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Effectiveness of Teacher Professional Education Program (PPG) of UIN Datokarama Palu from Students' Perspective (A Mixed Method Approach)

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Abstract	effective imple the program's e we simultaneo the distribution interviews with consider the P competencies various classed digital learning format. However in learning, into available times technological curriculum and	es to investigate PPG students' per mentation at UIN Datokarama Pareffectiveness. The research method usly employed quantitative and quantitat	ceptions regarding the program's alu and identify factors that affect dused is a mixed method in which qualitative methods. We surveyed a Forms and conducted in-depth sults indicate that most students ers' competencies and skills. The reloping, using, and actualizing hile, the skills include practicing rant teaching material in digital ch as the lack of active interaction mismatch between task load and study recommends improving entoring, and re-evaluating the ce the Effectiveness of PPG in the sing PPG students' engagement
Keywords	Program Evaluation; Students' Perception; Teacher Professional Education Program		

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1. INTRODUCTION

The in-service PPG program was implemented in 2009 through the PLPG (Teacher Professional Training Education). Since its implementation, the program has been considered to improve the quality of teachers and become a best practice in teachers' professionalism management (Hidayah, 2013). However, other scholars argue that the Teacher Professional Education Program (PPG) activities have not provided good results. Although PPG activities have been carried out for several years, teacher competency remains low (Hoesny & Rita Darmayanti, 2021). In addition, a study by Christensen et al. (2022) shows that almost 50% of teachers with a Bachelor's degree have not been certified. In addition,



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the number of teachers and education personnel who have completed certification in 2020 reached 694,773 people. However, the latest Teacher Competency Test (UKG) results indicate that only 30% of teachers passed the UKG. Around 70% of teachers still do not meet the established competency standards (Christensen et al., 2022).

The 2017 Human Development Report from the United Nations Development Program (UNDP) ranked Indonesia at 116 out of 189 countries in the Human Development Index (HDI). Indonesia's HDI score of 0.694 is much lower than neighbouring countries such as Brunei Darussalam (0.853) and Malaysia (0.802). A separate survey from the Institute for Management Development (IMD) noted that Indonesia ranked the lowest, 14 out of 14, among Asia Pacific countries regarding teacher quality (Zulfitri, Setiawati, & Ismaini, 2019). On the other hand, a reading literacy study from the Progress in International Reading Literacy Study (PIRLS) in 2006 showed that Indonesia was ranked 41st out of 45 developed and developing countries studied (Lim, Juliana, & Min Liang, 2020). The source of the matter is that the Teacher Professional Education (PPG) program does not appear to have significantly impacted the abilities and competencies of Indonesian teachers in the classroom (Aisyah, Hardika, Iriyanto, & Utamimah, 2024). This is supported by the results of the evaluation by the Ministry of Education and Culture, which states that the implementation of PPG in several LPTKs is still considered suboptimal (Pangesti, Fauzan, & Risnawati Risnawati, 2020).

Some challenges in achieving the goals of the Teacher Professional Education Program (PPG) to improve the quality of teachers in Indonesia (Mardhatillah & Surjanti, 2023) Is the limited ability of most teachers, including facilitators and lecturers, in operating laptops and understanding class management procedures in the Learning Management System (Mariati, 2021), unstable network connection, too many tasks (Zunuaris & Fatimah, 2021). Teachers' excessive teaching load limits their involvement in PPG activities (Sims et al., 2025). A survey via Google Form to PPG student alums, around 73% said that the PPG program is actually very relevant to the needs of teachers in improving their competence. Still, sometimes various factors cause the program not to be implemented as it should be. To improve the understanding of PPG students, lecturers and mentor teachers need a more comprehensive explanation regarding the learning materials provided. As an initial step, it is recommended that materials be delivered at least once a day via a platform such as Zoom to ensure that each material can be programmed properly before moving on to the next module.

