The COMMON PROBLEM PROJECT
ENGAGED LEARNING
A Collaboration of:

Plattsburgh
STATE UNIVERSITY OF NEW YORK

Cortland
SUNY

OSWEGO
STATE UNIVERSITY OF NEW YORK

SUNY ONEONTA
ABOUT THE COMMON PROBLEM PROJECT

The Common Problem Project ($CP^2$) involves an innovative and exciting new pedagogy. $CP^2$ is a form of applied or experiential learning that has elements of problem-solving, service learning, inquiry based learning, interdisciplinarity, teamwork, civic engagement, signature work, and other proven pedagogies.

The pedagogy integrates these learning practices in service to a real-world problem, tied to a community partner, that is of common interest to faculty and students from different disciplines.

THE BASICS OF THE PEDAGOGY

In the Common Problem Pedagogy, faculty from different disciplines, such as the sciences and the humanities, business and social science, work with community partners, to identify a real-world problem of interest to all.

Following well-established techniques in active learning, faculty design relevant existing classes to include assignments that have students, working as an interdisciplinary team, to analyze or provide a solution to the problem.

Faculty partners arrange to have their respective student teams meet to discuss their analyses and possible solutions to the problem. The goal is to have the teams develop a cross-disciplinary perspective that would hopefully add important dimensions to each of their efforts. The final assignment is for the teams to present their analysis or solution to the problem to the community partner for consideration.
BACKGROUND

The approach of problem-based learning (PBL) arose in the 1950s in the field of medical education and dissatisfaction with teaching techniques that relied on lecture and memorization. Instructors found that students learn more effectively through a process of collaboration and problem solving rather than by spending time memorizing blocks of information.

With good reason, since the 1980s, PBL has grown in application in medical education and has more recently found its way into other disciplines.

As Cindy Hmelo-Silver and colleagues note “In PBL, students learn content, strategies, and self-directed learning skills through collaboratively solving problems, reflecting on their own experiences, and engaging in self-directed inquiry.”

PBL is a learner-centered teaching technique that researchers, such as Sharyn McDonald, think has the potential to improve critical thinking skills, as well as support the development of “social process skills.”
**GENERAL GOAL**

The goal of the Common Problem Pedagogy is to help students become engaged and self-directed learners. Like problem-based learning, the common problem approach gives students the opportunity to learn content through analysis and application.

Since the practice involves students working in groups, an added benefit is the development of strong communication skills in cooperative learning – a fundamental of constructivist learning theory.

The pedagogy is meaningful to the students because the problems chosen are real, and relevant—a powerful motivating force for learning. Additionally, in being engaged with students outside of their own discipline, they can often gain new insight into problems by employing different disciplinary concepts and frameworks.
CHARACTERISTICS OF THE PEDAGOGY

- Self-directed, active and guided learning are emphasized;
- A student-centered approach to learning is encouraged;
- Students develop heuristics for problem-solving;
- Learning is in the context of teamwork and a community of inquiry;
- Communication and listening skills are important;
- Civic engagement, community awareness and partnership are stressed;
- Cross-disciplinarity is emphasized;
- Knowledge is anchored in application, with opportunities for real-life professional and disciplinary experience;
- Student self-reflection on learning is key;
- Learning is a process rather than content delivery.
**Anticipated Learning Outcomes**

Students will be able to:

- Identify the critical issues and scope of an ill-structured problem, determine causes underlying the problem, and construct and assess possible solutions to the problem.

- Identify and incorporate the insights of other disciplines in the effort to construct meaningful solutions to problems and evaluate and adjust the process of problem solving.

**Other Anticipated Outcomes**

- Communication and listening skills;
- Teamwork skills;
- Civic-mindedness;
A SAMPLING OF

COMMON PROBLEM PROJECTS
THE SMART NEIGHBORS PROJECT

SUNY Oswego’s SMART NEIGHBOR project is focusing on the problem of getting neighbors in the community to buy local. To date, the partnership involves over 23 local businesses, the Oswego Chamber of Commerce, 15 faculty and nearly 400 students in more than 20 courses. Courses include photography, literature, film, art, sociology, history and marketing.

