

## Relationship Analysis and the Enhancement of Student Social Intelligence in Problem-Based Social Science Learning

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### ABSTRACT

This study seeks to investigate and analyze the relationship between the implementation of Problem-Based Learning (PBL) in Basic Social Sciences education at PGRI University Yogyakarta and the improvement of students' social intelligence. The study employs a qualitative approach with a case study design, in which the researcher conducts interviews and observations with six students and One Lecturer participating in PBL-based Basic Social Sciences education. These individuals are from various regions, and each has unique characteristics. According to the researcher's criteria, the informants are selected as essential informants. The subjects of this study are second-semester student in PGRI University Yogyakarta's Elementary School Teacher Education program. The investigation is conducted over a span of two months, beginning on March 27, 2023 and ending on May 11, 2023. Documentation, in-depth interviews, and participant observation are data collection methods. The findings suggest that the relationship between social intelligence and the implementation of Problem-Based Learning (PBL) in Basic Social Sciences education enables students to develop social skills such as cooperation, effective communication, empathy, and situational understanding, which are essential components of social intelligence.

**Keywords:** *Social Intelligence, Problem-Based Learning (PBL), Social Science*

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## INTRODUCTION

The era of society 5.0 provides an overview of the increasingly rapid development of technology (Nastiti & Ni'mal'Abdu, 2020) especially during the Z generation, which is predicted to become the Prima generation in Indonesia in 2045 (Hidayat, 2021, p. 55). Various efforts have been made as a form of improving the quality of human resources, especially in learning, which is one of the important aspects (Ishana et al., 2019, p. 2), because through learning, a person can improve his quality of life and shape his character (Ismail, 2021). In addition, learning also plays a role in facilitating the acquisition of knowledge, skills, and attitudes that are essential to facing future challenges (Zangiacomi et al., 2020, p. 12). Therefore, it is important for us to ensure that the learning provided today can meet the needs needed in the face of the demands of an ever-evolving era.

Learning itself is a complex activity carried out by lecturers, and lecturers create an environment so that students can carry out the learning process (Uno & Mohamad, 2022, pp. 22-23). From the results of observations and initial interviews with several students, it can be seen that social science lectures have been perceived as monotonous. The use of lecture and presentation methods causes students to only ask questions to get grades without really paying attention to the answers given. During the presentation, only some students really paid attention. After considering these conditions, it is necessary to immediately find a solution to overcome the problem. In addition, when the lecturer explains the material, students do not fully understand the points conveyed.

Meanwhile, in the learning process of the Basic Social Sciences Courses for PGSD Students Class of 2022 at PGRI University Yogyakarta, there are problems that occur in the field, especially in the presentation process. Some students have difficulty determining a learning objective. This is based on the fact that students have difficulty determining the topic of discussion or interacting with or understanding individuals who ask questions or respond. In addition, some students have not been able to interact well with fellow students in class due to differences in character, especially in social interaction, because some students come from outside Java with a variety of languages of origin as well as the social characteristics they carry. This difference in character provides positive and negative nuances in learning. This difference in character causes some individual students to dislike other students. Some other problems are the level of loudness of the voice issued or thrown, politeness in responding to questions, arrogance, and so on.

Related to the above problems, one important aspect that is often overlooked in learning is social intelligence (Nasution, 2018). Social intelligence can be defined as the ability to understand and manage social interactions with other individuals, including skills in working together in groups, resolving conflicts, and communicating effectively. (Oviyanti, 2017). Social intelligence is very important in everyday life, including in the world of work and relationships, for every human being (Aman, 2021). At present, social intelligence is considered to be an increasingly important ability in facing the challenges of an increasingly complex world of work (Wirtz et al., 2018, p. 919) and continues to grow (Zubaidah, 2019, pp. 1-2). However, often social intelligence does not receive enough attention in the education and learning process (Septianti & Afiani, 2020). A learning method that can help improve students' social intelligence is the Problem Based Learning (PBL) learning model (Erlina, 2016, pp. 28-29). In its application, students work in groups to solve certain problems or tasks, which allows them to learn from shared experiences and develop their social skills.

In line with this, research conducted by Edström & Kolmos (2014) revealed that in the PBL model, problems are the starting point for learning, their processes placed in context, and their outcomes based on the learner's experience. The task involves the analysis of more complex problems, the solution of more complex problems, and the presence of strategies in problem solving. Finally, a social approach is essential. In group-based learning, the learning process is social, where learning takes place through dialogue and communication with students. Not only does the learning process include each other, but students also learn to share knowledge and organize the collaborative learning process with collaborative knowledge constructs. The social approach also includes the concept of participant-directed learning, which indicates collective ownership of learning processes, especially problem formulation (Edström & Kolmos, 2014, pp. 544-545).

Furthermore, in research (Malikha, 2018) it was stated that problem-based learning is a learning strategy that puts students at the center, where they are required to have skills and sensitivity in solving problems in a real social environment collaboratively. PBL is a learning approach rooted in constructivism where the focus is on selected problems involving current global issues or problems. Thus, students are not only expected to understand concepts relevant to the problem in focus but also experience learning experiences related to problem-solving skills and develop a critical mindset.

Another study by (Oktaviyanti & Novitasari, 2019) resulted in the finding that the application of PBL improves students' ability to think critically through solving relevant social problems. In addition, students' understanding of social sciences also improves because they are directly related to social problems that exist in real life. Furthermore, the learning process using PBL provides deeper meaning for students because they understand that social sciences are not only about the subject matter but also have a context that is relevant to everyday life.

