

Crowdsourced document for ideas on how different projects can meet each PolyX criterion.
From the Learn Through Discovery Summer Institute, June 2021.

Resources:

- PolyX Hub website: <https://www.cpp.edu/polyx/index.shtml>
- FAQ: <https://www.cpp.edu/polyx/resources/faq.shtml>

Criteria:

Intense Mentorship (Students engaged in the PolyX should be mentored “intensely” by faculty, staff, industry mentors, and/or peers. “Intense” mentoring is intentional, regular, invasive, in-depth, and sustained. It involves referral to resources for appropriate student populations and mentoring the whole student. It is tailored to the needs of students, understands the environment in which students function and pairs resources and support to issues that students face.)

Ideas or examples of activities:

- Peer mentors (Seniors and juniors mentoring first years, etc.)~~(upper classi~~
- Alums as mentors
- Involve graduate students if available
- Community partner- student mentoring relationship
- Mentoring Workshops for New Mentors
- Program Staff acting as mentors, both in 1-1 and group settings
- Faculty mentorship with students (1-group, or 1-1)
- Non-academic meetings among students (game night etc.) as long as it is intentional and mentoring is built into the events.
- Community partners as mentors
- Formalized internships with community partners

Questions:

- How to get students to volunteer to be peer mentors? (Time commitment?)
 - Extra credit possibilities
 - Letter of recommendation
 - Explaining to students that it will be in their own interest
 - Cultivate a supporting environment where everybody wants to help
 - Through student clubs
 - Scholarships/work-study?
 - Alternative Learning Record - digital badge

- What training do we provide to faculty/staff/community members to be able to properly identify and refer students to resources?
- What training do we provide to faculty/staff/community to honor and recognize the identity, needs of students, understands the environment in which students function?
- Can we engage with local high schools? Many of students are alums of these schools can we work with them?

Dissemination Beyond the Classroom (The results of this project should be published, presented, or publicly accessible in one form or another. In the event that the data of the project is of a sensitive or proprietary nature, the publication may be in a redacted form in Bronco Scholar, and presentations to small groups of selected professionals from the partnering corporate body are acceptable.)

Ideas or examples of activities:

- Bronco Scholar Works (<https://www.cpp.edu/library/digital-collections/bronco-scholarworks/index.shtml>)
- Twitter dissemination (eg. visuals for communicating to general public)
- RSCA Conference (<https://www.cpp.edu/cppsrc/index.shtml>)
- College-level presentations during the Research Celebration (<https://www.cpp.edu/our-cpp/events-workshops/celebration-research/index.shtml>)
- Present during Department Open House event
- Presentations at local schools
- Opportunities to Work at the grass roots Level.
- Presentation to community organization (and board of advisors)
- Policy work/grassroots organizations
- FYE Poster Presentation
- Presenting to CPP administration/programs/staff
- A thank you letter to stakeholders discussing the results/deliverables of the project
- CPP conference/ symposium for undergraduate students
- Local and national conferences
- Presentation at professional organization conferences (student posters)
- Perhaps we can create a video repository - like a TED talk
- Using tools such as [Photovoice: https://miro.com/app/board/o9J_kiXAlxM=/](https://miro.com/app/board/o9J_kiXAlxM=/)
- [Publications in peer-reviewed journals](#)
- Policy brief/white paper/report with recommendations
- Video tutorials for laboratory techniques, how to use software, etc.
- Showcase on department website, library events, etc.
- Presentation to parents and families (**love this one**) !!

Questions:

- How to get students (who may work during non-school hours) to commit to presentations outside of CPP?
- How to get funding to support activities
- If Faculty will be involved, how do we support them?

Creativity, Discovery, and Innovation (The project should result in an original work of some sort. This may include, but is not limited to, an original artistic work; an original research publication that sheds new light on a research question; the presentation of the results of an experiment that provides new insight in an area of scientific study; the development of procedures/policies to solve a specific problem; the creation of a specific product to fulfill an identified need.)

Ideas or examples of activities:

- An online oral narrative archive (love this!)
- TED TALKS
- Zine libraries
- Digital storytelling archive
- Wikipedia
- An event
- A concert
- Digital Storytelling with StoryMaps
- YouTube video presentations
- Virtual Reality/Augmented Reality experiences
- College students creating discipline based lessons that are culturally relevant for K-12 students or for peers
- Community-based project that resides in the community
- Research publication -- conference proceedings and peer-reviewed journals
- A startup/new venture (for profit, non-profit, social entrepreneurship)

Questions:

- What are some creative ways to display these projects or ways to “house” these digital projects? Maybe the library’s digital repository? Bronco ScholarWorks (<https://www.cpp.edu/library/digital-collections/bronco-scholarworks/index.shtml>)?
- Can we use College Display Boards?

Diverse and Multidisciplinary Perspectives (Preferably, the project invites and encourages participation from a variety of disciplines. This can include students from multiple departments; students from a single discipline working with others from different disciplines; students being introduced to diverse and multidisciplinary perspectives in some way.)

