

Project-Based Learning 101

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“Education is not preparation for life; education is life itself” – John Dewey

Active-learning modalities continue to enhance traditional teaching and learning methodologies, promoting inquiry-based, multidisciplinary, and authentic outcomes. Such approaches require greater levels of intention and effort on behalf of educators and students. Student-driven project-based experiences have been proven to develop deeper levels of understanding and new skillsets that will assist them in the world of academia and beyond (Thompson & Beak, 2007).

Project-based learning (PBL), a form of active-learning, heavily influenced by the constructivist views of Jean Piaget and John Dewey, is shaped by a basic belief that learners do not gain knowledge passively but do so based on the reality constructed by their past and present experiences (Edutopia, 2019). PBL can be traced back to the 1960s, when it was pioneered by medical and engineering college students. “The approach has been widely implemented at the elementary and secondary level with impressive results in student achievement, problem-solving capabilities, communication and understanding” (Thompson & Beak, 2007).

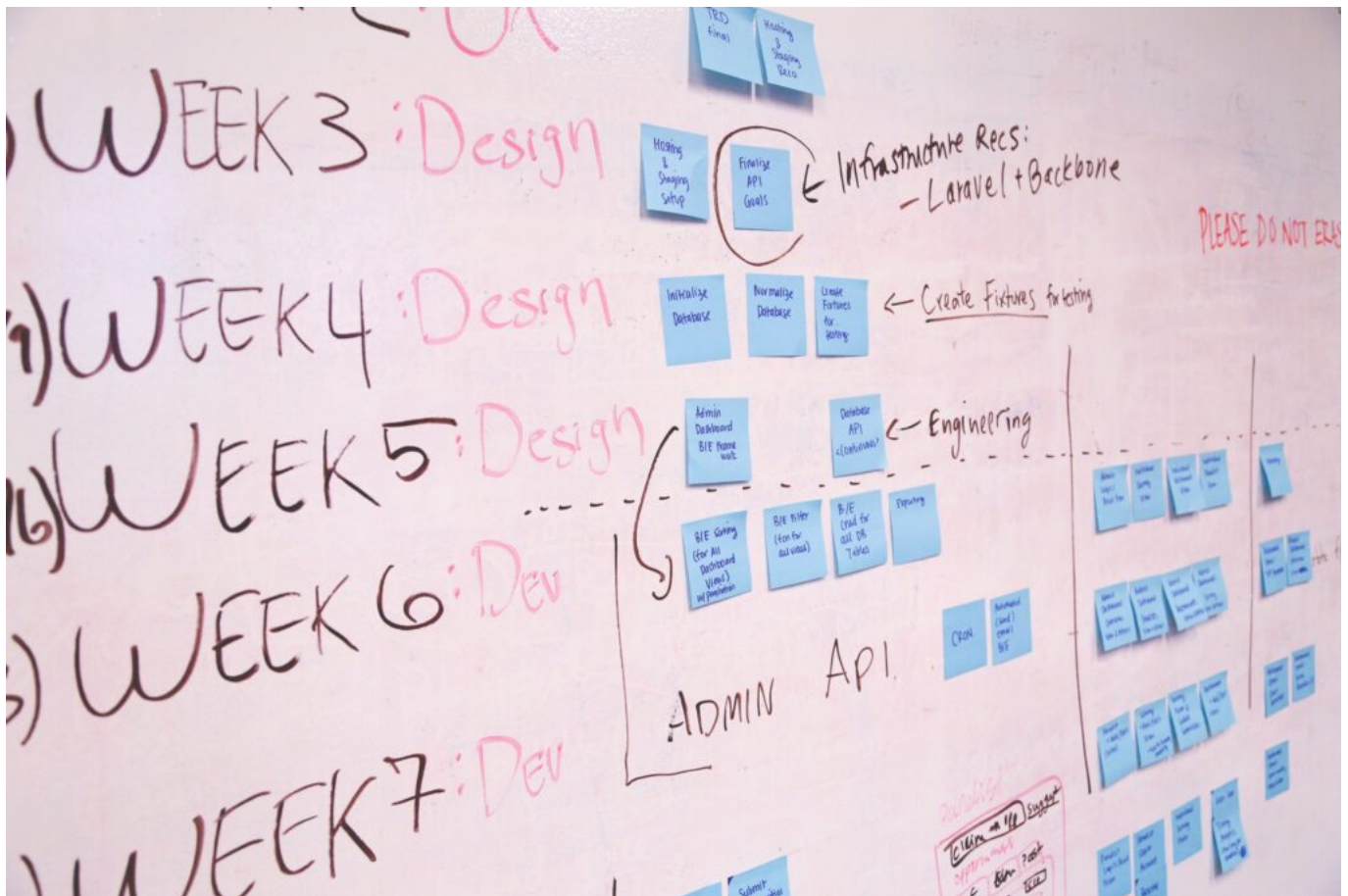


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Project-based learning uses open-ended questions/real world problems to construct performance-based, relevant, experiential learning. “At its essence project-based learning is focused on learning through one’s experiences” (Solomon, 2003). Project-based learning differs from that of traditional projects which are typically pre-planned and clearly based on a set of criteria. The concrete processes of PBL act as a guide and focal point of learning and as result, true knowledge is realized.

Among the many benefits associated with this modality are the elevated levels of metacognition and problem-solving as students assume full responsibility for making decisions about their learning, the outcomes and the very sophisticated pathways that precede. Project-based learning prepares learners for the real world, allowing opportunities to try on various roles while making connections across varying disciplines. In addition, project-based learning fosters skills that are not related to content, such as collaboration, research skills, project-management, and public speaking.

Benefits of Project-Based Learning

- Deeper student engagement

- Student autonomy
- Sustained inquiry
