

## The Capability of Students to Collect Materials for Course Presentations Based on Project Learning

Sudarwan Danim<sup>1</sup>

<sup>1</sup>Universitas Bengkulu, Indonesia

Corresponding author e-mail: [sudarwan@unib.ac.id](mailto:sudarwan@unib.ac.id)

Article History: Received on 19 October 2022, Revised on 15 December 2022  
Published on 2 January 2023

**Abstract:** This study evaluated students' abilities in compiling lecture presentation materials based on project learning. The study was carried out at the Doctor of Education Program, FKIP Universitas Bengkulu. The subjects of this study were students of the doctoral program at FKIP Universitas Bengkulu who were taking the Leadership Development and Decision Making course. The results obtained, indicate that first, the ability of students to prepare lecture presentation materials for class meetings with a PjBL approach varies, and some of them do not even reflect the ideal PjBL. Second, there are still some gaps between their theoretical thinking and the reality on the ground to realize effective project-based learning. Third, the ideal PjBL model to be applied in fulfilling lecture achievements is only possible if there is sufficient time available, using a flexible academic calendar, and the participation of related parties.

**Keywords:** Decision Making, Leadership Development, Project Based Learning

### A. Introduction

Moving on from the reality of the learning process in tertiary institutions which tends to be descriptive, narrative, and theoretical which results in learning outcomes that are not optimal, it is time to change that process by prioritizing a Project-Based Learning or PjBL approach (Hidayah, 2022, *BelajarAPApun.com*). The term PjBL refers to a learning approach that uses projects over a relatively long period of time, with fairly strong academic goals (Thomas, 2020). With PjBL students not only learn to hear and get information, but also apply it through group work and then produce real work (Thomas, 2020).

The idea of learning with the PjBL approach is an integral part of the Independent Campus program plan from the ministry of education, which supports higher education Main Performance Indicators (IKU). The PjBL approach is a good process for injecting creativity, both from oneself as a teacher and from students as participants.

The PjBL approach requires the involvement of all parties, in this case the industry, to advance the quality of higher education in Indonesia (*Kompas.com*). Academically, PjBL is not entirely new. In the 1960s, a new wave of investigations into

the nature of learning and instruction emerged in response to changing conceptions of students as workers and learners (Thomas, 2000).

This study evaluates the problem of the ability of students of the Doctoral Program of Education, Faculty of Teacher Training and Education, University of Bengkulu in preparing project learning-based lecture presentation materials. There are three main focuses that become the scope of research. *First*, the ability of students to prepare lecture presentation material for class meetings with a project-based learning approach. *Second*, the gap between their theoretical thinking and the reality on the ground to create effective project-based learning. *Third*, the ideal project-based learning model is applied to fulfill lecture achievements.

PjBL in higher education is not a completely new issue. A new wave of investigations into the nature of learning emerged in response to changing conceptions of students as workers and learners. The PjBL essence emerged as a way to focus on developing skills for real-world contexts rather than the traditional approach, which focuses on memorizing facts and figures (Condliffe, 2022).

The benefits of PjBL in higher education are relatively unlimited. PjBL is a student-centred pedagogy that promotes independent research and discovery, stemming from the broader concepts of experiential learning and inquiry-based learning. Students engage with meaningful tasks that are connected to their daily lives and real-world contexts (Condliffe, 2022). The instructor guides the PjBL project, but the students and their peers take over. At its core, PjBL is an immersive experience, giving students the opportunity to apply their knowledge and skills in meaningful ways (<http://onlinelibrary.com>).

How can PjBL benefit universities? Specifically, PjBL benefits universities in many ways. Some of these include enhancing the curriculum with real-life experiences, preparing students to enter the world after graduation, increasing student retention and engagement rates, better job outcomes, professional enhancement of graduates, strong relationships with industry, excellence and competitiveness, etc. others (Walker, 2009).



Fig. 1 Steps on PjBL <https://www.educationise.com>

How is PjBL implemented? In Educationise (2020) <https://www.educationise.com> it is explained that PjBL in tertiary institutions is carried out using certain stages and standards, as shown in Figure 1. Students can make plans that will integrate as many subjects into the project as possible (Strobel & van Barneveld, 2009).

## **B. Methods**

The focus of this study is: (1) what is the ability of students in preparing lecture presentation material for class meetings using a project-based learning approach? (2) what is the gap between their theoretical thinking and the reality in the field to create effective project-based learning? and (3) what kind of project-based learning model is ideal to be applied to meet lecture outcomes?

This study used a qualitative approach with descriptive methods. Moleong (2013) and Danim (2020) argue that qualitative research is carried out to understand the phenomenon of what is experienced by research subjects by means of descriptions in the form of words and language, in a natural context and utilizing various scientific methods. The validity of the data is done by source triangulation.

