## **PROJECT-BASED LEARNING (PBL)**

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**Abstract** - *Project-based learning (PBL) is a novel or imaginative educational strategy. The use of projects in the classroom allows students to investigate issues and difficulties from the outside world while also gaining valuable skills. A modern method of instruction known as project-based learning (PBL) has recently gained popularity across a variety of academic fields and across several national settings. We conclude by saying that the studies contrasting PBL's relative productivity are largely consistent in showing that it is more effective at retaining knowledge over the long term and applying it.* 

In a problem-based learning (PBL) approach, students learn about a subject by collaborating in groups to find a solution to a problem. The motivation and learning of the students and teachers are driven by this issue.

## Introduction -

PBL is a proactive method for increasing student engagement and inspiration in their educational endeavors. The primary goal of several learning techniques used in the teaching method is to empower students to actively address the challenges that are put before them (Martn and Rodrguez, 2015). The projectbased learning approach is an alternative that involves interaction with the study objective and culminates in the completion of an assignment by the students that has been recommended by the teacher<sup>(1)</sup>.

Briefly stated, project-based learning evolved from the concept of constructivism, which holds that learning is perceived as an intellectual construction. Accordingly, students learn through the development of novel ideas on their own initiative, show that they have understood them using various presentation forms, and gain expertise and knowledge that will serve as a solid foundation for their future in the global community.

### Objectives of the Study -

The study attempts to accomplish the following goals through the use of cooperative learning, an active strategy that enables students to accomplish both social and academic goals, so fostering acknowledging for all learners without distinction. Having an understanding of how cooperative work functions is important for developing the operational structure of the newly launched PBL. More proof of PBL's effectiveness has just been provided through an empirical investigation. The research team randomized the groups of students to participate in one of the three scenarios (lecture-based, or self-study groups, PBL), and they discovered that those who participated in the PBL group had an increased chance of changing their conceptualizations, compared to those provided to both of the remainder of the two scenarios in conceptual tests after the instructional session and in a post- test that was postponed one week later.

Teachers build up an well-organized system of correct collaboration in order to hinder the growth of the predetermined goals as well as other competing goals, such as communication, collaboration, and social awareness<sup>(2)</sup>.



Figure 1: The process of PBL

#### PROJECT-BASED LEARNING IN LANGUAGE TEACHINGAND LEARNING

In numerous ways, project-based learning (PBL) constitutes a productive and effective teaching strategy. Greater emphasis should be placed on how PBL might be modified to effectively teach language in secondary education. PBL learning has been extensively examined, and various publications have explored the fundamental benefits of using PBL in educational situations. Future generations of people will require skills to be able to overcome concerns and problems related to the global environment, so students should practice working on these issues in class. Students need to develop the ability or capacity for using their comprehension of science in circumstances that require decision-making and problem-solving expertise, rather than simply memorizing the material without comprehension of the facts and value associated with the knowledge<sup>(4)</sup>. The following four key concepts from the field of learning sciences are essential to project-based learning: To make it possible for students to learn effectively,

- 1. Work continuously to improve their comprehension,
- 2. Working collectively,
- 3. Authentic learning environments that are appropriately complemented by cognitive<sup>(5)</sup>.

The success of project-based learning should focus on teaching expertise that is student-centered and developing a close-knit community between students and teachers<sup>(6)</sup>. The teacher and student both grow to play different roles as a result. Students are expected to expect self-indulgent learners who can endure the ambiguity and unpredictability of project-based learning projects, and teachers frequently have to masquerade concurrently as developers, the promoters, facilitators, and leaders in project-based learning<sup>(7)</sup>.

Through their active participation in the work that has been allocated to them and their use of that knowledge to improve the future of the international economy, students are taught a course of knowledge through project-based learning. The pupils have the opportunity to engage with the world physically, intellectually, and socially in an effort to discover the purpose or the body of knowledge required for the growth of this modern world. As a consequence, the learner gains a thorough understanding of the subject.

