EPICS Online Workshop

16-18 July 2024

Outline

	Day 1	Day 2	Day 3
Session 1	Overview of service-learning and community-engaged learning, examples of EPICS programs	Human-centered design, design thinking, design doing and community-engaged learning	Structures to support multi-year projects and partnerships
Session 2	Preparing students for professional practice and future leadership	Assessing student learning and community partners	Building institutional support and funding projects
Session 3	Building mutually beneficial partnerships within the community and corporate support	Cultivating reflective and critical thinking	Applying to our own institutions and closure

DAY 1

Session 1

Will provide an overview of pedagogy of *service-learning* or *community-engaged learning*. Best practices will be presented and how they apply to engineering and computing academic contexts. Examples of EPICS Programs will be presented along with the core values for all EPICS programs.

Learning Objectives

At the end of the session, participants will be able to:

1. Describe at least four key elements of service-learning/community-engaged learning
2. Describe the role of a community partner in the pedagogy
3. List at least two core values of EPICS Programs.

Session 2

Will discuss how academia often fails to prepare students for success in professional practice and how data show programs like EPICS are effective in developing leaders across diverse career paths. Will describe approaches to integrate experiences that prepare students with the broad set of professional and disciplinary skills needed in today's global economy.

Learning Objectives

At the end of the session, participants will be able to:

1. List at least two ways to integrate professional preparation into the academic curriculum
2. Describe how a community project can benefit students entering professional practice

Session 3

Will discuss how to identify and develop meaningful community partnerships. Approaches for identifying partners as well as managing the partnerships will be discussed. Agreement models will be presented for long-term partners. Approaches for nurturing mutually beneficial partnerships and how to integrate them into design processes will be discussed with examples. Ideas of how to engage corporate partners to support community partnerships and projects will also be presented.

Learning Objectives

At the end of the session, participants will be able to:

1. Describe at least two benefits of community partnerships for your students and institution
2. Describe at least two benefits for community partners
3. List at least three items that should be agreed upon with a partner before starting a project
4. Describe at least two benefits for a corporate partner to engage with your program

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DAY 2

Session 1

Will provide an overview of *human-centered design* and how it can develop *design thinking* which may be better termed as *design doing*. Fundamental ideas of iteration, collaboration and user engagement will be discussed. How prototyping can be used within the process to promote learning and better designs. A model for design will be presented that has been successfully used. Research findings will be presented. The connection with community-engaged learning will also be discussed.

Learning Objectives

At the end of the session, participants will be able to:

1. List at least three characteristics of human-centered design.
2. Describe how human-centered design with community partners can nurture design thinking
3. Describe at least three benefits of using community-engaged learning to teach design thinking.

Session 2

Will discuss approaches to assess student learning within the context of design-based community engagement. Approaches will be presented that are evidence-based approaches that have been informed by industry practices. The approaches have been used in multidisciplinary teams with diverse students. Evaluation of community partnerships will also be discussed.

Learning Objectives

At the end of the session, participants will be able to:

1. List at least two goals of assessment in community-engaged design
2. Describe an assessment approach that does not involve exams or tests
3. List at least two benefits of assessment in community engaged design that will benefit students in professional practice.
4. List at least two dimensions that can be evaluated in a community partnership

Session 3

Will discuss how to integrate reflective and critical thinking into community engaged learning. Connections to design thinking and learning will be presented. Evidence-based approaches for reflection will be presented along with models that have been used in practice to encourage student development. Benefits of reflection will be presented.

Learning Objectives

At the end of the session, participants will be able to:

1. List at least three benefits of reflection
2. Describe at least three methods of reflection
3. Describe at least one model of reflection

Session 1

Will describe how to create structures that will support multi-year projects and community partnerships. Methods to manage teams and projects will be presented that include staffing models and student organization. Student leadership and ownership is a key component and approaches for developing leaders will be presented. Lessons learned will be discussed after nearly three decades of experience.

Learning Objectives

At the end of the session, participants will be able to:

1. Describe at least two benefits for the institution or faculty to have multi-semester or multi-year projects and partnerships
2. Describe at least two benefits for the community partners to have multi-semester or multi-year projects and partnerships
3. List at least two ways to engage students in transitioning between semesters or academic periods.

Session 2

Will discuss approaches to building institutional support with faculty and management or administration within your own institution. Will highlight benefits that align with typical institutional priorities to justify backing. Real projects need money, and ideas for funding projects will be discussed along with challenges of raising funds.

Learning Objectives

At the end of the session, participants will be able to:

1. Describe how the community-engaged work aligns with at least two institutional priorities.
2. List at least two key stakeholders on your own campus that would need to support such an approach.
3. List at least two potential funding sources for projects.

Session 3

Will focus on how to adapt the ideas of the workshop to one's own institution. How can they be integrated into the curriculum, and who will need to be brought on board? What are each person's next steps to begin a program or to take an existing program to the next phase? Ways to stay in contact will be discussed to support each other.

Learning Objectives

At the end of the session, participants will be able to:

1. List at least three actions to take to advance the idea or work on their own campus.