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

In this decision guide, you’ll learn more about PBL and how it’s being used successfully in the K–12 classroom. You’ll be introduced to a framework for evaluating which tools and systems will enhance instructors’ success in the PBL classroom and discover the role that a full-featured learning management system (LMS) plays in that 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.

Finally, you’ll get an inside look on how to implement this type of end-to-end system, take an interactive quiz https://itslearning.typeform.com/to/rmRJ04 and watch a video interviewing teachers and students from Bartholomew Consolidated School Corporation's (BCSC) PBL Magnet School, which has been using PBL as the central pedagogical method since inception. These informative tools will help you determine where your district stands on the PBL spectrum and what it needs to do to get even more out of this innovative learning approach.
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).

The Buck Institute for Education describes PBL as a teaching method in which students:

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

Until recently, 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, and it also supports the district’s learning outcomes, 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.
Seventy-six and half percent of teachers believe that students are more engaged in learning when technology is integrated into instructional activities."

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.

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“They’re 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.

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 make these decisions. How well is your current approach supporting your district’s PBL activities?

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<tr>
<th>Question</th>
<th>Acceptable</th>
<th>Questionable</th>
<th>Unacceptable</th>
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<tr>
<td>Can students and teachers reflect on learning, project activities, and work quality?</td>
<td>Yes, both students and teachers have a central platform that they can use for reflection and review.</td>
<td>We have a process in place that they can use for reflection, but it’s not uniform or centralized.</td>
<td>Teachers and students manage this aspect of PBL on a case-by-case basis by using different approaches.</td>
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<td>Can teachers easily align their project-based lessons with state standards and local curriculum?</td>
<td>Yes, we have a standards alignment tool that teachers can apply to all of their PBL lessons and materials.</td>
<td>We make resources available to help teachers align their lessons, but we don’t have an easy-to-use alignment tool.</td>
<td>Teachers are left to find their own resources to align lessons with state and local standards.</td>
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<td>Do teachers have a central place to store, access, and share all of their PBL lessons and content?</td>
<td>Yes, we have a central hub or library that houses all of our PBL curriculum materials.</td>
<td>Our PBL curriculum materials reside in multiple systems, but we do have a platform for teachers to share their materials.</td>
<td>Our PBL curriculum materials are in separate systems throughout the district, with no easy way for teachers to share materials.</td>
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<td>Can teachers easily deliver assessments and personalize instruction for their students?</td>
<td>Yes, we have a single platform for creating and delivering assessments and analyzing results. Teachers can see students’ needs easily and can assign personalized content to them as applicable.</td>
<td>We have multiple platforms for giving assessments, and we’re personalizing instruction based on the results—but we have no easy or automated way to do this.</td>
<td>At this time, we’re not using assessment results to deliver personalized instruction to meet our students’ unique needs.</td>
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<td>Can students work independently on self-directed learning within the PBL framework?</td>
<td>Yes, students are aided by technology and able to work independently on assignments and have some control over their own learning.</td>
<td>Students sometimes work independently, but there is no coordinated system that enables students to do this district-wide.</td>
<td>Our students rarely work independently, and/or they have no control over their own learning.</td>
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<td>Can students access content and demonstrate their understanding in multiple modalities?</td>
<td>Yes, teachers can easily post course content in text, audio, video, and other formats. Students can submit their work in a variety of formats as well.</td>
<td>Some teachers post content and let students demonstrate their understanding in multiple formats, but at this time there is no integrated, simple way for them to do this.</td>
<td>Few of our students are able to access content or demonstrate their understanding in multiple modalities.</td>
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<td>Do students have the level of voice and choice that they need to be able to make decisions about their projects?</td>
<td>Yes, we have a single, easy-to-use platform that gives our students voice and choice.</td>
<td>We have multiple means of giving our students voice and choice, but we don’t have a single platform.</td>
<td>We don’t have a process or technology in place to facilitate this aspect of PBL.</td>
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<td>Are teachers using PBL to enhance their students’ college and career readiness?</td>
<td>Yes, we have a single, easy-to-use platform that gives students the tools they need to prepare for college and career.</td>
<td>We put an effort into college and career readiness, but we lack a single, district-wide system.</td>
<td>We’re not using PBL to drive college and career readiness because we lack the technology needed to make this a reality.</td>
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<td>Do teachers have access to just-in-time professional development resources from a single, central location?</td>
<td>Yes, we have an online platform that gives teachers easy access to professional learning resources whenever and wherever they might need them.</td>
<td>Teachers have access to some online professional development resources, but they must be accessed from various locations.</td>
<td>Teachers have little access to online professional learning resources.</td>
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Using itslearning as a Virtual PBL Staging Area

If you answered "questionable" or "unacceptable" to any of the questions on the previous side, then you should consider replacing your current systems with an enterprise LMS that can satisfy all of these requirements. Today’s modern 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, integrated learning management system (LMS) platform 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.

"If our children are to grow up to make important contributions to our society, it is essential that we provide them with powerful tools and experiences across the curriculum," states Alan November of November Learning.

“This will require a new culture of teaching and learning that engages students as contributors.”

For Dean Wright, a 3rd-grade learning facilitator at Columbus Signature Academy, Lincoln Campus in Columbus, Indiana, itslearning serves as a virtual “staging area” for the wide variety of hands-on projects that his students tackle each school year.

Before implementing itslearning, Wright lacked a central location for uploading, storing, and utilizing PBL assets for his class, and instead used Google documents and PowerPoint for content sharing. Using itslearning as a staging area, Wright equips students with the tools that they need to successfully create their projects.

“Then, while working independently or in groups,” says Wright, “students take ownership of their learning by referring back to specific videos and information on an as-needed basis.”
Taking PBL to New Heights

You understand the enriching qualities that PBL provides students in the classroom, during their everyday lives, and in the collegiate or work setting. You also realize that managing the assets, supporting team-based activities, and instilling 21st-century skills in a very efficient manner requires a robust, modern LMS that facilitates learning, collaboration, and success in ways that traditional tools cannot.

A commitment to using and benefitting from PBL starts with a centralized LMS with a single login, rich multimedia capabilities, and 24/7 access to students and instructors. To help you through the selection process and ensure the highest level of success with PBL, here is an interactive quiz (https://itslearning.typeform.com/to/rmRJ04) with various key points to consider.
How we can help you...

With itslearning as your partner in digital curriculum management, school districts can extend their investment in existing curriculum resources by streamlining resource management and providing more meaningful and consistent access to instructional materials across the district. To learn more about itslearning for Project Based Learning, visit itslearning.com

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