- Innovation
- Multidisciplinary conversations
- Greater retention of knowledge
- Real world relevancy
- Soft skills development

Research has proven active-learning, specifically, student-driven experiences, yield tremendous success. However, these endeavors are not synonymous with simple, quick fixes, or easier approaches. “Projects are usually long-term and concept rich. Therefore, this learning approach involves greater commitment and organization on the faculty member’s part” (Blumenfeld, *et. al*, 1991). In addition, educators should expect to carefully reconstruct their present model when transitioning to a PBL schema. Below is a list of considerations for making the transition.

What you should consider if you transition to a project-based learning curriculum:

- Consider student preferences and skill sets when assigning questions/problems
- Create well-balanced student teams
- Empower students to make choices and enact their voices
- Enlist mentors to help in the process
- Provide project management guidance
- Meet continuously with varying team representatives
- Welcome conflict (as challenges present room for problem-solving)
- Celebrate small victories

General criteria to guide the PBL Learner Experience:

1. Start with a question
2. Design a plan for the project
3. Create a schedule
4. Monitor the progress of the project
5. Assess the outcomes
6. Evaluate the experience

Below are suggested questions to guide the PBL Educator/Facilitator Experience:

- What is the learner’s projected role in the project?
- Who is the learner’s audience?
- What kind of support will be needed and who can provide it?
- What scaffolding can support learning outcomes?

- How is effectiveness measured in every stage?
- How can students integrate community into their experience?
- What attributes are most critical to student success?

References

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Solomon, G. (2003). Project-based learning: A primer. *Technology and Learning* 23 (6), 20-26.

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Additional Project-Based Learning Resources

<https://www.edutopia.org/project-based-learning>

[High Quality Project Based Learning \(hqpbl.org\)](http://highqualityprojectbasedlearning.org)

[Successful Project-Based Learning | Harvard Business Publishing Education](http://successfulprojectbasedlearning.org)

[Project-Based Learning Strategies - Center for Excellence in Learning and Teaching \(iastate.edu\)](http://projectbasedlearningstrategies.org)