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# **ORIGINAL**





# Project-Based Learning in Political Sociology Course: Enhancing Student's Critical Thinking Skills and Learning Outcome

Aprendizaje basado en proyectos en el curso de sociología política: mejora de las habilidades de pensamiento crítico de los estudiantes y resultados de aprendizaje

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## **ABSTRACT**

Learning Political Sociology course at the Civic education department tends to be conventional and does not involve students completely. Therefore, a learning model which is needed for students to participate actively and stimulate their critical thinking skills should be implemented. The aims of this study are to determine students' critical thinking skills and student learning outcomes, as well as to describe the advantages and disadvantages of learning using Project-based Learning. This study uses a qualitative approach and the subjects were 37 students of the Civics Education Study Program. Data were collected through observation, test, and conversation while the project was conducted using a rubric, test, and interview schedule and then analyzed using predetermined assessment criteria. The results showed that students were able to improve their critical thinking skills through challenging and simultaneous assignments on the topics, namely Legislative Candidates in the 2019 General Election. Due to a series of structured assignments, students also obtained good learning outcomes based on the six components assessed during the project that is a summary of an interview with the candidate, profile of candidates, journal, presentation, final report, and final test. Further research on the effect of the project on student understanding and involvement in the project is needed.

**Keywords:** Project-Based Learning; Political Sociology; Civic Education; Critical Thinking; Learning Outcome.

## **RESUMEN**

El aprendizaje de la asignatura de Sociología Política en el Departamento de Educación Cívica tiende a ser convencional y no involucra a los estudiantes por completo. Por lo tanto, se debe implementar un modelo de aprendizaje que sea necesario para que los estudiantes participen activamente y estimulen sus habilidades de pensamiento crítico. Los objetivos de este estudio son determinar las habilidades de pensamiento crítico de los estudiantes y los resultados de aprendizaje de los estudiantes, así como describir las ventajas y desventajas del aprendizaje mediante el aprendizaje basado en proyectos. Este estudio utiliza un enfoque cualitativo y los sujetos fueron 37 estudiantes del Programa de Estudios de Educación Cívica. Los datos se recopilaron a través de la observación, la prueba y la conversación mientras se llevaba a cabo el proyecto utilizando una rúbrica, una prueba y un cronograma de entrevistas y luego se analizaron utilizando criterios de evaluación predeterminados. Los resultados mostraron que los estudiantes pudieron mejorar sus habilidades de pensamiento crítico a través de tareas desafiantes y simultáneas sobre los temas, a saber, los

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candidatos legislativos en las elecciones generales de 2019. Debido a una serie de tareas estructuradas, los estudiantes también obtuvieron buenos resultados de aprendizaje basados en los seis componentes evaluados durante el proyecto que es un resumen de una entrevista con el candidato, perfil de los candidatos, diario, presentación, informe final y prueba final. Se necesitan más investigaciones sobre el efecto del proyecto en la comprensión y la participación de los estudiantes en el proyecto.

Palabras clave: Aprendizaje Basado en Proyectos; Sociología Política; Educación Cívica; Pensamiento Crítico; Resultados del Aprendizaje.

#### INTRODUCTION

Learning in higher education tends not to maximize student involvement in analysing and solving a problem. In general, learning is still carried out where the lecturer is the information giver of knowledge while students are the recipients who absorb the knowledge. Most of the learning is still surface learning and students are still receiving various information from lecturers about various concepts that they must master. Meanwhile, deep learning which focuses on the meaning and significance of the knowledge learned is still not optimal. Therefore, appropriate strategies or approaches in learning are needed and help students to gain in-depth and well-oriented knowledge. In order to overcome this problem, the Ministry of Education and Culture of Indonesia issued Decree No. 3 of 2021 regarding policies for implementing learning in universities in the form of case studies and project-based learning. This is intended so that students can be equipped with hard skills, professional skills and soft skills so that they have sufficient provisions to compete in entering the world of work.

