ELEARNINGNEWS ARTICLE

Year 6 - number 209 Wednesday 29 june 2022

Project Based Learning (PBL): what it is and how it works

Project-based learning can significantly improve the effectiveness of a training course and amplify its effects in the extra-curricular context. Let's find out how.

Traditional education is often anchored in inadequate training methodologies that do not provide students with the stimuli, methods and solutions to apply the notions learned to non-training reality and work activities. This is because the teaching approaches used are still very much linked to the **mechanical memorisation of notions alienated from their concrete uses** in the real world.

But how can we ensure that training contributes to developing the critical intelligence needed to address and solve the complex issues faced in everyday (work and non-work) reality?

In this article, we will look at the opportunities offered by **Project Based Learning (PBL)**, focusing in particular on:

- What is Project Based Learning
- The 7 essential elements of Project Based Learning
- The main advantages of project-based learning

What is Project Based Learning

Project-based learning is a teaching approach designed to give students the opportunity to develop their skills from projects based on challenges and problems they might face in the real world.

This teaching methodology thus allows students to learn from complex and strongly goal-oriented experiences, unlike traditional education, which promotes the pure memorisation of information and notions disconnected from their practical use.

At the same time, Project Based Learning is designed to put each participant in the condition of a "**student-worker**" and ensure that they learn to collaborate, communicate effectively, think critically, and move away from the pure assimilation of standard training concepts.

The 7 essential elements of Project Based Learning

The PBL model consists of these 7 main elements.

1. PROBLEM TO BE SOLVED

First, the project is framed by a **significant problem** to be solved or a question to be answered. To ensure maximum involvement, we recommend creating projects or tasks that are authentic, connected to the real world, interesting for the students and, above all, linked to the curriculum.

2. INVESTIGATION

Once the problem has been assigned, students engage in a rigorous process aimed at asking questions, finding resources and information useful in solving it. The **investigation phase** can last up to weeks and involve students in activities outside the classroom. Drawing from a variety of resources (interviews with experts, use of new tools and technologies, etc.), students interact with the world around them while obtaining the information they need to develop a well-researched answer to the question posed in the first phase and develop communication skills and critical thinking.

At this stage, it is crucial that the teacher constantly assesses the learning outcomes and student participation.

3. AUTHENTICITY

Authenticity increases students' motivation and learning. A project can be authentic in several ways, often in combination: it can have an **authentic context**, such as when students solve problems like those faced by people in the world outside the school; it can involve the use of real-world processes, activities and tools; it can have a real impact on others, such as when students address a need in their school or community (e.g. design and build a school garden, improve a community park, etc.) or create something that will be used or experienced by others. Finally, a project can have **personal authenticity** when it speaks of the students' concerns, interests, cultures, identities and problems in their lives.

4. VOICE AND CHOICE

Having a voice in a project creates a **sense of ownership** in students, because it makes them care more about the project and work harder. If students are unable to use their judgement when solving a problem and answering a guiding question, the project is simply reduced to carrying out an exercise or applying a set of given directions.

5. REFLECTION

During a project, students should reflect on what they are learning, how they are learning and why they are doing it. Reflection can take place informally, but it is preferable if it is part of the project and assessment itself. Reflecting on the ongoing learning process helps students to consolidate what they have learnt and to think about how it might apply elsewhere, beyond the project.

6. CRITIQUE AND REVISION

Feedback is an essential element of any activity because it contributes to improving processes and products. Therefore, students should be taught how to give and receive constructive peer **feedback**, guided by formal feedback rubrics, templates and protocols.

7. PUBLIC PRODUCT

The final element of Project Based Learning is the so-called '**public product**', i.e. the phase in which students make their project work public by sharing and explaining it or presenting it to people outside the classroom. There are two main reasons for creating a public product: firstly, a public product greatly increases students' motivation and encourages high quality work; secondly, by creating a product or presentation, students make tangible what they have learnt and, at the same time, increases the social dimension of learning.

Advantages of project-based learning

As we have seen, traditional learning hardly ventures beyond the realm of the purely academic. Project-based learning, by contrast, connects students to the world outside the classroom and prepares them to face real-world challenges in a way that mirrors what professionals do every day.

The main advantage of this teaching approach is that it helps students to be self-sufficient, creative and critical thinkers capable of tackling any challenge.

Let us therefore see in detail what the main advantages of Project Based Learning are.

1. EMPHASISES TEAMWORK

When students work together to solve a real-world problem, their interpersonal skills improve dramatically. In addition, the collaborative nature of projects enhances social and emotional learning programmes.

2. DEVELOPS CRITICAL THINKING

Being engaged in problem-solving helps hone critical thinking and problem-solving skills.

3. FACILITATES DEEP AND LONG-TERM LEARNING

Project-based learning offers students the opportunity to engage deeply with the target content, focusing on long-term retention of the information learned.

4. INSTILS SELF-CONFIDENCE

During the PBL phases, students engage in the learning process and express their opinions, building self-confidence.

5. INCREASES INVOLVEMENT

The PBL structure helps build intrinsic motivation in students because it links learning to a central question or problem and a meaningful outcome. In this way, their natural curiosity about the topic increases and they end up wanting to understand the answer or solution to the problem, actively engaging.

6. IMPROVES DECISION-MAKING SKILLS

Project-based learning improves students' decision-making skills because it puts them in a position where they have to make critical decisions while carrying out projects. For example, decisions on the research path or the tools that should be used to achieve an effective result.

7. DEVELOPS TECHNOLOGICAL COMPETENCES

In the investigation phase, students are also motivated to identify and use technological tools that can help them achieve the intended learning objectives. Technology and the Internet, for example, can help them in their research, analysis, and consideration of alternative solutions.

8. FACILITATES MULTIDISCIPLINARY LEARNING

Using the so-called 'project-based approach', students are pushed to achieve long-term goals that have a lot to do with real-life problems. This enables them to observe the complexity and interdisciplinary aspects of any job or activity in a more realistic way, helping them to prepare for future challenges.

Translated with www.DeepL.com/Translator