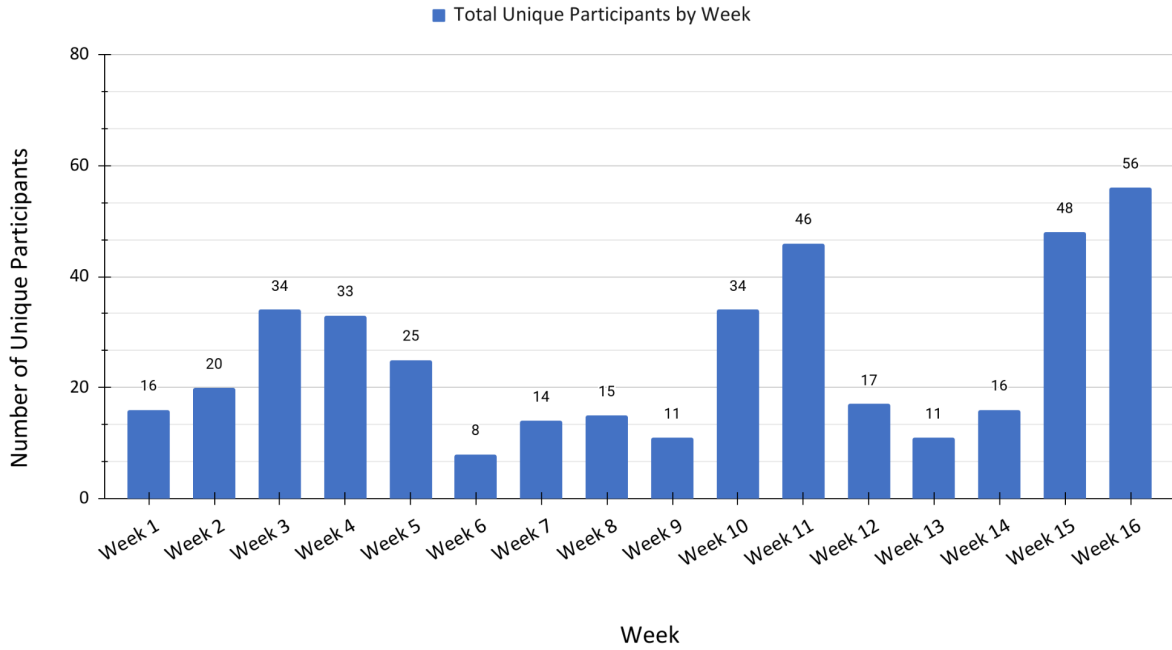
Feedback from employees and participants will be incorporated with following iterations of the course to continuously improve and streamline activities. *Making for All* determines what guidelines are needed for file creation and manufacturing using specialty equipment like 3D printers, laser cutters and vinyl cutters. This course will improve equitable access to specialty equipment that require additional training or protocols customized for the CSUMB Library Makerspace, allowing an expansion of opportunities for participants.

Makerspace student employees and participants are representative of the overall campus population and will directly benefit from attending this course. CSUMB students, staff, faculty and community members will benefit from this project through expanded access to the Makerspace and the increased availability of trained staff. The CSUMB campus, a Hispanic-Serving Institution, has a diverse campus population.

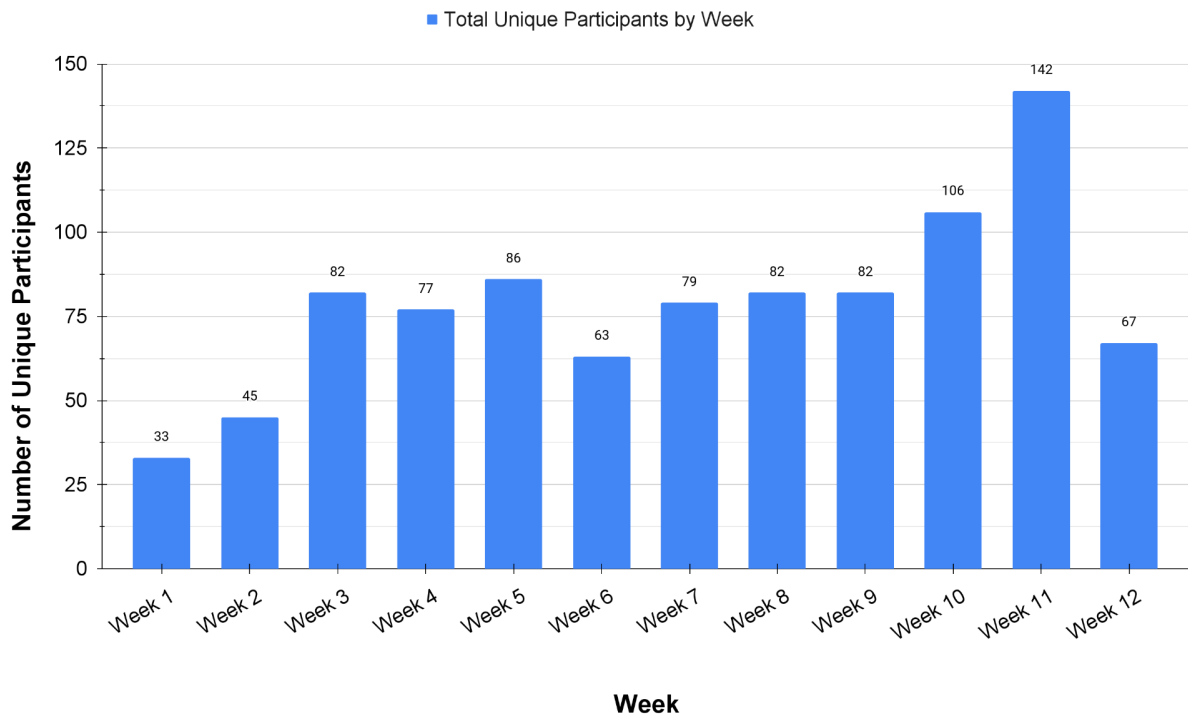
See graphs below for Makerspace and campus population demographic information showing use increasing over time.

