



(2025)

PBL



ROADMAP

/Milestones Quick Start Guide

@castschools

(Spring 2025)

A guide for teachers
of all experience levels.

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PBL

Roadmap

From Launch to Legacy



Just starting out?
Don't reinvent the wheel!
 Use a [PBL that's already been built out](#) as your starting place. Find some examples here.

00 Starting Out

With our bags packed with equity, teachers collaboratively plan a topic, essential question, activities, an inciting event or "launch" a general timeline, rubrics, and "deliverables" *with student input*.

01 Milestone

- Students explore the essential question topics.
- Host an official "PBL Launch" with students
- Students form teams and develop "driving questions" and "need to knows"
- Driving questions, early learnings, and need-to-knows' are put on posters and posted on a PBL wall by each team
- Students explore posters and offer feedback between teams

02 Milestone

- Student teams develop a management plan.
- Student teams explore their communities' needs related to their driving question.
- Students teams choose a community impact focus toward which to aim.
- Student teams build knowledge (databases, interviews, speakers).
- Using protocols student teams share and receive feedback from a variety of sources.
- Student teams reflect on feedback.



03 Milestone

- Student teams build knowledge
- Student teams conduct interviews and surveys
- Student teams choose community impact focus
- Using protocols student teams share and receive feedback from a variety of sources.
- Student teams develop their project, prototype, and presentation

04 Milestone

- Finalize PBL projects and presentations.
- PBL "Rehearsals"
- Tune PBL with feedback, reflection, and revision.
- Determine showcasing process

05 Milestone

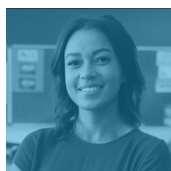
- Showcase presentation of learning and celebrations
- Self and Team reflection
- Call to action

00

Starting Out

True equity in PBL means designing projects that are culturally responsive, providing scaffolds for different learning needs, and ensuring all students have access to the tools, time, and mentorship necessary to thrive. It's not just about delivering engaging learning experiences—it's about making sure every student has the opportunity to contribute, grow, and see their work as valuable.

Emily | The Beginner



"This seems like way too much work. Where do I even start?"

Start Small & Focus on One Project – Don't try to overhaul everything at once. Choose [one simple PBL unit](#) and focus on making it successful.

Find a Mentor or Model – Observe a colleague who has done PBL before, or check out [videos of PBL classrooms](#) to see it in action.

Use a Structured PBL Framework – Follow a ready-made PBL model such as the [CAST PBL Planning Document](#) or the [PBL template from the Buck Institute](#) to help you structure your first project step by step.

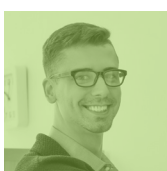
Pre-Plan the Basics – Before launching a project, define your [essential question](#), [key standards](#), and [final product](#). Keep it manageable!

Start with Student Curiosity – Engage students with a real-world hook or a [big question](#) that gets them excited to explore.

Give Yourself Grace – PBL has a learning curve for both students and teachers. You don't have to get it perfect the first time!

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Mike | The Aspiring Pro



"I want to improve quality, engagement, and accountability in my PBL."

Refine Your Driving Questions – Strong [driving questions](#) make or break a project. Work on making them [more open-ended, relevant, and thought-provoking](#).

Build Student Ownership Early – Instead of designing everything for students, let them co-create elements like the [project plan](#), [success criteria](#), or even the [driving question](#).

Strengthen Formative Assessment – Ensure students get regular feedback throughout the project, not just at the end. Use [peer reviews](#), [self-assessments](#), and [checkpoints](#).

Increase Authenticity – Bring in more real-world connections, such as [local experts](#), [industry partners](#), or [audiences beyond the classroom](#).

Experiment with Different PBL Structures – Try [different project formats](#) (e.g., inquiry-based, service-learning, interdisciplinary) to expand your PBL approach.

Reflect & Iterate – After each project, [analyze what worked](#) and [what needs improvement](#)—adjust for next time.