Related to the results of the research above, the learning process with the PBL model cannot be separated from the social approach, which strengthens the idea that the social interaction of each student has a positive influence on learning. Bandura's modeling theory states that the behavior of humans has a reciprocal interaction that is mutually continuous between cognitive, behavioral, and environmental influences. Most of these behaviors can be learned by observation in the form of modeling, that is, by observing others. Then the results serve as a guide to action (Lesilolo, 2018). Like Bandura, Vygotsky put forward the idea that a person's cognitive and learning potential depends on transitions across the ZPD (zone of potential development). ZPD is a zone of understanding or close cognitive development, after which the learner moves to the next level of understanding. When a learner has progressed, they should be helped to move towards this zone and then afterwards to a new, higher level. In Vygotsky's view, ZPD is a potential level of development determined through problem solving (Simamora & Saragih, 2019, p. 62), under the guidance or cooperation of adults and with peers who have abilities (Suardipa, 2020).

Basically, social sciences are based on reality and social phenomena that are revealed through an interdisciplinary approach (Sovacool et al., 2018, p. 20) from various branches of social science. The main goal is to develop a concept of thinking based on the reality of social conditions around students. Through learning social sciences, the hope is to be able to form good citizens who are responsible for the nation and state. Edgar Bruce Wesley, in Endayani (2018), p. 122, defines social science as a social science discipline that has simplified and reduced its complexity so that it can be taught effectively in an educational context (Endayani, 2018, p. 122). In line with the opinion of Edgar, the National Council for the Social Studies (NCSS) defines "social sciences" as a study approach that combines social sciences and humanities with the aim of increasing the understanding and skills of citizens (Peck & Herriot, 2014, p. 387). In the context of education, social sciences systematically and coordinately study various disciplines such as anthropology, archeology, economics, geography, history, law, philosophy, political science, psychology, religion, sociology, and include material related to the humanities, mathematics, and natural science.

Based on the review of the previous literature above, this study aims to investigate and analyze the relationship between the application of problem-based learning (PBL) in learning basic social sciences and increasing students' social intelligence. The main objective is to analyze the effectiveness of PBL in improving

students' ability to work together, manage conflict, and communicate. In addition, this study also provides practical recommendations for the use of PBL in improving students' social intelligence. Thus, this research is expected to make an important contribution to the development of learning in the basic social sciences, which focuses on developing students' social intelligence through the application of the PBL method.

This research contains updated knowledge findings by exploring the relationship between students' social intelligence and the application of problem-based learning (PBL) in learning the basic social sciences specifically. This research also explores the potential of PBL in improving students' social intelligence, which is an important aspect of their learning and social lives. By focusing on the context of learning basic social sciences, this study provides new insights about the effectiveness of PBL in increasing students' social intelligence in an academic setting.

The results of this study are expected to contribute to the development of a more holistic and integrated education, taking into account the importance of social intelligence in the learning process. In addition, the results of this study can also be a reference for teachers and lecturers to develop effective learning methods for improving students' social intelligence. Although there are several studies on the application of PBL in learning social sciences, research that focuses on the relationship between students' social intelligence and PBL implementation is still very limited. Therefore, this research can contribute to complementing the literature on the effectiveness of PBL in increasing students' social intelligence in learning social sciences in a tertiary institution.

## **METHOD**

This research uses qualitative research methods. The research approach to be applied in this research is a Case Study. This is due to the purpose of research that wants to uncover and explain various aspects of phenomena that occur in the field (Hancock et al., 2021). Therefore, qualitative research uses inductive reasoning in data analysis (Sugiyono, 2017). This study used data collection methods, namely: observation, interviews with 7 respondents consisting of lecturers and students of different ethnicities, documentation, and triangulation. Data analysis The technique uses the Miles and Huberman model, namely data reduction, data display (data presentation), and conclusion drawing (Miles et al., 2018).

Sampling is based on purposive sampling, data sources based on certain considerations. Samples from PGRI University Yogyakarta are based on the following criteria: Students and Lecturers of the Department of Elementary School Teacher Education, Students are taking Social Science Courses, Students are in the second semester, and Course Supervisors, Respondents in this study according to the criteria are Lecturers, Students from Java, and Students from outside Java. The main respondents are students to find out the behavior and attitudes during the application of Problem Based Learning, and see the relationship in their social intelligence including Social Awareness, Social Skills, and Social Information in the learning process. In this case, lecturers to know the practice of applying PBL in Social Science Courses and Social Science Concepts in the Elementary School Teacher Education department. This research was conducted in a span of 2 months starting on March 27, 2023 to May 11, 2023.

Table. 1 Data Collection Instrumen.

Data	Sumber data	Pengumpulan data
<b>Social Intelligence</b> According to grag there are 3 indicators in social intelligence (Silvera et al., 2001) : <b>Social awareness</b> <ol style="list-style-type: none"> <li>1) Response to social problems</li> <li>2) An attitude of respect for differences (Empathy)</li> </ol>	- Students from different tribes aged 18-20 totaling 4 people - Lecturer of PGSD Course	Observation Interview documentation
<b>Social Skill</b> <ol style="list-style-type: none"> <li>1) Effective communication skills</li> <li>2) Ability to collaborate (Interaction style)</li> </ol>		
<b>Social Information</b> <ol style="list-style-type: none"> <li>1) Understanding Information with social context</li> <li>2) Integration of social aspects in mindset</li> <li>3) Awareness of social roles</li> </ol>		
<b>Application of Problem Based Learning in Social Science Learning</b>		
Orientasi pada masalah Organizing students / students Guiding the investigation Presenting Results Troubleshooting evaluation	- Lecturer - Student	Observation Interview Dokument
<b>The relationship between social studies learning and increasing students' social intelligence through PBL</b>	- Lecturer - Student	Analysis Research

The collected data will be analyzed descriptively and interpretively to gain a deeper understanding of the effect of PBL on students' social intelligence.