The place of this research is the doctoral program of the FKIP University of Bengkulu. The research period is 6 months, starting from July-December 2022, with activities consisting of preparing lecture materials, presentations, and discussions for the Leadership Development and Decision-Making courses. The number of presentation material analysed was 13 pieces. Data analysis techniques use analytical techniques from Miles and Huberman (1984) and Danim (2020). This analysis was carried out by researchers to obtain research results consisting of data reduction activities, data display, and conclusions or data verification. For the validity and reliability of this study, triangulation was carried out, both data, methods, sources, and theory.

## **C. Results and Discussion**

### **1. Students' Ability to Prepare Class Meeting Lecture Presentation Materials with a Project-Based Learning Approach.**

There were 13 presentation manuscripts analyzed in this study. Of the 13 presentation scripts, 5 manuscripts did not follow the workflow of the PjBL approach. Of the 8 manuscripts that follow the PjBL workflow, 2 of them still lack focus on the stages that must be highlighted. A total of 5 manuscripts have approached the ideal condition of the PjBL-based learning approach.

For the most part, student presentation material has no real-world nuance and provokes serious thought when they acquire and apply new knowledge in the context of solving problems faced or realities in society (Barron & Darling-Hammond, 2008; Thomas, 2000). Indeed, some student presentation scripts have led to this focus. Typical projects initiated by students for some have presented a problem to be solved, namely what is the best way to be solved within the framework of policy-making and decision-making in the field of education (Strobel & van Barneveld (2009). Most of the

material content has replaced traditional teaching models, such as lectures, textbook attachment, or solely depending on key topics in the curriculum.

The PjBL approach is a comprehensive project-based learning (Walker, 2009; Danim, 2019). Student menus are generally organized around open-ended questions or challenges and create a need-to-know important content and skills, requiring inquiry to learn and create something new.

## 2. The Gap Between Theoretical Thinking and the Reality on the Ground to Realize Effective Project-Based Learning

Learning materials presentation by PjBL approach have been designed by students to involve themselves in real-world problems, particularly in the areas of leadership development and decision-making in education. PjBL-based learning encourages doctoral program students to have a deeper understanding and analysis of the focus of interdisciplinary studies (Ghiraldini, 2022). In *Edutopia Weekly* (2021) it is explained that PjBL is an interdisciplinary approach, because real-world challenges are rarely solved using information or skills from one subject area (Almulla, 2020).

When students undertake work, they often use content knowledge and skills from a variety of academic domains to successfully complete projects. The PjBL process fosters student independence, ownership of their work, and the development of 21st century or workplace skills (Sakulviriyakitkul, et. al., 2020; Almazroui, 2022). The results of the qualitative analysis show that in the presentation of student lecture material there is still a gap between ideal and actual conditions, as presented in Table 1 below.

**Table 1. The Gap Between Expectations and Reality**

No	Ideal	Actual
1	Focus on questions, challenges or big issues and are open to research and response or solving.	Has focused on a major question, challenge, or problem, but is not yet clearly open to research and response and/or resolution.
2	Focusing on what should be known, understood, and can be done academically into reality.	Presentations bring what should be known and understood, but not necessarily academically, into reality.
3	Inquiry-based, stimulates intrinsic curiosity, and generates questions to seek answers.	All presentations are inquiry-based, stimulate intrinsic curiosity, and generate questions to seek answers.
4	Using 21st century skills, such as critical thinking, communication, collaboration, and creativity.	Some of the highly colorful offerings employ 21st century skills such as critical thinking, communication, collaboration and creativity.
5	Build student choice into the process.	All presentation materials that meet the PjBL criteria have opened student choices into the process.
6	Provide opportunities for feedback and revision of plans and projects, just like in real life.	The relatively short discussion time causes opportunities for students to provide feedback and to revise plans and projects, as in real life, to be limited.
7	Require students to present problems, research processes, methods, and results, just as scientific research or real-world projects should be, open to review and criticism.	A total of 13 student groups presented their problems, research processes, methods, and results, as scientific research or real-world projects must stand before review and constructive criticism.

### 3. The Ideal Project-Based Learning Model is Applied to Fulfill Lecture Achievements

PjBL is an approach widely used in schools and other educational settings, with different varieties being practiced (Aksela and Haatainen, 2019). However, there are key characteristics that differentiate "doing projects" from engaging in rigorous project-based learning.

Lecturers and students find it helpful to distinguish a "dessert project" a short, intellectually light project presented after the teacher has discussed the unit content in the usual way from a "main course" project, in which the project is the unit. In PjBL, projects are a vehicle for teaching important knowledge and skills that students need to learn (Newmann and Wehlage, 1995; Wekesa and Ongunya, 2016).

