Learning Innovation Combination of Project Based Learning and Problem Based Learning Based on Research and Devotion

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Abstract. The main problem in this research is learning innovation in the lecture process which can improve students' collaborative, creativity, communication and critical thinking abilities. The aim of this research is to improve students' collaborative, creative, communication and critical thinking abilities through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion. This research uses mixed research methods. Research informants, qualitative research using purposive sampling amounted to 2 people, while determining the research sample used a total sampling technique of 50 respondents. The data collection techniques used were questionnaires, observation, interviews and documentation. Qualitative data analysis was carried out through the stages of data reduction, data display and drawing conclusions, while quantitative data analysis used questionnaire verification, tabulation of questionnaire data and percentage of questionnaire data. The validity of qualitative data uses source triangulation and method triangulation, while quantitative data uses reliability tests (accuracy) and validity tests (correctness). The results of the research show that the application of a combination of research and devotion-based project based learning (PJBL) and problem based learning (PBL) in the Sociology and Anthropology of Education courses has increased students' collaboration, creativity, communication and critical thinking abilities.

INTRODUCTION

The problem studied is that learning innovation in the lecture process at universities really needs to be carried out by every lecturer to keep up with increasingly rapid developments and to make adjustments to the characteristics of students to have many abilities in living life in the 21st century.

In 21st century learning in higher education, every lecturer is required to be able to teach students to have the ability to collaborate, have creativity, have communication skills and have critical thinking skills (Suardi, 2024), better known as 4 C skills (Septikasari & Frasandy, 2018); (Zubaidah, 2018); (Lestari, 2021); (Ahlah & Melianah, 2020). However, on the other hand, students still have character or attitudes (Suardi et al., 2020); (Suardi, 2023a); (Suardi & Nur, 2022); (Suardi & Syarifuddin, 2018); (Suardi & Muhajir, 2022); (Suardi et al., 2022); (Grace et al., 2021); (Nur et al., 2021); (Suardi, 2023d); (Suardi & Nursalam, 2020); (Suardi, 2023c); (Suardi et al., 2020).

Learning innovations that can be carried out by lecturers in the lecture process at universities are by implementing innovative learning models such as project based learning

(PJBL) and problem based learning (PBL) learning models. Project based learning (PJBL) has advantages in improving collaboration abilities (Mayuni et al., 2019); (Akhyaruddin, 2022); (Yudha, 2019); (Pgmi et al., 2023), increasing creative abilities (Sadikin & Yelianti, 2021); (Mira Shodiqoh. M Mansyur, 2022); (Ardianti et al., 2017); (Insyasiska et al., 2015), improving communication skills (Siregar & Harahap, 2020); (Irman & Waskito, 2020); (Marselus, 2021); (Indrawijaya & Siregar, 2022) and students' critical thinking (Prasetyo, 2019); (Shofa & Teacher, 2021); (Insyasiska et al., 2015); (Trimawati et al., 2020). Meanwhile, problem based learning can improve 21st century skills (Fitri et al., 2020), problem solving (Ardiansyah et al., 2022); (Silvi et al., 2020); (Buana & Anugraheni, 2020), activities (Novianti et al., 2020); (Mayasari et al., 2022), learning outcomes (Novianti et al., 2020), critical thinking skills (A. Suryaningsih & Koeswanti, 2021); (Education et al., 2020), understanding concepts (Kurniawan, 2023), creative thinking (Amalia et al., 2021), ability to write poetry (Herman Wijaya & Fikri, 2019) and writing skills (Nanda Putri, 2019). This increase in ability is also expected in the lecture process at Muhammadiyah University of Makassar, therefore the lecture process must be designed using innovative learning models such as project based learning (PJBL) and problem based learning (PBL).

The combination of project based learning and problem based learning models has learning stages, namely:

1. Orientation stage: Introduction stage of the scientific project and devotional project that will be carried out
2. Observing stage: Field observation stage of scientific projects
3. Organizing stage: Forming a scientific project team and devotional project
4. Questioning stage: Stage of making scientific project formulations and questions
5. Planning stage. The planning stage for implementing a scientific project
6. Schedule preparation stage: Stage of preparing the scientific project activity schedule
7. Data collection stage. Stage of collecting scientific project data
8. Data analysis stage: Data analysis stage resulting from scientific project activities,
9. Verification stage: Stage of verifying the correctness of the scientific project results,
10. Presentation stage: Stage of presenting data from scientific projects,
11. Reflection stage: Reflection stage on scientific project activities,
12. Developing stage: Stage of developing scientific project results in the form of project devotion,
13. Presentation stage: Presentation stage of development results which become project devotion,

1. 14.Action stage: Project devotion implementation stage,
14. Reflection stage: Reflection stage of project devotion activities,
15. Follow-up stage: Planning stage for follow-up activities for scientific projects and devotional projects

One of the courses that needs to be improved in the quality of the lecture process in the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Makassar University is the Sociology and Anthropology of Education course. Based on the results of learning observations in Sociology and Anthropology courses, education is only limited to theories related to educational reality viewed from the aspects of sociology and anthropology, so students do not have the ability to understand social reality, let alone contribute to society through the resulting research results.

