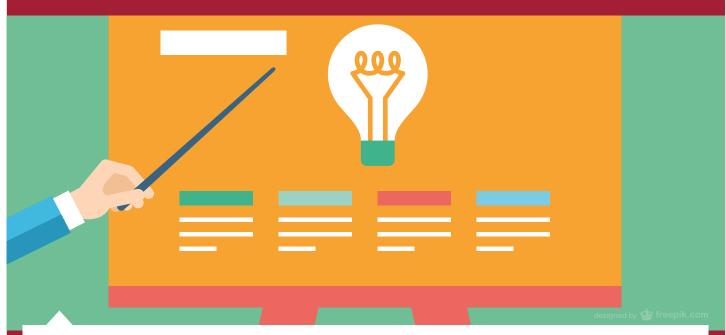# PROJECT-BASED LEARNING

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WHAT IS IT?

Project-based learning is a dynamic student-centred approach in which students gain knowledge and skills by designing, planning and carrying out a project where they are required to investigate and respond to an engaging and complex problem, or challenge. This can occur as a collaborative and/or independent project over an extended period of time. Project-based learning begins with the end product or presentation in mind, which serves as evidence of their learning process and engagement with the problem or challenge.

WHY USE IT?

- Project-based learning is grounded on experience motivating students to 'learn by doing' through the exploration of authentic problems, working with others, and in building real solutions, which increases students' interest and value of the learning process.
- Project-based learning activities provide opportunities for students to foster creativity as they develop high quality, authentic products or presentations that show evidence of their engagement with real world situations, which may be adapted for their future courses.
- In the process of completing their projects, students are given the opportunity to gain a deep understanding of concepts by exercising their problem solving, decision-making and investigative skills.

WHAT COULD I USE?

- vUWS Tools - Group Tools, Journal, Self and Peer Assessment
- Mindmap apps for brainstorming and development of ideas
- Presentation tools like Prezi, PowerPoint, for end product/s
- Learning Studio or Collaborative Learning Spaces

CONSIDERATIONS

- In project-based learning, the primary role of the instructor is to facilitate student learning through guidance and feedback during the learning process.
- In order to make a project more meaningful to students, they need to have a voice and choice in the project process. Present students with opportunities to develop their own approaches to tackling a problem, for instance, how to design, create, and present the end product/s. It may be useful to provide a framework of options to prevent students from becoming overwhelmed by choices.
- Project-based learning can work as independent and/or small group projects where students can develop confidence and self-direction as they move through both team-based and independent work.

HOW DO I DO IT?

1. An authentic problem or situation is central in giving students a sense of purpose and challenge. The question should be provocative, open-ended, complex, and linked to core concepts, theories or practices.
2. Give students time and opportunities to build such skills as collaboration, communication, critical thinking, and the use of technology, which will serve them well in the workplace.
3. Instructors should set learning goals, including timelines and milestones to assess student progress and provide feedback.
4. In addition to providing direct feedback, use rubrics for self and peer review of project outcomes and processes.

WANT TO KNOW MORE?

- Larmer, L., Mergendoller, J.R. (2010) Seven Essentials for Project-Based Learning. *Giving Students Meaningful Work*, 68(2) 34-37. Available at: http://www.ascd.org/publications/educational_ leadership/sept10/vol68/num01/Seven_Essentials_for_Project-Based_Learning.aspx
- Lee, J. S. , Blackwell, S. , Drake, J. , & Moran, K. A. (2014). Taking a Leap of Faith: Redefining Teaching and Learning in Higher Education Through Project-Based Learning. *Interdisciplinary Journal of Problem-Based Learning*, 8(2). Available at: http://dx.doi.org/10.7771/1541-5015.1426
- Project-Based Learning Strategies (University of Texas)
- Project-based learning in higher education (Sam Houston University)
- Why Teach with Project-Based Learning?: Providing Students With a Well-Rounded Classroom Experience (Edutopia)