

Project-Based Learning: Facilitating The Development of Students' Critical Thinking in English Essay Writing

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Abstract. This study aimed to investigate how the project - based learning was implemented to facilitate the development of students' critical thinking skills in English essay writing in higher education context. An exploratory case study research design was used in this study while the participants were one lecturer and 15 students. The data were gleaned from classroom observations, interview, and documents. The data analysis results that teaching English essay writing in which project- based learning was implemented covers three stages including preparation, implementation, and presentation. The other result from data analysis shows that the students can write essay cohesively and coherently in which this results indicates students' critical thinking skills. The results lead to the conclusion that all of the students had a chance to be actively involved during the project and in the teaching and learning process. It indicates that project - based learning apparently could facilitate the development of students' critical thinking in English essay writing.

Keywords: *critical thinking, essay writing, higher education, project-based learning*

Introduction

One of the challenges in English essay writing in university level is the expectation of advanced language proficiency and academic writing skills. In higher education, students are required to demonstrate a strong command of the English language and apply sophisticated vocabulary, grammar, and sentence structures in their essays. Additionally, university students' essays often demand critical thinking and analytical skills. Students are expected to develop well-structured arguments, support their claims with evidence, and engage with scholarly sources. According to Wassell & LaVan (2009) stated that students able to review their practices during learning by interaction and exchange experiences. This level of analysis requires students to think critically and present their ideas in a coherent and logical manner.

Critical thinking skills play a crucial role in English essay writing for several reasons. First, it allows students to analyze and evaluate information, arguments,

and evidence presented in their essay topics. It helps them assess the credibility and relevance of sources, identify biases or logical fallacies, and determine the strength of arguments. According to Facione, (2011) stated that Critical thinking skills can be defined as a set of cognitive abilities that are active and skilled in conceptualizing, applying concepts, analyzing, synthesizing, and evaluating information obtained from observation, experience, reflection, reasoning, or communication, as a guide for determining attitudes or actions.

By critically engaging with the material, students can present a well-rounded and balanced perspective in their essays. Second, critical thinking encourages students to think creatively and independently. It enables them to generate original ideas and insights, rather than relying solely on surface-level knowledge or preconceived notions. Through critical thinking, students can develop unique perspectives and contribute fresh insights to their essays, making their work stand out and demonstrating intellectual maturity. In the educational process, students are encouraged to train and develop their thinking to gain understanding and good thinking skills (Saputri et al., 2019)

Third, critical thinking enables students to construct coherent and logical arguments in their essays. They can identify the main claims, supporting evidence, and counterarguments relevant to their topic. By critically evaluating different viewpoints and evidence, students can craft well-structured arguments that are persuasive and effectively convey their ideas to the reader. In addition, it helps students tackle complex essay prompts by breaking them down into manageable parts. They can identify the key issues, analyze them from different angles, and propose well-reasoned solutions or interpretations. This problem-solving ability enhances the quality of their essays, allowing them to delve deeper into the subject matter and offer insightful perspectives. Carroll (2007) and Condon & Kelly-Riley (2004) suggest a change in students' intellectual or thinking ability in the writing process. Then, critical thinking encourages students to consider multiple perspectives and viewpoints on a given topic. It helps them avoid bias and promotes a more inclusive and nuanced approach to essay writing. By critically engaging with diverse perspectives, students can demonstrate a comprehensive understanding of the subject matter and engage in thoughtful and respectful dialogue. Last, critical thinking complements research skills in essay writing. It enables students to critically evaluate and select relevant sources, distinguishing between reliable and unreliable information. Critical thinking also helps students identify gaps or inconsistencies in existing research, allowing them to propose new avenues for investigation or suggest areas for further exploration.

Considering the importance of critical thinking skills in English essay writing. Facilitating students to develop critical thinking skills through teaching methods is a necessity. One of the teaching methods that can promote the students' critical thinking skills Project – Based Learning (PBL) is an effective approach to developing students' critical thinking skills in English essay writing. Project-based learning offers authentic project design, problem-solving tasks, scaffolding and guided inquiry, collaboration learning, reflection and metacognition, integration of technology, and assessment of critical thinking. According to Sapturi (2019) stated that in the educational process, students are encouraged to train and develop their thinking to gain understanding and good thinking skills.

