

## **The Implementation of Project Based Learning to Improve the Students' Thinking Skills**

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### **Abstract**

Using the Project-based learning (PjBL) paradigm, this study describes the learning of English subjects using descriptive qualitative research, which include asking fundamental questions, organizing and scheduling, monitoring, product assessment, and evaluation, and applying it to English instruction Low Semester Students. As result, the PjBL can a be used to implement HOTS-based learning. The first stage to the fourth stage is the application of level C4, namely analyzing. The fifth to seventh stages are the application of level C5, namely evaluating. All of these stages are a series in order to reach level C6, namely creating. Thus, it can be concluded that project-based learning is the right learning model to achieve 21st century learning criteria on shaping the students' demanding skills.

**Key words:** PjBL, Thinking Skills, and Implementation

### **How to Cite:**

## **INTRODUCTION**

Globalization is one of the factors changing Indonesia's language education system. The technological revolution has caused the globe to develop very quickly, necessitating the need for more concentrated and effective language learning programs. Technology breakthroughs have changed everything about the world order, including how individuals live, think, and act (Febriani et al., 2020). One of the key changes in learning a foreign language is also influenced by the way that education has evolved in the twenty-first century. The skills that students need to develop in the twenty-first century are the 4Cs: communication, cooperation, creative thinking and invention, and critical thinking and problem solving (Rusdin, 2018; Sole & Anggraeni, 2018; Toifah, 2021). These four components of 21st century abilities can help you become more fluent in English. It is still difficult for educators to include critical thinking abilities into instruction for students studying English as a second language (Febriani et al., 2020). According to the results of the 2023 Program for International Student Assessment (PISA), Indonesian students performed significantly worse than the global average (Dewabrata, 2021).

Indonesian students' reading literacy competency received an average score of 371 out of 487 on the PISA 2023 survey, which was made available on the OECD website kemendikbud.go.id. The average score for the OECD was higher. Their average OECD score was 487, and their average score in the mathematics literacy category was 379. Next, the average scientific literacy score for Indonesian students is 389, while the OECD average is 489. PISA is an international student assessment program administered by the OECD. Harsianti (2018) examined the PISA questions' characteristics. The results of the study showed that most of the questions that were used to help students hone their critical thinking abilities met the HOTS requirements.

Critical thinking skills may be challenging to employ when learning English as a second language. In order to assist students in developing their critical thinking skills, educators need to be inventive and imaginative (Islamiyah & Muassomah, 2020). Two learning models that can be used to integrate critical thinking into instruction are student-centered learning (Fitriyah, 2020) and HOTS-based learning (Dwijayanti, 2021). Pupils who study English, which calls for the

application of high-level thinking skills (HOTS), are capable of assessing, delving into, and coming up with a resolution for a problem they run across (Ichsan et al., 2019). When learning a language, HOTS needs to be gradually introduced. As a result, it is impossible to rapidly reach HOTS at the end of the learning process without first utilizing English Language Learning, which includes HOTS (Rahmawati, 2018). Growing higher order thinking skills in Aspects of student knowledge and proficiency in studying media lectures grow as a result of the project-based learning model's application. A number of researchers have studied model-based learning, also known as project-based learning (PjBL). For example, Assidik (2018) conducted research on "Implementation of Project Based Learning (Project-Based Learning) in the Learning Media Course in the Indonesian Language Education Study Program, Muhammadiyah University of Surakarta." Kavlu (2017) conducted research on the use of project-based learning in teaching English to non-native speakers of the language. The results of the study lend credence to the idea that project-based learning helps students become more self-aware of their English language skills and improves their capacity to apply it in daily contexts. PjBL also increases interest in the learning process and learning motivation. Next, Thuan (2018) conducted a study named "Project-Based Learning from Theory to EFL Classroom Practice". The study's conclusions indicate that in addition to having the benefits of cooperative learning, student-centered learning, lifelong learning, and independent learning, project-based learning encourages students' excitement and creativity in the classroom.

