Invitation to Participate in CCC InnovationMaker3 Grant (CCC Maker)

“Make” An Impact: Join the Statewide Community College Makerspace Movement

Vision: CCC Makerspaces will drive innovation in education, and California Community College students will be prepared for success in STEM/STEAM careers that demand 21st century skills.

What: Funding for colleges to create makerspaces as part of an educational and workforce strategy.

$40,000 Seed Grant – All 37 eligible colleges that submit the Intent to Participate letter will receive $40,000 to participate in Makerspace Start-up from December 2016-June 2017.

• Your college planning process will be supported with professional development, technical assistance and other resources. The planning process culminates in a plan that your college can use to move forward with your Makerspace and a proposal for an Implementation Grant that begins in July 2017.
• $20,000 to be disbursed, on receipt of the Intent to Participate letter and $20,000 will be dispersed upon submission of your Makerspace implementation plan.

$100,000 to $350,000 per year Implementation Grants – After the initial seed grant, submitted proposals will be considered for Implementation Grants ranging from $100,000 to $350,000 per year for two years ending in May 2019.

Apply: Submit an Intent to Participate letter by January 13, 2017 to be awarded $20,000 to get started.

What’s Expected: Join the community and participate in webinars, attend professional development events and apply innovative practices, to develop a plan that will:

• Develop or expand an inclusive makerspace that fits your college’s interests and capabilities
• Engage faculty to integrate making into the curriculum
• Facilitate student internships and work based learning
• Support students in preparing for STEM/STEAM careers
• Share best practices

Important Dates:

• December 14, 2016 at 11 AM – Overview Webinar on the CCC Maker project
• December 15, 2016 at 2 PM – CCC Maker: Ecosystems Mapping Basics
• January 13, 2017 – Submit Intent to Participate

Review Packet: The attached packet explains the resources that will support you in developing a successful makerspace strategy for your college.

Information: Deborah Bird Deborah@CCCMaker.com

Learn More: Sign up for the newsletter, see calendar and learn more at http://cccmaker.com/
Required Intent to Participate in the “Makerspace Start-up” Grant

Please use the template below to indicate your intent to participate in the CCC Maker Makerspace Start-up grant. This six-month long, guided and funded process will support eligible colleges to develop an implementation plan and grant proposal for multi-tiered funding from the $12m total allocated for the 2017/18 and 2018/19 academic years.

Each eligible college that agrees to participate in Makerspace Start-up will receive a $40,000 seed grant, disbursed $20,000 on receipt of your Intent to Participate, and the remainder on submission of a Makerspace implementation plan. Eligible colleges that complete Makerspace Start-up will be considered for funding in future phases of the CCC Maker program.

Please submit your Intent to Participate by January 13, 2017 to:

 ceppper-kittredge@sierracollege.edu
 Carol Pepper-Kittredge
 Statewide Project Manager
 CCC Maker
 c/o Sierra College
 5000 Rocklin Road
 Rocklin CA 95677

Submitted by: ____________________________ (college)
 ____________________________ (project contact)
 ____________________________ (phone)
 ____________________________ (email)

Please acknowledge the requirements of participation by checking each paragraph below. Feel free to add additional information below each section:

_____ We understand that our college will participate in activities and technical assistance that will culminate in an integrated plan focused around four key areas:

• Makerspace planning and development
• Communities of practice
• Curriculum innovation
• Student Internships
Our intent in participation is to develop realistic plans for an appropriately equipped and sustainable makerspace that serves all stakeholders, accesses resources and opportunities, creates a vibrant maker culture and community, encourages innovation and entrepreneurship, and actively matches students to quality STEM/STEAM work based learning opportunities.

We agree to complete Makerspace Start-up tasks and milestones as detailed in the attached information packet.

We agree to participate in a statewide community of practice which will include regular website updates, social media postings on Facebook and Twitter, and webinar chats and conference calls. Progress may include success stories, student narratives and feedback, new resources, competitions and technical updates.

We understand that allowable costs must meet three primary criteria: 1) Substantiate that the cost was necessary and reasonable for proper and effective administration of the allocations; 2) The cost must be allocable to the funding source activities; and 3) The cost must not be a general expense required to carry out the grantee’s overall responsibilities (not supplanting).