Authentic design projects that mirror real-world scenarios or issues related to English essay writing. For example, students could be tasked with researching and

writing an essay on a current social or environmental problem. This promotes critical thinking as students are able to analyze complex issues, evaluate evidence, and propose well-reasoned arguments. Problem-solving tasks incorporate problem-solving tasks within the project. Present students with challenging questions or dilemmas related to their essay topic. Encourage them to explore various perspectives, conduct research, and critically evaluate different solutions. This fosters critical thinking by requiring students to analyze, synthesize, and evaluate information to arrive at informed decisions. With critical thinking skills, students will be more active in exploring various information, analyzing, evaluating, and solving problems (Kincheloe, 2008; Lai, 2009).

Scaffolding and guided inquiry provide structured guidance throughout the project to support students' critical thinking development. Introduce inquiry-based tasks that prompt students to ask questions, seek evidence, and evaluate sources. Offer feedback and facilitate class discussions that encourage critical analysis and reasoning. Collaborative learning foster environments where students work together in teams. This encourages peer-to-peer discussions, debates, and the sharing of diverse perspectives. Collaborative tasks can involve group research, peer editing, or group presentations. Through collaboration, students can challenge each other's ideas, provide feedback, and engage in critical dialogue, thereby strengthening their critical thinking abilities. Students who have critical thinking can write something important and substantive because students who have critical thinking skills can clearly and critically express various ideas. Students can evaluate their ideas and ideas submitted by others and can find solutions to solve problems (Paul & Elder, 2006).

Reflection and Metacognition incorporate opportunities for students to reflect on their thinking and learning processes. Encourage them to evaluate their own reasoning, identify biases or assumptions, and reflect on how their critical thinking skills have developed throughout the project. Promote metacognitive strategies, such as self-questioning or self-monitoring, to enhance their awareness of their own thinking. In addition, utilize technology tools and resources that support critical thinking skills. For example, students can use online databases, academic search engines, or critical thinking software to access and evaluate sources. Encourage the use of digital platforms for collaborative writing, peer feedback, and online discussions, providing opportunities for students to engage critically with digital information. Design assessment criteria that specifically evaluate students' critical thinking skills in their essays. Focus on criteria such as evidence-based arguments, logical reasoning, analysis of multiple perspectives, and the ability to evaluate and synthesize information. Provide constructive feedback that highlights areas for improvement and encourages students to further develop their critical thinking skills. Learning to write must be done by applying learning steps that can encourage students to think critically and develop their writing skills (Abidin, 2017; Varner & Peck, 2003).

Project-based learning is an instructional method that encourages students to explore real-world problems and challenges through the completion of extended projects. Unlike traditional classroom settings, where students passively receive information, PBL places them in the driver's seat, promoting active engagement and independent thinking. By working on complex, authentic projects, students not only acquire subject-specific knowledge but also develop essential skills such as critical thinking, problem-solving, collaboration, and communication. Through learning

activities, project-based learning provides opportunities for students to gain knowledge, increase understanding, and acquire new skills (ChanLin, 2008).

In addition, it allows students to engage deeply with essay prompts by breaking them down and understanding their key components. Through collaborative discussions and research, students develop the ability to analyze prompts, identify relevant keywords, and determine the underlying purpose of the essay question. This critical analysis enables them to approach their essays with a clearer understanding of what is expected, resulting in more focused and well-structured responses. According to Chanlin (2008) stated that Through learning activities, project-based learning provides opportunities for students to gain knowledge, increase understanding, and acquire new skills.

Engaging in project-based learning exposes students to diverse sources of information. As they embark on their projects, students are encouraged to conduct thorough research, exploring various perspectives and gathering evidence to support their arguments. PBL also emphasizes the importance of evaluating sources for credibility and reliability, enabling students to develop critical thinking skills in distinguishing between trustworthy and biased information. Project-based learning is an instructional technique used to develop study and language skills. This characteristic of project-based learning is included in meaningful activities because it allows students to participate in decision-making activities and problem-solving (Howard, 2002).