Many studies on the use of projects in university learning have been written. (4,5,6) The majority of studies are related to engineering and linguistics. However, for universities in Indonesia, the use of projects in learning has not been written much, including in the field of civic education. Moreover, government policies related to the implementation of learning in universities have just been issued. Therefore, studies on the implementation of learning using projects in universities in Indonesia are still needed.

This paper aims to complete a study on the use of project strategies in learning in higher education, especially in the civic education study program. Besides that, this paper aims are 1) to determine students' critical thinking skills in implementing projects in the political sociology course in the civic education department 2) to determine student learning outcomes using projects 3) to reveal the advantages and disadvantages of learning political sociology using project as a learning strategy.

This paper assumes that the study of political sociology discusses the structure and dynamics of power, both at the macro level or related to the state, as well as at the micro level or in other smaller units of social life, such as: families, associations, organizations will be very intersected with the actual problems that exist in people's lives. Therefore, involving students in projects related to actual problems in society will arouse students' interest and attention so that their thinking skills can be trained and improved in finding solutions to existing problems. (7,8)

Project-based learning (PjBl) is a learning strategy that involves students in acquiring knowledge and skills through a complex and structured inquiry process where students can produce a product or task. (9) PjBl students work in groups to solve problems that are authentic and based on the curriculum. (10) PjBl requires students to construct knowledge through meaningful projects and produce real products. (11) The three opinions above emphasize that learning using PjBL is learning that is active, challenging, in accordance with the real world, involves knowledge and skills, and finds solutions to existing problems.

Active student involvement in learning using PjBl can be seen from the characteristics of PjBl proposed by Krajcik & Shin namely: 1) the main questions that will direct students in completing the project, 2) focusing on learning objectives, 3) student participation in learning activities, 4) collaboration between students in completing projects, 5) utilizing technology assistance, 6) producing real or tangible products. Among the six criteria, producing a real product is a characteristic that distinguishes PjBL from PBL. Implementing PjBL with the above criteria causes students not only to construct knowledge but also to acquire and train several important skills needed in the 21st century, namely: critical thinking skills, creativity and productivity, collaborative and communicative, digital literacy, citizenship, and problem solving.

Critical thinking, creativity, problem solving and decision making are the main competencies in the 21st century that are important to be developed in education. (14) These skills are indicators in determining the quality of human resources needed in this digital era. Critical thinking is an intellectual discipline that includes several elements, namely: purpose and problem identification, concept clarification, discovery of assumptions, consideration of points of view, detection implications or consequences, validation of evidence, and reflection. (15) Based on this opinion, it is clear that critical thinking skills involve a deep and complex thought process

about something to get the desired goal. (16) Therefore, critical thinking can be considered as a multidimensional cognitive construct, implying inductive and deductive reasoning, as well as creative processes, interacting in distinct phases of the problem-solving process. (17,18)

The ability to think critically is very important in education and has been investigated in many studies. Students who performed better in a critical thinking assessment test, hence showing higher levels of critical thinking, reported fewer negative outcomes in their daily lives. From such an association, the relevance of thinking critically has gained strength. Furthermore, Butler, et al found that the assessment of critical thinking ability and the validity of critical thinking scores to predict what people actually do (or say they do) in real life. (19) This finding further emphasizes that the ability to think critically is an ability that people need to live their lives and achieve what they want. Therefore, critical thinking skills must be taught and trained especially to students so that they are able to become productive human beings and become good citizens. (20)

Political sociology is a field of science that is one of the compulsory subjects for students in the civic education department. The Political Sociology course discusses the structure and dynamics of power, both at the macro level or related to the state, as well as at the micro level or in other smaller units of social life, such as: families, associations, organizations. Studying Political Sociology has at least three benefits, namely: analytical relevance, practical relevance and moral relevance. (21)

