

WHAT IS IT?

Project-based learning (also known as PBL) is a strategy that focuses on real world problems and challenges using problem solving, decision making and investigative skills. It is increasingly being used across all disciplines because of its capacity to engage students in the development of self-directed learning skills. Projects range in scale and type, and can be focused on academic, personal or industry problems, and involve external stakeholders as clients or partners (Thomas, 2000).

Characteristics of project-based learning typically include:

- The presence of a driving question or central concept
- The presence of a task, a process, a product and a reflection
- Students must learn through investigation of defined goals which should be constructive and knowledge building
- Projects are student-centered with teacher facilitation or guidance
- Projects are real-world and have significance to the student.

WHY USE IT?

(Adapted from [Sam Houston State University](#) )

Project-based learning can:

- promote effective goal setting, project management skills, effective project consultation and monitoring, and effective feedback (Garrison, 1999).
- transform student work habits and effectiveness (Thomas, 2000).
- support students' acquisition of new patterns of thinking where they learn how to capitalise on the wisdom of the group, and, most importantly, they continually learn how to learn together (Boss and Kraus, 2007).
- stimulate students to demonstrate a greater interest, engagement and mastery approaching various disciplines (Vasilienė–Vasiliauskienė, Butvilienė and Butvilas, 2016).

HOW TO DO IT?

This guide from Edutopia (2007) [How Does Project Learning Work?](#)  outlines key elements for understanding the process of planning and undertaking project-based learning:

1. Start with the essential question: Use a real-world topic and devise a question that poses a real-life situation or problem that students can tackle.
2. Design a plan for the project: engage students in decision making so that they have a sense of ownership from the outset; select activities that support the question and utilise the curriculum; recognise what materials and resources are available to support students.

3. Create a schedule: design a timeline for project components, this will have some flexibility but is important to keep students on track.
4. Monitor the students and the progress of the project: facilitate the process of the project, encourage collaboration and keep the project on track while maintaining students' sense of ownership. Use rubrics to help guide the project.
5. Assess the outcome: assessment can provide diagnostic feedback for educators and students and evaluate the progress of the project. Wherever possible, give students the opportunity to conduct self-assessment.
6. Evaluate the experience: educators and students will benefit from reflecting upon the experience both during and after the project through journaling, group reflection and discussion.

The Edutopia site also has links to further PBL resources such as:

- how to start projects
- writing effective driving questions
- scheduling
- assessment rubric and graphic organisers
- workshop activities
- project templates.



WHAT IF I WANT MORE?

- [Seven Essentials for Project-Based Learning](#)  (ASCD)
- [What is Project Based Learning \(PBL\)?](#)  (Buck Institute for Education)
- [Project Based Learning in Higher Education](#)  (Sam Houston State University)
- Crosthwaite, C., Cameron, I., Lant, P., & Litster, J. (2006). Balancing curriculum processes and content in a project centred curriculum: In pursuit of graduate attributes. *Education for Chemical Engineers*, 1(1), 39-48.
- [Project Based Learning: Am I Doing IT Right?](#)  [video 3:06]



REFERENCES

- Boss, S. and Krauss, J. (2007), *Reinventing project-based learning: your field guide to real-world projects in the digital age* (1st ed.). Washington, DC: International Society for Technology and Education (ISTE).
- Garrison, S. (1999) *Dual perspectives on the effectiveness of project-based learning in an online environment*. Paper presented at the Teaching in the Community Colleges. Retrieved from <http://tcc.kcc.hawaii.edu/previous/TCC%201999/papers/garrison1.html> 
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