Data shows that the Makerspace is a popular on campus resource which is accessed by the campus population. Fall 2021 was a transition semester with limited open hours. Spring 2022 offered a near return to pre-pandemic levels of access.

## Fall 2021 Participants per Week



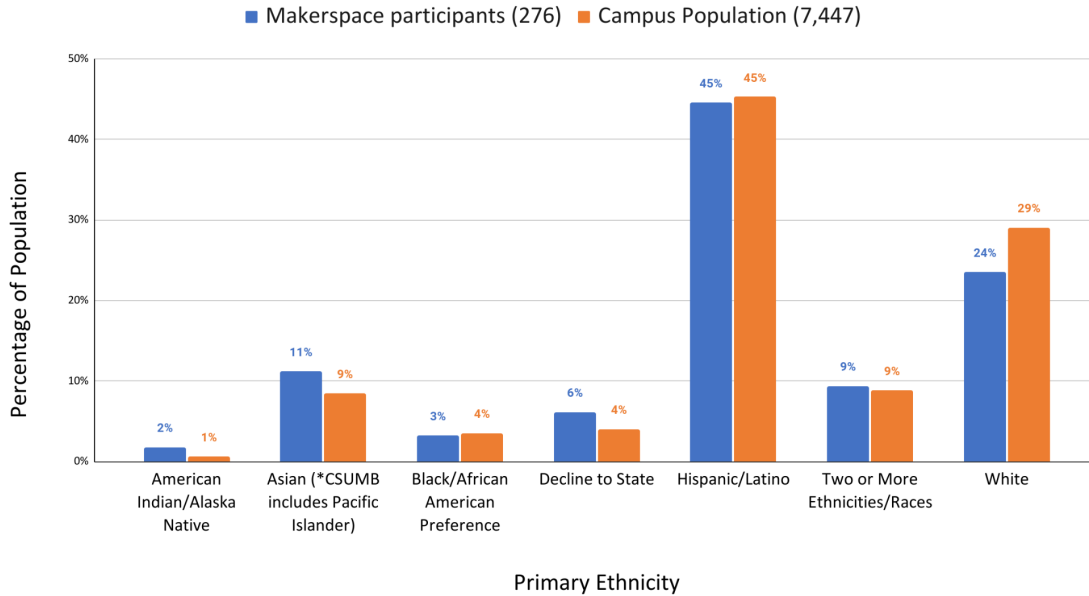
## Spring 2022 Makerspace Unique Participants by Week



