



# PSPA Spotlight

## Project Based Learning

### Focus

Project Based Learning (PBL)

### Quote

"PBL is learning by doing. Students have the opportunity to develop knowledge and skills through engaging projects that are set around the challenges and problems they may face in the real world," explains Jodi Rubin, a PBL and instructional coach for grades K-8 who is in her sixth year at PSPA. "This type of learning is inquiry-based and does not have just one answer."

### Value

"PBL strengthens student engagement, improves learning, and has other positives impacts on students regardless of their backgrounds. Once a project is ready to go, it is integrated into classrooms. Through teamwork and planning, teachers can successfully facilitate a PBL classroom with students working independently."



At Pine Springs Preparatory Academy, the student comes first. One way we put that into action is through the use of project-based learning (PBL), an educational approach that gives students an active role in deciding what they learn, how they learn it, and how they demonstrate their learning.

PBL differs from traditional classroom methods in that it is student-driven and personalized. It builds upon the traditional curriculum by making connections between those lessons and the real world.

Recent studies also indicate that PBL may help raise standardized test scores. For example, a study from the University of Michigan and Michigan State University found that students in [PBL classrooms outperformed](#) traditional classrooms by eight percentage points on a state-level test. Additional [independent studies show](#) PBL strengthens student engagement, improves learning, and has other positives impacts on students regardless of their backgrounds.

"I have personally been teaching through PBL for many years, and my English Language Arts (ELA) test scores at PSPA were always in the top 10% of the state," says Rubin. "The hope is that students are learning and practicing skills through PBL and applying those skills when they are taking standardized tests. Standardized tests assess a basic level of knowledge, while PBL forces students to apply and create, which is so much more challenging."

## Integrating PBL with Classrooms and Curriculum

PBL starts with a thorough planning process to ensure the project is likely to achieve the intended outcomes. First, the content or skill is examined to make sure it fits within this educational style. Is it a core concept the students need to learn? Is it important for further learning? Is there a connection between this content and the real world? Next, there is brainstorming to define what the student product will be.

The administration and PSPA board is sometimes involved in the planning, and they may even play a role in the actual project by participating in project launches or attending the final presentation. Teachers also collaborate to make projects connect across subjects, curriculum and grade levels.

Once a project is ready to go, it is integrated into classrooms. Through teamwork and planning, teachers can successfully facilitate a PBL classroom with students working independently and ensure no student is left behind.

While the projects are student-driven, guidelines are put in place to help ensure progress and accountability. For instance, project calendars are shared with students so they know deadlines, and pre-planned checkpoints allow teachers to be involved at regular intervals. These checkpoints also offer students multiple opportunities to show what they have learned. Modifications are made as appropriate to ensure that all students have the same opportunities throughout the project.

Finally, formative assessments are built into PBL to help measure student success. Tools such as writing prompts, exit tickets, rubrics, checklists and quizzes help assess student learning throughout the unit. At the project's conclusion, students present their learnings to an audience.

## Preparing for the Future

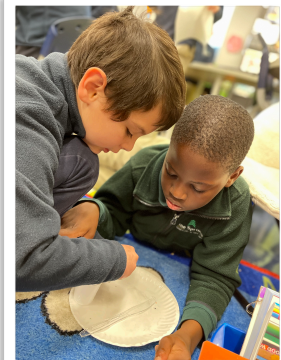
The critical thinking skills that students learn through PBL projects set them up for success in many future scenarios, such as situations they might encounter in the workplace. [According to Forbes](#), the top five traits' employers most value in 20-something employees are:

1. Ability to work in a team
2. Ability to make decisions and solve problems
3. Ability to plan, organize and prioritize work
4. Ability to communicate verbally with people inside and outside an organization
5. Ability to obtain and process information

"These are the exact soft skills PBL focuses on," says Rubin. "The students are given the opportunity to work on these skills in a carefully guided way with a teacher helping them through the process."

For Rubin, the reward is watching students grow and change throughout their PBL experiences.

## Favorite Projects



### Fifth Grade's Era Market

This project has become a tradition at PSPA. Think "Shark Tank meets Core Knowledge meets State Fair."

### Sixth Grade's Machine Madness Competition

This project is a cross-curricular PBL on the Industrial Revolution. Similar to the March Madness NCAA basketball tournament, in Machine Madness teams compete against each other.

### Seventh Grade Rockets

Seventh grade students design, create and fly their own model rockets in this project, which explores how we, as aerospace engineers, can build rockets that fly as high as possible to demonstrate and explain the kinematics and forces.