In addition to teaching English as a language, project-based learning can also be utilized to teach English to speakers of other languages. "Implementation of PjBL with Instagram Media on English Writing Skills at Islamic High School PB Soedirman 1 Bekasi" is one study that exemplifies this (Syukriya, 2019). The results of the study provide credence to the idea that it is quite reasonable to use PjBL learning strategies in conjunction with contemporary media when learning a foreign language. After that, Putry's investigation

The article "Tiktok Application as a Project-Based English Learning Media" was published in 2020 by Muassomah and associates. The study's conclusions suggest that using the TikTok app into project-based English language learning can increase students' motivation to learn and make the material more interesting rather than dry. Project-based learning is a learning strategy that can increase students' HOTS, according to research by Takidin et al. and Harun (2020). The results of both research indicate that project-based learning can support students' growth in higher-order thinking skills. Several studies show that project-based learning (PjBL) can enhance the effectiveness of learning a foreign language and encourage the usage of HOTS in the process. The truth is that some teachers still have difficulty planning and implementing project-based learning. One of the difficulties teachers have is that students still see project-based learning as task-based learning (Rahmawati, 2018). Research that elucidates project-based learning planning is therefore crucial. From these multiple studies, researchers have not found anything that specifically explains the use of project-based learning (PjBL) to improve higher order thinking skills in English language acquisition, especially for students in low semesters. Consequently, the researcher explains in this work how PjBL in ESL instruction can increase students' HOTS.

## METHODS

In order to document English Language Learning at Low Semester Students—which uses a project-based learning methodology to execute HOTS—a descriptive qualitative approach is adopted in this study. Three approaches for conducting qualitative research are used in this study, per Miles and Huberman (1994): data reduction, data presentation, and data conclusion. In order to improve high-level thinking abilities, researchers collected a range of data during the data reduction stage and then decreased the data in accordance with English Language Learning by using project-based learning (PBL) mode. Subsequently, the researchers provide information regarding the skills that students will require to be successful in the twenty-first century, in addition to HOTS and project-based learning, which can enhance HOTS. The data's conclusion

is the last phase. In this phase of the research, the investigator will talk about the application of the project-based learning paradigm to English language learning.

## RESULTS AND DISCUSSION

For students enrolled in the low semester English language course, each semester covers three themes. Following that, the students must be given the four language components and abilities for each of the topics. It is imperative that teachers possess the necessary skills to serve as mentors in the English language learning process. Incorporating teamwork, communication, cooperation, and creativity activities into classroom instruction is necessary to meet 21st century learning objectives (Sole & Anggraeni, 2018). Modern classroom instruction is needed to meet these demands. Pardede and 2020 claim that these four skills teach students how to deal with issues or challenges in their life that they might come across in the future. According to the Minister of Religion's regulation number 183 of 2019, students can acquire skills that are applicable in the twenty-first century by meeting the prescribed learning conditions. These standards are as follows:

1. Diverse and engaging learning opportunities and activities;
2. A method of instruction that develops students' critical thinking skills;
3. Learning through the use of a range of sources;
4. Learning that places information or content in the context of real-world events;
5. Learning through the use of technology in the classroom
6. Instruction centered on challenges or projects;
7. Connections between various educational programs; Working together to gain knowledge;
8. Encourage originality and ingenuity;

You should include both formative and self-assessment in your evaluation process. It is currently impossible to separate the relationship that exists between the process of learning English and the role that the teacher fulfills in the capacity of an educator. According to Wahab (2015), educators are supposed to keep an eye on, investigate, manage, and harness the intelligence of students and the media in addition to fostering a learning environment and assessing all acts that are connected to learning. Consequently, there is a need for alternate knowledge on English language learning strategies that professionals in the educational field can use.

### **PjBL in English Language Learning**

Good learning is learning that can make students try to build their own knowledge and be active in seeking information, or in other words, learning that is more focused on students (Fitriyah, 2020). One model of student-centered learning is project-based learning (*Project-based learning*).

According to Hastang (2019), project-based learning has characteristics, namely (1) there are problems or challenges presented to students, (2) encouraging students to obtain a more interesting and meaningful learning experience, (3) producing a real

product, and (4) the evaluation process is carried out on an ongoing basis. Project-based learning is a learning model that increases students' creativity which is very compatible with higher order thinking skills (HOTS) (Harun, 2020). The thinking process and its division used in the world of education is Bloom's Taxonomy, which contains levels of thinking processes, namely remembering, understanding, applying, analyzing, evaluating and Creating.

