

## ENHANCING STUDENTS' WRITING ACHIEVEMENT, CRITICAL THINKING, AND SELF EFFICACY THROUGH PROJECT BASED LEARNING (PBL) IN STATE ISLAMIC INSTITUTE OF CURUP

Hadi Suhermanto<sup>1)</sup>, Sarwo Edy<sup>2)</sup>, Eka Apriani<sup>3)</sup>, Farida Esmianti<sup>4)</sup>, Erfin Wijayanti<sup>5)</sup>, Muthmainnah<sup>6)</sup>, Alesa Durgayan<sup>7)</sup>

<sup>1)2)3)</sup> Institut Agama Islam Negeri (IAIN) Curup, <sup>4)</sup>Poltekkes Kemenkes Bengkulu, <sup>5)</sup>IAIN Fattahul Muluk Papua, <sup>6)</sup>Universitas Al Asyariah Mandar, <sup>7)</sup>Armenian State Pedagogical University

[hadi13nov74@gmail.com](mailto:hadi13nov74@gmail.com)<sup>1)</sup> [edywong59@yahoo.com](mailto:edywong59@yahoo.com)<sup>2)</sup> [eka.apriani@iaincurup.ac.id](mailto:eka.apriani@iaincurup.ac.id)<sup>3)</sup>  
[faridaesmianti15@gmail.com](mailto:faridaesmianti15@gmail.com)<sup>4)</sup> [erfinsunaryo05@gmail.com](mailto:erfinsunaryo05@gmail.com)<sup>5)</sup> [muthmainnah@unasman.ac.id](mailto:muthmainnah@unasman.ac.id)<sup>6)</sup>  
[alesadurgaryan@gmail.com](mailto:alesadurgaryan@gmail.com)<sup>7)</sup>

### Abstract

The purpose of this study is to find out how project-based learning may help students become more proficient writers, critical thinkers, and self-sufficient. This study utilized the descriptive-quantitative method, which combines numerical data, as per Sugiyono's claim that quantitative research is a legitimate scientific approach due to its concreteness, objectivity, and logicalness. Using a whole sample approach, the study focuses on sixty students enrolled in the Institute for Islamic Studies of Curup's English Study Programme. The study examined how students' writing proficiency, critical thinking, and self-efficacy in English—their target language—were affected by project-based learning (PBL). With a 14.46-point gain between the pre- and post-test writing achievement, the findings demonstrated a considerable improvement. The critical thinking essay writing score of fifth-semester students rose from 78.43 to 84.05, representing a 04.02 point gain from the start of the exam. Five categories of analysis were applied to the data: organisation, focus, reasoning, integrations, and conventions. According to the study's findings, PBL raised students' self-efficacy in writing classes.

**Keywords:** Writing achievement, critical thinking, self-efficacy, project-based learning

©English Language Education FKIP UM Palembang

### Introduction

Traditionally the learning process usually occurs when the teacher and students are in the same class. The usual learning material is presented in the same way, namely paper-based learning content. In addition, students are only recipients of passive information, because there is a pressure on acquiring knowledge only "(Huba & Freed, 2000). Communication between teacher and student only occurs in one direction with one-dimensional learning media only, electronic learning technologies (e-learning) that are new and emerging have altered learning from a constrained approach to one that is flexible, accessible, and inventive. Learners can no longer rely entirely on traditional classroom learning to inform them what and when they must study; instead, they are expected to learn on their own time

"assume high levels of responsibility in learning situations and actively choose their goals and manage their learning" (Sparrow, Sparrow, & Swan, 2000). Stated differently, students become integral to the learning process itself as a result of the renewal of the learning paradigm. As a result, students may readily interact and communicate with one another as well as with real-world situations. They can also obtain knowledge at any time, anyplace. On the other hand, with the change in learning styles from "teacher centered" to "Learner centered" make the teaching staff or educational practice to change the learning strategy. A project-based learning technique is one of them (PBL). Based on a project The learning paradigm is intended to improve students' abilities, notably their thinking skills, creativity,

