



## Problem-Based Learning Method for Improving the Learning Achievement of Students

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**Abstract:** The issue with this study is the low levels of student learning outcomes and learning activities in the sample IPS2 individuals. The objective of this project is to raise student learning outcomes and active learning achievement in social studies. PTK, or classroom action research, is the term used to describe this sort of study. Planning, action implementation, observation, and reflection are all phases of research. The information used in this study came from watching student learning outcomes and activities in Social Sciences 2 courses. According to the recapitulation data, the first cycle's average percentage of learning activities was 63.8%, and the second cycle's average percentage was 89.34%. This demonstrates an increase in student learning activities. In cycles I and II, respectively, the average student learning outcome was 42.22% and 71.04%. This demonstrates that social studies 2 student learning outcomes have improved. The minimum completeness score (71.04%) is obtained, according to the recapitulation of learning activities and student learning outcomes using problem-based learning techniques. Thus, applying the problem-based learning method can improve learning outcomes and learning activities of class C1 IPS2 students of the PGMI FAI-UMI Makassar Study Program.

**Abstrak:** Permasalahan dalam penelitian ini adalah rendahnya aktivitas belajar dan hasil belajar siswa pada mata pelajaran IPS2 sebagai sampel. Berkaitan dengan hasil belajar dan aktivitas siswa, tujuan penelitian ini adalah untuk meningkatkan prestasi belajar IPS. Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus termasuk dalam kategori ini. Tahapan penelitian adalah perencanaan, tindakan/pelaksanaan tindakan, observasi, dan refleksi. Data yang diperoleh dalam penelitian ini adalah hasil observasi aktivitas belajar dan hasil belajar siswa pada mata pelajaran IPS2. Hasil rekapitulasi menunjukkan bahwa persentase rata-rata aktivitas pembelajaran pada siklus I adalah 63,8%, dan siklus II adalah 89,34%. Hal ini menunjukkan bahwa aktivitas belajar siswa mengalami peningkatan. Rata-rata hasil belajar siswa pada siklus I sebesar 42,22% dan siklus II sebesar 71,04%. Hal ini menunjukkan bahwa hasil belajar siswa pada mata pelajaran IPS 2 meningkat. Berdasarkan rekapitulasi kegiatan belajar dan hasil belajar siswa dengan penerapan metode pembelajaran berbasis masalah dapat disimpulkan bahwa ketercapaian nilai ketuntasan minimal (71,04%). Dengan demikian disimpulkan bahwa penerapan metode problem based learning dapat meningkatkan hasil belajar dan aktivitas belajar siswa kelas C1 IPS2 Prodi PGMI FAI-UMI Makassar.

## A. Introduction

In the process of raising the standard of human resources, education is crucial (Efendi, 2020; Ramadhani et al., 2021; Cinque, 2016). The process of growing human resources is connected with the process of raising educational standards. Improving education standards is one of the government's policy measures for raising the caliber of Indonesia's human resources. Professionalism is necessary in all sectors, including the field of education, to keep up with the developments of the 21st century, often known as the period of globalization. How a learning process is created and generated in practice is the issue that is constantly present in the field of education (Widya et al., 2019; Afandi et al., 2019; Al Kandari & Al Qattan, 2020; Jalinus, 2021). The effectiveness of teachers in carrying out their vocation as students is intimately tied to the good and poor quality of education. A teacher working in this environment must continuously identify the right format and develop a tactical approach for an enlightened learning design (Batubara, 2021; Ufie et al., 2020; Wen et al., 2018; Spiteri, 2021).

According to the description above, learning in micro-praxis must determine the most effective manner to communicate the concept taught in a specific course so that students may apply and retain the concepts longer as a practical competency (Farozin et al., 2020). Additionally, teachers must interact with students effectively. The ability to choose the best technique and learning strategy for the type of course is the logical result of this professional requirement. As a social science subject that was formed in an academic setting, social science theoretically, ideally, has a strategic role in analyzing and researching socio-political issues that arise in society (Ningsih & Jha, 2021). As a result, social science education must be more responsive to societal trends and always prepared with critical and alternative thinking to address the difficulties that are being faced (Budianto, 2020; Tuerah et al., 2019).