Based on these problems, the solution to overcome them is to use a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion as a learning innovation in Sociology and Anthropology of Education courses which is expected to be one of the innovations to improve students' skills in facing change. and the dynamics of life in the 21st century.

Research using a combination of project based learning (PJBL) and problem based learning (PBL) has been carried out by several researchers, such as to improve critical thinking skills (A. Suryaningsih & Koeswanti, 2021); (Triningsih & Mawardi, 2020); (Rozi Sianturi & Susiaty, 2020); (Saputro & Rayahu, 2020), achieving learning objectives (Ariyanti, 2017), improving learning outcomes (Simbolon & Koeswanti, 2020); (Juanda & Pontianak, 2019); (Handhika et al., 2021) and motivation (Simbolon & Koeswanti, 2020), ability to compile worksheets (Haryani & Wardani, 2018), communication skills (Shin, 2019), learning outcomes (Fiana et al., 2019); (Hanipah et al., 2018); (Mater & Dan, 2019); (Sciences & Kudus, 2022), learning achievement (Karanganyar, 2016), writing skills (Wachyu & Rukmini, 2015), problem solving abilities (Safithri & Huda, 2021). However, none of the research that uses a combination of project based learning (PJBL) and problem based learning (PBL) has researched research and devotion based skills to improve students' collaborative, creative, communication and critical thinking skills in Sociology and Anthropology of Education courses, so the research What is done has novelty.

Based on research problems, observation results and state of the art research, the aim of this research is to construct learning innovations in Sociology and Anthropology of Education courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion to improve collaboration skills. , communication,

creativity and critical thinking of students in the Primary School Teacher Education Study Program, FKIP Muhammadiyah University, Makassar.
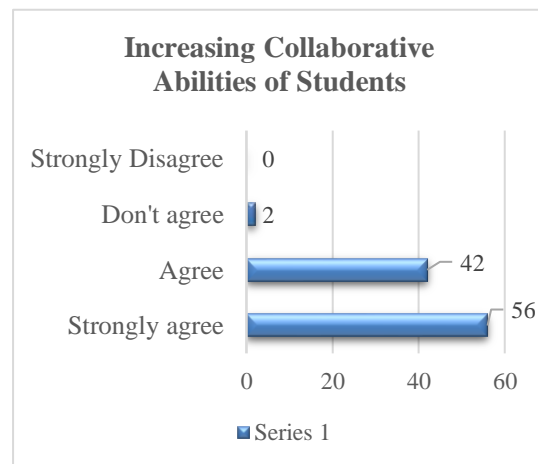
RESEARCH METHODS

This research uses mixed research methods. The first stage of the mixed methods concurrent embedded model uses qualitative research methods and the second stage uses quantitative research methods simultaneously or together but with different weights. Research location or research location on the Makassar Muhammadiyah University Campus. The qualitative method instrument uses researchers as the main instrument (Suardi, 2023b) using interview guidelines (Manab, 2015), while the quantitative method uses a Google form questionnaire. The research's qualitative method informants used purposive sampling (Suardi, 2023b), totaling 5 students, while the quantitative method research respondents used a total sampling technique totaling 32 respondents. The data collection techniques used were the distribution of closed model questionnaires, direct observation, interviews (Manab, 2015). Qualitative data analysis was carried out through the stages of data reduction, data display and drawing conclusions, while quantitative data analysis used questionnaire verification, tabulation of questionnaire data and percentage of questionnaire data. The validity of qualitative data uses source triangulation and method triangulation (Suardi, 2023b) (Manab, 2015), while quantitative data uses reliability tests and validity tests (Hermawan, 2019).