and critical thinking. Furthermore, via the use of projectbased learning, By accepting shared responsibility for their education in their surroundings, learners may engage in integrated learning (Bilgin, Karakuyu, & Ay, 2015). Furthermore, being a learner-centered methodology, PBL assists students in expanding their own knowledge and transforming education into an all-encompassing, real-world experience (Tamim & Grant, 2013). Unwilling students may be tempted by this method, which creates a situation that can enhance students' motivation. (Bilgin et al., 2015). Furthermore, Artini, Ratminingsih, and Padmadewi (2018) state that with PBL, students in EFL classrooms would learn how to solve problems, explore, make decisions, and work strategically. A learning style called project-based learning (PBL) introduces students to contextual settings. PBL seeks to accomplish three goals: Enhance scientific comprehension by using examples from everyday life; 2) Develop skills for thinking; and 3) Create strategies for self-learning. Learning in this technique begins with issues to be addressed rather than content to be learned. The real-world problem is utilized in PBL to encourage students as they work through the difficulties (Farhan & Retnawati, 2014) cited in Anazifa et al (2017). Project-based learning makes learners really work on challenges that necessitate the development of expert knowledge, problem-solving abilities, life-long learning abilities, and team involvement skills Teachers serve as facilitators in PBL, directing the issues so that the students' discussions are focused on the solution Wulandari (2013) in Anzifa et al (2017). So that, this learning strategy is very useful for the language learning process especially for foreign language learner. As is known that learning a foreign language or a second language is that is not easy to do. Due too

many aspects that must be learned, how to pronounce, grammar, vocabulary, and others. As with other foreign languages, English is not a language that is easily learned by learning which not their first language is. In English there are many aspects that need to be learned. Listening, speaking, reading, and writing are the four major areas of English that students must learn. Writing is the most difficult and intricate of the four abilities. Grammar, dictionaries, punctuation, structures, and cohesiveness must all be considered when writing, as well as coherence to ensure that the sentences we construct are correct and acceptable for the situations. Writing is a cognitive skill that involves learning new information and its analysis, application, and transcription (Praba', Artini, & Ramendra, 2018). It may also assist students in communicating their ideas and experiences (Sadeghi, Biniiaz, & Soleimani, 2016). There are also twelve other text genres, Examples include recount, report, procedures, narrative, news items, descriptive, hortatory, and so on. Students should be tremendously driven throughout the writing learning process, because it is a cyclical process that requires each student to practice writing time after achieving writing abilities. Thus, the availability of project-based learning (PBL) can assist individuals in applying these abilities and understanding to novel real-world scenarios. As per Dunlap's (2005) assertion, the challenges that students work on mirror intricate, real-world scenarios that lack order. Because of this learning technique, students may now use the information they need to fulfil their ambition to become better writers. Not only an increase in ability to write, but also with the application of Project-based learning (PBL) to make students think more critically. The capacity to comprehend facts, make conclusions, convey knowledge clearly, analyses, and

evaluate is referred to as critical thinking. According to the research that has been conducted by Anazifa and Djukri (2017) they concluded project-based learning affect students' creativity and critical thinking. Moreover, PBL could affect to students' self-efficacy. Senemoğlu (2005) in Bulut (2017) defines self-efficacy as an individual's assessment and conviction in himself/herself on the extent to which he/she will be effective in conquering challenging situations in the future. In addition, According to Schunk (2003) cited in Bulut (2017), there is a sense of self-efficacy for students to attain their goals at the start of learning activities. This was also stated by (Tiwari, Lai, So, & Yuen, 2006; Yuan, Williams, & Fan, 2008). A lot of research has been done in the area on project-based learning (PBL) as a learning approach to improve critical thinking. Additionally, PBL has the ability to foster the development of critical thinking abilities, according to Kek and Huijser (2011). Critical thinking, as defined by the American Philosophical Association (1990), is "an evaluative process aiming at and self-regulation." The effects of PBL on students' writing performance were examined in a research by Affandi and Sukyadi (2016), which included 78 EFL learners. The students' writing achievement increased. In order that Students no longer have to sit through lectures as passive consumers of information; they now have a voice in what and how they learn. Students, on the other hand, actively engage in the process of learning. They possess the ability to independently determine where resources and information are located. as well as how to alter knowledge so that it has more personal significance for them. Not only do Sulaiman's (2011) studies demonstrate that students can engage in critical thinking, but they also demonstrate that PBL and PBL may positively impact students' critical thinking. Studying using a learner-centered approach has helped