Unlike other learning projects, PjBL requires critical thinking, problem solving, collaboration, and various forms of communication. To answer questions that encourage and create high-quality work, students need to do more than just memorize information (Condliffe, 2022). They need to use higher order thinking skills and learn to work as a team. To be able to organize PjBL model learning requires a relatively long time and focus on that.

### D. Conclusion

The ability of students to prepare lecture presentation material for class meetings with a project-based learning approach varies, some of which do not even reflect the ideal PjBL. There are still some gaps between their theoretical thinking and the reality on the ground to realize effective project-based learning. The ideal project-based learning model to be applied in fulfilling lecture achievements is only possible if there is sufficient time available, using a flexible academic calendar, and the participation of related parties. This study recommends 1) special training or guidance is needed so that students are able to prepare class meeting lecture presentation materials with an ideal project-based learning approach; 2) several gaps between students' theoretical thinking and the reality on the ground to realize effective project-based learning can be overcome with special guidance and involving stakeholders; and 3) it is necessary to simplify the project-based learning model so that it can be applied to meet lecture outcomes.

### E. Acknowledgement

I thank to Rector Universitas Bengkulu, Dean of Faculty of Teacher Training and Education Universitas Bengkulu, and all stakeholders and respondents who have supported me to do this project.

### References

- Aksela, M., & Haatainen, O. (2019). Project-based learning (PBL) in practise: Active teachers' views of its' advantages and challenges. *Integrated Education for the Real World*.
- Almazroui, K. M. (2022). Project-Based Learning for 21st-Century Skills: An Overview and Case Study of Moral Education in the UAE. *The Social Studies*, 1-12.

- Almulla, M. A. (2020). The Effectiveness of the Project-Based Learning Approach as a Way to Engage Students in Learning. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020938702>
- Barron, B., & Darling-Hammond, L. (2008). *Powerful Learning: What We Know About Teaching for Understanding*. San Francisco, CA: Jossey-Bass.
- Condliffe. (2022). Using Project-Based Learning Model to Promote Students Learning, <https://edukatif.org>
- Danim, S. (2019). *Educational Innovation*. Bandung: Pustaka Setia
- Danim, S. (2020). *Become a Qualitative Researcher*. Bandung: Pustaka Setia.
- Educationise. (2020). *6 Steps To Implement Project-Based Learning In The Classroom*. <https://www.educationise.com/post/6-steps-to-implement-project-based-learning-in-the-classroom>
- Edutopia Weekly (2021) Project based learning can also provide an effective model for whole-school reform, <https://www.edutopia.org>
- Ghiraldini, K. (2022). Critical Thinking: 4 Ways to Promote Executive Functioning Skills. <https://www.edutopia.org/article/executive-function-skills-secondary-grades/>
- Hidayah, N. (2022). *BelajarAPapun.com*, accessed December 10, 2022.
- Kompas.com. (2022). *9 Independent Campus Programs, Do Students Understand?* <https://www.kompas.com/edu/read/2022/11/04/121700771/ini-9-program-kampus-merdeka-mahasiswa-sudah-paham?page=all>
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Beverly Hills: Sage Publications
- Moleong, L. J. (2013). *Qualitative Research Methodology*. Bandung: Remaja Rosdakarya.
- Newmann, F. M., & Wehlage, G. G. (1995). *Successful School Restructuring: a Report to the Public and Educators*.
- Sakulviriyakitkul, P., Sintanakul, K., & Srisomphan, J. (2020). The design of a learning process for promoting teamwork using project-based learning and the concept of agile software development. *International Journal of Emerging Technologies in Learning (IJET)*, 15(3), 207-222.
- Strobel & van Barneveld. (2009). When is PBL More Effective? A Meta-synthesis of Meta-analyses Comparing PBL to Conventional Classrooms, *Interdisciplinary Journal of Problem-based Learning*
- Thomas, J. W. (2000). *A Review of Research on Project-Based Learning*. San Rafael, CA: Autodesk Foundation.
- Walker, (2009). *The Role of Sleep in Cognition and Emotion*. [https://www.ocf.berkeley.edu/~sanl/reprints/Walker\\_NYAS\\_2009.pdf](https://www.ocf.berkeley.edu/~sanl/reprints/Walker_NYAS_2009.pdf)
- Wekesa, N. W., & Ongunya, R. O. (2016). Project Based Learning on Students' Performance in the Concept of Classification of Organisms among Secondary Schools in Kenya. *Journal of Education and Practice*, 7(16), 25-31.