Based on the curriculum of the civic education department, the competencies expected in this course are to understand, convey and use information about matters relating to political issues from a sociological perspective, including the existence of power in society, political structure, political socialization, political communication, political conflicts, mass movements and political movements, political change and integration in society. To achieve these competencies, aspects that need to be developed in learning are knowledge, attitudes and skills.<sup>(22)</sup> One of the most important skills is critical thinking skills.<sup>(23)</sup>

# **METHOD**

# Project plan

This research was carried out in a Political Sociology course at the civic education department, Universitas Negeri Padang at semester January - June 2019. In this course, students have a project entitled, Legislative Candidates in the 2019 General Election". This project will explore the problems surrounding legislative candidates related to ways to gain power, the political structure that allows someone to advance to become a legislative candidate, political activities carried out by legislative candidates, political conflicts that may be faced by legislative candidates, the role of legislative candidates and their political parties in dealing with political changes and the direction of the intended social change, and the role that legislative candidates can play if they later become people's representatives in realizing the integration of Indonesian society.

The driving questions of the project are; How is the credibility and capability of the legislative candidates who will compete in the 2019 election? What can be expected from them? This question is then divided into 10 sub-questions that will guide students in solving them, namely: 1) Why are there so many people who want to go forward to become legislative candidates at this time? 2) Who exactly are they? 3). Why do they want to run for legislative candidates? 4). What challenges do they face as legislative candidates? 5). What image do these legislative candidates want to build in achieving their goals? 6). What factors enabled them to become legislative candidates? 7). Could they face political conflicts in realizing their ambition to become a legislative candidate? 8). What roles are expected from legislative candidates if they are elected for political change towards a better Indonesia? 9). What roles are expected from legislative candidates if they are elected to bring about better social change for Indonesia/West Sumatra in the future? 10). What is the contribution of a legislative candidate when elected in strengthening Indonesia's national integration?

This project lasts for 2,5 months or 10 weeks with 13 meetings and details of the products produced during the project are listed in table 1.

Table 1. Criteria for the product of project			
No	Product	Indicators	
1	Interview conclusion	<ol> <li>Number and identity of informants</li> <li>The breadth and depth of the interview results</li> <li>Data accuracy</li> <li>Relevance to the project</li> <li>Originality of interview results</li> </ol>	
2	Legislative candidate profiles	<ol> <li>Relevance to the project</li> <li>Data wealth</li> <li>Data accuracy and data sources</li> <li>Originality</li> <li>Writing systematics</li> </ol>	

3	Journal	<ol> <li>Relevance to the project</li> <li>Completeness of supporting data</li> <li>Analysis accuracy</li> <li>Systematic notes</li> <li>Originality</li> </ol>
4	Group presentation	<ol> <li>Demonstrating understanding</li> <li>Shows breadth of insight</li> <li>Answering questions correctly</li> <li>Supported by complete materials and data</li> <li>Comprehensive</li> </ol>
5	Final report	<ol> <li>Originality</li> <li>Completeness of contents</li> <li>Accuracy in using data and sources</li> <li>Use of language</li> </ol>

The project lasted for approximately two and half months and was carried out in the Civics Education Study Program which involve students physically and mentally. The implementation of the project takes place in the classroom and also outside the classroom, while the student activities in doing it can be seen in table 2.