In addition, attention to the timing of PPG implementation needs to be increased, considering that students follow the PPG program and carry out teaching activities. Reinforcement of materials through face-to-face meetings is crucial to support a more effective learning process. Formative test activities must be adjusted to the module's contents to optimize learning evaluation. In this case, the age factor of students needs to be considered by providing easy access. The placement of PPG students should also be adjusted to their geographic area to facilitate the implementation of activities. The PPG curriculum must be adjusted to current conditions regarding module materials, articles, and videos. An adequate solution is needed for students who face network constraints so that the learning process can continue running smoothly. From this data, most PPG students hope implementing PPG at UIN Datokarama Palu will require improvements.

Several studies have found that for many teachers, the PPG program is not a source of happiness, because it is considered that the PPG program has not been proven to be very effective and transformative (Aparicio-Molina, Carolina, Sepúlveda-López, & Felipe, 2023). Education policy and evaluation researchers argue that it can be challenging to plan effective PPG programs because varying contexts introduce a web of factors that influence whether or not certain characteristics or practices produce desired outcomes (Fischer et al., 2022). However, when the PPG program is effective, there is a relationship between changes in teacher practices and positive student learning outcomes. This research cumulatively shows that for the PPG program to be successful in the future, there is a need to make students perceive the program as an effective way to improve their teaching skills (Avalos, 2011; Sims & Fletcher-Wood, 2021). Instead, the studies have shown the relationship between students'

perception and PPG program effectiveness; no studies have been conducted to evaluate PPG UIN Datokarama effectiveness from the students' perspective. Therefore, it is necessary to evaluate the effectiveness of PPG implementation from the perspective of students as the program participants to improve the quality of the implementation of PPG in the future, especially at LPTK UIN Datokarama Palu.

This study aims to fill the gap by answering three questions by evaluating the results of PPG students' perceptions of implementing PPG at LPTK UIN Datokarama Palu. First: How do students view the implementation of the PPG program at UIN Datokarama Palu? This question is expected to contribute to higher education stakeholders in Indonesia, especially the implementers of PPG UIN Datokarama Palu. Second: How are the results of student achievement related to implementing PPG? This question evaluates the results of implementing PPGs for students who passed and those who did not. So that solutions can be found to the causes of student graduation and failure. Third: How should the performance of the organizers, both lecturers and mentor teachers involved in the PPG program? This question seeks to contribute to PPG students getting services in implementing PPG to gain an indepth understanding and experience during PPG.

This paper is based on the argument that the results of PPG students' perceptions of the implementation of PPG can be classified into two types: effective and less effective perceptions. Effective perceptions are the implementation of the Professional Teacher Education Program that can provide sufficient insight and skills for prospective teachers to carry out their duties, thus spurring the motivation and interest of students to hone their educational competencies and professional skills. Meanwhile, less effective perceptions are that curriculum targets are not achieved properly due to inactive learning interactions. The background of these perceptions is that lecturers in PPG activities are less intensive in reinforcing materials, additional time is needed due to network constraints and additional tasks as teachers, as well as the age gap between students who can no longer operate several online learning applications.

2. METHODS

The type of this research is mixed method; meanwhile, the approach of this research is a combination of quantitative and qualitative approaches simultaneously (Bryman, 2006). The object of this study is the implementation of the PPG program at UIN Datokarama Palu, while the subject of this study is the students of the PPG program. Quantitative data were gathered through an online survey, which distributed questionnaires using Google Forms. There were ten questions in the online questionnaire survey. 172 PPG students and alums were selected using a non-probabilistic sampling technique to fill the questionnaires. The use of questionnaires through Google Forms facilitates distribution to all research respondents in the broader area (Marshall, 2005). Who are domiciled in several districts in Central Sulawesi province. Thus, the study can include responses from PPG PAI UIN Datokarama Palu alumni who come from various regions. The data is supplemented with self-observation of PPG students to determine student achievement results in implementing PPG. The questions are intended to evaluate the PPG implementation results for students who graduated and those still in the study process.

Meanwhile, the qualitative data were gathered through focus group discussion (FGD), in-depth interviews, and written document analysis obtained from the PPG study program of UIN Datokarama Palu. FGD involved 30 students, which lasted more than two hours. Meanwhile, in-depth interviews involved twelve PPG alums. The interviews lasted between 30 and 45 minutes. Meanwhile, documents from the PPG study program at UIN Datokarama Palu were used to find data related to the teaching process, students' scores, and students' backgrounds.

