

Digital problem/project based learning

General assessment

Digital problem/project based learning is an active methodology that allows students to see the real world application of the learned concepts, stimulating the taste for learning.

Aim

This teaching method appeals to the student's ability to think and actively engage in real and personally meaningful projects by performing meaningful learning.



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Target group

Taking into account the proper adaptations needed to some students with disabilities, it is a great way to engage in significant learning with all students. Step-by-step guidance allows students not to feel lost or disheartened in the middle of a large project.

Description

Digital problem/project based learning is a teaching method whereby students are guided by their teachers through a step-by-step real problem solving process, typically: identify the problem, develop a plan, do a reality test. Students reflect on the plan while in the process of designing and completing the project. The teacher provides a topic for either individual or group learning to be developed by the students through research or project work and monitored by the teacher).

Evaluation

This method has great potential for inclusion and can be transformative for students, especially those who are further away from the educational opportunity, as it mixes content mastery, meaningful work and personal connection to create powerful learning experiences, promoting student personal growth.

Problem behavior, risk and protective factors

Students may not accept the method well and therefore invest less in studies by learning less. On the other hand, there is a great ease of access to sources of information available on the Internet, so students can resort to dubious research sources, without the concern with the origin and veracity of the information found. Teachers should give accurate instructions and closely monitor all phases of work and provide information that allows self-regulation of learning.

Effort

In digital problem/project based learning the teacher must know very well the method. On the other hand, access to the available technology is an important factor. The teacher should be familiar with the technology.

Degree of innovation

This active methodology has more and more supporters among educators. Enhancing the use of this method through digital means remains a challenge.

Experience with the method

A well designed digital problem/project based learning provides all students, including students with special educational needs the opportunity to develop many skills such as group work, managing projects and holding leadership roles, written communications, critical thinking and analysis, explanation of concepts based on the real world examples and problem solving involving various disciplines.

Brief instruction how to implement the method

The teacher together with the students defines the theme and launches the challenge. After that students examine and define the problem and develop a plan; explore what they already know; define what they need to learn and how they can acquire the information and tools needed to solve the problem; evaluate possible ways to solve the problem; solve the problem and communicate their outcomes.

Strategies for teachers successfully implement digital and inclusive Project-Based Learning (PBL):

- Encourage reflection and metacognitive skills: PBL should prompt students to reflect on their learning and develop metacognitive skills. Encourage them to think about how they are learning, what they are learning, and how to improve their learning.
- Focus on facilitation skills: As a teacher, develop strong facilitation skills to guide students through the PBL process effectively. Facilitate discussions, manage group dynamics, and provide support throughout the project.
- Utilize self-assessment tools: Implement self-assessment tools to help students take ownership of their learning and identify areas for improvement. It empowers students to evaluate their progress in PBL and make necessary adjustments.



[Photo by Pexels](#)

Search access, links, websites

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

<https://teaching.cornell.edu/teaching-resources/engaging-students/problem-based-learning>

Literature

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