5. Analytical ability

Table 2. Mapping the project				
Week	Meeting	Activities Description	Products	Notes
1st week	1st meeting	Project was started by project information activity		In classroom
2nd week	2nd meeting	Completing a part of project by project question number 1	Resume about topic	Group work in the classroom
	3rd meeting	Arranging interview guide	Interview guide	Group work in the classroom
3rd week		Doing interview with legislative candidate	Interview transcript	Out of class
4rd week	4th meeting	Describing interview result	Conclusion of interview result	Group work in the classroom
	5th meeting	Arranging legislative candidate profile of 2019 election individually	Legislative candidate profile of 2019 election	Group work in the classroom
5th week	6th meeting	Collecting and analysing information from various sources of question number 6 and 7	· · · · · · · · · · · · · · · · · · ·	Group work in the classroom
	7th meeting	Collecting and analysing information from various sources of question number 7 and 8		Group work in the classroom
6th week	8th meeting	Collecting and analysing information from various sources of question number 9 and 10		Group work in the classroom
7th week	9th meeting	Designing the group presentation and individual final report	Group presentation design	In the classroom
8th week	10th meeting	Group presentation		In the classroom
	11th meeting	Continuing the Group presentation		In the classroom
9th week	12th meeting	Reflecting the project and submitting journal	Complete journal	In the classroom
10th week	13th meeting	Submitting final report and conducting final test	Individual final report	In the classroom

# Research Design

The design of this research is qualitative where the researcher is also the subject supervisor who will carry out the project with the assistance of colleagues who act as observers during the research. (Creswell, 2012). Primary data consists of 5 kinds of products produced by students on the project, the results of student final tests on project material, observations about students' critical thinking skills in completing projects, and interviews with students about the advantages and disadvantages of learning using the project method. While

secondary data is data about legislative candidates obtained from the KPU (Komisi Pemilihan Umum) or General Election Commission.

# Research participants

The participants of this study were 37 students enrolled in the January-June 2019 semester in the civic education study program, consisting of 10 males and 27 females. At the time the research was conducted they were in the 5th semester of their study period. Students are grouped heterogeneously based on academic ability, gender and ethnicity. There were six groups, each consisting of 6 people and 1 group consisting of 7 people. Each student must get 1 legislative candidate who is actively campaigning in the elections that will soon be held, thus one group will produce a profile of legislative candidates with 6 and 7 legislative candidates later. Overall the class will be able to display 37 legislative candidates from various parties who are fighting in the election.

# Data collection

Data were collected through observation when lectures were taking place in class. Analysis of product documentation produced by students in the project, as well as written tests in the form of essays regarding student understanding. Data concerning 5 types of products from the project were obtained using a rubric where each criterion was interpreted as shown in table 3.

Table 3. Criteria for evaluating the resulting product			
Value	Criteria		
1.	Incomplete and only fulfills 1 indicator		
2.	Less incomplete and only fulfills 2 indicators		
3.	Complete enough and fulfills 3 indicators		
4.	Complete and fulfills 4 indicators		
5.	Very complete and fulfills 5 indicators		

While the final test was obtained by asking students to answer 5 essay questions with the Higher Order Thinking (HOT) criteria related to project material in political sociology. Observation sheets are used to reveal students' critical thinking skills with five indicators, namely: identifying and analysing problems, problem solving strategies, evidence and answer arguments, delivering answers, and evaluating. These five indicators of critical thinking skills were developed into ten aspects that were observed or assessed. Ten aspects of student's critical thinking assessed includes among others: 1) identifying information or problems contained in the project. 2) Analysing problems to find the right solution, 3) Strategies used in solving complex questions rationally, 4) The arguments are correct, clear, and specific, 5) Active in answering questions, 6) The language used is good and correct, 7) Has good and balanced evidence presented, 8) Makes the right conclusions, 9) Responds to questions given well, and 10) Has a high curiosity. Data on the advantages and disadvantages of learning to use projects were obtained through reflection and interviews with students after the project was completed.<sup>(24-26)</sup>

## Data analysis

The data obtained through the rubric about the product of the project were analysed using descriptive statistics. (27) Before analysing, the data were tabulated and interpreted. The grouping is based on the analysis of the ideal mean and standard deviation ideal. Furthermore, the data is presented in the form of a frequency table and then categorized. The categorization is based on four criteria consisting of high, medium, less, and low. This categorization can be seen in table 4.