Quantitative data were analysed descriptively (Marshall & Jonker, 2010) to interpret the results from the survey. The analysis was presented in a simple statistical format to reflect the study results. Meanwhile, qualitative data were analysed using a thematic approach outlined by Strauss and Corbin (Strauss & Corbin, 1998). The results of the qualitative data analysis were presented according to each theme in the data. Each theme was presented to discuss each topic found in the research and to show this study's academic and practical contributions.

3. FINDINGS AND DISCUSSIONS

Program Quality

The PPG program at UIN Datokarama Palu is comprehensive and provides reasonable provisions for becoming professional teachers. However, several aspects still need to be improved, such as the balance between theory and practice. Most students (93%) stated that the PPG program is very relevant to the needs of teachers in improving their competence, but several obstacles need to be fixed. Some obstacles mentioned include unstable internet connections, too much workload, and a lack of understanding of the material from lecturers and mentor teachers. This can be seen from the survey results:

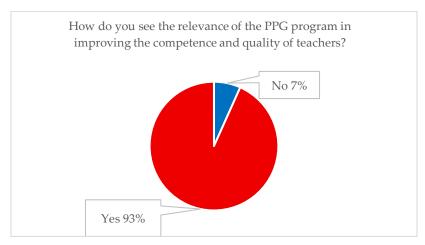


Figure 1. Program Relevance Towards Competency Improvement

Figure 1 above shows that most PPG students, or 93 % said the PPG program is very relevant in improving their teacher competence and quality. Their perception is based on several reasons: 1) The PPG program can provide them opportunities to increase their professional teaching skills. The PPG program also increases their competency to select, plan, develop, use, and actualize various teaching materials in classrooms based on teaching standards. 2) The students also said that the PPG program can be an effective means to increase their ability to select and use a variety of teaching materials in accordance with competency standards. 3) The PPG program is very relevant to improving teacher competence and quality because in the PPG program, teachers are honed, guided, and given material by lecturers to improve their quality.

Although there are minor answers with a percentage of 7% regarding the PPG program's relevant, the respondents' arguments are based on two reasons. First, the PPG program might be only a formality policy shown in the final exam results, 100% students passed. Second, the quality of teachers could be increased if the welfare of teachers is guaranteed, especially for Madrasah teachers who are still honorary with low salaries. However, on average, the teachers are in a good qualification and have more experience in teaching. Our findings are relevant to previous studies, which found that qualified teachers usually have teaching experience of more than five years (Gore, Rosser, Jaremus, Miller, & Harris, 2024; Graham, White, Cologon, & Pianta, 2020).

In the following figure, the PPG students were asked whether the PPG program increased their understanding of all the material given during PPG training. The answers of the students are presented in Figure 2 below.

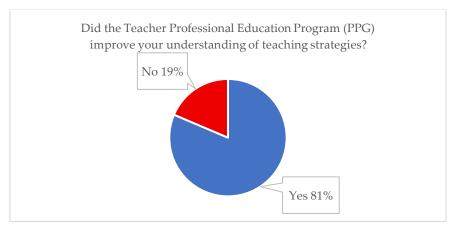


Figure 2. The Perception of Increasing Understanding

The data from Figure 2 above reflects that most PPG students agree that the PPG program can provide adequate understanding and skills to carry out their duties as teachers, with a percentage of 81% for several reasons. From the PPG program, many skills are obtained by a teacher, especially in digital learning, which can increase knowledge in choosing and mastering teaching materials, planning, developing, and actualizing productive teaching and learning processes. Meanwhile, only a few students, or about 19%, stated that the Teacher Professional Education Program (PPG) could not provide adequate understanding and skills to carry out their teacher duties because the PPG was delivered online. They argue that lecturers and mentor teachers still need offline reinforcement of the material.