students take more ownership of their education and develop better social skills. (Giddens, Hrabe, Carlson-Sabelli, Fogg, & North, 2012; Kramer et al., 2007). Students will engage in more fruitful metacognitive activities and management initiatives if they have a motivational orientation that includes the conviction that the activity is fascinating and significant. In addition, Duncan and McKeachie (2005) argue that "motivation is dynamic and contextually bound and that learning strategies can be learned and brought under student control". Furthermore, they investigated the impacts of a They observed that students reacted to a favorable attitude toward a learner-centered approach, and students reported an increase in control of the intrinsic achievement goals of learning beliefs, selfefficacy, critical thinking, metacognitive thinking, and metacognitive thinking. skills and self-efficacy. For these reasons the researchers are interested in conducting the research entitled "*Enhancing Students' Writing Achievement, Critical Thinking, And Self Efficacy Through Project Based Learning (PBL) In Institute for Islamic Studies of Curup*"

## **Methodology**

### ***Research Design***

The descriptive-quantitative method was used in this study. This approach focused on combining numerical data. Sugiyono claims that since quantitative research satisfies the requirements of being concrete/empirical, objective, quantifiable, logical, and systematic, it is a legitimate scientific approach. In the meanwhile, the descriptive approach is a study method that explains the circumstances around an event or occurrence, according to Nazir in Simanjuntak. Furthermore, quantitative content analysis is described by Riffe and Fico as the methodical and repeatable study of communication symbols that are

given numerical values in accordance with reliable measurement techniques, along with the statistical examination of the correlations between those values to characterise the communication, deduce meaning from it, or gather details about its production and consumption contexts. In summary, the researcher has determined that this study employs a descriptive quantitative approach in conjunction with content analysis, as per the preceding criteria. This approach explains the scientific method, which is entirely logical, systematic, and data-driven. Since this isn't an experiment, it's clear that content analysis is being used. The researcher looks into analysis to produce findings that analyse how Project Based Learning (PBL) is used to help students develop their critical thinking and self-efficacy.

### ***Subject of The Research***

Subject of the research are all the students who learn Essay Writing Subject at English Study Program in Institute for Islamic Studies of Curup. There are 60 students that joining essay writing course. The researcher used total sampling to choose the subject of this research.

### ***Procedure of The Research***

The inquiry was conducted by the researcher based on the care given to the study subject. This suggests that the researcher taught essay writing via project-based learning.



**Figure 1.** The Research Procedure

From the procedure above, it can be seen the first step conducting the research is applying the approach. Here,

project-based learning was used by the researcher to help students become more self-assured and critical thinkers. Composing an exam is the second stage. During this stage, the researcher administers pre- and post-tests to the students in order to gauge their abilities both before and after the PBL-based teaching process. Distribute the questionnaires are the last step before coming to the result. There are two questionnaires used by the researcher: critical thinking questionnaire and self-efficacy questionnaire. After both instruments are distributed, the researcher found the result of the research.

### ***Technique for Collecting The Data***

Two distinct approaches were used to collect the data for this investigation. The students' writing ability would first be assessed by a test using project-based learning. Subsequent to project-based learning instruction in essay writing, students' critical thinking and self-efficacy would be evaluated through the use of questionnaires.

### ***Instruments of The Research***

In this study, the researcher used two instruments based on two methods of data collection. The first tool used to determine the students' writing proficiency is the Writing Test. Pretests and posttests are the two different kinds of tests. Second, Questionnaire would be used to know the Students' Critical Thinking and Self Efficacy Learning after teaching essay writing through Project Based Learning.

### ***Technique for Analyzing The Data***

The researcher used two techniques for analyzing the data. Quantitative technique will be used to analyze the result of writing test. The results of the questionnaire and the observation checklist will be analysed using a qualitative methodology.

- The t-test formula will be used to analyse the written exam. This algorithm is used to determine if project-based learning has improved students' writing achievement. Gay's (1981) writing scoring rubric is used to validate the data obtained from the students' writing exam.

