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Effectiveness of School Field Introduction (PLP) Program on Improving Teaching Strategy Skills of Mathematics Education Students

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ABSTRACT

This study aims to evaluate the effectiveness of the School Field Introduction Program (PLP) in improving the teaching strategy skills of mathematics education students. Using a quantitative approach, data were collected through questionnaires distributed to UIN Syarif Hidayatullah Jakarta students. According to the results, most students reacted positively to the introduction of PLP, especially in terms of their attitudes towards lesson planning, content absorption, study monitoring, and the use of technology in education. Increased self-esteem, development of teaching skills, and preparation of people for academic challenges were all considered benefits of the program. However, there were areas related to teamwork and self-assessment that needed to be developed. These results underline the importance of incorporating real experiences such as PLP into teacher training programs to develop flexible and competent instructors.
Keywords: School Field Introduction (PLP), Teaching strategy, Teaching skills

ABSTRAK

Penelitian ini bertujuan untuk mengevaluasi efektivitas Program Pengenalan Lapangan Persekolahan (PLP) dalam meningkatkan keterampilan strategi mengajar mahasiswa pendidikan matematika. Menggunakan pendekatan kuantitatif, data dikumpulkan melalui kuesioner yang disebarkan kepada mahasiswa di UIN Syarif Hidayatullah Jakarta. Menurut hasil , sebagian besar siswa bereaksi positif terhadap pengenalan PLP, terutama dalam hal sikap mereka terhadap perencanaan pelajaran , penyerapan konten, pemantauan studi, dan penggunaan teknologi dalam pendidikan. Peningkatan harga diri, pengembangan keterampilan mengajar, dan persiapan orang untuk tantangan akademis semuanya dianggap sebagai keuntungan dari program ini. Namun, ada bagian yang terkait dengan kerja tim dan penilaian diri yang perlu dikembangkan. Hasil ini menggarisbawahi betapa pentingnya memasukkan pengalaman nyata seperti PLP ke dalam program pelatihan guru untuk mengembangkan instruktur yang fleksibel dan kompeten .
Kata Kunci: Pengenalan Lapangan Persekolahan (PLP), Strategi Mengajar, Keterampilan Mengajar

INTRODUCTION

1.1 Background

In the process of learning mathematics, a teacher is expected to be able to provide quality learning. One way to achieve this is by utilizing PLP activities to improve teaching strategies in the future. PLP activities are one of the activities that support students in the teaching process. This activity aims to prepare teaching strategies to support success in the teaching and learning process so that learning activities become more effective in achieving the desired goals. According to the Journal of Mathematics Education - University of Lampung (2023), "In mathematics learning, it is essential for teachers to integrate field practice experiences (PLP) to improve teaching effectiveness and student understanding. PLP activities serve as a bridge between theory and practice, preparing prospective teachers to face challenges in the classroom. According to Zhang and Wang in 2022, they also said that practical teacher training can significantly improve the quality of mathematics teaching and student learning outcomes.

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The Field Introduction Program (FIP) aims to provide mathematics education students with hands-on experience in teaching in schools. Meanwhile, it is not yet known whether this program helps students grow and change their teaching methods to be more appropriate and effective for real classroom contexts. Thus, it is important to determine the extent to which FIP enhances students' ability to improve good teaching approaches. This study aims to determine the views of mathematics education students on the effectiveness of PLP activities. Through a quantitative approach, this study uses data collection through forms with mathematics education students. The results of this study indicate that mathematics education students have different views on PLP activities. So that students can use the micro-teaching method during the implementation of PLP.

1.2 Previous studies

Research conducted by Audrey Louise Makatita, Ayu Christine Rahaweman, Riwa Rambu, Hada Enda, Mia Fransiska M. Dimu in 2024 entitled Comparison of the Effectiveness of Microteaching and School Environmental Introduction (PLP 2) in Developing Teaching Skills for Biology Education Students. This study provides a comparative evaluation of the effectiveness of microteaching and PLP 2 in improving teaching skills among biology education students.Commonly used in university settings , small - scale teaching exercises , or microteaching , involve simulations of teaching and learning activities . In these activities , students receive feedback from their supervisors and classmates . Meanwhile , PLP 2 provides hands - on experience in a real classroom , with challenges and opportunities to interact with students . This article examines and compares how each method helps improve teaching skills. Key findings indicate that PLP 2 focuses on flexibility to different situations and learning methods to engage students, while microteaching emphasizes pedagogical methods and classroom management. This study suggests that better preparation of prospective teachers with comprehensive teaching skills in multiple educational contexts is achieved by integrating both techniques into teacher education programs.