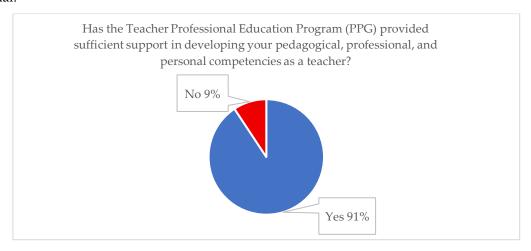


Figure 3. Survey on Support from PPG Committee

Figure 3 shows that 91% of the students perceived that the PPG program has provided sufficient support in developing pedagogical, professional, and personality competencies. However, several respondents, or about 9% said that the implementation of PPG needs to be developed more specifically and with more action compared to the theory in the module in the future. They argue that the PPG program did not provide sufficient support in developing pedagogical, professional, and personality competencies.

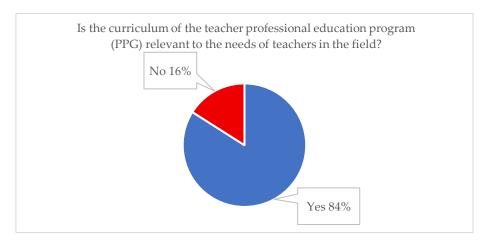


Figure 4. Survey Result on Curriculum Relevance

The data in Figure 4 shows that 84.0% of PPG students consider the PPG curriculum relevant to the needs of teachers in the field. However, several respondents provided input for improvement, namely: (1) revision of the curriculum content and modules to align with the latest curriculum, (2) deepening of student assessment materials, and (3) improving learning practices through the application of various models.

On the other hand, 16.0% of respondents thought that the PPG curriculum was irrelevant. The main reason for this irrelevance was that the curriculum was too broad in scope, considering the diverse backgrounds of students from various educational units, making it less applicable in field practice. A respondent with a background in teaching Arabic in junior high schools gave an example: the PPG curriculum required them to study advanced Arabic, whereas teaching basic Arabic was more suitable for the students in the PPG program. Based on this, it is recommended that students be mapped based on the background of the same educational unit so that the PPG curriculum can provide more conceptually and practically relevant impacts and benefits.

Our findings from in-depth interviews with 20 PPG students reveal that there are some problems in the program of PPG training program, for example, limited practical learning, less connection between learning theories, a lack of training, and the learning process does not reflect the actual situation, as said by the following students:

"The program provides a strong foundation in educational theory and pedagogy. We learn various modern teaching methods and how to manage a class effectively. However, I feel that the time for hands-on practice is still lacking. We need more opportunities to apply the theories we have learned in real classroom situations." (student A)

Another student also expressed his opinion as follows:

"The material provided is very relevant to the needs of today's teachers. Including the use of technology in learning. However, having more intensive simulations or micro-teaching before we went to school for teaching practice would be better." (student B)

The student's comments above reflect that the PPG program's teaching quality still needs to be improved, relating to practical learning, the connection between theories and the practical world, and teaching training. Encouraging students to apply integrated learning, combining theoretical and practical knowledge, is crucial during the PPG program to ensure they gain comprehensive knowledge. This integration of practical and theoretical knowledge can be achieved by paying equal attention to both practical and theoretical knowledge across various curriculum sections. (Tempelman & Pilot, 2011). Our research also shows that most PPG students cited three key reasons for the importance of gaining practical knowledge during their PPG program. The first reason is that they have specific interests and activities that require practical knowledge. Second, they also teach science at school,

requiring practical skills during their PPG studies. Third, they require new teaching methods to implement in their schools, making practical knowledge essential during the PPG program (Kersting et al., 2023).

Practical knowledge is important for acquiring and retaining motor skills, developing expertise after repeated practice, and regularly reinforcing learning material (Donaldson & Allen-Handy, 2020). There is also a need for the PPG student to learn skills that are not taught in the PPG program, such as detailed teaching procedures, teachers' and students' communication strategies in solving certain problems, and classroom management skills, as argued by Budgen & Gamroth (2008). The benefits of implementing a real education situation and the relevant empirical teaching material should be provided in a teaching training process. This can be conducted by considering the implementation of empirical learning programs and relating them to social learning theory (Lowe, Thompson, Vass, & Grice, 2024). As a result, there will be a link and match between theoretical learning in a classroom and teaching and learning in real classroom situations. In addition, our study confirms that practical learning can be practiced in a hybrid situation resembling a real learning context in a school. For example, the learning could be practiced in-home mode or in community-based activities, through virtual simulations, online practice, and video-based teaching and learning, to offer more opportunities to engage in practical learning (Forbes, Dilani, Cheryl, Maggie, & and Datt, 2023).