Students helped develop marketing plans, multimedia storytelling, photography, sociological analysis, filmmaking and other artistic products for local businesses.

“Smart Neighbors” -- SUNY Oswego students partnering with Man in the Moon Candies and its owner.

“As students, this project helps us step out of our comfort zones. We forget that a huge part of why we’re here is networking and getting out into the community. This project gives us the confidence to do that.” — student Emily Shaben

“It was a great experience working with the students and reconnecting with college-age perspectives.” — Amy Stone-Learn, owner

“One of the great things for me with this project, it’s worked so well to get students working together, to get them learning about each other’s method of approaching problem-solving—Leigh Wilson, faculty
How each of the classes involved in The Smart Neighbors Project helped Man in the Moon do better business locally:

**Sculpture**
Students created molds for soap or for chocolate in their investigation of local history and geographies. Many of the molds were generously donated by the sculptors to the project and to Man in the Moon Candies, including chocolate silhouettes of famous Oswegonians as well as chocolate/gold pearl dust interpretations of the lake waters.

**Photography**
Photographers conducted multiple photo shoots at Man in the Moon Candies, providing all of the collaborating classes with high quality digital photographs that ultimately appeared in their final projects.

**Literary Citizenship**
For the Smart Neighbors Project, students in Literary Citizenship moved their considerable creativity + writing skills into the creation of sophisticated and appealing digital essays for Man in the Moon Candies.

**Advanced Poetry**
Each student then contributed a poem on these themes to a class chapbook and participated in a public reading celebrating Man in the Moon Candies, myriad forms of sweetness, and what it means to be “Smart Neighbors.”

**Experimental Filmmaking**
For the Smart Neighbors Project filmmakers interpreted the multi-faceted visuals and candy-making themes of Man in the Moon Candies, creating delightful “confections” in motion pictures.

**Marketing and Management**
Graduate students conducted a rigorous analysis of market conditions in Oswego as context for the development and presentation of a marketing plan for Man in the Moon Candies.

**Race, Class, Ethnicity, Gender**
For the Smart Neighbors Project students identified common problems they believe Man in the Moon Candies and other businesses face in Oswego.
Dr. Curt Gervich in Environmental Science and Planning, and Dr. Michael Devine in English, have joined their sustainability course and filmmaking classes to develop a joint common problem course that looks at place through film. Students form teams to create narratives and films that explain the place around them, and the problems they face. Among these films include homelessness in Plattsburgh, lake pollution, patronizing local businesses, among others.

A film made about the Common Problem class was shown at the Next Generation Rural Creative Placemaking Summit at the University of Iowa.

The instructors also gave a presentation on their Common Problem courses, “Civic-Minded Filmmaking in the Common Problem Classroom” for AAC&U’s 2018 General Education and Assessment, Foundation for Democracy conference. They also published an article, “Are We Experienced? Reflections on the SUNY Experiential Learning Mandate,” in The Journal of Experiential Education (2017), in which they discuss their common problem class.
A Day in the Life explores the hidden economic links between student waste and the impoverished who recycle it.

As one student noted in the reflection paper: “The process of making our film A Day in the Life… was an adventure, to say the least. The problems that we ran into along the way had a huge impact on the way our film evolved as well as the way we experienced this class. I was genuinely interested in the concept of incorporating sustainability issues in Plattsburgh into a film project and was intrigued by the new thought processes we discovered from the sus-

The student film Power, about homelessness, was shown in the 2017 Lake Champlain International Film Festival, and considered for the Lake Placid Film Festival.