## RESULT AND DISCUSSION

In the research results section, data from interviews between lecturers and students are presented. The report is designed qualitatively and descriptively according to the results of the source/informant:

### Implementation of Basic Social Studies Course Learning with PBL model

#### 1. Social Studies Learning In PGSD Majors

Based on the results of interviews with lecturers related to social studies learning in the context of courses in the PGSD department are as follows:

*Social studies is a science that is closely related to the lives of individuals, groups, and communities in everyday life, of course, this learning is very important, especially for prospective elementary school teachers who will teach social studies subjects to children. As a PGSD student, social studies in this course is not just a collection of subjects such as history, geography, or sociology. more than that. It is about empowering children with knowledge and skills that enable them to recognize and understand their role in society, and involves developing caring attitudes towards the social environment, respecting cultural diversity, and understanding the principles of citizenship. Lecturer*

Based on the interview above, social studies learning in the PGSD department is to understand, explore, and teach various aspects of social, cultural, historical, and geographical life to elementary school children. Social studies at PGSD is not only about transferring facts, but also about forming critical understanding and social skills in order to be active, participatory, and have a broad insight into the world around them. According to lecturers in social studies learning at PGRI University Yogyakarta, it is divided into 2, namely IPS 1 and IPS 2 and has a relationship. As revealed by the IPS 2 lecturer, this is a continuation of IPS 1

*Nope, for the basic concepts of social studies courses in the UPY PGSD department are divided into two, namely IPS 1 and IPS 2, in IPS 2 it is taught in even semesters and is continuous with IPS 1. Lecturer*

In this case, researchers conducted research at the time of social studies learning 2. Meanwhile, according to Perpsketif students, social studies learning is very important for them because it can provide deeper knowledge about Social Science and also so that they can prepare themselves to become prospective professional educators as revealed in the following interview:

*Social Studies 2 learning opened doors for me to develop social, critical skills, and social studies learning also became an important role for me as a prospective elementary school teacher as a prospective educator in guiding the learning process later. Through social studies learning, I can prepare myself as an educator who is able to have a positive impact on the social development of students in school later. Students 1,2,3,5,6*

Based on the interview above, Social Science Learning in the realm of the Department of Elementary School Teacher Education, is a subject that provides fundamental knowledge about the scope of social sciences which aims to enable prospective elementary school teachers to be able to understand social problems in global and national contexts and develop social, critical, and broad insight skills, especially for prospective professional teachers, especially in elementary schools which incidentally are the foundation of education.

Researchers found similarities in the basic concepts of social studies with research from sisters (Mariati et al., 2021) the results revealed that Social Sciences contains the integration of several social science disciplines including geography, economics, political science, law, history, anthropology, psychology, and sociology, but the difference is that different findings mariati reveal conceptually with the basic foundations of social sciences general, while researchers specialize in aspects of elementary school teacher education courses. Another similarity is with sister Oktaviyanti's research (2019) Affirming the purpose of Social Science

covering three domains, namely cognitive, affective, and psychomotor. The goals of Social Science that are so clear and directed at these three domains will be very good if they can be achieved (Oktaviyanti & Novitasari, 2019, p. 44).

## **2. Implementation of PBL in Social Studies Course Learning**

Learning-based learning has been carried out several times by lecturers, one of which is social studies learning according to the teacher

*Problem-Based Learning (PBL) is a learning approach that focuses on solving real problems, where students are encouraged to identify, analyze, and solve complex problems. The application of PBL to social studies learning involves a series of steps to design learning experiences that provide real social context to students. Teacher*

In line with the interview above, Jabarullah and Iqbal Husain (2019) in their research stated that the general form of the Problem Based Learning (PBL) Model, is that students are presented with problem scenarios (Jabarullah & Iqbal Hussain, 2019). In line with Jabarullah and Iqbal Husain, Savery (2019) in his research said that in the course of overcoming problems, they experience systematic learning steps, lecturers usually act as facilitators in PBL (Savery, 2019, p. 88). This is also supported by Ritiaw (2021) which revealed that in implementing PBL, students analyze and formulate problems by identifying important facts and trigger words contained in the problem. In general, Problem-based learning is a set of teaching models that use problems as a focus to develop problem-solving skills, materials, and self-organization in learning (Ritiaw, 2021, p. 65).

Lee and Yang (2023) in their research say PBL uses constructivist principles to encourage prior application of knowledge, collaborative learning, and active engagement (Lee & Yang, 2023, p. 12). While Seibert (2021) in his research said to start PBL activities, a small group of students analyze problems, identify relevant facts, and apply existing knowledge and experience to solve problems (Seibert, 2021, p. 85). The difference in the findings of researchers based on the interview above, namely the application of PBL is carried out in the learning process of social studies courses in the Department of Elementary School Teacher Education where the focus of the problem or topic used is related to real social problems around students. In addition, according to students, learning with the PBL model is very good as the following interview results:

*For me, PBL is very good, because it can have a positive effect, namely teamwork and can also hone thinking and communication skills in the classroom. Student 1.2*

*I think PBL also helps me get closer to other colleagues and be able to come up with ideas together about solving existing problems. Student 3.4*

As for applying PBL to social studies learning in the classroom, according to the teacher,

