



# Environmental Project-Based Learning Resources



## Environmental Project-Based Learning Preparing the Next Generation of Problem-Solvers through Environmental Project-Based Learning



### WHAT IS E-PBL?

Environmental project-based learning (E-PBL) offers opportunities for students to actively explore and address environmental challenges while building skills in teamwork and communication, research, data collection and analysis, community engagement, and reflection. E-PBL enables and requires students to delve deeply into their academic content while investigating issues in their own backyard.

### WHY E-PBL?

PBL has been shown to help students develop critical skills while delving deeply into their academic content. Studies show that students who are engaged in PBL score higher on standardized tests than their peers learning in a more traditional classroom. Further, PBL students develop higher-order skills that enable them to apply what they have learned in more meaningful ways. <https://www.neefusa.org/environmental-project-based-learning>



### The Environment as a Compelling Portal for PBL



Equipping students to successfully navigate the complex environmental challenges of the 21st century by re-thinking, re-designing and creating viable solutions is emerging as a key task for educators. At first glance, the prospect of adding one more responsibility into an already demanding mix of content requirements seems daunting. However, many creative educators are taking up the charge to increase environmental knowledge by engaging their students in school and community projects that make a difference today and impart core academic, workforce readiness and life skills that are critical for the future. [https://my.pblworks.org/resource/blog/the\\_environment\\_as\\_a\\_compelling\\_portal\\_for\\_pbl](https://my.pblworks.org/resource/blog/the_environment_as_a_compelling_portal_for_pbl)

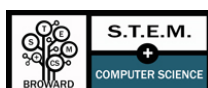


### What is ExploraVision?



*The ExploraVision competition for K-12 students engages the next generation in real world problem solving with a strong emphasis on STEM. ExploraVision challenges students envision and communicate new technology 20 years in the future through collaborative brainstorming and research of current science and technology.*

ExploraVision is a science competition that goes beyond the typical student science competition and into what it takes to bring ideas to reality. A teacher will sponsor and lead his/her students as they work in groups of 2 – 4 to simulate real research and development. A teacher will guide his or her students as they pick a current technology, research it, envision what it might look like in 20 years, and describe the development steps, pros & cons, and obstacles. Past winners have envisioned technologies ranging from a hand-held food allergen detector to a new device to help people who have lost limbs regain movement in real time. <https://www.exploravision.org/what-exploravision>



STEM + Computer Science with Environmental Stewardship  
<https://www.browardschools.com/stem>