Institute on Project-based Learning
June 22-25, 2016
Worcester Polytechnic Institute
Worcester, Massachusetts
Application Deadline: February 15, 2016

In partnership with

WPI
Association of American Colleges and Universities
About the Institute

The Institute on Project-based Learning at Worcester Polytechnic Institute is a 2.5-day intensive workshop where teams of five or more faculty and administrators from colleges and universities will gain knowledge about project-based learning and make tangible progress to integrate those concepts into their own curricula. It is hosted and run by WPI in partnership with the Association of American Colleges & Universities, the leading national association focused on undergraduate liberal education.

The Institute draws on over 40 years of experience integrating project-based initiatives into undergraduate education, including classroom projects in a wide range of disciplines, projects in the first year, major capstone projects, community-based projects, and study abroad projects. Project-based learning offers students real-world opportunities to research issues, think critically, gain new perspectives, solve problems, and develop written and oral communication skills—all within the framework of a team environment and guided by engaged and involved faculty.

“The 2015 Institute on Project-based Learning was highly productive and generated good discussion and ideas for our college. I developed a specific, concrete plan for two of my own courses.”

Ryan Keen, PhD
Assistant Professor of Psychology
Middlesex Community College
Institute Goals

Through collaborative work, teams of faculty and administrators will develop strategies to integrate project-based learning into their own undergraduate curricula, whether in general education or in the major, in one department or across the campus.

Institute faculty will use proven materials and examples to help participants...

- **bring project work into their own classes**, seminars, and capstones, and learn how to use projects to help students make interdisciplinary connections.
- **use faculty-guided project work** to strengthen service-learning, study abroad, and internship programs.
- **develop the fundamental skills needed** to make project-based learning work for students, including student team formation and development, evidence-based thinking and writing, and strategies for attacking open-ended problems.
- **create faculty development plans** to support project-based learning, including community networks and partnerships with external organizations.
- **use student project work** as a key component for overall program evaluation and student learning assessment.
- **build relationships with teams** from other institutions to share ideas and experiences.

Campus Action Plans

Teams from varied institutions—public, private, liberal arts, STEM, community colleges, research universities—will come to the Institute with a proposal outlining a specific goal or project they would like to advance. Through engaging and interactive group activity and faculty-led workshops, teams will formulate, develop, and refine ideas to fit their own campuses.

"The Institute on Project-based Learning provided coaching, support, expertise, and inspiration. We've done much with projects and some with PBL—here's interest among faculty—and I feel ready to combine those elements!"

*Catherine Zeek, EdD*
Professor of Education
Lasell College
Institute Faculty and Expertise

The Institute is led by a diverse team of faculty representing disciplines in the humanities, engineering, sciences, and business. Institute faculty have extensive experience with all facets of project work from classroom implementation and coordination of student project work around the globe to leading curricular change, spearheading faculty development, and supporting project-based learning across the curriculum. Each team will be mentored by one or more Institute faculty whose expertise aligns with the team’s needs, and the entire faculty will be available for consultation and guidance.

**HOLLY K. AULT | WPI**
Project-based education in engineering • teaching design • engineering design graphics • assistive technology

**MARJA BAKERMANS | WPI**
Project-based first-year classes • collaborative co-teaching across disciplines • research projects in biology classes • incorporating citizen science

**KRISTEN L. BILLIAR | WPI**
Project-based learning in courses • challenge-based engineering laboratories • experiential learning in research laboratories for all ages • use of the engineering design process as a tool for curricular development

**KRYSTYN BOUDREAU | WPI**
Project-based learning in the first year, the humanities and general education • working with teams • bringing the humanities to engineering education • teaching with writing • facilitating development of information literacy

**J. ELIZABETH CLARK | LAGUARDIA COMMUNITY COLLEGE**
E-portfolios • integrative learning • teaching with technology • writing and technology • assessment

**CHRYSANTHE DEMETRY | WPI**
Course design • faculty development • assessment for student learning • projects for program-level assessment • project-based learning in K–12 outreach for girls

**MICHAEL B. ELMES | WPI**
Using experiential methods to foster social innovation and change • identifying processes that promote learning in organizations and communities • engaging students in reflective practices

**DOMINIC GOLDING | WPI**
Experiential, project-based learning in domestic and international contexts • informal science education • interdisciplinary teaching and research • mentoring and evaluation • museum studies • environmental sustainability

**LAURA HANLAN | WPI**
Information literacy in project-based learning • information practices in STEM disciplines • information literacy outcomes assessment across disciplines