Table 4. Classification of the ideal mean and standard deviation		
Interval Formula	Category	
Mi + 1,5 SDi < X ≤ Mi + 3 SDi	High	
Mi < X ≤ Mi + 1,5 SDi	Medium	
Mi - 1,5 SDi < X ≤ Mi	Less	
Mi - 3 SDi < X ≤ Mi - 1,5 SDi	Low	
Mi = the ideal mean value: (maximum score + minimum score) and SDi = the ideal standard deviation: 1/6 (maximum score - minimum score)		
Source: Suharsimi Arikunto (28)		

The analysis results explain the achievement level of critical thinking skills and learning outcomes possessed by students. The results of interviews and reflections were analyzed qualitatively. (29)

# **RESULT**

# Students' Critical Thinking skills

Students' critical thinking skills are obtained based on the rubric from the results of observations while students complete their projects. The results can be explained in figure 1 below.

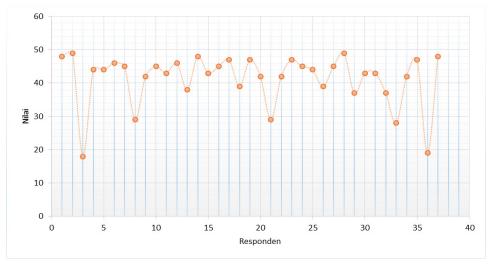


Figure 1. Students' Thinking Skills in completing their project

Meanwhile, the results of the data analysis are listed in table 5.

Table 5. The Descriptive Data of Students' Critical Thinking				Thinking		
Mean	Std. Deviation	Variance	Range	Min	Max	Sum
41,405	7,653	58,581	31,00	18,00	49,00	1532,00

The data in table 5, it turns out that there are 27 students who scored critical thinking skills above the average value (mean) = 41,4105 and as many as 10 students whose scores were below the average value. This norm is based on the normal curve. Considering the lowest score and the ideal highest score, namely 10 and 50, then the ideal mean value = (maximum score + minimum score) = (50 + 10) = 30. The ideal standard deviation (SD) is 1/6 of (maximum score - minimum score) = 1/6 (50 - 10) = 6,67. Categories of student's critical thinking skills can be arranged as shown in table 6.

<b>Table 6.</b> Categories of students' critical thinking skills		
Interval data	Category	
41 - 50	High	
31 - 40	Medium	
21 - 30	Less	
10 - 20	Low	

By referring to this category, it can be explained that there are 27 students who already have high critical thinking skills, 5 people are in the medium category, 3 people are in the less category and 2 people are in the low category. Thus, it can be concluded that the majority of students have shown high critical thinking skills. By referring to this category, it can be explained that there are 27 students who already have high critical thinking skills, 5 people are in the medium category, 3 people are in the less category and 2 people are in the low category. Thus, it can be concluded that the majority of students have shown high critical thinking skills.

# **Student Learning Outcomes**

The final student scores were obtained from the results of the interview conclusions, the product values

of the 2019 election candidate profiles, presentation skills, journal scores, report scores, and test scores are presented in table 7.

	Table 7. Results of analysis based on assessment indicators			
No	Rated aspects	Mean	Standard Deviations	
1	Interview Conclusion	79,32	5,79	
2	2019 election candidate profile	79,05	5,51	
3	Presentation	80,08	6,13	
4	Journal	75,41	5,82	
5	Final Report	80,00	3,91	
6	Final test	77,59	4,76	

Based on the research data, the indicator of the results of the interviews with the candidates was obtained by 20 students who obtained the results of the conclusion of the interviews with the candidates above the average value (mean) = 79,32 and as many as 17 students whose scores were below the average value. For the 2019 election candidate profile product indicator, it was found that there were 18 students who obtained the 2019 election candidate profile product score above the average value (mean) = 79,05 and as many as 19 students whose scores were below the average value. For the presentation ability indicator, 18 students got scores above the average (mean) = 80,08. For the student journal indicator, it was found that 11 students scored above the average value (mean) = 75,41 and as many as 26 students scored below the average value. For the final project report indicator, it was found that there were 9 students who had a final project report score above the average value (mean) = 80, and 28 students who had a project final report score below the average value. For the indicator of student test results, it was found that there were 24 students who had test scores above the average value (mean) = 77,56, and 13 students who had test scores below the average value. Student learning outcomes are concluded based on the average component of the assessment shown in figure 2.