For a complete description of allowable expenditures under the CCC Maker (Innovation Maker 3) grant #16-203-001, please see http://extranet.cccco.edu/Portals/1/WED/WEDDRFA/RFA-Innovationmaker/16-203/Appendix_C_GuidlinesDefinitionsAllowableExpenditures_InnovationMaker.pdf

As the duly-authorized representative of ____________ College, I affirm that the information and statements within this Intent to Participate, to the best of my knowledge, are truthful and accurate.

Name ___________________________ Title ___________________________ Date ________________

This project is funded, in part, by the California Community College Chancellor’s Office, Workforce and Economic Development Division’s InnovationMaker3 #16-203-001 grant.
Makerspace Start-up Information Packet

Your college has qualified as one of the 37 colleges eligible to participate in the CCC Maker program, a statewide initiative of the California Community College Chancellor’s Office CCC InnovationMaker3 Grant (CCC Maker), developed under the Doing What Matters for Jobs and the Economy framework. This initiative is designed to accelerate the development of 21st century curriculum, increase the attainment of STEM/STEAM Certificates and Degrees, improve alignment of skills to employer needs, and contribute to increased entrepreneurship, economic growth and job creation. The CCC Maker program will support community colleges in launching unique makerspace strategies focused on students, faculty, industry and the community.

CCC Maker Timeline

<table>
<thead>
<tr>
<th>Makerspace Start-up</th>
<th>Implementation Grant</th>
<th>Implementation Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Funding</td>
<td>Competitive</td>
<td>Continuing</td>
</tr>
<tr>
<td>• Plan</td>
<td>• Implement</td>
<td>• Scale</td>
</tr>
<tr>
<td>• Experiment</td>
<td>• Adapt</td>
<td>• Integrate</td>
</tr>
<tr>
<td>• Propose</td>
<td>• Capacity</td>
<td>• Sustain</td>
</tr>
</tbody>
</table>

Now, your college is invited to participate in Makerspace Start-up, the first phase of the CCC Maker program. This six-month process will support and fund eligible colleges to create a two-year Implementation Plan to develop or expand a Makerspace as part of an innovative education model. The plan will be incorporated into an Implementation Grant proposal to compete for multi-tiered funding for 2017 through 2019.
Two year Implementation Plans will address the key outcomes of the CCC Maker Project including:

**Makerspace** – Plan and implement an appropriately equipped, inclusive and sustainable Makerspace that addresses the specific interests and needs of students.

**Community of practice** – Initiate an inclusive network of faculty, industry, other educational partners and students to communicate, share experiences and resources, evaluate outcomes and iterate best practices.

**Curriculum innovation** – Support faculty to create learning platforms and embed making into curriculum design to develop programs that align with industry needs, support an entrepreneurial ecosystem and foster innovation across the curriculum.

**Student Success** – Connect students with mentoring and internships to discover and prepare for STEM/STEAM careers, using CCC Maker funding to support 1,000 paid internships throughout the state by the completion of the program in 2019.

In addition to submitting the Implementation Grant proposal for funding, proposals will be shared within the college community of practice to assist other California Community Colleges in successfully joining the Maker Movement. Additionally, Implementation Grant proposals will lay the groundwork for subsequent proposals to other funding sources such as the Strong Workforce Program and employer matching funds.

Throughout the CCC Maker project, Technical Assistance and specialized Service Providers will provide professional development and technical support to your team as you research and design a new or expanded Makerspace based on the needs of your institution and region. This will assist your college to identify necessary equipment and resources that add value to the learning experience, integrate interdisciplinary faculty and students into collaborative learning communities and Maker networks, support innovative project-based curriculum and Maker events that connect to the regional creative ecosystem, and develop student internship opportunities and employment with regional employers.

Colleges will benefit from sharing experiences and lessons learned across the community of practice. The network of connections between colleges engaged in creating makerspaces is a valuable resource and helps grow and strengthen the greater makerspace community. Colleges will upload project documentation to the CCC Maker website, participate in special topics webinars and video conferencing, identify and implement best practices, and refine the final plan and Implementation Grant proposal to be submitted at the end of the project.
Makerspace Start-up Activities – A Community College Driven Approach

The strategy underlying Makerspace Start-up is a design thinking problem-solving methodology that yields innovative solutions through a process of experimentation and prototyping, testing with real “customers” and critical evaluation in a supportive, low risk environment. Successful makerspace solutions are created by the collaboration of the stakeholders in the local ecosystem including students, faculty, college leadership, industry partners and the community. Participating colleges will have access to the CCC Maker Technical Assistance Provider (TAP), specialized coaching and resources as they actively explore possible solutions. Colleges will also share their findings, challenges and discoveries throughout this process.