Project-based learning provides opportunities for students to construct persuasive arguments. Through conducting research, organizing information, and engaging in thoughtful discussions, students learn how to form logical arguments based on evidence and sound reasoning. They develop the ability to critically evaluate different viewpoints, anticipate counterarguments, and articulate their own opinions effectively. These skills not only contribute to their essay writing abilities but also prepare them for future academic and professional endeavors. Project-based learning is an instructional technique used to develop study and language skills. This characteristic of project-based learning is included in meaningful activities because it allows students to participate in decision-making activities and problem-solving (Howard, 2002).

According to Umar (2022) The advantages of the PBL model are that it can accommodate students' learning interests. Based on theory above it can be explained that PBL encourages collaborative work, allowing students to engage in group projects where they can share ideas, discuss concepts, and provide feedback to their peers. Collaboration fosters critical thinking by exposing students to diverse perspectives and challenging them to consider alternative viewpoints. It also enhances their communication skills, as they learn to articulate their thoughts clearly, actively listen to others, and engage in constructive dialogue. These collaborative experiences in PBL help students refine their critical thinking abilities and broaden their horizons.

Therefore, by implementing PBL strategies that promote authentic tasks, problem-solving, collaboration, reflection, and technology integration, students can develop and enhance their critical thinking skills in English essay writing. PBL provides a rich and engaging learning environment that encourages students to think critically, analyze information, and construct well-reasoned arguments in their essays.

Research Method

The research was conducted in a private university in Majalengka Regency of West Java province. According to information gathered during preliminary observation, writing a coherent and cohesive essay was not an easy thing. In this context, project-based learning was implemented to facilitate the students' critical thinking skills development in writing English essay. Participants involved in this research are one lecturer and fifteen students in the second semester. Data collection techniques were used to collect the fact for this study, namely: observation, interview, and documentary. For the observation period, everything that happened during and after the course was noted (Fraenkel & Wallen, 2007). In the implementation session, four classroom observations were performed. An Interview was employed to gain a clear portrait of the implementation of project-based learning. The students' essay writing tasks were collected then were analyzed. By examining the quality of the essays, including the organization of ideas, use of evidence, logical reasoning, and critical analysis, researchers can assess students' critical thinking skills. Longitudinal studies that track the progression of students' writing samples or portfolios over time can provide valuable evidence of the development of critical thinking abilities.

In summary, the research methodologies employed in these studies to investigate the facilitation of students' development of critical thinking in essay writing may include qualitative methods (such as interviews or surveys). Teaching critical thinking in the context of essay writing poses challenges, and there is a call for research to develop theory concerning the learning experience associated with critical thinking enhancement. Additionally, there is a need to explore more tailored teaching and evaluation methods. These calls for research suggest the importance of investigating the effectiveness of different approaches and instruments in facilitating critical thinking development.

Interviews were used to gather in-depth insights into students' experiences and perceptions of critical thinking in essay writing. Researchers can conduct individual interviews or group discussions to explore students' thought processes, challenges faced, strategies employed, and the impact of specific instructional interventions. These qualitative instruments provide rich data that can complement quantitative assessments.

Finding and Discussion

Findings

Implementing PBL in English Essay Writing

To effectively implement project-based learning in the context of English essay writing, the researcher used observation and interview to get the data. During teaching learning process, the researcher divided the activity into some phase.

1. Selecting Relevant and Engaging Topics

Students should choose a topics that resonate with students' interests and align with the curriculum was crucial for engaging their attention and motivation. When students feel a personal connection to the subject matter, they were more likely to invest time and effort into the project, leading to a deeper understanding and improved critical thinking skills.

2. Providing Clear Guidelines and Rubrics

The researcher prepared a clear guidelines and assessment rubrics for helping students understand the project expectations and evaluation criteria. By providing a transparent framework, educators can guide students through the project while emphasizing the importance of critical thinking, evidence -based arguments, and effective communication.

3. Encouraging Reflection and Self-Assessment

Reflection was a critical component of project-based learning. By encouraging students to reflect on their learning journey, evaluate their strengths and areas for improvement, and set goals for future projects, educators can promote metacognition and the development of higher-order thinking skills. Self-assessment activities also encourage students to take ownership of their learning process, fostering autonomy and critical reflection.