Social sciences are increasingly being asked to address issues related to globalization, such as democracy, decentralization and autonomy, human rights enforcement, good governance, emancipation, and democratic society. The Madrasah Ibtidaiyah Program's Learning Strategy and Model of Learning in Teacher Education aims to improve students' ability to think, act, and interact in a variety of social and cultural contexts based on ethics. The learning objectives for the Teacher Education Madrasah Ibtidaiyah Program include two cognitive and practical goals (PGMI Social Sciences). cognitive training Giving pupils a solid grounding in the social sciences will enable them to evaluate and comprehend the components of individuals, cultures, and society as a whole. Additionally, practical goals are intended to assist students in developing more mature attitudes and behaviors as they deal with the diversity of society, culture, social settings, and social challenges in daily life. At the level of reality, teachers frequently stick to traditional methods that are mainly focused on the achievement of cognitive features that rely on lecture methods in the study of social sciences in both secondary and higher education. If this occurs, what occurs is merely a verbalization of knowledge. Students can memorize social science principles in academic contexts, but they also need to have

problem-solving abilities. According to the actual circumstances on the job, particularly in the Teacher Education Madrasah Ibtidaiyah Program (PGMI) of the Islamic Faculty of the Muslim University of Indonesia (UMI), teachers continue to study by using traditional teaching techniques. Due to the impact of these teaching strategies, students have a tendency to memorize the material being covered, which keeps the value of the learning outcomes in the course from being fully realized. Additionally, the learning outcomes did not have any relevance to students' day-to-day lives. Some of the course participants have shown that they still have some difficulty understanding the difficulties of navigating the social, economic, political, religious, psychological, and cultural frameworks. For instance, students are unable to skillfully resolve problems and their behavior still frequently displays immaturity.

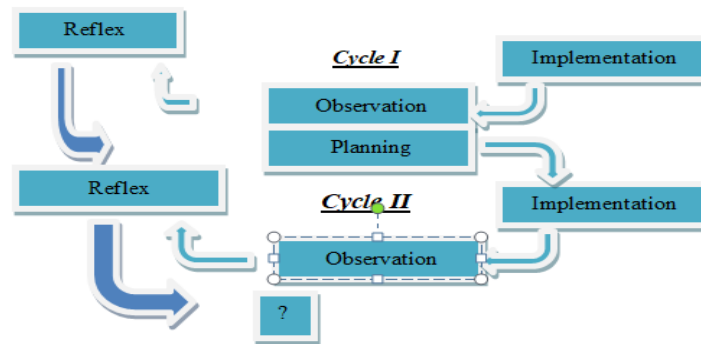
In the problem-based learning approach, students learn about critical thinking and problem-solving techniques in the context of actual situations from the real world (Kusnandar, 2019; Astuti, 2019; Mella et al., 2022). Problem-Based Learning (PBL) becomes applicable to be used as a Social Science learning technique when the underlying assumption about the problem's perimeter is taken into consideration. One innovation built on a paradigm of education that gives students' learning activities priority is problem-based learning (PBL). According to Anazifa & Djukri (2017); Kristiana & Radia (2021), PBL is a technique of learning whereby students work through the steps of the scientific method to solve a problem in order to gain information about the issue at hand as well as the necessary problem-solving abilities. According to Abidin et al (2021); Kusumah et al (2020) A method of designing and instructing the course as a stimulus and concentrating on student activity is problem-based learning". Furthermore, Akhdinirwanto et al (2020); Evi & Indarini (2021) stated that PBL is a teaching strategy that involves confronting students with real-world issues that are unstructured or open-ended as learning stimuli. According to Lider (2022); Hasanah & Fitria (2021), PBL is a way of learning that starts with the problem before gathering and incorporating additional information.

The PBL method makes the assumption that studying social sciences will be attractive since the topics are relevant to students' daily life. In addition, the idea of moving from basic knowledge to higher-order thinking skills will encourage kids to organically learn in context. The goal of this research is to boost social studies learning achievement in the characteristics of activeness and student learning outcomes based on the description of the problem's background provided above.

## B. Method

Classroom Action Research is the methodology to be employed (Simanjuntak & Silalahi, 2022; Nurhasanah et al., 2020; Syakur et al., 2020; Ardani, 2021). The research participants were 18 students from batch 2015/2016 class C1 of the Teachers Education of Madrasah Ibtidaiyah Program (PGMI) at the Islamic Faculty of Muslim University of Indonesia in Makassar. An observation of lecturer and student activity as well as an

interview with respondents, both lecturers and students, on their reactions to this problem-based learning, serve as the two instruments used in this study to gather data. The descriptive-analytical method was employed in this study's data analysis.