Lisa | The Expert Practitioner



"I'm hesitant to change how I do PBL unless it benefits me or improves our experience."

Empower Students to Lead the Design – Transition from teacher-designed projects to fully student-driven projects where students [propose](#) and [plan](#) their own inquiries.

Expand Beyond the Classroom – Incorporate [internships](#), service-learning, or public [showcases](#) that extend beyond the school environment.

Strengthen Interdisciplinary PBL – Collaborate with colleagues across subjects to create [cross-disciplinary projects](#) with deeper content connections.

Shift Assessment to Reflection & Portfolio Work – Instead of just grading final products, implement student portfolios and [reflection-based assessments](#) to emphasize growth over time.

Mentor Other Teachers – Share your experience by coaching beginners like Emily or leading a professional learning session for colleagues.

Research & Innovate – Push beyond traditional PBL structures by exploring [design thinking](#), challenge-based learning, or global collaboration projects.

01

Milestone

What Happens:

- Students explore the essential question topics.
- Host an official “PBL Launch” with students
- Students form teams and develop “driving questions” and “need to knows”
- Driving questions, early learnings, and need-to-knows’ are put on posters and posted on a PBL wall by each team
- Students explore posters and offer feedback between teams

Deep Dive:

Milestone 1.1 Students and Teachers

Milestone 1.2 Launch PBL

Milestone 1.3 Teachers Explore Community Needs



Emily
The Beginner



Focus On

Understanding the purpose of the essential question and driving questions.

Introducing teams to collaborative brainstorming.

Building a visual project wall for organization.



Quick Start Spark

Use the “[See, Think, Wonder](#)” **routine** to explore a general topic like “climate change” with students and identify a potential essential question they find relatable.

Try a 10-minute [Think-Ink-Table-Share activity](#) to brainstorm PBL topics. Each student contributes to group ideas while reflecting personally.

Create a simple [project wall](#) for student teams to display their driving questions and “need-to-knows,” and invite another team to offer feedback using sticky notes.



Mike
The Aspiring Pro



Focus On

Refining essential and driving questions with student input.

Establishing meaningful team norms.

Incorporating peer feedback early in the process.



Quick Start Spark

Share a pre-selected overarching [essential question](#), like those in the example (“How have contagions impacted us?”), and challenge teams to rewrite or adjust it for relevance to their lives.

Use “[Compass Points: Knowing Your Team](#)” to assign roles within teams during brainstorming activities, such as facilitator, notetaker, and timekeeper.

Host a peer-feedback session using the [HTH tuning protocol](#) where each team presents their initial posters, receives 2-3 questions from peers, and revises their ideas.



Lisa
The Expert Practitioner



Focus On

Launching the project with authenticity.

Encouraging interdisciplinary thinking in project launches.

Facilitating deeper feedback exchanges between teams.



Quick Start Spark

Move beyond a simple hook by incorporating a local [guest speaker](#) or expert to introduce the essential question. For example, bring in a community leader to discuss a pressing issue related to the project.

Use the “[Project Zero Creative Hunt](#)” activity to explore how diverse academic fields (e.g., math, art, science) intersect with the essential question.

Guide students to provide structured peer feedback using [the Peer Feedback Choice Board](#) on team posters during a gallery walk.

02

Milestone

What Happens:

- Student teams develop a management plan.
- Student teams explore their communities' needs related to their driving question.
- Students teams choose a community impact focus toward which to aim.
- Student teams build knowledge (databases, interviews, speakers).
- Using protocols student teams share and receive feedback from a variety of sources.
- Student teams reflect on feedback.

Deep Dive:

Milestone 2.1 Teams Form Build

Milestone 2.2 Organize and Plan

Milestone 2.3 Add Community Focus



Emily
The Beginner



Focus On

Building strong student teams.

Establishing simple team norms.

Introducing students to the community focus.