Engaging collaborative planning using design thinking principles will result in stronger student-centered Makerspaces and creative solutions. Makerspaces are unique, complex, dynamic ecosystems where the process of experimentation and discovery are as important as the resulting product. They are highly relational, interdependent and responsive to the needs of the communities they serve. College Makerspaces can be catalysts for innovation and entrepreneurship, developing skills that students will need to be successful in the 21st century workplace.
Makerspace Start-up will follow a locally driven planning process comprising three phases:

Phase One: Explore (December 2016 - February 2017)

This phase helps colleges to better understand the scope and complexity of creating a Makerspace community rather than leaping to conclusions about needs and solutions. This involves research and analysis to define the challenge beyond just the requirements of the physical space. It also includes identifying the specific needs of users and stakeholders.

• **Project Introduction Webinar** - Colleges will receive an orientation to the project to get them started. Colleges will understand the expected outcomes, the rationale for the process and the eligibility requirements for competitive Implementation Grant proposals. Subsequent webinars will explore specific steps in the Makerspace Start-up process.

• **Self Study** - Colleges will gather and analyze student, program and institutional data, investigate industry, community and regional information, and stakeholder needs and attitudes. Colleges will identify institutional strengths and weaknesses by analyzing their institutional profile.

• **Innovation Ecosystem Mapping** – Colleges will map connections and relationships within their institution and community. Ecosystem mapping will reveal opportunities for colleges to incubate innovation and build community in their region.

• **Reporting** – Colleges will upload their self-study and ecosystem mapping data and analysis to the online project management system. This information will be updated and revised as needed for Implementation Grant submission. Participation in regular conference calls will monitor progress towards this milestone.

Phase Two: Create (February - April 2017)

This phase of the planning process involves experimenting with possible solutions, prototyping, testing ideas and refining them towards a final plan. This is the opportunity to take risks and try new solutions. Failure is an essential part of the process as it reveals limitations, assumptions and unintended consequences. There are multiple opportunities to improve your unique makerspace plan and the Implementation Grant proposal throughout this process.

• **Logic Model Development** - Using a template provided by the TAP, colleges will develop a working Logic Model defining the relationships between the major Makerspace project components, the strategy and sequence of project implementation, and the measures of success in each outcome. Each Logic Model will be refined throughout the Makerspace Start-up process.
• **Makerspace Site Support** – The CCC Maker TAP will meet with each participating college either on-site or virtually to assist colleges with their specific Makerspace needs. It is expected that each makerspace plan will be different based on the unique needs and interests of each college.

• **Curriculum Innovation Project** - Colleges will adapt an existing project or create a new event to test with their students and share with their Maker community. It may involve a public presentation of student work, an interdisciplinary project involving community or employers, participation in a competition or holding a community based event. This experience will build community and support the ongoing planning and Implementation Proposal process.

• **Internship Development Plan** - Using specialized training and information from TAP Specialized Service Providers, each college will create an Internship plan to develop entrepreneurship and soft skills to prepare for and place students in CCC Maker funded internships.

• **Additional support** – Technical and special service providers will provide professional development, webinars and video-conference advice during this creative phase.

• **Reporting** – Colleges will provide supporting documentation to the project management website. Participation in regular webinars and conference calls will facilitate progress towards this milestone.

**Phase Three: Connect (May - June 2017)**

The final phase involves sharing the results of the Makerspace Start-up process, evaluating the outcomes of the Start-up experience, finalizing the college Makerspace plan and submitting the Implementation Grant proposal.

• **Bay Area Maker Faire Symposium** - Colleges will convene prior to the Maker Faire in San Mateo to share the results of their Makerspace Start-up experience. In collaborative teams, colleges will evaluate the results and discuss ways to improve the Makerspace Start-up process. Attendees have an opportunity to participate in the Maker Faire over the weekend of May 20/21.

• **Documentation and Reporting** - Colleges will share lessons learned through documentation and final reporting. Documentation of work process will accompany the grant proposal.