We also analysed the curriculum and syllabus of PPG at UIN Datokarama Palu, showing: 70% of the material focuses on educational and pedagogical theory, 20% is allocated for teaching practice, and 10% for direct practice in partner schools. The annual program evaluation document shows that the university is aware of the need to improve the practical aspect, with plans to: Increase teaching practice hours from 40 to 60 hours per semester, intensify internship programs in partner schools, and develop teaching simulation laboratories with virtual reality technology.

Based on the triangulation of data from surveys, interviews, and documentation, it can be concluded that the PPG program at UIN Datokarama Palu is comprehensive and provides a strong foundation for becoming a professional teacher. The main strength of this program lies in its relevant and up-to-date curriculum. However, an area that still needs improvement is the balance between theory and practice. Students need more opportunities to apply their knowledge in actual teaching situations. The university has recognized this and is in the process of improving the practical components of the curriculum. Recommendations for program improvement include: Increasing the duration and frequency of teaching practice, integrating more simulations and role-playing in theory classes, strengthening collaboration with partner schools to provide a more diverse teaching experience, and implementing a mentoring system where students can learn directly from experienced teachers. With these improvements, the quality of the PPG program at UIN Datokarama Palu will continue to improve, producing prospective teachers who are not only strong in theory but also ready to face the reality of teaching in the field.

Students' Reflection Journal

Analysis of the reflection journals of 50 PPG students for one semester showed that 80% of students noted a significant increase in their understanding of educational theory, 70% felt more confident in preparing learning plans, and 65% experienced increased classroom management skills. However, 60% felt dissatisfied with the number of opportunities for teaching practice. Excerpts from student journals:

" This week I feel like I understand more about complex pedagogical concepts. However, I still feel awkward when I have to practice them in teaching simulations." (Student C)

Meanwhile, based on our teaching practice logbook data analysis, students only get an average of 3-4 full teaching practice opportunities during a semester. 75% of students feel that this amount is not enough to build their confidence and teaching skills, 85% noted an improvement in teaching quality from the first to the last practice. Relating to this fact, a student said, "I feel more fluent in transitioning

between learning activities. However, I still have difficulty handling students' questions beyond expectations." The PPG students' difficulties in handling students' questions at schools reflect the challenges faced by the early-career teachers who are still in the process of becoming professional teachers, which is described as a challenging phase (Rowan, Mayer, Kline, Kostogriz, & Walker-Gibbs, 2015). Such challenges can be resolved after a few years of training and practice.

In fact, a teacher's ability to answer student questions is a crucial part of the professional competency every educator must possess (Brookhart, 2011). This ability reflects mastery of the material, communication skills, and sensitivity to students' learning needs. However, many teachers still struggle to provide appropriate, clear, and constructive answers when students ask questions. This weakness can negatively impact the overall learning process. For example, one of the impacts is declining student trust in teachers because the ability of teachers to response to students' questions is low.

Students who frequently receive unsatisfactory or inaccurate answers from their teachers will begin to doubt their teachers' competence. Trust is a crucial foundation of the teacher-student relationship (Van Maele & Van Houtte, 2011). When this trust is weakened, students lose respect, are reluctant to ask questions, or seek other learning resources without guidance. In addition, lack of trust can also inhibit the students' curiosity and motivation to Learn. Therefore, one of the most effective ways to foster curiosity is through questions and answers with professional teachers. When students' questions aren't adequately answered, they feel their curiosity isn't valued. In the long run, this can dampen their enthusiasm for learning and lead to passive participation in the learning process.

