



BOOSTING *the*
POWER *of* **PROJECTS**

*Will project-based learning increase student engagement?
Yes—especially if teachers design projects with motivation in mind.*

John Larmer

Project-based learning is widely acknowledged as a way to boost students' motivation to learn. In traditional schooling, students typically express the following reasons to learn: "I want to please my teachers or parents"; "I want a good grade"; or "I've been told I need to learn this for the next grade level, for the next course, or for college." In contrast, project-based learning gives students more compelling reasons to learn: "I want to explore a topic that matters to me and to successfully complete an important task that I've undertaken."

Project-based learning presents students with real-world challenges, asks them to pose and answer interesting questions, and allows them to set the direction for their own learning to some extent. All of these features should lead to more meaningful and engaging learning.

Sounds fine in theory. But many teachers who are new to project-based learning may find themselves wondering midway through a project, "Why aren't my students as fired up about this as I thought they'd be?" Students are dutifully completing their tasks, but the project feels like just another assignment (except longer), and the energy level in the classroom is not noticeably different from the level on any other day.

How can teachers maximize project-based learning's potential to engage students? Here are seven suggestions.

1. Give students more voice and choice.

A common stereotype about project-based learning is that students always choose their own topic to explore and make their own decisions about how to share what they've learned. This may sometimes be true, but in today's standards-based world, most teachers design the project to

some extent. Indeed, our model of project-based learning at the Buck Institute for Education is more of a *teacher-guided* approach than a *teacher-facilitated* one.

However, some teachers may go too far and feel the need to plan every step of a project. It's not easy to give up complete control, especially when a teacher is just beginning to shift his or her practice from traditional instruction to project-based learning.

If students feel like they have no voice and choice in a project, that project is going to lose a lot of its motivating power. At the more limited end of the scale,

teachers can let students choose whom they work with, find some resources on their own, and decide which product to create from a menu of choices. To provide more choice, teachers can allow students to form their own teams, set their own goals and daily tasks, and come up with their own ideas about what products they would like to create. Students can even codevelop a driving question for a project. The more students feel like they own the project, the more committed they will be.

2. Localize the project.

Adults typically have a broader view of the world and perspective on time than children and teenagers do. A history teacher might appreciate how important the end of the Cold War and the fall of the Soviet Union were to events in the world today, but for most students, those events may feel distant and abstract, unrelated to their lives. So why should they care about a project in which

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they are asked to create museum exhibits to explain the Cold War?

What if, instead, the project's driving question involved students in documenting a local angle on the topic? Imagine how engaging it would be for students to interview residents of their community who emigrated from Russia or other former Soviet republics during that time and tell those immigrants' stories by publishing a book or creating multimedia presentations to show to the community.

Or consider the science teacher who believes that habitat destruction around the world is a gripping and urgent issue. Some students, especially older ones, might agree and be fully motivated to pursue a project to save the lemurs of Madagascar. But others might say, "Lemurs? Sure, they were cute in that video we watched, but they're far away and I can't get excited about creating public service announcements to raise awareness of their problems."

Localizing the issue can change that attitude. Something like this happened in 4th grade teacher Laurette Rogers's classroom in San Anselmo, California. In a class discussion after watching a somewhat depressing video about endangered species around the world, one student finally said, "What can we do?" This question led to a project in which students identified a local endangered species, a freshwater shrimp found in creeks, and worked to save it. They contacted local ranchers and did habitat restoration work, raised public awareness, and communicated with state legislators.

Below are some examples of how driving questions could be revised from general to local while still focusing on the same content:

■ Change "How do architects design environmentally friendly buildings?"

to "How could we design an environmentally friendly building for the property at 5th and Oak Street?"

■ Change "What is a healthy diet?" to "How can we plan a campaign to raise awareness in our community about a healthy diet?"

■ Change "What are the dangers of global warming?" to "How could global warming affect our region?"

■ Change "How is the U.S. economy changing?" to "How will closing the local auto parts factory affect our region?"

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3. Keep it real.

A project that draws on students' own lives, cultures, and identities can be the most compelling of all. Ideas for projects can come from the music, books, clothing, video games, movies, and TV shows that students love or from issues and events they see as important. Here are a few examples:

■ Students admire characters in movies, TV shows, and books who display perseverance in the face of adversity. *Potential project:* Students consider examples from these sources and conduct interviews with people in their families and community to reach conclusions about what it means to be resilient. They share their thoughts in a spoken-word poetry event for the community.

■ Students wonder about how the clothing, food, electronics, and other things they buy affect workers and the environment. *Potential project:* Students trace the production of various products they and their families buy, decide whether they meet criteria for acceptability, and create a report to post on the school website and a social media campaign to influence their peers' purchasing decisions.

■ Students are asked to consider the question, "What messages does popular music send about the role of women in our society?" *Potential project:* Students survey peers, interview experts, read informational texts, and analyze song lyrics, and then create a multimedia presentation that synthesizes their answers to the question.

■ Local police have been stopping and searching cars driven by teenagers. *Potential project:* Students study the Fourth Amendment and precedent legal cases, interview the police, survey their peers, and then debate the issues in a mock trial.