Ideas or examples of activities:

- Highlight history of ones discipline in different continents/countries
- Highlight articles/work from scholars around the world in ones discipline
- Build a team comprised of students from variety of disciplines
- Highlight work of scholars who have been left out of credit for contributions (eg. Nobel prize is only given to 3 people, but many more contribute)
- Many PolyX have to use communication skills, group work, psychology, etc. Perhaps we can invite a speaker from another department to train students how to use these skills, which can then be incorporated into their project -- [love this, e.g., having a Spanish-speaker teaching medical Spanish to Vet Tech students](#)
- Creating discipline-specific resources in other languages.
- Residential students on campus & their experience with their respective disciplines and the knowledge they bring to the community
- Create/ revise courses in partnership with **Interdisciplinary** General Education
- Bring in expertise from faculty in different departments and colleges on campus. Include faculty of color and other faculty that reflect students' identities and experiences.
- Guest speakers from professional associations, industry, government and NGO etc
- [Cross listing similar courses across disciplines and have students collaborate on projects, e.g., cross-listing an FYE course in Ag and Engineering](#)

Questions:

- When teaching an upper-division elective, where all the students pretty much belong to one major, would bringing in multiple lenses to view the situation suffice? Yes!

Community and Global Engagement (The project should engage in some way with an identifiable community. On-campus communities such as: a specific group within a discipline; a specific club or organization; an identified subset of Cal Poly Pomona's students, faculty or staff; and the campus as a whole. Off-campus constituencies such as: specific non-profit organizations; specific corporate partners; an identified group or organization; and a municipal, state or national government. Potential benefits or drawbacks of the project to that community should be considered and explicitly stated at the outset.)

Ideas or examples of activities:

- A community writing project
- Guest curate at local cultural centers or museums
- Department/Course led involvement in professional associations, societies, and organizations. (Shows, conferences, volunteering, etc)
- Local high school collaborations/presentations
- Events for specific groups within Cal Poly Pomona's population (ie Residents)

- Judge for local science fairs
- Activities related to discipline at daycare centers
- Environmental justice organizations
- Public health groups
- The campus population is also considered a community
- Cross-campus collaboration
- Global service learning -- collaborating on a community-based project with students from another community/country using technology
- Filling the gap in the literature of a specific discipline -- academic community
- College forums/ groups led projects in specific areas
- Partnering with agencies in other geographic locations (other states/countries). I have heard that Fulbright has programs for this. Maybe a joint lesson or project with another professor at another university?
- Thinking globally around the SDG's with layered experiences to expose students to the world around them.

Questions:

- How to engage unhoused people besides shelters?
 - *Just an idea- look into resources that they utilize, IE basic needs at CPP. Alternatively at college campuses- parking lots, the gym, etc.*
- How to reach out to community? Is there a list of potential partners that instructors have access to (like alumni for professor for a day)? Please work with the Center for Community Engagement (<https://www.cpp.edu/cce/>)

Collaborative Learning (While faculty oversight and mentorship play a key role in the project, it should be primarily a student-led effort. Students should participate in generating questions or topics of study, developing answers, defining roles and responsibilities for team members, finding resources, setting schedules and deadlines and asking follow-up questions.)

Ideas or examples of activities:

- Citizen science
- Participatory planning
- Group project
- Class discord/slack (without faculty member in it)
- Students conduct need assessment of specific community and create initiative to assist (ie an event)
- College forums/ groups led projects in specific areas
- A partnership of two people can also be considered collaborative learning
- Peer mentoring - Alumni/ seniors with junior students
- Projects that address student-generated research questions

Questions:

- How to prepare for class? What material the instructor will have to pre-prepare and what needs to be left out to be decided by students?
- What interference the instructor is expected to have?
- How to motivate students and encourage them to stay on task

Critical Thinking and Problem Solving (The project should have reflection exercises integrated into it in some way. Through these exercises, the student participants pause to consider what they are learning, how they might need to alter their project's scope, course or focus and analyze the effectiveness of the methods they are pursuing. The goal of the reflection should also include heightening students' awareness of the PolyX and the skills they have developed as a result of participating in the PolyX. This should support students' ability to articulate the PolyX experience)

Ideas or examples of activities:

- Journal prompts with specific questions that speak to reflection, learning, and articulation of the PolyX experience
- Regular facilitated group discussion specific questions that speak to reflection, learning, and articulation of the PolyX experience
- Intentionally built 1-1 conversations specific questions that speak to reflection, learning, and articulation of the PolyX experience
- Paper/portfolio as a final deliverable with an appendix of reflections as well as data or artifacts--this can also serve as a writing sample for jobs and internships
- Encouraging and mentoring students to write opeds for Calpoly paper regularly or to submit them to other newspapers, or set up a blog
- 24 hour open note/book/internet exam that requires application of what learned in class to published research
- Discussion forums built into canvas classroom
- Coming up with a research question and potential solution
- Peer and self evaluation exercises
- Pre and Post Surveys to measure students' critical thinking/ problem solving

Questions:

- Maybe we can create a reflection guide for faculty/staff/community members to use when discussing projects with students? I can see it now- a semester long guide with questions tailored to the season the students are in :) (I love it!)
- How to avoid positive reflection bias? Maybe ask specific questions like: What is an area that can be improved? Where did you struggle and why?

- Reflecting on the emotions/feelings that came up for the student when doing the service learning at the community organization. Challenges they experienced, how it's shaping their thinking. Addressing and inviting the different emotions that come up for them. This could be done through reflection papers or through in-class discussions.