**DESTIN HEILMAN | WPI**
Curriculum design • project-based learning throughout the curriculum • senior undergraduate research mentorship • student metacognitive strategies and learning modes • outcomes-based learning and assessment

**ARTHUR HEINRICHER | WPI**
Institutional change • STEM education • first year programs • industrial sponsorship for project work • program assessment

**SCOTT JIUSTO | WPI**
Project-based, experiential education • project partners, and communities, student proposal and report writing and presenting • multi-stakeholder, cross-cultural collaboration and learning
AARTI SMITH MADAN | WPI
Project-based language learning · experiential education in the humanities · local and global service learning · cross-cultural competency · teaching with technology · interdisciplinary teaching and research

LAUREN MATHEWS | WPI
Principles of hypothesis-driven experimental design · quantitative analysis and data interpretation · inquiry-based education · building skills in quantitative literacy in biology courses

CHARLES MORSE | WPI
Preventive programming to enhance student project team functioning · project team group dynamics consultations · campus community programming on recognizing and responding to student distress

GEOFFREY PFEIFER | WPI
Project-based learning in the first year and as general education strategy · ethics and politics education · interdisciplinary and integrative teaching and learning

PAULA QUINN | QUINN EVALUATION CONSULTING
Assessment and evaluation in education · goals and outcomes development · research design · strategies and logistics for data gathering · instrument development (surveys, interview protocols, rubrics)

TERREL RHODES | AAC&U
E-portfolios and rubrics · learning communities · integrative learning · institutional transformation · transfer students · assessment

KENT RISSMILLER | WPI
Learning outcomes and project assessment · mentoring project advisors · student preparation for project work

DERREN ROSBACH | WPI
Cross-disciplinary collaboration · sustainability across the curriculum · problem-oriented and interdisciplinary teaching and learning · team science · trans-disciplinary methodologies

INGRID SHOCKEY | WPI
Project-based learning · qualitative analysis and research methods · ethics in social science research · cross-cultural collaboration · ethnography · appropriate technology/innovation design

JEANINE SKORINKO | WPI
Project-based learning in courses · experiential learning in research laboratory · bridging the sciences and engineering · engaging students in reflective practices · cross-cultural psychological science research projects

DAVID SPANAGEL | WPI
Project-based learning in the first year, humanities, interdisciplinary settings · working with teams · bringing the history of science and technology into technological education · discussion and collaborative writing as tools of critical thinking

ROBERT TRAVER | WPI
Teaching, curriculum, and learning environments · instructional design and assessment (K–16) · science and environmental education

RICHARD VAZ | WPI
Experiential education · international education and global learning · design and assessment of engaging pedagogies · integrative and interdisciplinary learning · institutional change and curricular reform

KRISTIN WOBBE | WPI
First year students · team teaching · project-based learning · interdisciplinary courses · engaging students · faculty development.
Institute Curriculum

The Institute curriculum is a mix of interactive workshops on project-based learning, consultations with experts, and collaborative teamwork. Teams will engage with institute faculty in project-based learning at workshops and in mentoring sessions focused on their proposed projects. Participants will develop curricular and organizational strategies tailored to their own institutions and will leave with practical action plans, examples of best practice, and relevant case studies to integrate project-based learning practices into varied academic curricula.

Institute Workshops

Teams will choose from a selection of interactive workshops to address their goals and ideas in areas such as...

- project-based learning as a first year and general education strategy
- partnering with external organizations for project-based learning
- student project team formation, development, and mentoring
- integrating project-based learning into STEM courses
- feedback, evaluation, and assessment strategies for project-based learning
- project-based learning in major capstone
- faculty development for project-based learning
- long-term impacts of project-based learning
- designing project-based learning experiences
- institutional leadership and organizational support for project-based learning

Institute Keynote

The Institute’s keynote speaker will be Randy Bass, Vice Provost for Education at Georgetown University.

Founding Executive Director of Georgetown’s Center for New Designs in Learning and Scholarship, Randy Bass is a thought leader in pedagogical research, and an authority on inquiry-based learning.
From Planning to Campus Action
Teams will leave the Institute with an enhanced understanding of project-based learning and a tailored plan to advance work on their own campuses. Each team will deliver a concise presentation of its action plan to gather feedback and advice.

Institute Campus Teams
Each team will consist of a minimum of five members (including a designated leader) from across disciplines and administration staff. A team’s institutional diversity helps facilitate implementing a comprehensive change in the curriculum and sustains the foundations of initiatives arising from work at the Institute.