The average value obtained on student learning outcomes is 77,57 while the standard deviation is 3,99. Five indicators that become learning outcomes used in political sociology learning are adjusted to the project design carried out so that the accuracy of the assessment is oriented to student activity, creativity and understanding. The knowledge possessed supports the achievement of results on each indicator.

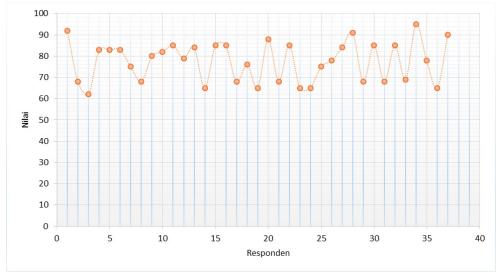


Figure 2. Students' final grades using PjBL

# The advantages and disadvantages of learning using projects

Based on the results of reflections on the project and interviews with students after the project was completed regarding the advantages and disadvantages of learning to use projects, the conclusions obtained are as listed in table 8.

Tal	Table 8. The advantages and Disadvantages of Project-based Learning			
No.	Student Responses learn to use the project method			
	Advantages	Disadvantages		
1	I have the experience of meeting directly with resource persons.	Feel exhausting		
2	I gained deeper knowledge	Takes a long time		
3	I can see the different perspectives of legislative candidates on the meaning of elections			
4	We can argue with friends about the quality of the candidates that we make resource persons			
5	I have to think more critically than if I study in the usual way			
6	I understand that elections involve many aspects of people's lives			

The data in table 8 above shows that students perceive many advantages that they feel in learning using the project method when compared to learning using the usual method where they listen more to lecturers' descriptions of learning materials. In addition to the advantages they felt learning with projects, they also stated that learning was more tiring because many assignments were requested and had to be completed on time. However, from the implementation of learning with projects, the advantages are still more than the disadvantages.

# **DISCUSSIONS**

This study shows that learning using projects can improve students' critical thinking skills, where more than 50 % of students have above average scores. The learning outcomes achieved by students in learning Political Sociology using PjBL are also in a good category, because in general students are able to achieve a success rate of above 75 percent, and there are no students who fail in this course. Students also have positive responses about learning to use projects because they consider learning to use projects have many advantages when compared to conventional learning.

Students' ability to think critically is triggered by projects that are quite challenging for them to use various strategies in solving existing problems. This is indeed in accordance with various research results that when students are given the opportunity and are challenged to face and solve their problems, they are able to use every potential that exists. (5,30) By confronting them with the problems surrounding legislative candidates in the 2019 election, they have to determine a strategy to solve it. This will be different if the lecturer explains at length about the election, then students will only listen without having the opportunity to explore problems based on their potential.

The project on legislative candidates in the 2019 election is a challenging project to do. Not only is this part of the lecture syllabus in the Political Sociology course, but this is also a real phenomenon that students can always observe. (10) Therefore, by direct involvement of students in exploring the topic, students are able to broaden their horizons as well as their critical thinking skills. This is also caused by projects that have a divergent nature or are open to subjective interpretation by all students, depending on one's abilities and insights about the topic being discussed. (31,32) There are no instant answers about projects in the available textbooks is a trigger for students to develop their critical thinking skills. For example, how the capability of the candidates they interviewed required an in-depth study of the criteria for a legislative candidate and the laws and regulations that govern them. Therefore, students must be able to describe themselves based on their understanding and analytical power of the topic. In this way, this project is able to improve students' critical thinking skills. (13)