#### Preparation for the accomplishment of PBL:

In project-based learning, the instructor is expected to educate the group for the project. However, he will mostly delegate the position of leader to the students, who will oversee the entire process. PBL's primary goal is to connect pupils to the outside world so that both they and the global economy can grow mutually beneficially. Because of this, the achievement of PBL is entirely and substantially dependent upon the encouragement of students, and an effective educator will be able to not only awaken the desire to learn and think, but also to start and maintain a suitable degree of engagement until the process is complete. All of this requires a little bit of different preparation, and it doesn't just come down to submitting a simple paper to the school teacher as a record. It may be true that reflection is a necessary component of project-based learning, and that this task is not very challenging to complete. However, we must make sure that the results acquired are not ignored at any cost, and that students are driven to complete the task for the benefit of human welfare.

## **METHOD STEP 1: Context and Selection of a project**

The teacher should set up a scenario where the pupils begin planning their contributions to the assigned projects. These projects should be discussed separately by the teacher and the pupils. The teacher should provide any essential or significant direction so that the student has as much opportunity as possible to complete a project. First, it must be acknowledged that not all circumstances have been created for our educational system to facilitate the transition to a PBL paradigm. The reasons for this include the extensive course requirements for all courses, the level of responsibility placed on students while they are enrolled in school, the unreliable school infrastructure, teacher preparation programs, etc. PBL provides an opportunity for the entire class to engage with the outside world, accept their differences, and grow as a team through fostering team spirit. It is not just for the top student

#### STEP 2: Make a plan for PBL and Make an outline

As it encourages teachers to be involved and creative, this is a significant, extremely engrossing, and restorative element of PBL. Due to the second step's ease of completion and its benefit of creating realistic employment chances. The concepts have now been placed in their proper perspective. Following the selection of the project program's content, the teacher and students should have complete flexibility to discuss it. The supplied foundation of PBL is completely clear if any of the offered topic content has been stratified or the student must deal with the context, but for the time being, the student and instructor can work together to make the content clear and sorted. For instance, if a student receives a topic on soil composition, the student will gather a variety of soil samples for the purpose of the project and discuss all of the details alongside the teacher for improved guidance.

# **STEP 3:** The rational structure of PBL and exhibition of the project

Project work should begin in accordance with the prepared or roughly formed project's structure or outline. As soon as the project-making process begins, the student's job must be completed responsibly. The teacher's duties include advising and motivating the students, supervising and reviewing their work, and making necessary revisions to the student project. Following that, the student completes the work provided with proper understanding, and the knowledge acquired is real and lasting. But you should also consider the following when planning a project:

- Why was this project assigned?
- What is the PBL's primary objective and end result?

## **PBL** goals

Students that participate in project-based learning should learn the subject matter, develop project-specific skills, and comprehend the project's objectives.

It will assist students in acquiring talents that they can apply for the good of the world and the future.

#### **STEP4: Evaluation and Results**

As soon as the project is finished properly, the professors and students review it and examine the outcomes, which will result in knowledge that will last a lifetime. It is based on the project's goals, and after the project is finished and carefully analyzed, its success or failure is discussed. In order to amend or remove errors from their work and recall all of their knowledge, the students debate and plan adjustments to their work. The PBL is not a straightforward learning process; it demands greater focus and commitment to the project's subject, and the information gained from it is rigid and enduring. The right direction from the teacher to the learners is essential for precise and accurate information. Hence, the collaborative effort between students and their teacher produces the ideal assignment for better knowledge and informational pieces.

#### CONCLUSION

Empowering society think differently in order to produce autonomous thinkers and learners is one of the primary objectives of project-based learning. Not just students and teachers are affected by the practical application and diffusion of the knowledge learned through PBL, but also many other people. The pupils will eventually have to enter the workforce where their performance will be assessed together with future generations' well-being. The quality of their collaboration, planning, organization, critical thinking, knowledge, abilities, and other important factors that help the students must also be taken into consideration while evaluating their work in addition to its results. PBL is the most effective and most accurate way for teaching kids the correct and superior knowledge. Project-based learning is an approach of imparting knowledge to students by getting them interested in the work that is given to them and utilizing that knowledge to improve the development of the global economic system.

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