*Generally, the practice of Problem Based Learning (PBL) is first by identifying problems (problem orientation to be given), organizing students in groups, guiding or guiding investigations, presenting results, evaluating problem solving or better solutions. Lecturer*

Based on the interview above, the implementation of the PBL model in social studies courses in the elementary school teacher education department and teachers is to follow the syntax of the PBL Learning Model itself which consists of, 1) identifying problems, 2) organizing students (in groups), 3) guiding investigations, 4) presenting results, 5) evaluating problem solving and providing better solutions, further researchers make observations and documentation in the practice of implementing PBL in learning IPS as follows:

**a) Problems Orientation**

As interviews with students, the application of PBL in social studies courses are:

*Lecturers usually explain in detail to students about the main learning processes and procedures during lectures after praying, usually lecturers give Problems or questions investigated are complex problems that have various solutions and often contradict each other. During the investigation process, we are encouraged to ask questions and seek information. The lecturer acts as a supervisor who provides assistance, while we try to work independently or with his friends, in this course we are divided into 9 groups of **Students 1,2,3,4,5,6,***

**b) Organizing Student**

The division of groups was also carried out after providing procedures in the learning process with the material on that day, as revealed by the students as the photo of the activity below

Figure 1. Group student organizing



**Source :** this image was taken on April 13, 2023 at 10.32

Based on the results of interviews, observations and documentation above, it can be concluded that this process requires the division of groups in each student, where in practice the group has been divided into 9 groups first and is continuous with the first stage.

**c) Guiding Investigations**

The third step has two steps, namely collecting experimental data and providing temporary hypotheses as well as interviews with students as follows:

*Usually teachers encourage us to collect data and conduct relevant experiments to thoroughly understand aspects of the problem. The goal is that we can gather enough information to develop existing ideas. Then we were given the encouragement to put all those ideas out and accept them completely. Next, the teacher asked questions that prompted us to consider the veracity of our findings and the solutions proposed, as well as the quality of the information we had collected. Teachers also consistently provide support and model the free exchange of ideas, and encourage a deeper understanding of the problem if needed. In addition, teachers also provide necessary assistance to students. **Students 1,2,3,4,5,6***



Based on these interviews, it can be concluded that at this stage the lecturer provides guidance to students to collect data and make hypotheses or temporary discussion results, both explanations, and problem solving.

**d) Presenting Result**

Based on the results of interviews with students in social studies learning with PBL at this stage as follows:

*The teacher in this case gave instructions to several groups to present the solutions found and provide assistance to us who faced difficulties. In my opinion, this activity aims to test our understanding and mastery of problems related to the material taught. Students 1,2,3,4,5,6*

Figure 2 process of presenting results on the PBL Model in social studies courses



Source: this image was taken on April 13, 2023 at 10:50

Based on interviews, observations and documentation, it can be concluded that at this stage, teachers as facilitators provide direction to several groups to convey solutions that have been found and provide support to us who face difficulties. The activity aims to test the extent of our understanding and mastery of the problems related to the subject matter being taught.

**e) Troubleshooting Evaluation**

Like other stages, this stage is the last stage in learning with the PBL model and includes several things, according to the results of interviews with students as follows:

*The analysis and evaluation process in the PBL model in the social studies course involves a series of steps in problem solving. First, usually the group must conduct an in-depth analysis of the problem at hand. Next, an evaluation is made of the options or solutions produced by our group or suggestions from other groups. We need to assess the advantages, disadvantages, and social impact of each proposed solution. Students 1,2,3,4*

*In addition, self-evaluation is also an important part of this process. As a student, I needed to reflect on my personal contributions, learn from experiences, and evaluate my role in the team. This helps develop our skills, deeper understanding of the material, and enhance our collaborative capabilities. Student 5.6*

Based on the results of the interview above, at this stage, the analysis and evaluation process in PBL in social studies courses is not only limited to solving the problem itself, but also includes self-reflection and continuous improvement in understanding and overcoming complex social challenges.

### 3. **Social Studies Learning with Problem Based Learning in improving Student Social Intelligence**

Social Intelligence in short is the ability to adapt, and understand, respond, and behave well based on intelligence in thinking, based on Silvera et.al theory (2001), social intelligence is divided into three dimensions, namely social awareness, social skills, and social information.

#### **Social awareness**

Social Awareness refers to a person's ability to perceive social cues about individual thoughts, aspirations, and emotions (Garg et al., 2021). It helps individuals to understand social situations appropriately. As based on interviews with students as follows:

*Social awareness for me, more to the attitude of the pack, and not relying on emotions or anger when arguing to find solutions to problems that are deliberated, especially when social studies learning which discusses social problems around us, and the PBL model gives us learning with discussion, of course attitude awareness is the main thing, Students 1,2*

This is also in line with the results of interviews with other students

*Social intelligence in the context of PBL In social studies courses means understanding and responding wisely to social dynamics that may affect problems or challenges faced by me and my colleagues in the learning and discussion process as students, and later can increase our sense of concern as fellow learners and prospective teachers, Students 2,3,6*

While another thing was revealed by the next student that

*For me, as a student, the name social intelligence is certainly not only attitudes and behaviors at learning times with discussion models such as PBL, sir, especially this course which is very broad in discussion, but also can appreciate and respect opinions because not all of them come from the same tribe, of course, different habits that include attitudes and behaviors, therefore, I think social intelligence is, more on our role in dealing with problems well and effectively, sir, Student 4.5*

