Breakout Session Descriptions

Preparing Students for the 21st Century Workforce:
A Free, Virtual Workshop on Cross-disciplinary, Team- and Project-based Experiences

Facilitating cross-disciplinary communication: a case study approach using immediate feedback-assessment techniques

The Environmental Project Management Academy (EPMA) uses weekly case studies in it curriculum as a way to promote cross-disciplinary communication. The case studies, often based on controversial situations, encourage the students to explore the connections and recognize the practical implications linking environmental science, business, and leadership. Students read the case studies and discuss them in small groups. Following discussion, a short, multiple-choice quiz is taken individually and then in the small group using the immediate feedback-assessment (IF-AT) technique. The professors then guide whole-class discussion, intentionally focusing on the environmental science, business, and leadership aspects of the case and the interplay among those three areas. The case studies are structured so that students are actively practicing communication skill development. Skills such as active listening and the use of questioning techniques during these case studies help set the stage for later project teamwork and associated team feedback.

This breakout session will model the EPMA case study approach with participants taking part in small group discussions, the IF-AT quiz technique, and whole-group conversation related to a case study on industrial hemp. Participants will also deliver and receive a sampling of peer feedback based on CATME (Comprehensive Assessment of Team Member Effectiveness), a critical feedback tool used in the EPMA program.

Participants will be given an opportunity to brainstorm and discuss ways in which this information on cross-disciplinary case studies, IF-AT quizzes, and/or CATME team feedback can be applied to their own course assignments.

Guiding team-based project work using a project management framework

The Environmental Project Management Academy (EPMA) uses ZOHO Projects, a cloud-based project management software, as a way to efficiently plan, track, and collaborate on cross-disciplinary projects. Due to its simplistic and user-friendly interface, students are able to perform the following activities within minimal software training:

- Plan project activities and milestones, assign work, management resources, and collaborate on assignments
- Use Gantt charts to build project plans, track task schedules, map critical tasks and task dependencies, and assess deviations between planned and actual progress
- Log billable and non-billable hours and track project budgets

This breakout session will focus on project management frameworks and techniques that take place without ZOHO software integration. Participants will collaborate in small groups on the development of appropriate milestones, task lists, and individual tasks associated with a home garden project. Using the milestones and task lists, the groups will develop a Gantt chart that visually represents the project lifespan. Participants will reconvene for a whole-group conversation related to the development and analysis of their project files. The session will end with a brief tutorial of ZOHO Projects.

Participants will be given an opportunity to brainstorm and discuss ways basic project management frameworks might apply to their course architectures and/or student project work.

Utilizing general education requirements to teach basic teamwork and leadership skills

We need to teach students the difference between teamwork and group work before we can expect them to be able to work effectively in teams. But where in in-major coursework is there room for such content? Many of the basic teamwork skills (interprofessional skills) have links to the foundational content of general education courses required for graduation, such as Sociology, Psychology, and Theater. While most students can identify when questioned on exams what teamwork skills are and when are opportunities to use them, students often find it difficult to apply these ideas in actual situations. Good courses for building teamwork skills should focus on the practice of interprofessional skills rather than on basic knowledge such as identifying or defining.

In this breakout session we will use the Think, Pair, Share strategy. We will group individuals by institutions and ask each group to link key teamwork skills to specific general education courses taught at their institution. We will develop links between one or two teamwork skills and foundational core content, using an exercise and assessment method. Individuals are encouraged to reach out to faculty members from across their institutions.

Making teamwork-intensive courses work: logistics that promote teams not just groups

Do you use "teams" or "groups" in your course? What is the difference and why does it matter? Are there ways to develop a single course or course pairings to foster teamwork, rather than group work? This breakout session will introduce two different modes of Teamwork-intensive courses that are intentionally set up to foster teamwork. Both modes necessitate students' dependence on other students to understand and complete a project. The dependence facilitates the need for communication to share knowledge and ideas which other team members lack. Effective communication can only occur with the successful use of each student's interprofessional skills.

 In this breakout session, we will use the Think, Pair, Share strategy. We will cluster faculty members by interdisciplinary research interests with members from different disciplines. Faculty will identify 1) a possible project and 2) the distinct knowledge students from each faculty member's course brings that is unknown to the others.

Introducing your students to the basics of problem-solving and team-building

Some basics of problem-solving

- What is problem-based learning?
- Types of problems
    - Functional vs. systemic problems
    - Ill-structured or wicked problems

Problem-solving process

- Identifying the problem
- Discovery
- Hypothesis: what is the solution
- Testing the solution

Team-building

- Studies on team dynamics
- How to select teams for projects
- Monitoring teams
- Evaluation of team work

Integrating cross-disciplinary problem-solving into your course

Faculty at several SUNY institutions have been providing students with cross-disciplinary learning experiences through a method we call Common Problem Pedagogy. In this breakout session, we will provide an overview of the process that we have used to assist faculty with planning these experiences in their courses. Major topics include:

- Selecting appropriate problems
- Incorporating cross-disciplinary perspectives
- Working with community partners
- Identifying specific tasks for students
- Methods for assessing student work

Session participants will have opportunities to brainstorm about ways to adapt these strategies for their courses, share ideas and concerns, and ask questions.