The George Lucas Educational Foundation (2003), cited by Wajdi (2017), outlined the steps for project-based learning as follows: (1) begin with the main question (essential question), where questions can arise from real life that are related to the content; and (2) plan (plan/design project), where students prepare an assignment in order to respond to a question. Involve students in the formulation of questions, the organizing and execution of student projects, and the sharing of ideas among educators to solve challenges. (4) monitor project progress (monitoring the project), in which the teacher supervises and tracks the advancement of students' projects in order to ascertain whether or not the project contains any errors or deficiencies. (3) create activity schedules (setting the schedule), in which the teacher and students collaborate to create a schedule (timeline) for the creation of the product. (6) evaluation (evaluate), the phase in which the instructor and the pupils consider how the project was carried out. (5) Product evaluation, often known as assessment of the product, is the process of evaluating the work that students have completed for their projects.

The instructor should start by giving students question prompts to promote critical and in-depth thinking as a result of the facts. This is implemented to support higher order thinking skills (HOTS), which are a collection of abilities that include problem-solving, creative and critical thinking, argumentation, and decision-making skills (Faruq & Huda, 2020). Nugroho (2018) asserts that HOTS is a higher-order cognitive process than memorizing. It mostly entails making connections between facts, acting upon information based on facts, categorizing facts, and modifying and using facts to generate novel solutions to problems. This high-level thinking talent anticipates that a person will apply new information or prior knowledge and create information in order to arrive at potential answers in novel situations, per the research of Fauziah et al. from 2020.

Create a plan for the product next. Project-based learning (PjBL) is a learning approach that focuses on project work that is integrated with real life and has the ability to develop students' learning capacities and skills. It can be used to build students' foundational knowledge (Hastang, 2019). The kids are now divided up into several groups, and in each of those groups, they have discussions on the ultimate product that will be made. By using groups, students can get used to cooperating with one another. In order to succeed in the twenty-first century, students must demonstrate their ability to collaborate with one another, according to Muiz et al. (2016). Islamiyah and Muassomah's research from 2020 suggests that incorporating creative thinking exercises and cooperative learning opportunities for students is one approach to increase the effectiveness and efficiency of learning. The pupils will then begin to plan the product they will be producing. However, the instructor may first give a few instances of what the pupils are capable of generating before they arrive at their ultimate result.

Thirdly, make a schedule. The instructor works with the students to create a schedule for

completing the project. This time limit, for example, varies based on the number of meetings available for a certain subject or topic. It is set at six times 45 minutes. The creation of this schedule is crucial to meeting the predetermined learning objectives and succeeding in the process.

Fourth, keep an eye on the project's progress. It is now necessary for the instructor to assess the pupils' progress on the project they have been working on. Furthermore, it is expected of the students that they actively discuss and work together on the material or product that they wish to create with the instructor and other group members.

The product's evaluation comes in fifth. After completing the product's manufacturing in line with the jointly-created timeline, each group will showcase the product's results and present them to the group.

In front of the students. Subsequently, in a courteous manner and without disparaging the group presenting, the instructor and fellow students provide their assessments or recommendations regarding the project. The sixth step is assessment and reflection on the knowledge acquired during project work, which is carried out to increase the effectiveness of the next project. Syihabuddin (2019) defines evaluation as a process that entails forming subjective assessments regarding students' comprehension of the material that has been taught. Ikhwan et al. (2021) claim that evaluation, which establishes the level of proficiency attained by students, is the main task in the learning process. Following this, the instructor will administer an evaluation with a focus on questions intended to improve HOTS once the project-based learning on a particular topic has concluded.

## CONCLUSION

Among the several learning models that are suitable for these accomplishments or objectives is the project-based learning (PjBL) model. Planning for project-based learning can begin with the following steps: (1) the instructor will provide stimulus questions; (2) the project will be planned; during this stage, the instructor will assist students in practicing creative thinking and working together with other students; (3) the creation of a schedule (timeline); (4) the monitoring of project progress; (5) the evaluation of the product; (6) the evaluation of the learning outcomes; and (7) the assessment of the learning outcomes. While the first stage prepares students to think critically, the second stage teaches them to think creatively. Both stages are designed to help students develop their thinking skills. Students are taught how to communicate during the third through fifth phases. Students are taught to analyze, evaluate, and assess during the sixth and seventh stages of the learning process. The HOTS-based learning approach can also be used with the help of this PjBL. Specifically, the application of level C4, which is analyzing, is the first stage that leads up to the fourth stage. The application of level C5, which is referred to as evaluating, occurs during the fifth through seventh stages. In order to achieve level C6, which denotes the creation stage, each of these steps constitutes a series. As a result, it is possible to draw the conclusion that project-based learning is the appropriate learning model to achieve learning criteria for the 21st century as well as learning at the HOTS level.

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