4. Launch the project with an entry event.

The start of a project should feel different—not like just another assignment, except longer, harder, and worth more points. Unfortunately, some teachers launch a project the way they begin any other unit; they explain what the topic is, what learning goals will be addressed, and what the major activities will be. This is usually not a good way to motivate students, unless the topic is inherently of high interest to them. And if the explanation of the project is accompanied by a huge packet of materials or a daunting list of readings, resources, tasks, and deadlines . . . well, let's just say, don't do that if you want to engage young people.

Instead, launch a project with a bang. Use an *entry event*—a term borrowed from the classic problem-based learning model—to grab students' hearts and minds. An entry event should provoke students to ask questions, beginning the inquiry process that is fundamental to project-based learning. An entry event could take many forms: a guest speaker; a field trip; a video or scene from a film; or a lively discussion about a reading, a work of art, or a set of startling statistics.

For example, at Katherine R. Smith Elementary School in San Jose, California, 4th grade teachers kicked off a project about a healthy diet by having students conduct a taste test among the student body to see whether cheese puffs or healthier alternatives were their preferred snack. (Guess which won.) To launch a project to design solar ovens, teacher Leah Peniman shared a letter from a nonprofit organization requesting help in finding an affordable, compact alternative to wood-burning stoves in Haiti. A 12th grade government/English project to create a political ad campaign promoting various propositions in an upcoming election began when teachers Justin Wells and Abby Benedetto raised issues about the power of the media by showing students television ads from the past.

5. Emphasize commitment to the team.

A sense of responsibility to their peers can be one of the most powerful motivating factors for students working on a project in teams. But this may not automatically emerge, given the reality that students may not have experienced successful group work in the past. Perhaps they've been part of a dysfunctional team in which one member had to do most of the work,

their ideas were ignored, or team meetings became stressful chores instead of productive gatherings of supportive colleagues.

Teachers can support students' teamwork in many ways: constructing list of norms or a rubric with students; having students write contracts for how they will work together; providing them with tools, such as task planners and online collaboration platforms; and teaching them how to resolve conflicts and make decisions. During a project, have team members frequently check in with one another—and the teacher—to be sure things are going smoothly.

To help with the less tangible task of fostering a strong sense of commitment to one's project team, classroom culture and team-building activities are important. In the elementary grades, morning meeting activities, role-plays, and fishbowl modeling can focus on what it means



to work as a team. For older students, teachers should facilitate honest discussions about the pros and cons of working in teams and keep that conversation going as they meet with teams during the project.

Post signs on the classroom wall to remind students of norms and processes for teamwork. For students of any age, build teams the way corporate retreat planners do, with fun tasks like constructing a tower of marshmallows and straws or a house of cards, playing games, and cooperating in physical challenges.

6. Involve outside collaborators.

One of the best ways to promote the motivational real-world aspect of project-based learning is to have students work with other adults in addition to their teacher. Adults from the community, government, business, or nonprofit organizations can act as partners or clients for project work. Adult experts or mentors could be used as resources for student research, explaining how they create a particular kind of product or giving students feedback as they develop products or answer a driving question.

In Telannia Norfar's algebra classes at Northwest Classen High School in Oklahoma City, Oklahoma, students worked with local business owners to analyze their companies' use of social media. In teacher Jeff Horwitz's 2nd grade class at Chesterfield Day School in Chesterfield, Missouri, students partnered with people from local nonprofit organizations to find ways to address various community issues; for example, the students collected food for the homeless and supplies for victims of natural disasters, and they promoted environmental clean-up and pet adoption events. At ACE Leadership High School in Albuquerque, New Mexico, students

designed and built information kiosks at a nature preserve with help from carpenters and others in the local construction industry.

7. Have students present their work to a public audience.

Teachers know all too well what can happen when project teams make presentations only to their classmates: not much effort, too much goofing around, or rote delivery of boring PowerPoint slides. But put students in front of a different audience, and the motivation to make a good presentation goes up; they want to make a good impression, persuade or move their audience, and answer questions well.

The audience for a project presentation could be modest. Bring in the principal; ask other teachers or parents

to play a role on a panel; or have students present to another class, older or younger students, or the whole school at an assembly. On the more ambitious side, teachers could have students share their work with audiences outside school. The desire to do high-quality work goes way up when students present at a community event or to people from nonprofit organizations, the business world, or academia. The users of a product that students created or the clients receiving a service also can act as a public audience, both during a project and at its conclusion.

Overcoming a Culture of Boredom

Many students are bored at school—especially as teenagers, and it often

starts much earlier. Teachers may have heard that project-based learning will fix this problem, but it's not that easy. Students new to project-based learning bring to it the baggage and habits of many years of less-than-engaging instructional practices.

When a teacher launches a project, he or she may think it will be smooth sailing on a brand-new sea, only to be disappointed by familiar apathetic looks and behaviors. But by following the seven ideas presented here, teachers will have a better chance of showing students that times have changed. ■

John Larmer (johnlarmer@bie.org) is editor in chief at the Buck Institute for Education, Novato, California (<http://bie.org>).