**Table 1.** Writing Scoring Rubric

Item Analysis	Score	Criteria of Scoring
Content	40-37	Excellent: substantial, informed, etc.
	36-32	Good: A basic comprehension of the topic is sufficient.
	31-27	Fair: Restricted. Subject knowledge-not much
	26-23	Poor: Lacks comprehension of the topic (non-substantive).
Organization	25-23	Excellent: Clear and concise explanation of ideas.
	22-19	Good: A little disjointed and jumbled, but the main idea is immediately apparent.
	18-15	Fair: Not coherent; ideas are jumbled or disconnected.
	14-12	Poor: Inadequate in both organisational and communication skills.
Vocabulary	25-23	Excellent: Excellent word and phrase choice and use,

Item Analysis	Score	Criteria of Scoring
	22-19	sophisticated range. Good: Ample variety; occasional errors in word or phrase form, selection, and application, but meaning remains clear
	18-15	Fair: narrow scope, many errors in word and phrase choice, use, and form.
	14-11	Poor: Strictly a translation with little knowledge of idioms, vocabulary, and word structure in English.
Total	90	

**Table 2.** Writing Classification Rubric

Scale	Classification
80-90	Excellent
69-79	Good
58-68	Fair
46-56	Poor

- The criteria and score sheet for the Marguerite Finken and Robert Ennis (1993) critical thinking essay exam are used to assess critical thinking. The following formula will be used to analyse the data: The following Heaton formula will be used to get the average or mean score of the exam taken by the students (1997:176)

$$m = \frac{\sum fx}{N}$$

m: The mean the primary score N:  
The total number of students

$\Sigma fx$ : The total of obtain score

To get the percentage, the researcher used the formula below:

$$P = \frac{F}{N} \times 100\%$$

Notes:

P: The Students' Writing Skill Score

F: Total Correct Answer of the Students

N: Total Number of the items

The following evaluation components were utilised to describe how the students' critical thinking was shown in their essay writing:

- 1) Focus
- 2) Reasoning
- 3) Integration
- 4) Supporting reason
- 5) Conventions
- 6) Organizations

- A quantitative approach would be used to analyse the self-efficacy questionnaire. Utilizing the Likert scale method to grade student questionnaires and classifying results using interval scoring

**Table 3.** Self-efficacy Questionnaire score classification

Interval score	Classification
104 - 80	High
79 - 60	Average
59 - 40	low

## Results and Discussion

### Finding

#### *Classification of Students writing Score Pre and Post Test*

Table 4 displays the frequency distribution and percentage of final writing exam results for students enrolled

in the English study programme for the third semester at IAIN Curup. Following the administration of both writing tests by the researcher to assess the students' progress towards producing a quality piece of writing, the results are shown in the table below:

**Table 4.** The frequency distribution and the percentage of final writing test score

	Pre-Test Score	Post-Test Score
<b>Total</b>	14.678	20.678
<b>Average</b>	70,21	84,67

It is evident from the following table that students' writing achievement scores increase when project-based learning (PBL) is used. The Pre-test score is shows that 70,21 as the average score. Meanwhile, in the Post test the average score is 84,67. It indicates that the project is success to improve students' writing ability. The improvement is 14,21. It is significant improvement category since the PBL implemented by the researcher.

#### *The result of Students' critical thinking ability*

For writing argumentative essays, students' average critical thinking scores were as follows: from focus, they scored good to average (22,98); from reasoning, they scored excellent to very good (18,91); from integration, they scored good to average (17,66); and from conventions, they scored fair to poor (17,03). Furthermore, students who composed argumentative essays from firms classified as good to ordinary (3,86) had a mean score of students' critical thinking skills. The students' ability to think critically from all aspects In terms of critical thinking, three (3) students were rated as extraordinary, fourteen (14) as very excellent, nine (9) as decent, and four (4) as weak. The average score for all criteria combined was a respectable 78, 43.

**Table 5.** The ability of students' critical thinking viewed from all aspects

Aspect	Students' Average Score		Category	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Focus	20,98	22,98	Good to average	Good to average
Reasoning	18,91	22,91	Good to average	Excellent to very good
Integrations	17,63	18,63	Good to average	Good to average
Conventions	17,03	18,03	Fair to poor	Good to average
Organization	8,86	12,86	Fair to poor	Good to average

The critical thinking essay writing score of 78,43 for fifth semester students is categorized as excellent at the beginning of the session or before PBL is used. After implemented the score was 84,45. The categorize was very good. So, there is improvement before and after PBL implemented. The improvement was 04,02. It calculates every factor and displays the Reid (1993;237) score range as follows;

A = 90-100 (excellent)

B = 80-90 (very good)

C = 70 – 80 (good)

D = 60-70 (poor)

E = Below 60 (very poor)

### ***The result of Students' Self Efficacy***

The frequency and proportion of students in the English Education Department's fifth semester who received a final self-efficacy score are displayed in the table below. The frequency and proportion of students in the English Education Department's fifth semester who received a final self-efficacy score are shown in the table below. Following the researcher's delivery of the questionnaires meant to gauge the

students' levels of self-efficacy, the students' beliefs were assessed.

