Project Based Learning and Student Engagement:
Preparing K-12 Students for College and Workforce Success

At schools nationwide, teachers are helping students creatively solve problems, stay focused, work on teams, and organize their thoughts in a way others will understand. Along the way, students are mastering standards-based content, improving their critical thinking and problem-solving skills, and becoming self-directed, independent learners.

These benefits extend well beyond the primary or secondary school classroom and help students prepare for successful careers.

Project-based learning (PBL) helps to fill noticeable gaps in the K-12 classroom, where engagement and passion are often in short supply for both students and teachers. This learning approach also poses unique challenges for school districts that don’t generally accommodate all learning styles. Managing PBL assets (e.g., data, videos, information, lessons, and expectations) requires the right technology to support curriculum, standards, and pedagogy.
The Buck Institute for Education describes PBL as a teaching method in which students:

1. Work for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.
2. Use the experience to improve their knowledge, understanding, and success skills.
3. Answer challenging problems or questions.
4. Find relevant resources.
5. Apply information.
6. Make decisions (i.e., how to work and what to create).
7. Reflect on their learning.
8. Use feedback to improve their processes and/or products.
9. Use presentations to display their work.

What is Project-Based Learning?

Defined as the ongoing act of learning about different subjects simultaneously, PBL guides students through the process of identifying—through research—a real-world problem (local to global) and developing a viable solution using evidence to support the claim. Students then present their solutions through a multimedia approach based in a set of 21st century tools. During their presentations, students show what they learned as they journeyed through the classroom unit, interact with the related lessons, collaborate with one another and with their teachers, and assess themselves and each other (rather than just taking a test to show proficiency).

Until recently, Bartholomew Consolidated School Corporation (BCSC) in Columbus, Indiana, was juggling a number of LMSs across grades K–12. They were particularly challenged when they used PBL as a primary instructional approach in two elementary schools, one middle school, and one high school.

District leaders needed a way to seamlessly manage team-based project materials, including notes, documents, videos, and other vital components. They also needed collaborative space for allowing students to make decisions, reflect on their work, and provide feedback to each other. One of the reasons, BCSC chose itslearning is that it allows students to demonstrate mastery via videos, blogs, chats, and multiple other formats (outside of traditional testing). itslearning now serves as a central repository for all PBL assets. All content and curriculum is aligned to the district’s learning outcomes so it also supports providing insight into student achievement, specifically 21st century skills, many of which are based on soft skills (i.e., good communication, teamwork, and collaboration) that are in high demand in today’s job market.

For example, BCSC recently brought in plant engineers from a major, local manufacturer to show pupils how they collaborate on the job, the outcomes of such interactions, and the team-oriented challenges that have to be overcome.
Supporting Today’s 21st Century Learner with PBL

As BCSC and many other schools districts have learned, PBL allows students to creatively solve problems, work on teams, stay focused on the task at hand, and organize their thoughts in a logical fashion that others will understand. As part of this process, pupils not only learn standards-aligned content, but they also gain critical thinking, collaboration, and problem-solving and decision-making skills that will help transform them into independent learners. Equipped with the necessary 21st century skills, students are better prepared to succeed in college and their careers.

To gain the greatest benefit from PBL and best leverage this new culture of teaching and learning, instructors are increasingly turning to technology-based tools that help them collaborate with their students, review progress, and consolidate all PBL assets in one place. One K–12 teacher said, “Seventy-six and half percent of teachers believe that students are more engaged in learning when technology is integrated into instructional activities.” Specifically with PBL, however, Alan November of November Learning says one of the biggest issues students struggle with is organization of content, notes, and other materials.

When considering collaborative, PBL-friendly technology platforms, K–12 leaders should consider their individual programs, their criticality to their districts’ missions, and whether the platform of choice truly supports teachers’ and students’ PBL goals.

Here’s an evaluation framework that can help you determine how well your current approach is supporting your district’s PBL activities.

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<th>Question</th>
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<td>1</td>
<td>Can students and teachers reflect on learning, project activities, and work quality?</td>
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<td>2</td>
<td>Can teachers easily align their project-based lessons with state standards and local curriculum?</td>
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<td>3</td>
<td>Do teachers have a central place to store, access, and share all of their PBL lessons and content?</td>
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<td>4</td>
<td>Can teachers easily deliver assessments and personalize instruction for their students?</td>
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<td>5</td>
<td>Can students work independently on self-directed learning within the PBL framework?</td>
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<td>6</td>
<td>Can students access content and demonstrate their understanding in multiple modalities?</td>
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<td>7</td>
<td>Do students have the level of voice and choice that they need to be able to make decisions about their projects?</td>
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<td>8</td>
<td>Are teachers using PBL to enhance their students’ college and career readiness?</td>
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<td>9</td>
<td>Do teachers have access to just-in-time professional development resources from a single, central location?</td>
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How an Enterprise LMS Can Help

If you struggled to align your current approach against the framework above, perhaps you should consider an enterprise learning management system (LMS). Today’s LMS goes way beyond just managing course delivery by effectively managing the PBL experience and assets (e.g., data, videos, information, lessons, expectations, and places to collaborate, communicate, reflect, and create) and supporting curriculum, standards, and pedagogy.

By using a single, LMS that requires just one login for content, curriculum, instruction, communication, and assessment, instructors can orchestrate all aspects of a project while freeing up their own time to work individually with students in the classroom and enable the students to have a rich learning experience. This, in turn, enables all users to collaborate, create, and reflect in very innovative and productive ways.

PBL empowers students to make their own decisions, utilize their critical thinking skills, and acquire real-world knowledge both in and out of the classroom.

“There’s a wide range of how students document their learning,” November points out. “There’s an enormous opportunity to do this cooperatively, and the itslearning platform is great for that.” When the right technology is aligned to curriculum and pedagogy, students can more readily take ownership of their learning, express their own voice and choice, and readily overcome any organizational or content challenges that PBL presents.

For more tips to help you and your team get started using itslearning, visit our resource center at:

https://itslearning.com/k-12/resources