Based on the findings of the interview above, researchers found that students understand social awareness is a behavior or attitude that arises by harmonizing understanding with one another, where in this case social intelligence is also seen when learning through the PBL model in class, especially in social studies courses which are closely related to social problems in society both nationally and globally. Therefore, researchers can conclude, of course, Learning in the Problem-based Learning Model in social studies courses is very helpful for students in increasing empathy, as well as social awareness, especially Social Sciences taught are part of everyday life

#### **Social Skills**

On the social skill dimension according to teachers

*Social skills are very important in the PBL model because they involve cooperation, communication, and interaction between individuals. In the context of the basic concepts of social studies, social skills help PGSD students to collaborate with fellow students, accommodate various views, and build positive relationships with students and the surrounding community. Lecturer*

Based on the interview above, Social Science Learning with Problem Based Learning (PBL) can improve their social skills and it is very important for every student to be able to collaborate and foster mutual respect for each other Furthermore, according to students

*Social studies courses provide a rich context for understanding social, cultural, and political dynamics. In the PBL model, it can be applied to solve problems in projects that require a deep understanding of society and social interaction. This can help strengthen empathy, cooperation, and shared problem solving. **Students 1,2,3,4***

*Through the practice of PBL learning in social studies courses, creating the ability to communicate clearly, listen with empathy, and facilitate group discussions, by understanding the basic concepts of social studies can also present learning materials with experience and social life, building a stronger bond between learning and daily life. **Student 5.6***

Based on the results of interviews with students after conducting social studies learning practices with PBL above, it can be concluded that there is an increase in social skills evidenced by a sense of cooperation between each other and an increase in good communication power between individuals with one another.

### **Social Information**

In addition to the two stages above, this next stage is an important stage, namely social information (SI) which at this stage, can increase interaction, especially in the application of PBL which prioritizes deliberation togetherness in solving a problem, based on the results of interviews with lecturers he said:

*Increasing understanding of social information in the basic concepts of social studies is important because it helps PGSD students better understand social interactions, cultural norms, and community dynamics. In the PBL model, this knowledge allows students to create projects that are more contextual, relevant, and responsive to the social needs around them. **Lecturer***

Furthermore, understanding of social information in the context of learning Social sciences can also help students understand situations with clear information and provide harmony in a team / group as expressed by the teacher

*PGSD students can integrate social information by conducting in-depth research on communities, interacting with local stakeholders, and understanding the social context of their projects. This allows them to create solutions that are more impactful and relevant to society, as well as make a positive contribution in order to improve social conditions. An understanding of social information allows students to read and understand the needs, preferences, and values of teammates, teachers, and local communities. This creates a solid foundation for communicating effectively, forging good cooperation, and building positive relationships. Social information can also be used to identify potential conflicts and find harmonious solutions. **Lecturer***

Meanwhile, according to the students' own perspective, the Problem-based Learning learning process in addition to improving social skills can also provide cohesiveness in doing something with valid data, based on interviews with several students as follows:

*In learning with the PBL Model in social studies courses, we directly collect data that we consider important in solving the topic of the problem being studied, This information not only provides a strong basis for solutions in solving problems on the topic of discussion in class, but also increases our understanding of social reality and community needs because social studies learning is always related to social problems in the community, so that the results are more meaningful and open our horizons. **Students 1,2,3,4,5,6***

In addition, understanding the interaction between people in sending information as a whole related to the project or problem faced to be solved in PBL

learning is certainly a very important role of social information, as the results of interviews with students

*By understanding social information, I can communicate more effectively with my teammates and guidance counselors because I can respect their needs and preferences. I was also able to better interact with local communities, forge positive relationships and accommodate their values and interests in PBL projects. This helps increase cooperation and positively impact our projects. In making decisions and solutions, we collect information through observation, interviews (if needed) and review of local literature but for the time being, we are more often looking for information in journals rather than journal reviews and news that are appropriate to the context of the problem topic discussed. This information becomes the basis for understanding needs so that decisions taken can be better. Thus, the PBL that we do becomes more relevant and makes a positive contribution. Students 1,2,3, 4,5,6*

Based on the presentation of the interview results above, it can be concluded that the increase in Social Information is supported by the application of PBL in social studies learning. Because the search for clear information or valid sources certainly gives students broad insight and avoids false information circulating, especially in overcoming social conflicts in their respective environments

#### **4. The Relationship of Social Intelligence with Problem Based Learning**

From the results of the description above, researchers found the relationship that exists in the application of the Problem Based Learning Model with Social Intelligence can be described as follows:

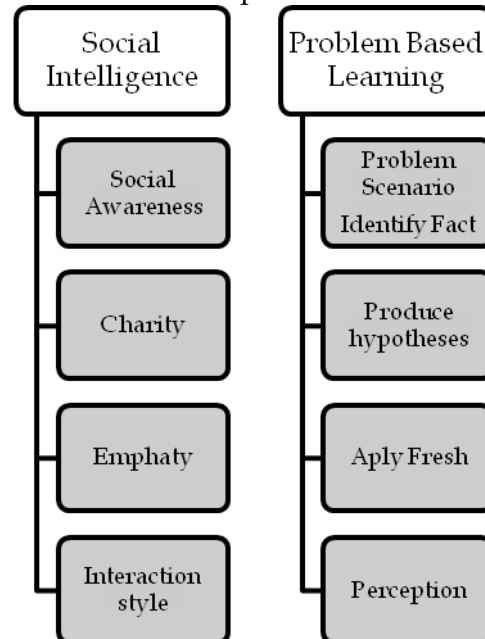
The application of Problem-Based Learning (PBL) can have a close relationship with the development of social intelligence. In PBL, students are given tasks or problems that require cooperation and interaction between students in identifying, analyzing, and solving problems collaboratively. This process involves communication, negotiation, conflict resolution, and teamwork, which are important components of social intelligence. Through PBL, students are invited to actively interact with team members, share thoughts, listen to each other, provide feedback, and work together to achieve common goals. In this context, students can develop social skills such as cooperation, effective communication, empathy, and situational understanding which are key aspects of social intelligence.