**Table 6.** Students' Self-Efficacy after PBL Implemented

Interval	Score	Number of Students		Percentage	
		Pre-Test	Post-Test	Pre-Test	Post-Test
104 - 80	High	22	38	30,95%	55%
79 - 60	Average	34	18	61,90%	38,67%
59 - 40	Low	4	4	7,14%	7,14%

According to the data, the majority of the students' SelfEfficacy Questionnaire scores were in the average group prior to the implementation of PBL. The score was 61,90%. On the other side, after PBL implemented the most percentage were in the high category, the score was 55%. It indicates that students' self-efficacy was increasing through PBL in writing class.

## **Discussion**

### ***Students' Writing Achievement Following the Implementation of Project Based Learning (PBL)***

The descriptive statistical analyses in the findings demonstrate that the students' writing quality, as shown by the mean score in table 1, is 9.15 based on the pre-test. It may be stated that the students' writing was rated as fair. The post-test score is 17.46, which ranges from excellent to very good. Based on the results, it can be concluded that following the therapy with an argumentative essay, the students were in a good position to produce an essay. On the other hand, the results of the post-test demonstrate that the students have made great development, with the majority of them receiving good categorization. In other words, argumentative essays improve students' writing productivity. This is



reinforced by Rahmat's (2004) findings, which discovered that using the PBL writing process might increase students' capacity to grasp and develop their writing activity, as well as their interest, because all of the students had a favorable attitude about it. It is also consistent with Oshima and Hogue (1997), who claimed that an argumentative essay is a common Pattern for writing on how to provide an argument through a writing effort. It is employed in all academic subjects and has the potential to become a drug that helps students enhance their essay writing skills.

### ***Students' Critical Thinking after the Implementation of Project Based Learning (PBL)***

Three (3) students were rated as having exceptional critical thinking skills, fourteen (14) as very good, nine (9) as good, and four (4) as bad. All factors together had a respectable average score (78.43). Overall, it's clear that the use of project-based learning (PBL) has enhanced critical thinking. PBL seems to have a good effect on students' ability to develop critical thinking skills. The improvement may be attributed to other factors.

1. The material selected makes students have background knowledge to do the task given by the teacher.
2. The project also give contribution to the improving students idea.
3. Learning through pbl made students have time to discuss about the topic with their group
4. Students have many ideas in selecting the topic.

**Table 7.** The ability for critical thinking among students as seen by the Organisation

Aspect	Students' average score	Category
Focus	22,98	Good to average
Reasoning	18,91	Excellent to very good
Integrations	17,63	Good to average
Conventions	17,03	Fair to poor
Organization	3,86	Good to average

Fifth semester students' critical thinking essay writing skill is rated as strong with a score of 78,43. It calculates every factor and displays the Reid (1993;237) score range as follows;

A = 90-100 (excellent)

B = 80-90 (very good)

C = 70 – 80 (good)

D = 60-70 (poor)

E = Below 60 (very poor)

### ***Students' Self Efficacy after the Implementation of Project Based Learning (PBL)***

Self-efficacy has a significant role in affecting student achievement. This effectiveness ultimately determines whether or not students succeed in learning the language, including producing high-quality writing, because students' self-efficacy of the learning situation influences how they behave to the best of their abilities in a given task and succeed in conducting any activities in the social learning process (Susanto, Sutarsiyah & Sinaga, 2015).

In light of this finding, the researcher draws the conclusion that one psychological component influencing writing performance is self-efficacy. Students that possess a high level of self-efficacy tend to do better while composing texts. Wening (2016) conducted studies that corroborated the outcome. According to the study, one psychological component influencing



writing performance is self-efficacy. The psychomotor and cognitive aspects of learning are impacted by self-efficacy, an emotional domain. When writing a text, students with high levels of self-efficacy may find the learning process enjoyable. As the framework of theories mentions, self-efficacy is critical to learning accomplishment. The nonlinguistic component of self-efficacy, which stems from a student's innate condition, increases students' motivation to study and reflect on their writing accomplishments. Bandura (1994) states that "students who evaluate themselves as poor writers tend to perform being reluctant to engage in writing works and making brief or incomplete piece of writing while students with higher writing self-efficacy have been found to complete writing tasks at a higher standard". It implies that students can write well if they have a high level of self-efficacy.