**Figure 1.** Schematic of Classroom Action Research (CAR) Model Kemmis & MC Taggart (Pangaribuan et al., 2022)

According to performance indicators derived from qualitative data, there was a positive learning improvement from Cycle to Cycle in terms of both the quality and quantity of positive attitude and the rise in respondent involvement (students). If the opposite occurs, it will make the cause for this class action investigation less compelling.

### C. Result and Discussion

#### Result

Student Learning Activities in Cycle I The following table shows the findings from the observation sheet for each student learning activity:

**Table 1.** Percentage of Student Learning Activities in Cycle I

No	Classification of Activities	Rated Aspects	Meeting Score I	Meeting Score II	Average (%)
1	Visual Activities	Participation of the students in the lecturer's explanation	2 (7 students)	3 (15 students)	61,1%
2	Oral Activities	Students' bravery exercises both posing and responding to inquiries	1 (5 students)	2 (10 students)	41,7%
3	Emotional Activities	the kids' engagement in the work.	3 (14 students)	3 (15 students)	80,5%
4	Mental Activities	Student activity using the activity sheet to address the issue	3 (13 students)	3 (13 students)	72%
	Average	Activities Cycle			63,8%

The amount of learning activities students participated in during cycle I was still low, at 63.8%, as shown by table 1 above, with the bulk of these activities being visual, verbal, active, and mental. The emotional activities are among the criteria that are given the highest marks, with an example of the students' work ethic on finishing the task at an 80.5% rate.

**Table 2.** Percentage of Student Learning Activities in Cycle II

No	Classification of Activities	Rated Aspects	Meeting Score III	Meeting Score IV	Average (%)
1	Visual Activities	Participation of the students in the lecturer's explanation	3 (15 students)	4 (17 students)	88,5%
2	Oral activities	Students' bravery exercises both asking and responding to questions	3 (15 students)	3 (17 students)	88,5%
3	Emotional activities	the kids' engagement in the work.	4 (16 students)	4 (16 students)	89%
4	Mental activities	Students solve the issue on the activity sheet.	4 (16 students)	4 (17 students)	91,5%
Average		Activities Cycle			89,34%

Description of student activity percentage:

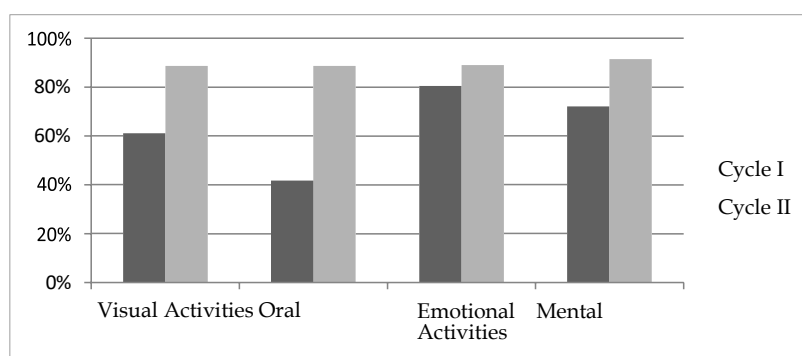
1 = less (05-25%)

2 = enough (25% -50%)

3 = good (50% -75%)

4 = very good (> 75%)

The average figure for the cycle I looked at is still low, at 63,8%, according to the table 2 score on the observation sheet of student learning activities. However, in Cycle II, 89.3% more pupils on average were learning IPS2 activity. This demonstrates that PBL can enhance students' learning activity on the IPS2. The average student's learning activity increased by 25.5% as a result. The diagram below compares the percentage of learning activities in Cycle I and Cycle II..



**Figure 1.** Bar Chart of Increase Percentage of IPS2 Learning Activities

based on the student learning outcomes in Figure 2 test for learning outcomes, formative testing oral exercises 88.5% of the students' courage activities involve asking and responding to questions. The percentage of pupils that actively participated in their assigned tasks was 89%.