Based on in-depth interviews with six students who were previously less active in class and different ethnicities, after going through the learning process of the PBL model, in this case they revealed that the learning process with this model, made individual students get to know each other well, after doing a series of solving problems given by lecturers as facilitators, solving this problem using collaborative communication in order to get solutions the right one. In this collaborative communication, students exchange views on finding solutions that make them closer, and understand the characteristics of each individual's character even though the group has different characters because not all of them come from the same tribe and region.

Based on the interview, it was found that one of the abilities that increased was students' soft skills, soft skills including communication, one's attitude in completing tasks, and one's ability to complete tasks as a member of a team or group (Jabarullah & Iqbal Hussain, 2019). PBL also provides activities for the development of these important skills. Problem-solving as independent research trains students to gather information that will inform group decisions and share them effectively with other group members. In social intelligence the most

important aspect is the mastery of attitudes that have been described before, for that the relationship between social intelligence and PBL can be seen in the picture below:

Figure 3. The relationship between SI and PBL



Based on the figure above, the relationship between Social Intelligence and PBL occurs at several stages of PBL, namely; *First*, Problem Identification, students are given real assignments or problems that require solving. This process involves the observation and understanding of the existing social situation. *Second*, Collaboration and Communication: Students work collaboratively in groups to analyze and solve problems. They interact, communicate, and share their thoughts and ideas. *During* the PBL process, students learn to look at problems from multiple perspectives and consider the opinions of others. This encourages the development of empathy and better social understanding. *In* group work, students may face disagreements or conflicts. The PBL process provides opportunities for students to learn to manage conflict constructively and reach mutual agreement. *Fifth*, Shared Learning Students provide feedback and support to each other, develop social skills such as cooperation, trust, and responsibility in achieving common goals, Through this process, the application of PBL helps students in the development of social intelligence. They learn to communicate well, work together in groups, manage conflict, and understand social situations better. All this contributes to the development of the social intelligence of students as a whole.

## DISCUSSION

Referring to the theory of Silvera et al. (2001) social intelligence is divided into three dimensions, namely Social Awareness (SA), social Information (SI), and social skills (SI) measured through the TSIS scale, but in this study, researchers took these three parts as the main indicators in obtaining descriptive information by asking in depth about the social interactions of students who have ethnic differences in *Purposive Sampling* In social studies learning through the Problem Based Learning Model, it was found that

*First*, increasing Social Awareness on the basis of behavior or attitudes that arise by harmonizing understanding with one another, where in this case social intelligence

is also seen when learning through the PBL model in the classroom, especially in social studies courses which are closely related to social problems in society both nationally and globally. Therefore, researchers can conclude that Learning in the Problem-based Learning Model in social studies courses is very helpful for students in increasing empathy, as well as social awareness, especially Social Sciences taught are part of everyday life. *Second*, improving social skills is evidenced by a sense of cooperation between each other and good communication between individuals with each other. *Third*, the increase in Social Information is supported by the application of PBL in social studies learning because the search for clear information or valid sources certainly gives students broad insight and avoids false information circulating, especially in overcoming social conflicts in their respective environments.

This is different from the research findings from (Akbar et al., 2021) which found that social intelligence emphasizes the intellectual intelligence of students themselves, while research (Ritiau et al., 2021) aspects of Empathy are on low criteria. while research from (Hadisa et al., 2022) states that there is no relationship between social intelligence on social studies learning outcomes.

Furthermore, the researchers found that Social Science Learning in the realm of the Department of Elementary School Teacher Education, is a subject that provides fundamental knowledge about the scope of social sciences which aims to enable prospective elementary school teachers to be able to understand social problems in global and national contexts and develop social, critical, and broad insight skills. In addition, the objectives of Social Sciences also include the development of commitment and awareness to social and human values, as well as the ability to communicate, cooperate, and compete in diverse societies, both at national and international levels.

Budiman's (2022) research shows that students feel a positive impact after the implementation of the PBL model, which is to improve critical thinking skills by solving social problems. In addition, students' understanding of social sciences is better because it is associated with social problems that actually occur (Budiman et al., 2022). This is in line with the results of Agustin's research (2018) which shows an increase in student learning outcomes after using the problem-based learning (PBL) model. However, the research subjects in high school students with a focus on student learning outcomes. Meanwhile, researchers found that Problem-Based Learning (PBL) can have a close relationship with the development of social intelligence. This is in accordance with the implementation that begins with students being given tasks or problems that require cooperation and interaction between students in identifying, analyzing, and solving problems collaboratively. This is also in line with the statement (Rahim et al., 2018) ) that this process involves communication, negotiation, conflict resolution, and teamwork, which are important components of social intelligence. According to (Lee & Yang, 2023) Through Problem Solving, students are invited to actively interact with team members, share thoughts, listen to each other, provide feedback, and work together to achieve common goals. In this context, researchers found that students can develop social skills such as cooperation, effective communication, empathy, and situational understanding which are key aspects of social intelligence.

This research has implications in the context of increasing students' social intelligence through a problem-based social science learning approach using case studies. By highlighting the potential for developing teaching methods and basic science in courses in the PGSD department, these findings can be a guide for educators and policy makers to design more effective learning strategies. However, the weakness

of this study lies in the limitations of informants and results in the context of social studies courses in the Department of Elementary School Teacher Education, as well as in the analysis of students' social intelligence that may require further attention. For future research, it is recommended to involve more diverse population groups, explore additional contextual factors, and validate and develop more careful measurement instruments.