DISCUSSION

The lecture process in educational sociology and anthropology courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion by sharing the research results obtained with school principals, teachers, students and parents can improve students' collaborative abilities , this is based on the results of a questionnaire on 50 students from classes V J and M, namely:

Increasing Collaborative Abilities of Students

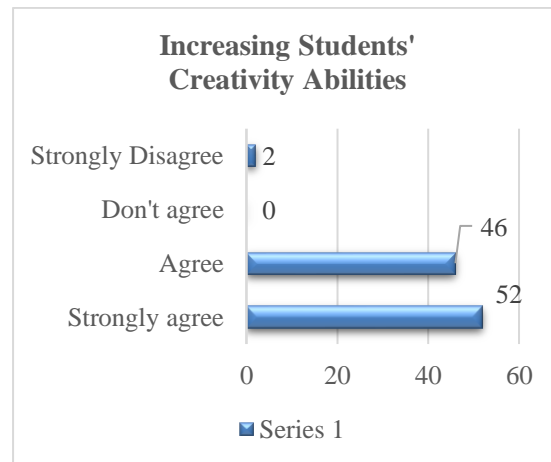|	
Strongly Disagree	0
Don't agree	2
Agree	42
Strongly agree	56

■ Series 1

Based on the results of the questionnaire, 56% of students strongly agreed, 42% agreed with the statement of a combination of research and devotion-based project-based learning (PJBL) and problem-based learning (PBL) by sharing the research results obtained with school principals, teachers, students and parents can improve students' collaborative abilities. However,

there are still 2% of students who do not agree with the combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion without giving reasons.

This happens because (1) Students collaborate with other students who have the same research location, so that students can collaborate with each other starting at the planning stage, interview data collection stage, observation and research documentation, research data analysis stage, research results demonstration stage up to the stage of making a research report. (2) Students collaborate with school principals, teachers, students and even parents in collecting research data needed by students so that learning with a combination of research and devotion-based project-based learning (PJBL) and problem-based learning (PBL) can enrich the collaborative experience student.

The lecture process in educational sociology and anthropology courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion by sharing the research results obtained with school principals, teachers, students and parents can increase students' creative abilities , this is based on the results of a questionnaire on 50 students from classes V J and M, namely:

Increasing Students' Creativity Abilities

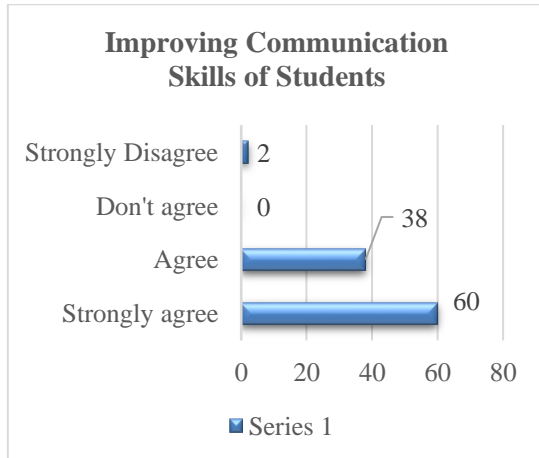| Category	Value
Strongly Disagree	2
Don't agree	0
Agree	46
Strongly agree	52

Based on the results of the questionnaire, 46% of students strongly agreed, 52% agreed with the statement of a combination of research and devotion-based project-based learning (PJBL) and problem-based learning (PBL) by sharing the research results obtained with school principals, teachers, students and parents can improve students' creative abilities. However, there are still 2% of students who do not agree with the combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion without giving reasons.

This happens because (1) Students express their creative ideas in conducting research starting from initial observations, formulating research problems, collecting data, analyzing data, presenting research results and carrying out community service actions by sharing research results with school principals and teachers. , students and parents of students. (2) Students make research reports based on the research results obtained so that students can express their creativity by writing research results reports. (3) Students create

research results brochures based on the research results obtained so that students can express their creativity in making research results brochures. (4) Students think of creative solutions to educational problems across scientific disciplines such as education, sociology and anthropology.

The lecture process in educational sociology and anthropology courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion by sharing the research results obtained with school principals, teachers, students and parents can improve students' communication skills , this is based on the results of a questionnaire on 50 students from classes V J and M, namely:
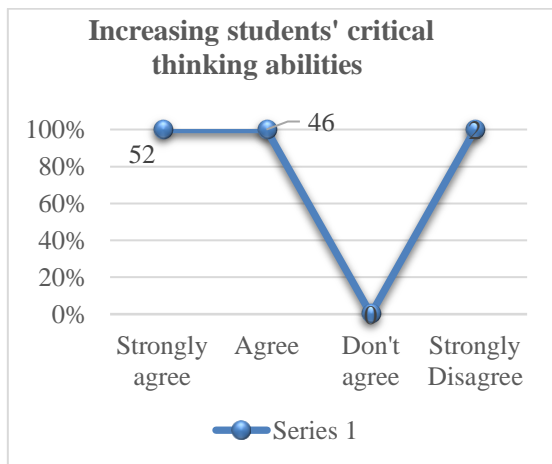

Improving Communication Skills of Students

Based on the results of the questionnaire, 60% of students strongly agreed, 38% agreed with the statement of a combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion by sharing the research results obtained with school principals, teachers, students and parents can improve

student communication skills. However, there are still 2% of students who do not agree with the combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion without giving reasons.

