

About the Handbook

There are many models of Project Based Learning. This Handbook reflects a specific model developed by the Buck Institute for Education (BIE). This model draws on the experiences of teachers who successfully use PBL in their classrooms, as well as recent research on student learning. It also incorporates the best practices of educators and organizations around the country who disseminate information on PBL.

The purpose of the Handbook is to guide teachers through all phases of successful PBL, from deciding on a project theme to reflecting on the outcomes of a project. The Handbook is designed to support both experienced and novice PBL teachers. It can be used as a supplement to the BIE Training Workshops in PBL, which are conducted regularly throughout the year, or as a stand-alone guide to PBL. Regardless of how you use it, we believe the Handbook will enable you to design high-quality projects in your classroom.

STANDARDS-FOCUSED PROJECT BASED LEARNING

Since the first edition of this Handbook in 1999, over 5,000 teachers have successfully used the BIE model to implement projects in schools across the United States and abroad. The new edition retains the tools and ideas that teachers have found useful but introduces a more refined guide to planning projects. Most important, the new Handbook takes special note of the need to design *standards-focused* projects that reflect today's emphasis on content, accountability, and performance.

We believe that the learning of specified subject-matter concepts and standards should be at the heart of PBL. Our projects begin with curriculum standards and use aligned assessments to determine what students have learned. They are designed around a Driving Question that knits together intended outcomes and project activities. Finally, they incorporate vital workplace skills and lifelong habits of learning, and they help teachers draw on the resources of the community to move project boundaries beyond the four walls of the classroom.

IMPORTANT NOTES ABOUT THE BIE MODEL OF PROJECT BASED LEARNING

BIE’s goal is to establish standards-focused PBL as a central strategy by which specific curricular goals and standards can be attained. In other words, we have not written this Handbook to help teachers “do projects.” Projects are too often the students’ reward for learning in traditional ways—they are the “icing” rather than the “cake.” For example, after lecturing about the parts of the Constitution in a government or social studies class and assigning textbook reading for homework, a teacher might break students into groups and ask them to write a constitution for a new lunar settlement. In this case, the project follows the learning as dessert follows the main course. This lunar constitution assignment could be an interesting and challenging project, but it does not fall within our understanding of PBL. For us, PBL is the central framework upon which the teaching and learning of core concepts is built, not a supplementary enrichment activity to be undertaken after the hard work of learning is done.

At the same time, another important message in this Handbook is that PBL should not replace all other methods in the classroom. The BIE model encourages teachers to rely on their experience and expertise to blend projects and conventional methods of instruction into an integrated whole that provides students with a rich blend of content, skills, and opportunities for academic and personal growth.

PROJECT BASED LEARNING VERSUS PROBLEM BASED LEARNING

In this Handbook, the term PBL refers to Project Based Learning. However, others use the term PBL when referring to Problem Based Learning. What is the difference between Project Based Learning and Problem Based Learning? First, few people agree on the precise meaning of these terms, and they are often used interchangeably. Both describe a process of using “ill-structured” problems that are deliberately designed to require students to learn content-specific knowledge and problem-solving skills as they seek diverse solutions to meaningful questions.

In the BIE vocabulary, Project Based Learning is a general term describing an instructional method that uses projects as the central focus of instruction in a variety of disciplines. Often, projects emerge out of an authentic context, address controversial or significant issues in the community, and unfold in unexpected ways. In contrast, BIE’s design for Problem Based Learning uses realistic scenarios and role-plays to lead students along a more carefully planned path toward a set of prescribed outcomes.* Regardless of how it is labeled, a project must be rooted in content standards and allow for student-centered inquiry into a meaningful question.

The Handbook is written for Project Based Learning, but it also introduces the terminology commonly used in the BIE Problem Based Economics (PBE) and Problem Based Government (PBG) units developed for high school teachers. For more information about these products, consult the BIE Website, www.bie.org.

USING THE HANDBOOK

This Handbook presents a systematic guide to the design and implementation of standards-focused projects and is divided into the following sections:

- An **Introduction** to Project Based Learning that presents the case for PBL and outlines the core objectives of PBL.
- A description of the **Design and Planning** process for creating successful standards-focused projects, along with **Idea Banks** of project resources and useful forms.
- **Examples** of typical projects.
- A section entitled **What Do PBL Teachers Say?**, offering expert advice and management tips from teachers who have successfully implemented projects in their classrooms.
- A **Project Planning Form** that can be used to plan your own project. This form can be copied from the Handbook and is available on the BIE Website.

*See N. Maxwell, Y. Bellisimo, and J. R. Mergendoller, “Problem Based Learning: Modifying the Medical Model for Teaching High School Economics,” *The Social Studies* 92, no. 2: 75–78.