## **CONCLUSION**

Social intelligence is a person's capacity to manage attitudes and personalities in social interactions with others. These attitudes or personalities are divided into four interrelated components: social awareness (SA), the capacity of individuals to comprehend social environmental situations; altruism, the capacity to communicate with other individuals; empathy, the capacity of individuals to demonstrate social sensitivity; and interaction style, the capacity to adapt to a new social environment.

Problem-based learning (PBL) is one of the many models or methods that can be used to create an effective learning environment in the classroom during the learning process. Students are usually presented with issue scenarios during PBL. In relation to the preceding description, the strategy for implementing problem-based learning in learning is as follows: The social sciences must pay close attention to the implementation stages in order to comprehend the PBL model's constructs. Problem orientation begins with, among other things, problem scenarios and the identification of facts related to the subject matter to be studied. This is done to make it easier for students to communicate and form hypotheses (guesses) while answering the problems given, and then guiding the investigation of this process is carried out so that the lecturer, as a facilitator, supervises student groups to prevent them from engaging in class discussion instead of solving the problems given. The purpose of presenting data for this activity is to determine the extent to which students in groups comprehend problem-solving, followed by an evaluation. In this instance, evaluation is used to provide a forum for students and instructors to discuss their shared perspectives on problem-solving and determine the best solution. According to the findings of this study, the relationship between social intelligence and the application of problem-based learning (PBL) in social science education is that students can develop social skills such as cooperation, effective communication, empathy, and situational understanding, which are essential components of social intelligence.

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## **AUTHOR CONTRIBUTION STATEMENT**

FNH contributed to the research concept and authored the initial draft; HH, SPK, DG and AQ also contributed. Review the manuscript and provide feedback and guidance.

## **REFERENCES**

Akbar, M. I., Chandra, T. K., Setyowati, R. A., Isnaeni, F., Zahro, S. L., & Yuniar, A. D. (2021). Interaction of social intelligence with social interaction of students outside

- Java, Faculty of Social Sciences, State University of Malang. *Jurnal Integrasi Dan Harmoni Inovatif Ilmu-Ilmu Sosial*, 1(5), 598–604. <https://doi.org/10.17977/um063v1i5p598-604>
- Aman, M. (2021). Kecerdasan Sosial Berbasis Al-Qur'an. *Rausyan Fikr: Jurnal Pemikiran Dan Pencerahan*, 17. <https://doi.org/10.31000/rf.v17i2.4198>
- Budiman, A., Sudarman, S., & Sutrisno, S. (2022). The application of the Problem Based Learning model in improving student learning outcomes in class IX social studies subjects of SMP Negeri 22 Samarinda for the 2021/2022 Academic Year. *Educational Studies: Conference Series*, 2(1), 74–80. <https://doi.org/10.30872/escs.v2i1.1200>
- Edström, K., & Kolmos, A. (2014). PBL and CDIO: complementary models for engineering education development. *European Journal of Engineering Education*, 39(5), 539–555. <https://doi.org/10.1080/03043797.2014.895703>
- Endayani, H. (2018). Sejarah dan Konsep Pendidikan IPS. *ITTihad*, 2(2). <https://ejournal-ittihad.alittihadiyahsumut.or.id/index.php/ittihad/article/view/43>
- Erlina, E. (2016). Pengaruh Metode Pembelajaran Dan Kecerdasan Sosial Terhadap Hasil Belajar Pendidikan Kewarganegaraan Siswa Kelas V Sekolah Dasar. *Jurnal Pendidikan Dasar*, 7(1), 27–37.
- Hadisa, A., Magdalena, I., & Zuliani, R. (2022). The Relationship Between Social Intelligence and Social Studies Learning Outcomes of Grade IV Students at SDN 04 South Tangerang City. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(5 SE-Articles), 6408–6416. <https://doi.org/10.31004/jpdk.v4i5.7721>
- Hidayat, A. (2021). *Pendidikan Generasi Alpha-Jejak Pustaka* (Vol. 1). Jejak Pustaka.
- Ishana, A., Vinessa, N., & Robert, R. (2019). The impact of psychological contracts on employee engagement at a university of technology. *SA Journal of Human Resource Management*, 17(1), 1–11. <https://doi.org/10.4102/sajhrm.v17i0.1039>
- Ismail, M. J. (2021). Pendidikan Karakter Peduli Lingkungan dan Menjaga Kebersihan di Sekolah. *Guru Tua: Jurnal Pendidikan Dan Pembelajaran*, 4(1), 59–68. <https://doi.org/10.31970/gurutua.v4i1.67>
- Jabarullah, N. H., & Iqbal Hussain, H. (2019). The effectiveness of problem-based learning in technical and vocational education in Malaysia. *Education + Training*, 61(5), 552–567. <https://doi.org/10.1108/ET-06-2018-0129>
- Lee, W. W. S., & Yang, M. (2023). Effective collaborative learning from Chinese students' perspective: a qualitative study in a teacher-training course. *Teaching in Higher Education*, 28(2), 221–237. <https://doi.org/10.1080/13562517.2020.1790517>
- Lesilolo, H. J. (2018). Penerapan teori belajar sosial albert bandura dalam proses belajar mengajar di sekolah. *KENOSIS: Jurnal Kajian Teologi*, 4(2), 186–202.
- Malikha, D. R. (2018). Strategi Pembelajaran PBL (Problem Based Learning) Sebagai Salah Satu Metode Pembelajaran Berkarakter dan Berwawasan Global. *Seminar Nasional Pendidikan Dan Kewarganegaraan IV*, 88–98.
- Mariati, M., Abbas, E. W., & Mutiani, M. (2021). The Social Science Contribution Through Social Studies Learning. *The Innovation of Social Studies Journal*, 2(2), 110–120.
- Nastiti, F. E., & Ni'mal'Abdu, A. R. (2020). Kesiapan pendidikan Indonesia menghadapi era society 5.0. *Jurnal Kajian Teknologi Pendidikan*, 5(1), 61–66. <https://doi.org/10.17977/um039v5i12020p061>
- Nasution, N. S. (2018). Pengembangan Kecerdasan Sosial Melalui Metode Pembelajaran Outdoor Education Dalam Pendidikan Jasmani. *Judika (Jurnal*



