



## Strategy Explorations: Project-Based Learning (PBL)

### Tools for Your Toolkit

Teaching is all about FLEXIBILITY. As you look for the right tools to help develop your project-based learning skills, Blue Apple has an abundance of ideas for you to try!

Explore the strategies in a fun and interactive way with the [PBL Thinglink](#), where you can click on the icons to discover a host of new strategies, or dive in using the list below. Identify your favorite ideas and give them a try. If they work for you, incorporate them into your pedagogical practice!



[PBL Thinglink](#)

## PBL Strategy List

Strategy Name	Strategy Description
B+ Exemplars	Students learn by observing models and by critiquing the work of others. So save or create a "B+ Exemplar " of how a project or assignment might look. Have students identify why the exemplar did well (it did, after all, receive a B+), as well as how it could be improved to earn that "A." When students make these observations themselves, they take greater ownership, and their learning sticks in a more durable way!
Backward Design	Got a sustained project that builds to a grand finale? Practice backward design to craft your project plans. Start by identifying the outcome you want and the date on which it will be complete. Identify the major milestones students would need to hit in order to meet that deadline. Then, work backward -- sequence your milestones and determine when they will need to be completed in order to achieve your end goal.
Choose Habits of Mind	Encourage metacognition and deep reflection by asking students to think about which <a href="#">Habit of Mind</a> they think will most support their work during a project or investigation. Afterward, ask students to determine if that was the Habit of Mind they needed most or if they would change their choice. Often students are surprised by which habits they used most in the investigation!
Chunk It!	When students are working on a large project, assist them in breaking it down into smaller tasks. Using labeled big blocks you can build a tower by chunking it. Or using big, labeled puzzle pieces, you can complete the puzzle. Help students understand that any task that seems daunting can be broken into smaller pieces and that celebrating small wins helps make large projects more manageable.
Citizen Science	The world needs your students' help! Show your students that they are part of a larger community of scientists by engaging them in <a href="#">citizen science projects</a> to help organizations like NASA, iNaturalist, or eBird.
Connect Across Content	After you determine the concept/topic of a PBL unit, identify 2 different content areas to integrate into your project. For example, if you are conducting a science investigation/data collection in your project, be sure to connect this to your math standard. Data collection is ripe for computational analysis. This helps students understand that learning doesn't just exist in content-area silos!

Strategy Name	Strategy Description
Connect with Another Teacher	Look for opportunities to work with another teacher who shares your same students on a PBL unit. This is a great opportunity for professional collaboration, but it also provides structure for your students so they physically “see” the connection between content areas as they move classrooms.
Cooperative Competition	Competition can motivate students, but it can also cause all sorts of problems. Get the benefits without the drawbacks by having your class collaborate to do something as well as possible. For instance, instead of having students race to finish their fact sheet first, ADD everyone's times and post the total on the wall. Then, next time, you can see if your class can beat their previous record. Students will support each other and cheer each other on as they strive to do their best... together!
Five-Step Picture Plans	Help students think with an appropriate level of detail about the work they're planning on a sustained project: have them narrow the steps they'll need to take down to five, and to create a <a href="#">poster</a> using words and pictures to outline their process. They'll have to identify the most essential action items, and to express them efficiently -- and creating the posters will help them see their work as manageable.
Genius Hour	Real passion is long-lasting. Help students persist in their passions by allowing them to choose a project to work on for one hour a week. The most important part of this strategy is making sure that they follow the project all the way through to completion—teach them that true passion doesn't give up!
Homework They Love	Allow students to replace some homework assignments with equally challenging work on topics they love. If your student is a proficient mathematician and doesn't need extra math practice, don't make them do it. Instead, use the opportunity to encourage them to design a project on something that interests them. For instance, have them write an opinion piece on a current event they care about, or about which car is the coolest!
Lego of Control	We don't always need to know what your students will come up with. "Lego" of control by giving students a few Legos and having them create something that symbolizes their learning. The creations they come up with and the explanations they provide will cultivate creative and critical thinking!