• **Implementation Grant Proposal Submission** - Colleges will incorporate feedback from the convening review into the Implementation Grant proposal and submit all deliverables by the project deadline. Submissions will then compete for multi-tiered funding for the following two years.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Makerspace Start-up Outcome</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview Webinar on the CCC Maker project – 12/14/16 11.00am</strong></td>
<td>College will participate in an introductory Webinar to understand Makerspace Start-up outcomes, activities, schedule, deliverables, technical assistance, resources and funding. College will submit an Intent to Participate letter.</td>
<td>Webinar attendance confirmation and feedback survey uploaded to TAP project management system. Intent to Participate due by 1/13/2017.</td>
</tr>
<tr>
<td><strong>Self Study</strong></td>
<td>College will review and analyze existing systems, resources and data as a baseline for project development.</td>
<td>College will upload institutional data and analysis to project management system. Due 2/17/2017.</td>
</tr>
<tr>
<td><strong>Ecosystem Mapping - Webinars and Workshop</strong></td>
<td>After participating in Ecosystem Mapping Webinars and workshop, College will map components of the Self Study and show relationships, and opportunities in their institution and community.</td>
<td>Kumu Ecosystem Map uploaded to project management system and display on CCC Maker website. Due 2/28/2017.</td>
</tr>
<tr>
<td><strong>Logic Model</strong></td>
<td>Based on the insights of the Self Study and Ecosystem mapping, College will develop a diagrammatic Logic Model showing plans to develop a multi-phase project, including the relationship between the four elements of the project - Makerspace, Curriculum, Community of Practice and Internships, as well as project logistics, reporting systems and long term funding. The logic model will align with CCC Maker policies, funding and reporting requirements.</td>
<td>Logic model uploaded to project management system. Due 3/17/17.</td>
</tr>
<tr>
<td><strong>Design your Makerspace</strong></td>
<td>With assistance of the TAP, each college will utilize design thinking strategies and techniques to create an individualized Makerspace design and implementation plan.</td>
<td>Makerspace Design and process documentation. Due 3/31/2017.</td>
</tr>
<tr>
<td><strong>Internship Plan</strong></td>
<td>Using support from TAP and Specialized Service Providers, each college will create an Internship plan to develop entrepreneurship and soft skills to prepare for and place students in CCC Maker funded internships.</td>
<td>Internship plan and process documentation. Due 4/14/2017.</td>
</tr>
<tr>
<td><strong>Student Maker Activity/Event</strong></td>
<td>College will plan, execute, document, share and evaluate a student activity utilizing Maker principles to directly engage stakeholders in the ecosystem.</td>
<td>Activity documentation in photos, video, student work. Due 4/28/2017.</td>
</tr>
<tr>
<td><strong>Symposium and Bay Area Maker Faire</strong></td>
<td>College team will attend a pre-Maker Faire Symposium to share Implementation Plan, and Makerspace Start-up experiences, documentation and lessons learned, May 19. College will participate in a poster session during Maker Faire, May 20/21.</td>
<td>Implementation plan uploaded to project management system and CCC Maker website. Printed poster for presentation and poster session. Due 5/17/2017.</td>
</tr>
<tr>
<td><strong>Documentation and Reporting</strong></td>
<td>Colleges will document and share their progress monthly using data, written reports, photographs, video and social media.</td>
<td>Data, written reports, photographs, video and social media uploaded to appropriate platform and shared with appropriate project entities.</td>
</tr>
<tr>
<td><strong>Implementation Grant Proposal</strong></td>
<td>Colleges can submit an Implementation Grant proposal for the next two years of competitive funding.</td>
<td>Implementation Grant proposal uploaded to project management system. Due 6/9/17. Grant award will be announced in July 2017.</td>
</tr>
</tbody>
</table>
Webinars, Workshops and Resources

Regular events and activities will be scheduled throughout the project to prepare colleges for each step in the process. Webinars will be archived for reference. Additional resources may be added as needed and requested by participating colleges. Your college will be notified as dates are confirmed:

Project Start-up Orientation - Technical Assistance Provider - TAP
Using Data to Inform Your Makerspace Plan - TAP
Ecosystem Mapping - National Association for Community College Entrepreneurship - NACCE
Makerspaces Designed by Your College using a Collaborative Design Thinking Strategy - TAP
Maker Connections - Maker Media
Maker Resources - Maker Ed
Work-based Learning - 21st Century Skills - New World of Work
Making Across the Curriculum - Zack Dowell, Folsom Lake College
Micro-Credentials - Hacker Lab
Micro-Enterprise and Social Benefit - Kiva
Makerspace Symposium - California Council on Science and Technology

Project Website: [CCC Maker Project](#)