Quick Start Spark

- ▶ Use the "[Compass Points](#)" activity to help teams understand each other's strengths, preferences, and working styles. This builds trust and lays a foundation for collaboration.
- ▶ Guide teams to create "[Community Agreements](#)" using a template. Focus on mutual respect and shared decision-making to ensure smooth collaboration.
- ▶ Facilitate a [brainstorming session](#) where students identify community issues that resonate with their driving questions. Use examples to inspire their ideas.



Mike
The Aspiring Pro



Focus On

Using student-driven inquiry to deepen engagement.

Assigning meaningful team roles.

Incorporating early community interaction.



Quick Start Spark

- ▶ Introduce the "[Parts, Purposes, Complexities](#)" thinking routine to encourage students to analyze their driving questions and identify deeper areas for research.
- ▶ Implement specific group roles, such as Team Lead, Data Analyst, or Communicator, and ensure accountability through periodic check-ins, role rotation, and [project team contracts](#).
- ▶ Arrange a class-wide brainstorming session like [Options Explosion](#) to identify potential community partners, such as local organizations or professionals, and assign teams to research their impact areas.



Lisa
The Expert Practitioner



Focus On

Establishing advanced team dynamics.

Exploring complex aspects of the project.

Strategically embedding community impact.



Quick Start Spark

- ▶ Use "[Restorative Circles](#)" to address challenges or conflicts in teams while fostering trust and open communication. Integrate this as a regular team-building practice.
- ▶ Challenge students to use the "[Ways Things Can Be Complex](#)" chart to analyze the multifaceted nature of their topics, guiding them toward nuanced understanding and creativity.
- ▶ Ask teams to create a detailed "[Community Action Plan](#)" outlining their goals, target audiences, and how their project will directly address community needs.

03

Milestone

What Happens:

- Student teams build knowledge
- Student teams conduct interviews and surveys
- Student teams choose community impact focus
- Using protocols (link) student teams share and receive feedback from a variety of sources.
- Student teams develop their project, prototype, and presentation

Deep Dive:

Milestone 3.1 Teams Build Knowledge

Milestone 3.2 Share and Receive Feedback

Milestone 3.3 Develop Project Prototype



Emily
The Beginner



Focus On

Developing basic research skills.

Learning to give and receive peer feedback.

Creating their first prototype.



Quick Start Spark

Introduce a [“How to Research” infographic](#) and organize a classroom workshop where students use a librarian-recommended database to gather initial data.

Facilitate a simple 20-minute peer feedback session using a [“Two Stars and a Wish”](#) protocol to guide students through giving constructive comments on early work.

Use the [Prototype Development Guide](#) help teams sketch or outline their project idea before building a simple, low-stakes prototype.



Mike
The Aspiring Pro



Focus On

Conducting meaningful interviews.

Structuring peer feedback sessions.

Iterating on prototypes.



Quick Start Spark

Have teams use the [“Tips for Effective Interviewing”](#) lesson to practice interviewing a peer, a family member, and a local expert, focusing on gathering diverse perspectives.

Use the [HTH Peer Tuning Protocol](#) to create a structured environment where teams present their findings and receive focused, actionable feedback from peers.

Engage in steps 4 and 5 of the [Prototype Development Guide](#) using a variety of feedback methods to help students gather feedback, make changes, and iterate.



Lisa
The Expert Practitioner



Focus On

Advanced project management and research.

Facilitating expert feedback sessions.

Preparing polished prototypes and presentations.



Quick Start Spark

Encourage teams to use [advanced project management](#) tools like Gantt charts or Scrum to track milestones and integrate their findings from interviews and research.

Connect teams with professionals through platforms like [Pathful Connect](#) or invite local industry experts to review students' work and offer guidance.

Share [examples](#) of [public products](#) and guide students in using the “Digging Deeper” routine to refine their prototypes and prepare compelling presentations.