Our research and the research have similarities and differences based on relevant research. The similarity between the two studies is that they both analyze the effectiveness of the PLP program before students become teachers. Meanwhile, the difference can be seen from the topics discussed, namely, if the previous research addressed the comparison of microteaching and PLP. In contrast, our study examined students' views on the effectiveness of the PLP program.

1.3 Literature Review

The School Field Introduction Program (PLP) is designed to train the skills of prospective teacher students through micro-teaching and direct observation at school so that they are ready to become professional teachers with adequate skills. Introduction to School Field (PLP): to train limited skills, students are trained in micro-teaching in limited situations; the subjects are classmates. Then, in the 2nd simulation, the introduction to the field through observation and appreciation is carried out directly in real conditions at school in providing lessons and can be taken at a specific time as one of the requirements to fulfil the Introduction to School Field (PLP) program. According to A. Kadir Munsyi (in Zainal Asril, 2015: 91). The PLP program is one of the factors influencing readiness to become a teacher. PLP is a series of programmed activities for students that combine educational and non-educational training to develop teacher professional skills (Adi, I.P.P., 2015).

Learning strategies play an essential role in achieving practical learning goals. They must be planned by considering critical components such as input, process, and output, as well as the characteristics of students and appropriate subject matter. In education, learning strategies are placed as a benchmark for how learning is carried out. This means that applying learning strategies in achieving goals consists of several continuous components. According to Hamalık, learning strategies are a process that, as a whole, consists of several components, namely input components, process components, and product components (output) (Husna et al., 2023). According to Haudi (2021: 4), "Learning strategies are plans that aim to optimize the potential of students so that they play an active role in learning activities to achieve the expected results with the guidance of teachers as educators." Before deciding to use the learning strategy that will be chosen, we as educators must pay attention to the characteristics of students in our environment, which cannot be equated with conditions in other schools. Of course, the selection of subject matter must be appropriate.

METHOD

Researchers apply a research design that involves a literature review by examining existing sources. This is also done by collecting data from answers to questionnaires given to students. The type of research we use is quantitative research. This type of research emphasizes the objectivity and accuracy of methods in data collection and analysis so that the research results can be relied on and free from the influence of researcher subjectivity. Quantitative research is an analysis that is free from values. Therefore, quantitative research is meticulous in applying various rational procedures obtained through instruments analyzed for validity and consistency. Quantitative research researchers reduce multiple things that can cause bias, such as entering personal thoughts and values. If this bias appears in the research, then quantitative research will be far from the rules of the actual scientific method (Maesari, 2021). According to Sudaryana et al. (2022), quantitative research focuses on processing numerical data and statistical analysis to test hypotheses objectively. In education, this approach is commonly used to broadcast the effectiveness of a program or learning strategy (Tofani & Jamaaluddin, 2020). Questionnaires are the main instrument to obtain data directly from respondents (Beryman, 2020).

This quantitative study aimed to determine the effectiveness of the Field Introduction Program (PLP) in helping mathematics education students improve their teaching methods. The survey approach, which uses a questionnaire given to students via Google Forms as respondents, is the data collection method. In addition, data were collected from secondary sources, such as research articles, journals, and literature that discuss PLP, mathematics education, and students' opinions about the program. This study uses a quantitative approach that allows statistical analysis to produce objective and measurable results. The research sample consisted of 9 UIN Syarif Hidayatullah Jakarta mathematics education students. The content analysis compared and contrasted students' views on the extent to which PLP assisted in the creation of learning techniques. Data from various sources were combined to provide a comprehensive understanding; literature and data were carefully examined to identify potential biases and thereby improve the research. Therefore, it is hoped that this study will provide an honest perspective on the function of PLP in improving the teaching ability of mathematics education students.

RESULT AND DISCUSSION

The results of student responses regarding the effectiveness of PLP activities.