Strategy Name	Strategy Description
The Midway Mole	Want to help groups benefit from each others ideas? Need to rebalance group dynamics that are turning sour? Try The Midway Mole! At certain set points in a group project, have one person from each group move to a new project. They can share their insights about how their group was solving the projects challenges, and you can readjust groups to diffuse tension, rebalance workloads, or just mix things up and help students make new friends!
M.V.P.	When engaged in a PBL experience or a STEAM project, much of the benefit comes from the process of refinement. Help your students take advantage of this by setting a due date for an M.V. P. -- a Minimum Viable Product -- about halfway through your project timeline. This will encourage them to get a draft created that they can tinker with and improve. By creating several successive versions of their work, students will create better and better work, and they'll learn a valuable lesson about the power of iteration!
Perspective Partnerships	We can learn so much from people who are different than we are. Help your students see this incredible truth by partnering with organizations that support people with different lived experiences. A senior citizen center, the local VFW, or a chapter of the Special Olympics... connect your students and have them learn from people's lives, and to provide a valuable service to them.
Phone a Friend	When a group is struggling with a complex problem, sometimes it helps to have the input of others. Have the group write their difficulty down, and to identify some possible solutions they are considering. Then, "mail" this as a letter to another group, and have them respond with the solution or solutions they prefer, as well as why they think this approach would be the most beneficial.
Planning Ahead of Problems	Help your students become better planners and problem solvers with this simple strategy! Before students put any <a href="#">project plans</a> into action, have them stop to think about the five troubles they're most likely to encounter. Then, have them brainstorm how they can stop or mitigate those problems BEFORE they arise! The more students engage in this practice, the better they'll be at making predictions about their work and minimizing the difficulties they encounter during projects.



Strategy Name	Strategy Description
Progress Bar	Students like to visually see where they are in a process. To keep them engaged, create a Progress Bar on the board. For example, if investigating plant growth, you could visually display the steps: Set up plants-->Record data after 5 days-->Record data after 10 days-->Analyze data-->Watch videos/Read sources-->Present. Color in each step of the process as you complete it. Progress Bars give your lesson an instant game-like quality.
Reflection Journal	<a href="#">Journaling</a> is demonstrated to help students retain learning, and to help them manage and process their own experiences in the classroom. Incorporate it for academic reasons, or to cultivate social-emotional learning.
Share Your Awesome	Students care more about their work when they know it will have an impact outside their classroom. Identify how your students will showcase their work. Ideas include: public service announcements, podcasts, presentations, music videos, commercials, fundraisers, share fairs, or even a published book!
Six Thinking Hats	Help structure productive collaboration by assigning your students different perspectives to adopt with the <a href="#">Six Thinking Hats</a> . Pioneered by Edward de Bono in 1985, this approach allows students to know their role in a clear and helpful fashion, and can make sure all relevant points of view are represented.
Skill Swap	Students love to know that they are making a positive difference -- and they learn deeply by teaching academic skills to others! Combine these two truths by having students teach what they've been learning to students a year younger than they are. Connect with older classes to have them tutor your kids. Everybody wins!
Start with Why	Motivate students with a compelling question and engaging hook as you launch into your PBL unit. Compelling questions should be provocative, motivating, and empowering. Examples: How can we stop germs in their tracks? Will our state survive the next 100 years? Can 4th graders inspire change in public policy?
The Relevant Elephant	Want to know how your learning might be relevant to the lives of your students? Ask them! Post a large (2'x3') elephant picture on your wall. Then, tack on a piece of paper with a topic you're studying. Tell your students you're afraid that what you're learning might be "irrelevant," and challenge them to come up with ways it might be useful now or in the future. By shifting frames to let your students argue for relevance, you increase buy-in and find out new ways your learning might be meaningful!

Strategy Name	Strategy Description
Their Work Matters	Whether it's a school, community, or global issue, empower your students to make a difference through their work. Students should know from the beginning that their project is going to make the world a better place by building awareness, raising funds, creating a solution, or building relationships.
Tie in SEL Lessons	As you move through the lessons in a PBL unit, find opportunities to bring in SEL topics such as CASEL's core competencies. For example, if you are having students review each other's work, it is a great opportunity to explicitly teach relationship skills and social awareness as students respond constructively and respectfully.