The success of learning is also evidenced by the achievement of learning outcomes. Learning by using projects in the Political Sociology course is the first experience for students, and it can be said to be successful even though it is not optimal. With five project components assessed plus a final test, there are indeed some variations in results between students with high achievement levels and students with moderate or good achievement levels. The six components of learning outcomes assessed from the project, namely the conclusion of interviews with selected candidates, profiles of candidates in groups, student journals, report presentation, final project reports and test results, it appears that all students are able to fulfil the desired goals. Because the six components are interrelated with each other, students who are not able to compile the results of their interviews with legislative candidates also cannot compile the profiles of candidates in their groups, so they are also unable to describe them in journals. Those who are unable to describe the capacity and capability of the legislative candidates will also not be able to take part in the final test and preparation of the final report. Therefore, to be able to complete this project, students are required to follow each specified stage. (4,11,33)

These activities and project activities are interrelated, so the level of student involvement is high. If they miss one stage, then they will lose the next stage, which they must pursue with great effort. (34) In addition to high involvement in activities, student understanding also becomes deeper because the topics discussed can be viewed from various perspectives and sources. The ten guiding questions given, all of them refer to the capacity of the candidates that must be explored by students directly or through various sources. Thus, PjBL provides an opportunity for students to have broad insights, far from what lecturers can explain as usual.

A learning model or approach cannot be separated from the advantages and disadvantages that exist in its implementation. In general, students are able to see that the advantages of this model or approach far outweigh the disadvantages they feel. The main advantages observed are the active involvement of students in learning and the demand to develop analytical power in solving problems. (12) In addition, learning using PjBL gives students the opportunity to gain hands-on experience in interviewing resource persons or candidates of their own choosing. Interview experience relates to the readiness of knowledge about what will be asked, as well as mental readiness to deal with other people in a real context. In general, students say that this is the first time they have had an interview with an important person, and usually this experience will last a long time. Thus, learning using PjBL gives students a different atmosphere from the usual lectures. For lecturers, it also provides new experiences, especially in preparing meaningful learning with planned and measurable projects from the beginning to the end of the semester.

The disadvantages raised about learning using PjBL can be said because students are not familiar with lectures that require a lot of work and assignments. (9) Because of that, they have difficulty in meeting the demands, especially the low habit of reading various sources among students makes them very busy to complete the existing tasks. Because this project also uses a rather long-time allocation, it basically requires students to be able to deepen their knowledge, but some students say that studying with projects feel exhausting, since the assignment are related to one another. However, the main problem is actually because the project changes the work rhythm of students from being accustomed to receiving from lecturers to having to find and reason for themselves the desired knowledge. A small number of students do not seem optimal in achieving their goals. This is known from the results of existing exams and comments when the reflection phase is carried out. They say that learning by project is very tiring because the demands are many and in-depth on one topic. This is indeed in accordance with the character of PjBL which requires a complete stripping of the topic that is used as a project. Therefore, basically repeated experiences are also needed so that the implementation of learning using PjBL can be successful.

The findings of this study are meaningful in two ways, namely 1) the learning process that involves students physically and mentally and is contextual in nature, will encourage students to develop all their potential and will be more motivated in participating in learning.<sup>(35)</sup> Therefore, lecturers in higher education must dare to go out of their comfort zone, where usually they as an information giver and source of knowledge for students turn into motivators and facilitators in solving a problem.<sup>(1)</sup> 2) The pattern of learning in higher education must be designed in an activity that causes students to be involved in theoretical and practical activities. In this way, they can be equipped with various skills, both hard skills and soft skills, which are needed to live in the 21st century and also as preparation for entering the world of work The Ministry of Education and Culture of Indonesia issued Decree No. 3 of 2021.