Table 1. Results of answers from the Google form of Mathematics education students

NO	INDICATOR	PRESENTACE	
		Agree	Disagree
1.	Teaching Planning and Implementation	88,8%	11,2%
2.	Student Understanding and Management	90,3%	9,7%
3.	Teaching techniques and strategies	89,7%	10,3%
4.	Reflection and Self-Development	84,3%	15,7%
5.	Inclusion and Collaboration	84%	16%
6.	Use of Technology and Innovation	88,9%	11,1%
7.	Challenges in Teaching	88%	12%
8.	Achievements and Competencies	92%	8%

This study's results indicate that most students have very positive views on the various parts of Learning Planning and Implementation (LIP). With 88.8% of students agreeing that LIP helps plan and implement learning, this program is quite helpful in teaching and learning, while 11.2% disagree. This percentage reflects students' belief that LIP provides the framework and guidance to plan and implement quality learning.

Student understanding and management also received agreement with 90.3%, while 9.7% disagreed. This shows that students feel more able to understand the subject matter and manage their learning process thanks to the support of LIP. Achieving the best learning outcomes depends on good self-management and understanding therefore this is very important.

In addition, 89.7% of respondents supported the teaching strategies and techniques, indicating that students believed they had been exposed to a variety of teaching approaches that were supported successfully. teaching strategies and techniques, indicating that students believed they had been exposed to a variety of teaching approaches that were successful. 10.3% disagreed. This supports the idea that different teaching methods should be modified to meet students' needs.

However, although the Reflection and Self-Development aspect received 84.3% agreement and 15.7% of students disagreed, this figure shows that there is still room for improvement. From these results, students have not fully realized the importance of reflection in their learning process or may not have received adequate guidance.

The Inclusion and Collaboration aspect, with an agreement level of 84%, also shows that although most students support it and 16% choose to disagree, there are still challenges in creating a truly inclusive and collaborative atmosphere. These results can be a focus for further development in the PLP program so that students feel more involved, can work together, and are active in the learning process.

The application of technology and innovation received high agreement; 88.9% and 11.1% stated they disagreed. This shows that students appreciate the use of increasingly

sophisticated technology in the learning process, which can increase the involvement and effectiveness of teaching.

Regarding teaching challenges, it also showed encouraging results: 88% agreed and 12% disagreed, so students agreed that activities in the PLP program prepare them to face challenges in the world of teaching. This program not only focuses on developing theory but also on applying to practices relevant to real situations that students will face in the field.

Achievement and competence received the highest agreement of 92%, and 8% disagreed, thus confirming that students feel that PLP plays a vital role in developing their skills and knowledge. This indicates that this program has provided students with the competencies to become professional teachers.

The results of the study showed that the implementation of the Learning Planning and Implementation (PLP) program received a very positive response from students. Students considered PLP a helpful program in teaching skills and learning strategies, planning, implementation, and developing self-competence. Students must have a learning strategy because it can help students become mathematics teachers who are more ready to innovate. In addition, students must also have teaching skills. Thus, the PLP program can be more effective in preparing students to face real challenges in the world of education. Tesmeri (2024) stated that various learning strategies, such as project-based learning, technology, and collaborative methods, can improve the understanding of mathematical concepts for students with diverse abilities. Mariam Nasution (2023) stated that an effective mathematics teacher must master various basic teaching skills so that the learning process runs effectively and efficiently.

The discussion of the research results includes advantages and disadvantages. The benefits of PLP activities are that students can learn good teaching methods better, gain direct experience, and build self-confidence to become teachers. The disadvantage is that some students are less confident in teaching directly and cannot socialize with their students. Armandri (2024) stated that using good learning media during PLP has significantly improved students' mathematics learning outcomes. Hanina (2023) stated that students tend to imitate the method of the supervising teacher without carrying out innovation or critical reflection.

CONCLUSION AND SUGGESTION

The study results showed that most students received positive responses from the Learning Planning and Implementation (PLP) program. Most stated that PLP helped them prepare plans, understand and manage processes, and develop redevelops and technology use. PLP has positively impacted forming prospective teachers who are more competent, reflective, and adaptive. For more optimal results, there needs to be increased mentoring and strengthening of soft skills so that students are more confident and ready to carry out their roles as professional educators. This program can equip students with the readiness to face challenges in the real world of education. However, self-reflection and inclusion collaboration still show room for improvement because some students have not fully felt helped in these two areas.

The researcher suggests that students are better prepared to run this PLP program. In addition, they are more confident in teaching directly. They can socialize

openly with their students to use learning strategies according to their characteristics to increase learning effectiveness.

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