

i3 Funding Opportunity Information Session Q&A

The following questions were received via email, and gathered during the Invention and Inclusive Innovation Initiative (i3) Funding Opportunity Information Session. For questions not addressed by the FAQ, please email wedd@cccco.edu by February 4, 2022.

FACULTY

1. What disciplines were the participating faculty from?

Faculty participation included Mathematics, Welding, Business & Entrepreneurship, Journalism, English, Physics, and more. Some colleges also tapped faculty from other disciplines such as Advanced Manufacturing, Mechatronics, and Building Industries for technical assistance when students needed additional support.

2. Do the faculty involved have to be full-time faculty or can they be adjunct?

This is up to the college and dependent on the college's local process for faculty selection in engaging with such projects, as with the case of the four pilot colleges.

3. How many faculty should be on a team? Are the faculty limited to humanities, business, and STEM?

Teams should consist of three faculty as specified in the Letter of Intent —one each from the following disciplines: humanities, STEM, and business. Humanities is very broad, which provides a lot of flexibility on who participates, and STEM includes any technical discipline. For example, Sierra College's team consisted of instructors from welding, mathematics, and business.

4. What happens if the team consists of only three STEM faculty?

The College's application would not likely be competitive. This is discouraged as the intention is to achieve a broad cross-disciplinary view and to simulate real-world work environments and experience for students.

5. Can staff serve as leads or must leads be faculty?

The i3 initiative is about innovation in teaching and learning, and faculty is critical in leading this effort. The role of a Dean can be part of the equation in supporting, as well as leading faculty, as we have seen work well at Sierra College.



6. Can directors of programs like MESA, TriO, etc. who serve firstgeneration, low-income, and under-represented students be part of a team led by faculty since they provide programs/workshops for their students?

The mentioned programs would participate as "supporting cast" and are a great resource and support for outreach to students to create a diverse cohort. Please see slide 31 of the presentation for additional information.

- 7. Does the "supporting cast" have the option of attending training?

 Yes. The plan is to also make the virtual training available to interested supporting cast at the colleges selected to participate.
- 8. How did LMIT support the faculty and pilot colleges?

 LMIT provided faculty training in the invention education and innovation process and created modules working with four prototype colleges' faculty. Experts from LMIT also supported faculty through office hours during the prototype workshop design, preparation, and delivery process.
- 9. What is the approximate number of hours of commitment over the estimated four-month training period for participating faculty?

 Participating faculty is expected to commit to appropriately 80 to 100 hours. The training includes learning about invention education, observing how the content is delivered, and designing the pilot offering for Summer or Fall delivery.

BUDGET

10. Is there a sample budget available from an existing program to see how funds were allocated?

There is no sample budget that is available to share. However, additional information on the budget is available on slides 32-33 of the presentation. The Chancellor's Office is interested in general categories that grant funds would be expended, with the assumption that the largest category would be to compensate faculty time for the time commitment necessary to fully participate in the program.

11. Are indirect costs allowed in the budget items?

The standard indirect cost rate allowed by the Chancellor's Office is 4%, which is \$4,808.

 $$125,000 \div 1.04 = $120,192 (grant operating budget) \times 4\% = $4,808 (indirect costs)$



STUDENTS

12. Were there any groups of 40+ students in the initial pilots, or were there only small groups of 10-15 students?

Phase 1 was for the purpose of program prototyping, and therefore there were smaller cohorts of students (as shown on slide 19 of the presentation). With the addition of more colleges in Phase 2, we are interested in learning from the additional pilot colleges ways to scale this program and impact a greater number of students.

13. How were students selected to participate?

Each college may wish to design their own recruitment and selection process focused on targeting women, students of color, and underrepresented groups. What we saw with the four prototype colleges was that students were recruited by i3 faculty across a range of disciplinary departments; diversity, equity, and inclusion (DEI) programs; veterans' programs; and/or international student programs to promote equity of access. Where there were more student applicants than available slots, faculty selected a cohort based on the diversity of the whole with respect to gender, disciplinary background, ethnicity, age, and their responses to application questions (i.e., why the student wanted to participate, etc.).

14. Do you know why so few Black students have been in the pilot programs?

The demographic makeup up of the initial pilot cohorts is heavily dependent on the community in which the college resides. For example, Modesto Junior College is a Hispanic-serving institution in the Central Valley. Colleges are encouraged to develop outreach strategies to expand the number of students of color to participate in the program. The i3 program is particularly targeted to women, students of color, and underrepresented groups.

OTHER

15. Does the program also support social innovations (i.e., new forms of social structures and relationships to solve social challenges) or programs and processes? Are the prototype designs limited to technical product innovations?

The program supports social innovations; it does not require a physical product to prototype. Multiple colleges had service-focused prototypes including mental health support. Not all the prototypes were technical product innovations.



16. What were some of the products that were developed by the students?

Student teams developed prototypes including a plastic shredder to recycle plastic bottles on campus and use the plastic pellets for projects in the makerspace. Other product development included solutions for addressing student mental health, prototyping musical instruments for inclusion of people with disabilities, and a hands-free device to open refrigeration cases in grocery stores.

17. Do we have information about the success of students postworkshop/internship? (i.e., What have they done with the training? How has it improved their careers?)

This initiative is still in the prototype and pilot phases. It is too early in the initiative for this type of data. The intention is to get to such outcomes for colleges with the programs and services that would support such activities and data collection as the program scales. Our efforts are informed by research studies at other institutions that have shown ways invention education supports student learning. Articles pertaining to higher education can be found in the Technology and Innovation Journal published by the National Academy of Inventors (https://academyofinventors.org/ti-journal/). A synthesis of studies pertaining to invention education in K12 education is available at https://inventioneducation.org/researching-invention-education/.

18. Are the program resources (e.g., modules, content, and assignment) available?

The initiative includes a faculty orientation and onboarding process over an estimated four-month period, which will include i3 materials and content that will be shared with the participating colleges selected through the LOI process.

19. Will the recording on the information session be available?

The recording and the presentation will be posted in the Vision Resource center. Visit https://visionresourcecenter.cccco.edu/ to create an account. This information will also be available on the i3 Letter of Intent page of the Chancellor's Office website.

20. Why is Phase 2 limited to only 20 additional colleges?

At this point the Chancellor's Office only has the resources to support 20 additional colleges. We hope to expand the program further in the future (Phase 3 and beyond).



21. How do internships factor into the i3 program? Did the teams have to find the internships and place students? Were they paid internships?

The i3 offering could be structured as an internship program should the colleges choose to do so, but it is not necessary. In Chaffey College's prototype, the i3 offering was structured as a workshop for students; the college had Title IV funds available and elected to pay the students to participate in the i3 pilot workshop structured as an internship. Depending on local circumstances, colleges may have the opportunity to attract businesses or philanthropic entities interested in funding/sponsoring specific students to attend this program once the offering is institutionalized. For example, Modesto Junior College was able to pay students from a local entrepreneur's donation.