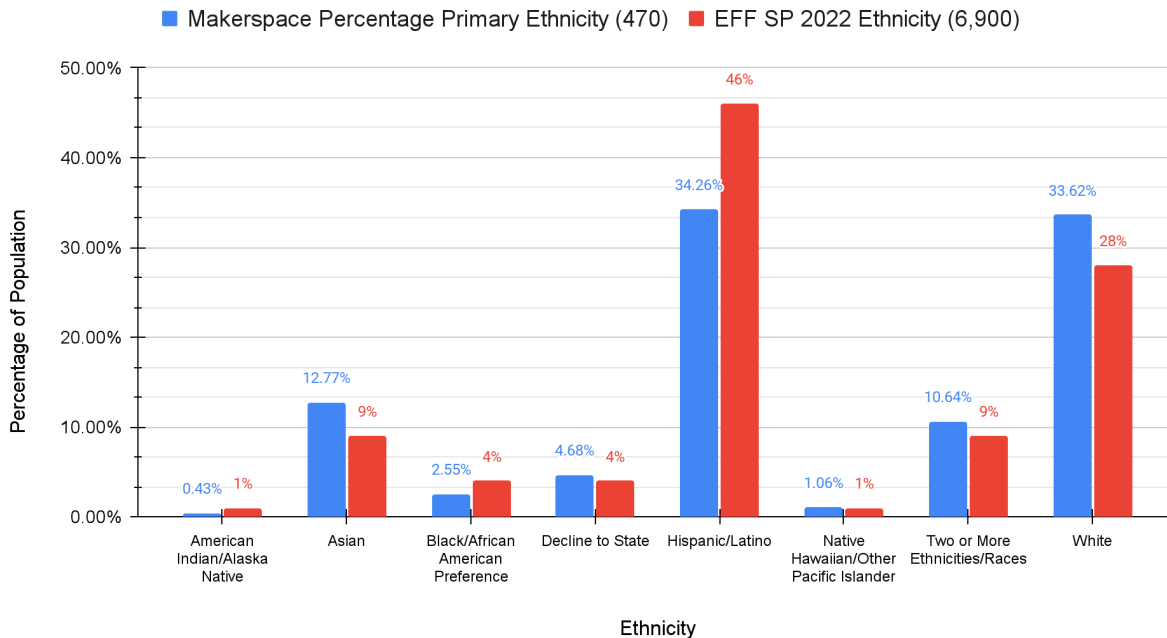


The following graphs show Fall 2021 and Spring 2022 Makerspace participants compared to the CSUMB [Enrollment Fast Facts](#) percentages of ethnicities and academic level

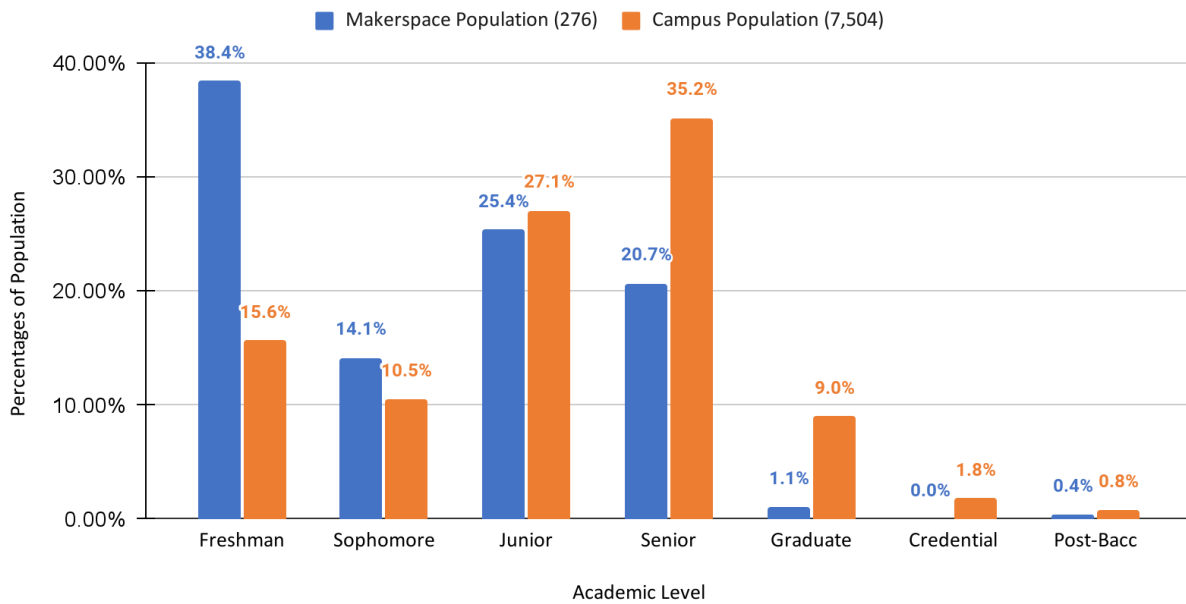
Fall 2021 Makerspace Patrons' Ethnicity Compared to Campus Population