Application Components and Selection Criteria
Institute applicants should submit a goal or a specific project they want to address. These should be submitted in Word or PDF format and be no more than 1,300 words. Applicants are asked to explicitly address the following questions when formulating the narrative.
Goals: What high-priority tasks do you expect your team to work on during the Institute? (These should be the tasks that, if advanced substantially during the Institute, would lead your team and campus to judge your efforts a success.)

Need and readiness: What is the current state of project-based or engaged learning on your campus, and what has motivated a desire for reform or action? Have assessment results prompted change, or do you need help creating an assessment plan? Has a unified vision of the planned reform emerged?

Team characteristics: In what ways do your team members reflect the opportunities for implementing project-based learning on your campus? How do they reflect the diversity and the various interest groups on your campus?

Contributions: We believe that participants will learn from each other, as well as from the workshop leaders. What do you believe your institution can contribute to the Institute?

Applications will be judged on the extent to which the team is likely to benefit from the Institute and advance its project-based learning initiatives. Reviewers will also consider a number of other factors, such as institutional type and project focus, to ensure a diverse group of participants who will complement and benefit from each other. Visit wpi.edu/+2016institute to apply online.
**Application Deadline and Fees**

Applications must be received by **February 15, 2016**. Notifications regarding acceptance will be sent to teams by **March 14, 2016**.

The Institute runs from Wednesday, June 22, through Saturday, June 25, 2016. Attendees should plan to arrive on Wednesday, June 22, in time for the Welcome Reception from 6:00 to 8:00 pm. The Institute program will officially start with the opening plenary at 8:30 am on Thursday and will end by noon on Saturday with team presentations. Please plan on having your team attend the Institute in its entirety.

The registration fee for the Institute will cover housing for three nights (June 22–24); tuition, materials, and consultations; three breakfasts, two lunches, and a Friday evening banquet and reception. Travel costs to and from the Institute are the responsibility of the teams.

- $7,500 per five-member team from AAC&U member institutions
- $8,500 per five-member team from nonmember institutions
- $1,500 per additional team member beyond five (as space permits)

For additional information, contact Kelly Army at 508-831-6590 or kmarmy@wpi.edu.

“We were involved, excited and thoughtfully motivated throughout the sessions at the 2015 Institute on Project-based Learning.”

**Dr. Pushpa Parekh**  
Professor of English  
Spelman College
Worcester Polytechnic Institute, Worcester, Massachusetts

Worcester Polytechnic Institute is a private university located in the heart of New England. WPI was founded in 1865 with the mission of providing an education that balances theory and practice. WPI’s pioneering undergraduate project education model provides students with extensive experience extending their classroom knowledge through undertaking hands-on projects with real-world impact. With over 45 project centers across the globe, students also have the opportunity to make a difference through project work in communities around the world.

WPI’s 80-acre campus is centrally located in Worcester, Mass., New England’s second-largest city. Worcester is at the crossroads of several major routes, making it accessible from several surrounding airports, including Logan International Airport in Boston, T. F. Green Airport in Providence, R.I., Bradley International Airport in Hartford, Conn., and Manchester Airport in Manchester, N.H. There is also an airport in Worcester with flights to and from a limited number of cities. For more information, visit wpi.edu.

“The 2015 Institute on Project-based Learning provided a view of higher education that is very much needed.”

Andy Borchers
Professor of Management
Lipscomb University
Since 1970, project-based learning has been the core of WPI’s undergraduate curriculum, known as the WPI Plan. Under the Plan, students work closely with faculty and each other to develop solutions to real-world problems in their own communities, and communities around the globe. Participating in team and individual research settings, students tackle authentic, open-ended projects under faculty guidance. In the process, they master critical thinking, sharpen research skills, fine-tune written and oral communication skills, and connect the curriculum to local and global issues.

"Many students come to WPI expecting to be prepared to get good jobs when they graduate, but they’ve found their project-based education has given them much more: They are more sophisticated, more well-rounded, and therefore much better prepared for whatever the world throws at them."

Richard F. Vaz
Dean of Interdisciplinary and Global Studies
Worcester Polytechnic Institute

WPI alumni confirm the findings of a 2014 Gallup-Purdue index poll that showed students who undertook long-term college projects report more career satisfaction and stronger connections to professional satisfaction, advancement, and personal enrichment.

“The project work can literally be life changing.”

Mary Ellen Blunt
Worcester Polytechnic Institute, ’79