In line with the findings above, the implications of this study are 1) the need for an assessment system in higher education that uses multiple instruments that can describe the authentic abilities of students. So far, the assessment system has been formatted mainly only for Mid test and final test scores, that currently lecturers can assess the competencies achieved by students through various assignments, both theoretical and practical. <sup>(36)</sup> In addition, the assessment system that relies on tests alone has not been able to measure the achievement of competence in the field of skills comprehensively. 2) Socialization and training are needed for lecturers in carrying out learning in higher education as required by The Ministry of Education and Culture of Indonesia issued Decree No. 3 of 2021 in which learning should be carried out in the form of case studies and project-based learning. This is certainly not as simple as it seems because carrying out learning using projects requires planning, procedures and an assessment system that demands the professionalism of lecturers in their fields. <sup>(9)</sup>

This research that has been done, supports the findings of other studies that project-based learning shows more effective results when compared to learning using traditional methods. (37,38,39,40,41) Bell also found that project-based learning is an innovative approach that teaches various critical strategies needed to be successful in the 21st century. The results of this study also support research findings which state that in project-based learning, students gain important knowledge, skills and disposition by investigating open-ended questions in order to derive meaning that can be transferred in a useful way. (42) Kazun & Pastukhova suggest that the application of project-based learning in several countries shows different effectiveness in several fields. (43) The results of this study are also in line with the research of Miri, et.al which explains that students' critical thinking skills are created when students understand the material being taught. (44) Snyder in his research explains that

to improve critical thinking skills, learning methods that emphasize student involvement are needed. Direct learning will provide real experience to students so that to solve problems faced by students will be able to think critically to make decisions from solving these problems. (45) In Indonesia, the findings of Rahardjanto, et al show that Hybrid-PjBl for prospective teachers shows a significant influence on the achievement of student learning outcomes and creative thinking skills. (46) The results of research conducted by Nafiah and Sugianto also conclude that the level of critical thinking is relevant to the learning outcomes obtained by students. (47)

Various studies have shown that learning using project-based learning shows various benefits that can be obtained by students both in terms of depth of knowledge and in terms of skills that are well honed and needed in life today, it is necessary to carry out more intensely in various fields of study in Indonesia College. The students' response that they felt so difficult in completing the project indicated that they were not used to learning in that way. Therefore, repetition in various projects related to the curriculum and contextual will make students have skills and strategies in completing their projects. Thus, the Ministerial Decree, No. 3 of 2021 regarding the policy of implementing learning in universities in the form of case studies and project-based learning needs to be immediately realized by lecturers in various fields of study.

## CONCLUSION

Learning using project-based learning in the political sociology course is able to bring students closer to the practical and theoretical side of democratic elections. Through the project, students are able to elaborate on the existence of legislative candidates who compete in elections by bringing various programs from the political parties that carry them. Carrying out projects on time when legislative candidates are actively involved in campaigns gives students the opportunity to get to know them, known the social and financial capital they rely on to be elected later, and assess their capabilities as candidates for representatives of the people. Because the project is real and contextual, students are able to demonstrate their critical thinking skills and get good learning outcomes. However, the most important thing is that students are physically and mentally involved in a long enough period of time to answer the challenges of completing the project.

This study shows that the concept of project-based learning which is designed in accordance with the theory developed by experts is one of the innovations in learning that is useful in developing the potential of students as young people who are capable, knowledgeable and reliable problem solvers. Therefore, this study emphasizes the government's policy that requires learning in higher education to be not only theoretical but also practical and useful.

This research was conducted in one of the learning sections of the Political Sociology course with limited number of students' participants, and only focusing on critical thinking skills and learning outcomes. Because the research was carried out before the general election was carried out so that students could no longer elaborate on the candidates who were elected in the election in order to re-evaluate the assessments they made in the project. Therefore, further research can be done to find out other aspects of project implementation such as motivation, intensity of involvement of various parties outside the university and the development of more complex projects with large number of participants.

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The authors declare that there is no conflict of interest.

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