This happens because (1) Students communicate with other students who have the same research location, so that students can communicate with each other starting at the planning stage, interview data collection stage, observation and research documentation, research data analysis stage, research results demonstration stage up to the stage of making a research report. (2) Students communicate with school principals, teachers, students and even parents in collecting research data needed by students so that learning using a combination of problem-based learning models and devotion-based Pancasila student profile projects can enrich students' collaborative experiences. (3) Students present the research results to other students in the class, and explain the research results to the principal, teachers, students and parents through a previously created research results brochure.

The lecture process in educational sociology and anthropology courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion by sharing the research results obtained with school principals, teachers, students and parents can improve

critical thinking skills students, this is based on the results of a questionnaire on 50 students from classes V J and M, namely:


Based on the results of the questionnaire, 52% of students strongly agreed and 46% agreed with the statement of a combination of research and devotion-based project-based learning (PJBL) and problem-based learning (PBL) by sharing the research results obtained with school principals, teachers, students and parents can improve student communication skills. However, there are still 2% of students who do not agree with the combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion without giving reasons.

This happens because (1) Students think critically in completing research activities starting from initial observation activities, formulating research problems, collecting data, analyzing data, presenting research results, because new students have new experience in conducting research (2) Students think critically when solving researched

problems according to the respective themes of sociology and anthropology in the world of education.

Of the four students' abilities improved when using a combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion by conducting research and sharing the research results obtained with school principals, teachers, students and parents. The following is improving 4 student skills through a combination of project-based learning (PJBL) and problem-based learning (PBL) based on research and devotion.
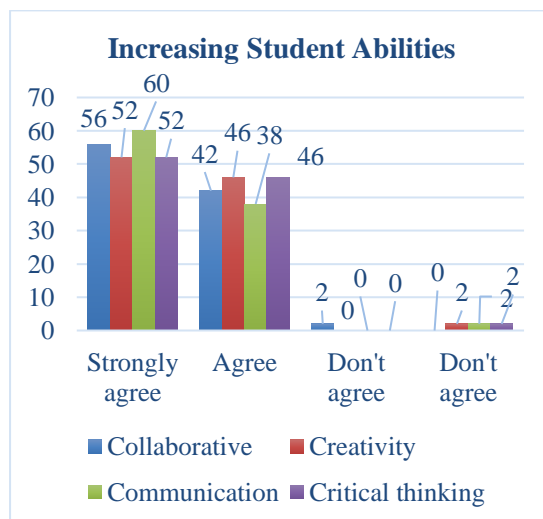
Based on the data in Figure 1.5, ability is the ability that is most developed in students if they use a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion, by conducting research related to educational sociology and anthropology, then sharing the results of the research. obtained from the principal, teachers, students and parents of students.

The lecture process in educational sociology and anthropology courses through a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion has been able to improve students' collaborative abilities (Akhyaruddin, 2022); (Eka Erlinawati & Bektiarso, 2019); (Susanty, 2020); (Krismona Arsana & Sujana, 2021), increasing students' creative abilities (Ardianti et al., 2017); (Listyowati, 2018); (Indrawijaya & Siregar, 2022); (Mira Shodiqoh. M Mansyur, 2022); (Mira Shodiqoh. M Mansyur, 2022), improving student communication skills (Mira Shodiqoh. M Mansyur, 2022); (Irman & Waskito, 2020); (Indrawijaya & Siregar, 2022); (Siregar & Harahap, 2020) and is able to improve students' critical thinking skills (Afifah et al., 2019); (Umar, 2016); (Trimawati et al., 2020); (Kamaruddin et al., 2022). Creativity and critical thinking are the abilities that are most developed in students if they use a combination of project based learning (PJBL) and problem based learning (PBL) based on research and devotion, by conducting research and then providing the research results to school principals, teachers, students and parents student.

CONCLUSION

The application of learning innovations that combine project based learning (PJBL) and problem based learning (PBL) based on research and devotion in educational sociology and anthropology courses has increased students' collaboration, creativity, communication and critical thinking abilities. Suggestions for further research are to use a combination of Project Based Learning and devotion-based models to see student creativity and productivity.

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