As colleges and universities search for fresh ways to engage students and improve teaching, many are turning to so-called high-impact practices. These often involve experiential learning or service projects that offer students a glimpse of the work world, while helping them develop solutions to real-world problems.

On November 12, The Chronicle held the first of three planned hour-long webinars in partnership with Worcester Polytechnic Institute (WPI). Called “Project-Based Learning (PBL) as a Vehicle for High-Impact Practices: Reinventing Courses,” the webinar examined how project-based courses can offer high-impact learning opportunities on college campuses nationwide. Proponents say that PBL courses, often taught to teams of students working collaboratively to solve problems, can enhance student learning. Administrators and faculty who revamp traditional courses to PBL courses report it to be a powerful and versatile tool for learning.
Moderated by Michael Anft, a *Chronicle* contributing editor, the webinar featured Kristin Wobbe, co-director of the Center for Project-Based Learning at WPI, Betsy Barre, executive director at the Center for the Advancement of Teaching at Wake Forest University, and Michael Reese, director of program development at the RISE Learning Institute at Bellevue College, a community college in Washington state.

The following thoughts represent key takeaways from the webinar. To hear the full discussion, register at chronicle.com/PBLwebinar2.

**Project-based learning is seen as a method for engaging college students more intensely, and is now employed by a wide range of higher-ed institutions.**

While project-based learning has long engaged interest from K-12 educators, colleges have been slower to infuse it into their curricula. Still, among higher ed institutions that have adopted this high-impact practice, PBL’s benefits have led many to continually expand and fine-tune their PBL offerings, webinar panelists agreed. These include community colleges, private liberal arts schools, and large public universities, among others.

Experts have noted that those institutions that infuse PBL courses in their curricula often seek new ways to use the practice. “Our repeat customers continue to increase,” says Richard Vaz, co-director of the Center for Project-Based Learning at WPI. The Center, which offers workshops, advice on assessing PBL student work, and feedback on coaching and mentoring, has worked with more than 135 institutions since its founding four years ago. “Institutions are realizing they have to do something markedly different to prepare their students for the real world. Project-based learning is a way they can distinguish themselves from other institutions,” Vaz continues. —Michael Anft

**Courses created using project-based learning principles can increase student engagement.**

“The best project-based learning, like other high-impact practices, engages students in their own learning. PBL asks students to address complex, open-ended questions with a real-world context. The students are involved in creating their own paths to answers. Doing this requires critical thinking, research, usually communicating in multiple ways—presentations, reports, visuals, often working in teams. In the end, adopting PBL can have a transformative effect on courses, changing the whole dynamic.” —Kristin Wobbe
PBL is an effective way to help students integrate and apply knowledge, deepen their understanding of a discipline, and help them understand the links between disciplines.

“At the beginning of a protein biochemistry course I taught, I had students adopt a pet enzyme. While we were learning the theoretical aspects of protein structure and function in class, students had to research those same things about their pet enzyme. The project, originally designed as a mechanism to require students to use available biochemical tools, had the unintended but wonderful consequence of helping them integrate information and see how the course’s topics built on each other.” —Wobbe

PBL students can take control of their own learning.

“RISE [at Bellevue College] hosts a celebration of teaching and learning every term. We call it Making Learning Visible. It’s a large poster showcase, but it also includes oral presentations, poetry readings, and engineering demos. It gives students doing PBL and other high-impact practices a chance to ‘stand and deliver’ and share what they’ve learned with the campus community. And when you talk to those teams of students standing beside their posters, or their robots, or their ‘zines, you can definitely hear their engagement. They’ve taken charge of their own learning, and they are so proud of what they’ve done or built.” —Michael Reese

Colleges looking to encourage faculty to develop PBL courses should advise them to first take baby steps.

“Start small. Think about doing a small project in a unit of a course. It’s more manageable for faculty, and they can get excited about that.” —Betsy Barre

Institutions can also avail themselves of early adopters who are already teaching courses that involve projects and student collaboration.

“There are already pockets of people on campus who may be doing PBL or PBL-related work. Start with them. They’re your faculty champions. Check out what they’re doing. Look at the results they’re getting. Use what those assessments are telling you to convince the reluctant, because there will be reluctant people.” —Wobbe
PBL can add value for faculty. Educators who already teach in similar ways can link up with each other and learn to refine their teaching practices together via a project-based learning focus.

Educators who already employ community-engaged teaching and collaborative learning strategies, or who oversee undergraduate research, may already be doing PBL-related work. “PBL gave us a common language to link up various pedagogies that work in somewhat similar ways. What was surprising and exciting for us is that we discovered 130 faculty doing projects in their classrooms. We were able to bring together various support service offices across campus that were previously in silos. It was a great way to bring faculty together who don’t normally work with each other so they can help one another think about developing their teaching practices. We built a bigger community instead of staying in smaller silos.” —Barre

Colleges should spotlight faculty who develop PBL courses.

“Our faculty have tons of amazing ideas so we can crowdsourc. And that’s what we’re doing with an initiative we’re calling the Provost’s Award for Innovation and Equity. This award supports teams of faculty who want to bring PBL or another high-impact practice into all or most sections of a course that reaches at least 400 students.” —Reese

Faculty will need additional support to transform courses.

“Some kinds of PBL take a lot of resources and logistics, such as locating community partners for projects, or giving the one-on-one attention necessary in undergraduate research. Providing faculty more logistical support so they can reduce the time it takes to develop PBL courses is something they really appreciate. Our faculty want to make sure their projects are aligned with their course goals. And they are particularly anxious about how to assess the work of their students and in a way that is aligned with their course goals.” —Barre

PBL is an effective method of pedagogy for a variety of institutions.

As the experiences of Bellevue and Wake Forest—a community college and a private liberal arts university—attest, PBL can be employed successfully at a range of institutions. —Anft