



Strategies to accomplish the benefits and drawbacks of problem-based learning

Q Wang*

Department of Educational Sciences, University of California, California, United States

*Corresponding author. E-mail: qun22@ac.edu

Received: 01-Nov-2022, Manuscript no: GJTE-22-83009, **Editor assigned:** 03-Nov-2022, Pre QC no: GJTE-22-83009 (PQ), **Reviewed:** 21-Nov-2022, QC no: GJTE-22-83009, **Revised:** 30-Nov-2022, Manuscript no: GJTE-22-83009 (R), **Published:** 07-Dec-2022, DOI: 10.15651/GJTE.22.10.034

DESCRIPTION

Problem-Based Learning (PBL) has become popular across many facets of higher education. It is an instructional strategy in which groups of students use deliberately crafted, open-ended problems to work through information to a solution. Initially, project-based learning, or PBL as it is more often known, was employed in several business major curricula. However, it is currently being used by students of all educational levels and in a wide range of fields.

Small groups of students frequently collaborate during the PBL instructional process. Each student assumes a role within the group, either formal or informal, and the roles frequently change. The emphasis is on the student's reflection and logic in creating their own learning.

Clarifying concepts, describing problems, brainstorming, organizing and forming hypotheses, learning objectives, independent study, and synthesizing are all parts of the Maastricht seven-jump process. To put it briefly, it involves figuring out what they already know, what they need to know, and how and where to get fresh knowledge that could help them solve the issue.

Advantages

There are advantages to Problem Based Learning (PBL). Since it is student-centered, it promotes active learning, which improves knowledge understanding and retention. Along with that, it aids in the development of transferable life skills. It can be utilized to improve material understanding while also encouraging the growth of teamwork, communication, problem-solving, critical thinking, and self-directed learning abilities. PBL may put students in a position to function at their best using real-world experiences. Diverse points of view might present various interpretations and solutions to an issue by utilizing collective group intelligence. Here are the benefits and restrictions of problem-based learning.

Improved Capability and Comprehension

Giving the meaning, applicability, and relevance of the learning materials greater weight results in a better grasp of the topics covered. Students become more skilled when they are assigned issues that are increasingly difficult and significant. Real-world situations and challenges help students learn in a deeper, more enduring way and improve the transferability of their knowledge and abilities from the classroom to the workplace. The transferability is increased since there is a wider range of applications for knowledge and skills. Additionally, it will be quite beneficial for them to picture how applying that knowledge and experience to their line of work or profession will feel.

Further Advanced Learning

Due to their superior problem-solving skills, learning competencies, self-assessment strategies, data collection methods, behavioral science, etc., PBL students do better than students in traditional courses. They learn in a situation that is similar to their future context, they expound more on the material offered, and this all contributes to higher understanding and knowledge retention. PBL examples can be used in medical education to include patient and doctor conversation, illustrate the narrative nature of the medical encounter, and look at the political and economic factors that contribute to the spread of disease. PBL can be used as a foundation for a discursive practices approach to culture that stresses the emergent, participant-constructed characteristics of social phenomena while still recognizing powerful social forces.

Disadvantages

Problem Based Learning (PBL) facilitation can be challenging and frustrating for some educators, and it calls for a larger staff participation in group-led discussions. Due to the simultaneous smaller group

learning, it uses a lot of resources and necessitates additional space and readily available computer resources. The difficulty in determining how much study is necessary and the applicability of the knowledge available is another issue that students raise. It's possible that students won't have access to teachers who can act as the motivating role models provided by conventional education.

Time-Consuming

Compared to instructors, problem-based learning instructors frequently need to spend more time preparing course materials and assessing student learning, despite

the fact that students generally like and improve their abilities to solve real-world problems in these classes. A portion of this annoyance is also brought on by the length of time spent presenting the most recent findings of each student's research project and by the disorganized way in which brainstorming is conducted.

Student's Traditional Preconceptions

The pupil's conventional presumptions are the issue with problem-based learning. The majority of pupils may have thought of their teachers as the primary knowledge-disseminators during their earlier years of education.