What did you learn about poverty in making this film?
Nathan Winans: I learned how hidden poverty can be.
—from an interview with Phung Pham

“When authentic, student-generated questions proliferate, problem-solving follows” —Dr. Michael Devine
Since starting with their pilot project for the Common Problem Project in 2015, SUNY Oneonta has had 26 faculty participate in the STEAM partnerships and 4 faculty participate as mentors for the teams. Community partners have included local schools, catering, facilities, local police, a science discovery center, a farm sanctuary, local second hand stores and more. While not intentional, many of the problems have shared a common theme of sustainability.

Above: SUNY Oneonta students getting a tour of the local school raised bed gardens as part of their sustainable schools

Many of the problems that the undergraduates have worked on have had lasting effects beyond the semester. For instance, the work the students did on the pilot in 2015 continues today as the elementary students picked up the project when the SUNY students graduated.

Participating courses included Young Adult Literature, Education Methods, Political Science, Astronomy, Environmental Economics, Statistics for Counselors, Probability and Statistics, Textile Science, and Advanced Composition.
SUNY Cortland began offering Common Problem projects in fall 2016. To date, 11 faculty members and nearly 170 students have participated in the experience. Projects completed thus far have included the following:

**Green Walking and Biking Trails**: Four faculty members from Biological Sciences, English, History and Philosophy had their students work with the City of Cortland and the Seven Valleys Health Coalition to consider ways to promote better health among city residents as well as a greater sense of civic pride through the establishment of green walking and biking trails in the city.

**Migrations in the Cortland Community: Towards Better Understanding**: Students from courses in Childhood Education, History and Political Science considered ways to better integrate refugees into the communities where they are settled. The idea was to both meet the needs of new migrants, and to address concerns and misconceptions about refugees from local residents. Community partners included the Cortland County Historical Society and the Migrant Education Tutorial and Support Services program.

**Sustainable Development in Cortland County**: This project involved four classes in Environmental Studies, Economics, Communication Studies, and History, and asked students to consider what a sustainable economy in Cortland might look like moving forward. They worked with Sustainable Cortland, a community-based advocacy organization on such issues as the development of downtown student housing that would promote student access to local businesses.
A Selected Bibliography


Information on the Common Problem Pedagogy, includes:

- Applying Common Problem Pedagogy in the classroom
- Working with community partners
- Selecting problems
- Logistics of organizing and scheduling classes
- Course design
- Suggested learning outcomes
- Suggestions about assessment
- Pre-and-post testing samples and suggested rubrics for their assessment
- Suggested rubrics for problem-solving, teamwork, oral presentations and civic-engagement
- How to set up teams and guide their activity

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Please visit our website at: https://web.plattsburgh.edu/offices/centers/cte/thecommonproblempedagogyproject.php
WHO WE ARE

The State University of New York is the largest state university system in the nation that encompasses 64 institutions, including research universities, medical centers, liberal arts and community colleges, as well as colleges of technology.

SUNY Cortland is located in the southern tier of the state in Cortland, NY, and one of the 13 comprehensive colleges of the SUNY system. It has a total enrollment of about 7,000 students. It offers 64 undergraduate degree programs and nearly 40 master’s degrees and certificates of advanced study.

SUNY Oneonta is a mid-size, public college rooted in scholarship across the liberal arts and sciences. We prepare students for successful careers and the pursuit of advanced degrees. As a member of the State University of New York, our small classes, opportunities for undergraduate research, and student/faculty interaction are as attractive as our cost. Nestled in the hills of
SUNY Plattsburgh enrolls approximately 6,000 students in over 60 baccalaureate, certificate, and master’s programs in the sciences, arts, humanities, social sciences, business, education, health and human services. Situated on a 256 acre campus that lies between the beautiful Adirondack Mountains and Lake Champlain. SUNY Plattsburgh is within easy traveling distance to Montreal, Lake Placid, and Burlington, Vermont, and the region provides many recreational opportunities. Contributing to our local and regional communities in ways that give our students many enriching experiences.

OUR FUNDERS AND SUPPORTERS

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The COMMON PROBLEM PROJECT
ENGAGED LEARNING

Please visit our website at:
https://web.plattsburgh.edu/offices/centers/cte/thecommonproblempedagogyproject.php