Success as a writer may be influenced by a wide range of factors or characteristics. Self-efficacy is only one of several factors influencing students' ability to compose. However, self-efficacy cannot be overlooked in the teaching-learning process, and it seems that students' writing performance is impacted by their sense of self. According to Lunenburg (2011), self-efficacy plays a crucial role in learning, motivation, and performance because people are motivated to learn and do the things they think they can do well. Students with strong writing self-efficacy find it easier to write texts than students with low self-efficacy. Effective writing is influenced by self-efficacy, but not in the way that emotional qualities affecting performance in the cognitive and psychomotor domains do. (Bandura, 1997).

The study's findings support Bandura's notion of self-efficacy, which may influence a student's performance

during the learning process or upon finishing a task. This study supports previous research showing that students believe they are quite competent of completing basic writing assignments such as editing and reading widely to improve, which has an indirect impact on their writing ability, particularly with regard to content.

### Conclusion

The data showed that the students' writing achievement was increasing from pre and post test given by the researcher. The improvement is 14,46. The improvement in the significant categories since the PBL was implemented in teaching process.

Fifth semester students' critical thinking essay writing skill is rated as strong with a score of 78,43. Meanwhile, after PBL implemented the score was increase. The score was 84,05. It means there are 04.02 point increasing from the beginning test. The category also improved from good to very good. The data was taken from the five aspects. The score was the calculation from focus, reasoning, integrations, conventions and organization.

The majority of participants fell into the average group during the pre-test or before PBL was applied. The score was 61.90 percent. On the other side, after PBL implemented the most percentage were in the high category, the score was 55%. It indicates that students' self-efficacy was increasing through PBL in writing class.

### Suggestions

The writer would like to make some suggestions for lecturers and students in order to improve students' Writing Achievement, Critical Thinking and self-efficacy in writing class. 1. PBL is one of Method in teaching who gives project as the autonomise learning to the students. The researcher suggests to the

lecturer who teach writing subject to apply this method in teaching process. Since the result of this study showed the increasing of students' writing achievement.

After the research, students' critical thinking also increases so it is recommended to the lecturer to use the same way.

The next researcher should look into what aspects of students' self-efficacy influence their self-efficacy or how to raise students' self-efficacy in order to enhance their writing performance, as this study found that self-efficacy had a substantial impact on students' writing performance.

This study's findings demonstrated how students' self-efficacy affects and is related to their writing performance. Therefore, it is suggested that the teacher foster students' self-efficacy in the learning environment. One way to do this would be to offer and grade writing assignments on a regular basis. This would encourage students to write well and in an interesting way.

## References

- Bandura, A. 1982. Self-Efficacy Mechanism in Human Agency. *American Psychologist*, vol. 37, No.2. retrieved on 7 th May 2019 from [www.uky.edu/.../Bandura/Bandura1982AP.pdf](http://www.uky.edu/.../Bandura/Bandura1982AP.pdf)
- Bandura, A. 1994. Self-Efficacy. *Journal of Encyclopedia of Human Behavior*. Retrieved May 7 th 2019 from <http://www.uky.edu/.../Bandura/Bandura1994EHB.pdf>
- Bell, S. Project-based Learning for 21 Century: Skill for the Future. Clearing House, A
- Creswell, John W.2002. *Educational Research Planning, Conducting and Evaluating Quantitative Research* Fourth Edition. United States of America, Pearson Education Inc.
- Duncan, T. G., & McKeachie, W. C. 2005. The making of the Motivated Strategies for Learning Questionnaire. *Educational Psychologist*, 40.
- Dunlap, J. C. 2005. Problem-based learning and self-efficacy: How a capstone course prepares students for a profession. *Educational Technology Research and Development*, 53(1),
- Edward M. Glaser .1941. *An Experiment in the Development of Critical Thinking* New York: Columbia University. Teachers College
- Fragoulis. 2009. Project-Based Learning in the Teaching of English as A Foreign Language in Greek Primary Schools: From Theory to Practice, *CCSE*, Vol. 2 No. 3.
- Garside, C. 1996. Look who's talking: a comparison of lecture and group discussion teaching strategies in developing critical thinking strategies. *Communication Education*, 45, 212-227.
- Giddens, J., Hrabe, D., Carlson-Sabelli, L., Fogg, L., & North, S. 2012. The impact of a virtual community on student engagement and academic performance among baccalaureate nursing students. *Journal of Professional Nursing*, 28(5), 284-290. doi:10.1016/j.profnurs.2012.04.011