4. Integrating Technology and Digital Tools

Leveraging technology and digital tools can enhance the project-based learning experience. Online research databases, collaboration platforms, and multimedia resources provide students with access to a wealth of information and facilitate seamless communication and collaboration. Integrating technology into PBL enables students to explore various perspectives, engage with authentic resources, and present their findings in creative and interactive formats.

Students' Critical Thinking in English Essay Writing

After obtaining the data through students' writing, observation result and interview. Students' critical thinking ability can be reflected in writing processes in the classroom as follows:

1. Contexts Analysis: students were able to analyze writing contexts, like writing purposes, target audience and social environments that influenced a reader. By understanding this context, students were able to adaptation during their writing activity.
2. Evaluation: students focused on reliability, validity and relevance evaluation from the sources in writing an essay. Students were able to consider an author's credibility, research methodology and information to support the arguments.
3. Argument Analysis: students were able to analyze an argument sentence from the sources. They were able to identify a perception sentence finding the strongest and the weakest from the argument sentence. The students were able to evaluate the sentence validity and able to recognize logical sentence or bias sentence in the paragraph.
4. Developing a main idea: critical thinking ability used their skills to develop a main idea in the paragraph. The result showed that the students were able to connect ideas in the paragraph with supporting evidence and arguments.
5. The ability of Analysis: in writing an essay, the students were able to analyze information from the text sources. The students could identify the pattern that used in the sentences. This kind of ability helped students to produce a deeper thinking in analysis.
6. Solving a problem: the students had implemented critical thinking skills to identify coming from their writing. The study showed that the students were able to solve difficulties during their writing and able to find an effective solution.
7. Reflection: critical thinking skills involved a reflection of writing process. The students had reflected on a decision to their writing including their thought and their

sumption in writing activity. By reflecting their writing, students could identify a paragraph need to be improved and developed to be better writing.

Discussion

The utilization of observation and interview methods in exploring the effects of Project-Based Learning in English essay writing has provided valuable insights into the multifaceted impact of this pedagogical approach. The discussion below elaborates on the implications of these research findings and their significance for educators and the educational community:

- **Nurturing Critical Thinkers:** PBL plays a crucial role in nurturing critical thinkers by fostering an environment where students can inquire, analyze, and solve problems independently. Educators can capitalize on this approach to cultivate a generation of students capable of critical analysis and informed decision-making.
- **Student-Centered Learning:** The active engagement observed during PBL activities indicates that student-centered learning approaches enhance motivation and interest in essay writing. By incorporating students' interests and real-world contexts, educators can create meaningful learning experiences that resonate with learners.
- **Promoting Collaboration:** Collaborative learning in PBL projects cultivates essential social skills, such as effective communication and teamwork. Integrating opportunities for collaboration in English essay writing tasks can enhance students' ability to present diverse perspectives and foster empathy in their writing.
- **Authentic Assessment:** Observation allowed researchers to witness firsthand the complexities of students' critical thinking and problem-solving during PBL projects. Educators can leverage authentic assessment methods, such as rubrics and portfolios, to evaluate students' growth in critical thinking skills more comprehensively.
- **Student Empowerment:** PBL empowers students to take ownership of their learning, promoting self-directed learning and autonomy. By guiding students through the PBL process, educators can instill a sense of agency, self-confidence, and self-efficacy in students' academic endeavors.
- **Life-Long Learning:** The transferability of critical thinking skills beyond essay writing underscores the significance of PBL in nurturing life-long learners. By fostering a growth mindset and curiosity, PBL equips students with skills they can apply throughout their educational and professional journeys.

Conclusion

The integration of observation and interview methods in studying the effects of Project-Based Learning in English essay writing has revealed its potential in facilitating the development of students' critical thinking skills. Enhanced critical thinking, active engagement, and real-world relevance highlight the transformative power of PBL in shaping students as independent, collaborative, and reflective learners. As educators continue to explore innovative approaches in pedagogy, Project-Based Learning stands as a promising avenue for promoting critical thinking and fostering a deeper understanding of English essay writing.

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