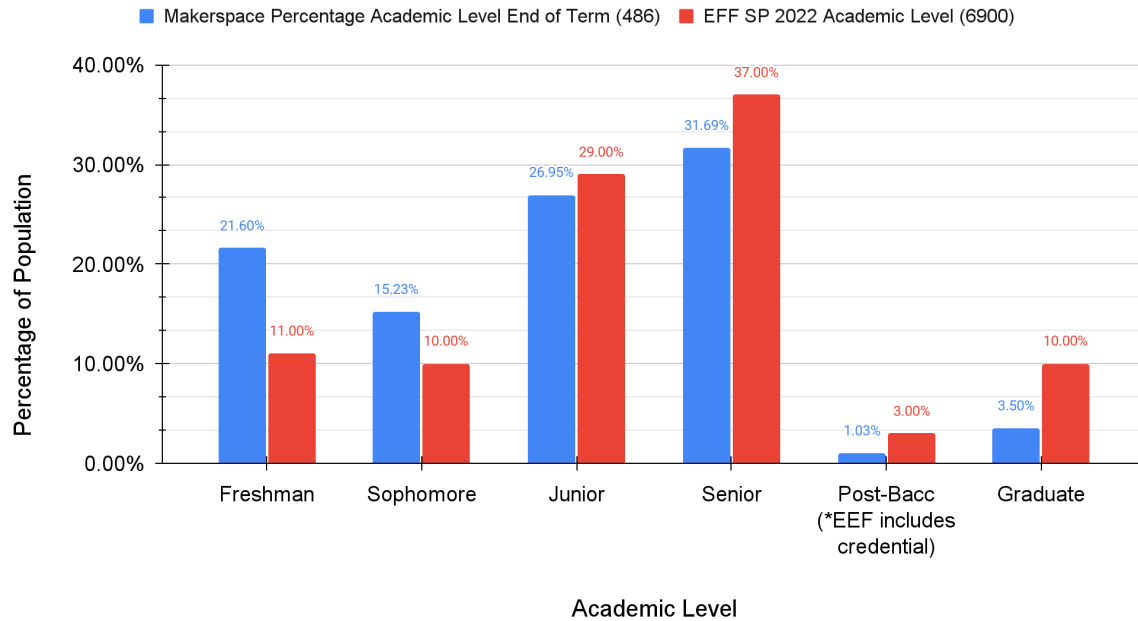
Spring 2022 Makerspace Patrons' Ethnicity Compared to Campus Population



### Fall 2021 Academic Level Comparison by Percentages in Makerspace Participants and CSUMB Campus Population



### Spring 2022 Makerspace Student Academic Level Compared to Campus Population



4. What are the goals and objectives of the project?

*Making for All* creates a means of standardizing training for staff and increasing the overall access to CSUMB Library Makerspace resources and specialty equipment for our campus population and community.

*Making for All* increases equitable access to specialty equipment. This course standardizes the training of staff and incorporates staff feedback to benefit independent and successful use of specialty equipment for participants.

The process of using specialty equipment will be streamlined and less cumbersome to staff and participants. Makerspace staff will be alleviated from answering repetitive questions by offering access to the online course and resources to interested participants. Participants will have the means to work independently and at their own pace until they are in need of Makerspace manufacturing equipment or project assistance. *Making for All* will provide clear instructions for file preparation and timelines required for manufacturing involving specialty equipment. This will create the capacity for consistent access to and manufacture of projects.

Participants can complete and upload through the online course at any time and will not be restricted by Makerspace open hours access. Participants can upload files using the online platform and retrieve the manufactured objects from the Makerspace during our open hours or utilize our library pick-up lockers, which are open 24/7. This will be more convenient and equitable without becoming burdensome to staff.

5. Please include your project timeline (include detail of activities).

#### **Fall 2022-Spring 2023**

- **August - September 2022**
  - Run pilot course *Making for All* with 10-20 student assistant employees (tuition will be paid through in-kind funding, no used as matching ~\$4700-9400)
- **September - October 2022**
  - Collect data and feedback surveys from employee participants
  - Compile and analyze data
  - Modify and revise course for public facing participants
  - Purchase supplies as needed
- **November 2022**
  - Run public facing course for 10-25 participants
  - Pay postage as needed
- **December 2022 - January 2023**
  - Collect data and feedback surveys from participants
  - Compile and analyze data
  - Modify and revise course
  - Purchase supplies as needed
- **February - April 2023**
  - Run pilot course for revised iteration of *Making for All* for 10-20 new participants

- Pay postage as needed
- Collect feedback surveys from participants
- Modify and revise
- **May - June 2023**
  - Compile and analyze data
  - Complete PLP grant report and project summary
  - Modify and revise course for next iteration

6. Please indicate how you will evaluate the success of your project.

**Quantitative data** will be collected which will include but not be limited to: participant numbers, majors, ethnicity, and academic level.

**Qualitative data** will be collected through feedback surveys about participant experience. Information will be disseminated and shared as needed to improve future course content and activities. Details about the length of time, tools, materials, and any needed troubleshooting around the project will be noted and incorporated into each successive course. Images or examples of finished projects will be archived and available as participant resources.

7. Please detail your project budget. (Note: Indirect costs are not allowed).

<i>Making for All</i> (1 or 2 trial runs)	Minimum 10 students per course	Maximum 25 students tuition costs	Total Cost
Tuition Fees	\$4,700	\$11,750	\$12,000
Supplies or postage as needed	\$250	\$2,600	

8. Please indicate how the project will be sustained after the grant term is over.

The Makerspace will apply to grants to pay for full or partial tuition scholarships or tuition will be paid by participants.