- Herrington, Jan. Authentic learning environments in higher education. IGI Global, 2006.
- Hirose, S. 1992. Critical thinking in community colleges. ASHE-ERIC Higher Education Reports. The George Washington University, ED348128.
- Huba, M. E., & Freed, J. E., 2000. Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning. Boston, MA: Allyn and Bacon.
- Kek, M. Y. C. A., & Huijser, H. 2011. The power of problem-based learning in developing critical thinking skills: Preparing students for tomorrow's digital futures in today's classrooms. *Higher Education Research & Development*, 30(3), 329–341. doi: 10.1080/07294360.2010.501074
- Learning. *The English Teacher* Vol. XL: 1-10 Journal.
- Markam, T. 2003. Project Based Learning Handbook. Canada: Buck Institute for Education, 2003.
- Pajares, F. 2003. Self-Efficacy Beliefs, Motivation, and Achievement in Writing: A Pajares, M. F and Johnson, M. J. 1993. Confidence and Competence in Writing: The Poonpon, Kornwipa. 2011. Enhancing English Skill through Project Based
- Siahaan, Sanggam. 2008. The English Paragraph. Yogyakarta: Graha Ilmu.
- Sparrow, L., Sparrow, H., & Swan, P. (2000). Student-centered learning: Is it possible? In A. Hermann & M. M. Kulski (Eds). *Flexible Futures in Tertiary Teaching*. Proceedings of the 9th Annual Teaching Learning Forum. Perth: Curtin University of Technology.
- Stoller, Frederica. Project-Work: A Means to Promote Language and Content. In Richards J. C. & Renandya W. A. (eds.). *Methodology in language teaching: An anthology of current practice* (pp. 107-120). Cambridge, Cambridge University Press, 2002.
- Sulaiman, F. (2011). The effectiveness of Problem-Based Learning (PBL) online on students' creative and critical thinking in physics at tertiary level in Malaysia (Unpublished doctoral dissertation). University of Waikato, Malaysia.
- Tiwari, A., Lai, P., So, M., & Yuen, K. (2006). A comparison of the effects of problem-based learning and lecturing on the development of students' critical thinking. *Medical Education*, 40(6), 547–554.
- Bilgin, I., Karakuyu, Y., & Ay, Y. (2015). The effects of project based learning on undergraduate students' achievement and self-efficacy beliefs towards science teaching. *Eurasia Journal of Mathematics, Science and Technology Education*, 11 (3), 469-477. doi: 10.12973/eurasia.2014.1015a

- Tamim, S. R. & Grant, M. M. (2013). Definitions and uses: Case study of teachers implementing project-based learning. *Interdisciplinary Journal of ProblemBased Learning*, 7 (2), 72-101. doi: 10.7771/1541-5015.1323
- Artini, L. P., Ratminingsih, N. M., & Padmadewi, N. N. (2018). Project based learning in EFL classes: Material development and impact of implementation. *Dutch Journal of Applied Linguistics*, 7(1), 26-44. doi:10.1075/dujal.17014.art
- Anazifa, R. D., & Djukri, D. (2017). Project-Based Learning and Problem-Based Learning: Are They Effective to Improve Student's Thinking Skills?. *Jurnal Pendidikan IPA Indonesia*, 6(2), 346-355.
- Praba, L.T., Artini, L.P., & Ramendra, D.P. (2018). Project-based learning and writing skill in EFL: Are they related? *SHS Web of Conferences*, 42 (1), 1- 6. doi: 10.1051/shsconf/20184200059
- Sadeghi, H., Biniaz, M., & Soleimani, H. (2016). The Impact of project-based language learning on Iranian EFL learners comparison/contrast paragraph writing skills. *International Journal of Asian Social Science*, 6 (9), 510-524. doi: 10.18488/journal.1/2016.6.9/1.9. 510.524
- Bulut, P. (2017). The effect of primary school students' writing attitudes and writing self-efficacy beliefs on their summary writing achievement. *International Electronic Journal of Elementary Education*, 10(2), 281-285.
- Affandi, A., & Sukyadi, D. (2016). Project-based learning and problem-based learning for EFL students' writing achievement at the tertiary level. *Rangsit Journal of Educational Studies*, 3(1), 23-40.