The test results for Learning Cycles I and II, which were administered at the beginning and conclusion of each cycle, are shown in Table 3. (pre-test and post-test). These tests are displayed in the following table:

**Table 3.** Result of Learning Cycle I and Cycle II

No	Name	Cycle I			Cycle II		
		Pre-test	Post-test	Standard of completeness	Pre-test	Post-test	N-Gain
1	Wulandari Rettob	30	40	Incomplete	60	80	Complete
2	Masnawin	40	0	Incomplete	50	70	Complete
3	Fauziah	45	70	Complete	62	75	Complete
4	Abd. Rahmanto	45	40	Incomplete	60	70	Complete
5	Isra Isa Saputra	35	60	Incomplete	60	70	Complete
6	Ristiana	55	50	Incomplete	70	75	Complete
7	Mai Syarah	50	65	Incomplete	64	73	Complete
8	Sriwahyuni	25	45	Incomplete	65	75	Complete
9	Muh. Irham Tuppu	20	60	Incomplete	60	70	Complete
10	Yuliyanti	50	35	Incomplete	60	67	Incomplete
11	Nur Hudanil Isma	50	65	Incomplete	62	70	Complete
12	Mirna	25	50	Incomplete	62	77	Complete
13	Hidayatullah	0	0	Incomplete	0	0	Incomplete
14	Heri Afandi	0	0	Incomplete	0	0	Incomplete
15	M. Rahmatullah	0	0	Incomplete	62	0	Incomplete
16	Suci Ayu Lestari	40	55	Incomplete	50	70	Complete
17	Ayu Lestari Putri	25	60	Incomplete	70	80	Complete
18	Masfufah Ruslan	55	65	Incomplete	62	85	Complete
	Amount	590	760		1099	1492	
	Average	32,77	42.22		52,33	71,04762	

According to Table 3, the average student learning outcomes increase in the first cycle, with a student learning outcome average of 42.22 and an average N-Gain of 0.15.



On the first cycle, as many as 17 students scored below the minimum completeness standard, and as few as one student received the above value. The score can be between 0 and 70, with 70 representing the highest value. This shows that the learning results from Cycle I can be enhanced. For the second cycle, the average student learning outcome was 71.04, and the average N-gain was 0.31. In this Cycle II, 0 is the lowest value and 85 is the highest. While the results of the observation sheet of the student learning activity and the student learning outcomes are shown in the following table:

**Table 4.** The typical recapitulation of student learning activities and results

No.	Rated Aspect	Cycle I	Cycle II
1	Average student learning activity	63,8	89,3
2	The average score of student learning outcomes	42,22	71,04762

The average score of student learning outcomes rises as the average of student learning activities rises, and vice versa, as seen in table 4 above. This is because all criteria for success have been attained. The limit of the indicator, which is 70%, has been reached, meaning that student learning activities have grown. In contrast, the average learning score on the cycle's final exam has likewise surpassed the indicator's upper limit of 70, and no more students received values that fell below the required level of completion. The investigation does not have to go on in the following cycle.

## Discussion

Interviews are conducted for the first time before to pre-research and following the action at the end of the cycle. Interviews with professors and students were done. Interviews conducted during the preliminary study period revealed that while some students are eager about enrolling in IPS2 classes, others dislike the course because it makes them drowsy and bored. The students are passionate about IPS2 studying with the PBL approach, according to the results of the interview conducted at the conclusion of Cycle II. The collaborating lecturer claimed that IPS2's learning activity had increased as a result of the PBL learning model's successful implementation.

This study uses classroom action research as its approach (PTK). According to the findings of this study, the average learning outcome for IPS2 pupils in a cycle is similar to 42,2 and their percentage of learning activity is equivalent to 63,8%. In Cycle II, the average IPS2 learning activity percentage was 89.3%, while the average IPS2 learning outcome percentage was 71.04762. When all indications are attained in Cycle II, the research is finished for that cycle. As a result, the average of IPS2 learning outcomes increased and IPS2 learning activity increased by 25.5% with the deployment of the problem-based learning approach.

## D. Conclusion

The following can be drawn from the discussion in Classroom Action Research (PTK): Educational Effects (Instructional Effects) for C1 students of the PGMI FAI-UMI Makassar Study Program, hopefully they are better able to solve IPS2 questions using the Problem Based Learning (PBL) approach. ). Related Impact (Nurturrent Effect).

Learning in the next cycle does not need to be continued because all indicators of success have been fulfilled, namely the indication limit has been reached and student learning activity has increased by 70%; the average end-of-cycle test learning outcomes have also reached the indicator limit of 70; and there are no more students who have scores below the minimum standard of completeness. The average value of student learning outcomes increases as the average student learning activity increases, and vice versa

The PBL approach in the IPS 2 learning process can improve students' ability to solve complex problems and stimulate more activity and creativity. Thus it is concluded that the application of the problem based learning method can improve learning outcomes and learning activities of class C1 IPS2 students of PGMI FAI-UMI Makkasar Study Program

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