04

Milestone

What Happens:

- Finalize PBL projects and presentations.
- PBL “Rehearsals”
- Tune PBL with feedback, reflection, and revision.
- Determine showcasing process

Deep Dive:

Milestone 4.1 PBL Rehearsal

Milestone 4.2 True Finalize PBL Showcase

Milestone 4.3 PBL Showcase and Celebration



Emily
The Beginner



Focus On

Practicing public speaking basics. ▶

Simplifying presentations. ▶

Incorporating peer feedback. ▶



Quick Start Spark

▶ Use a simple activity where students practice delivering their presentations in pairs, focusing on clarity and eye contact, using tips from the [“Presentation Rehearsal Checklist”](#) resource.

▶ Guide students to create a PowerPoint with minimal text and visuals, after reading [“The Power of Professional Presentations”](#).

▶ Organize a brief, structured peer-feedback session using a [“Quick Peer Tuning Protocol”](#) to refine their work.



Mike
The Aspiring Pro



Focus On

Refining presentation delivery. ▶

Enhancing presentation visuals. ▶

Using parent and facilitator feedback. ▶



Quick Start Spark

▶ Have students practice with the [“Public Speaking and Storytelling Tips”](#) for their presentation select tips that suit their style best.

▶ Ask teams to critically evaluate their slides using [“Tips for Effective Presentations”](#) and applying one improvement to make their presentations more engaging.

▶ Host a rehearsal where peers, experts, parents, and facilitators provide constructive feedback, using the [“Peer and Expert Feedback Form”](#) as a guide.



Lisa
The Expert Practitioner



Focus On

Achieving professional presentation quality. ▶

Perfecting through multiple rehearsals. ▶

Designing a memorable showcase. ▶



Quick Start Spark

▶ Share [examples of professional presentations](#) and have students rehearse their delivery in front of a cross-campus audience, incorporating feedback to achieve higher quality.

▶ Schedule iterative rehearsals where students [receive feedback](#) from various stakeholders, such as peers, teachers, and community members, to fine-tune their presentations.

▶ Collaborate with students to [plan the final showcase](#) layout, incorporating creative elements like thematic decorations, interactive exhibits, or live demonstrations to captivate the audience.

05

Milestone

What Happens:

- Showcase presentation of learning and celebrations
- Self and Team reflection
- Call to action

Deep Dive:

Milestone 5.1 PBL Reflection

Milestone 5.2 Call to Action

Milestone 5.3 Begin New PBL Journey



Emily
The Beginner



Focus On

Reflecting on growth during the project.

Introducing a basic call to action.

Preparing for the next PBL experience.



Quick Start Spark

▶ Use a guided reflection template where students answer [simple prompts](#) like “What did I learn?”, “What was challenging?”, and “What am I proud of?”

▶ Help students write a one-sentence [call to action](#) related to their project’s impact. Example: “I can reduce waste by recycling one item every day”

▶ Facilitate a [brainstorming session](#) where students list topics they’re curious about for their next project, keeping it low-pressure and fun.



Mike
The Aspiring Pro



Focus On

Deepening reflections to evaluate project impact.

Creating actionable next steps for the call to action.

Building a roadmap for future PBL projects.



Quick Start Spark

▶ Organize a peer-sharing circle where students present their reflections on how their work impacted the community or their understanding of the topic.

▶ Guide students to draft a short [action plan](#) with three steps they can take to continue the impact of their project in the community.

▶ Have students review the challenges they faced and suggest improvements for how they’ll approach their next project, encouraging collaboration within their teams.



Lisa
The Expert Practitioner



Focus On

Facilitating complex, multi-layered reflections.

Inspiring leadership through the call to action.

Mentoring others for the next PBL journey.



Quick Start Spark

▶ Use a reflection matrix where students evaluate their work in categories like teamwork, innovation, and community impact, then present findings in a visual format (e.g., infographic).

▶ Encourage students to [design a mini-campaign](#) (e.g., posters, social media, or a short video) to inspire others to take action on their project’s focus.

▶ Ask experienced students to [mentor newer students](#) in brainstorming and planning their next projects, fostering a culture of peer-led learning and collaboration.