- Pendidikan Unsika*), 6(1), 73–80. <https://doi.org/10.35706/judika.v6i1.1227>
- Oktaviyanti, I., & Novitasari, S. (2019). Analisis Penerapan Problem Based Learning pada Mata Kuliah Pendidikan IPS. *Musamus Journal of Primary Education*, 2, 50–58. <https://doi.org/10.35724/musjpe.v2i1.1945>
- Oviyanti, F. (2017). Urgensi Kecerdasan Interpersonal bagi Guru. *Tadrib*, 3(1), 75–97. <https://doi.org/10.19109/Tadrib.v3i1.1384>
- Peck, C. L., & Herriot, L. A. Y. (2014). Teachers' Beliefs about Social Studies. *International Handbook of Research on Teachers' Beliefs*, 399–414. <https://doi.org/10.4324/9780203108437>
- Rahim, A., Civelek, I., & Liang, F. H. (2018). A process model of social intelligence and problem-solving style for conflict management. *International Journal of Conflict Management*, 29(4), 487–499. <https://doi.org/10.1108/IJCMA-06-2017-0055>
- Ritiauw, S. P. (2021). Implementasi Model Problem Based Learning Dalam Meningkatkan Kecerdasan Sosial dan Hasil Belajar Siswa Kelas IV SD 48 Inpres Ambon. *PEDAGOGIKA: Jurnal Pedagogik Dan Dinamika Pendidikan*, 9(1), 60–77. <https://doi.org/10.30598/pedagogikavol9issue2year2021>
- Ritiauw, S. P., Mahanangingtyas, E., & Ode, T. (2021). Use of Social Inquiry Model to Improve Social Intelligence of Grade V. *Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan*, 30(01). <https://doi.org/10.17977/um009v30i12021p032>
- Savery, J. R. (2019). Comparative Pedagogical Models of Problem-Based Learning. In *The Wiley Handbook of Problem-Based Learning* (pp. 81–104). <https://doi.org/10.1002/9781119173243.ch4>
- Seibert, S. A. (2021). Problem-based learning: A strategy to foster generation Z's critical thinking and perseverance. *Teaching and Learning in Nursing*, 16(1), 85–88. <https://doi.org/10.1016/j.teln.2020.09.002>
- Septianti, N., & Afiani, R. (2020). Pentingnya Memahami Karakteristik Siswa Sekolah Dasar di SDN Cikokol 2. *As-Sabiqun*, 2(1), 7–17. <https://doi.org/10.36088/assabiqun.v2i1.611>
- Silvera, D., Martinussen, M., & Dahl, T. I. (2001). The Tromsø Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology*, 42(4), 313–319. <https://doi.org/10.1111/1467-9450.00242>
- Simamora, R. E., & Saragih, S. (2019). Improving Students' Mathematical Problem Solving Ability and Self-Efficacy through Guided Discovery Learning in Local Culture Context. *International Electronic Journal of Mathematics Education*, 14(1), 61–72. <https://doi.org/10.12973/iejme/3966>
- Sovacool, B. K., Axsen, J., & Sorrell, S. (2018). Promoting novelty, rigor, and style in energy social science: Towards codes of practice for appropriate methods and research design. *Energy Research & Social Science*, 45, 12–42. <https://doi.org/10.1016/j.erss.2018.07.007>
- Suardipa, I. P. (2020). Proses Scaffolding Pada Zone Of Proximal Development (ZPD) Dalam Pembelajaran. *Widyacarya: Jurnal Pendidikan, Agama Dan Budaya*, 4(1), 79–92. <https://doi.org/10.55115/widyacarya.v4i1.555>
- Uno, H. B., & Mohamad, N. (2022). *Belajar dengan pendekatan PAILKEM: pembelajaran aktif, inovatif, lingkungan, kreatif, efektif, menarik*. Bumi Aksara.
- Wirtz, J., Patterson, P. G., Kunz, W. H., Gruber, T., Lu, V. N., Paluch, S., & Martins, A. (2018). Brave new world: service robots in the frontline. *Journal of Service Management*, 29(5), 907–931. <https://doi.org/10.1108/JOSM-04-2018-0119>
- Zangiacomi, A., Pessot, E., Fornasiero, R., Bertetti, M., & Sacco, M. (2020). Moving towards digitalization: a multiple case study in manufacturing. *Production*

*Planning & Control*, 31(2-3), 143-157.  
<https://doi.org/10.1080/09537287.2019.1631468>

Zubaidah, S. (2019). STEAM (science, technology, engineering, arts, and mathematics): Pembelajaran untuk memberdayakan keterampilan abad ke-21. *Seminar Nasional Matematika Dan Sains, September*, 1-18.

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