Self-Evaluation

From the self-evaluation form filled out by students before the semester is finished, this study found 85% of the students rated themselves as 'good' in mastery of the material, 70% rated themselves as 'adequate' in practical teaching skills, and 60% rated themselves as 'needs improvement' in the ability to handle unexpected classroom situations. A student said she has mastered the theory and teaching methods, but still needs more practice applying them in real classes. She wishes there were more opportunities to practice and get direct feedback. This reflects that the students require more practical knowledge in the PPG program. Previous studies have found that in a teaching improvement training program, in-service teachers and pre-service teachers still need more practical experience from experienced mentors to improve their pedagogical content knowledge and skills (Allen & Wright, 2014). This implies that the PPG of UIN Datokarama Palu should increase practical learning during the program implementation.

Our findings from the Focus Group Discussion (FGD), which involved 30 students, also revealed that the students need more simulations of realistic classroom situations. They also want more detailed feedback from the supervisor, exposure to different types of schools and student characteristics, and the importance of specific skills training in using information technology in education. This self-observation strengthens previous findings about the imbalance between theory and practice (Lu, 2012) in the teaching process at higher education. Students experienced significant improvements in understanding concepts and lesson planning, but had fewer opportunities to practice these skills in real situations.

The students also argue that they need more exposure to diverse and complex classroom situations. Exposure to diverse students' characteristics and classroom complexity can increase the PPG students' knowledge on structuring learning situations for specific students' characteristics and the classroom (Sleeter & Owuor, 2011).

The diverse characteristics of students and the complexity of the class can also be factors that increase the knowledge of PPG students (Abbas, Amaliawati, Aulia, & Agustiningrum, 2023). Both cause this encouraging lecturers and participants to adapt to each other, share experiences, and develop more reflective and contextual learning strategies (Kolajo, 2025). In addition, the diversity of the students in the classroom also supports the sharing and exchange of diverse knowledge and skills, as

found by (Jackson, Fleming, & Rowe, 2019) and (So, Seah, & Toh-Heng, 2010). As such, all students have opportunities to obtain new knowledge and skills during the PPG training, which impacts their school's development.

Regarding the need for frequency and variety of teaching simulations, Krajčovič, Gabajová, Matys, Furmannová, & Dulina (2022) and (Chernikova et al., 2020) Suggest incorporating information technology into the teaching process, such as using virtual reality for simulation. The virtual reality technology can visualize teaching in a way that resembles reality (Christou, 2010), which can help the PPG students understand the real world. The students can experience a learning subject as it is experienced in real daily life through virtual reality in education.

Meanwhile, opportunities for teaching practice can be provided through longer periods of teaching practice at schools guided by experienced mentors. Teaching practice can also be improved through a more intensive mentoring system with more detailed feedback (Ingersoll & Strong, 2012). A longer study period can provide the benefit of gaining deeper and more comprehensive knowledge. With more time, students have the opportunity to explore the material more comprehensively, deepen their understanding of theory and practice, and develop more mature critical and analytical thinking skills (Rohrer, 2015; Spooner, Flowers, Lambert, & Algozzine, 2008). Previous studies have found that improving the quality of education depends heavily on teachers' competence in implementing teaching practices in the classroom. One proven effective strategy for improving teacher skills and professionalism is through an intensive and ongoing mentoring system (mentoring or coaching) (Hudson, 2013). Mentoring is not merely supervision, but a collaborative process that encourages teachers to reflect on, evaluate, and develop more effective learning strategies.

Regarding the impact of PPG students' achievement after following the PPG program on education at their schools, we present the results in Figure 5.

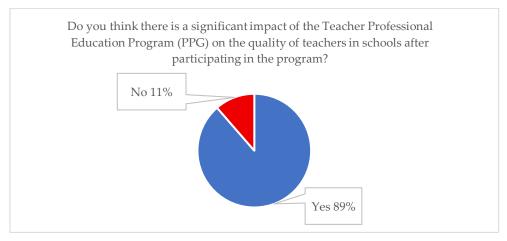


Figure 5. Impact of PPG on Schools' Education Quality

Based on the data presented in Figure 5, the PPG program has improved education quality at schools where the PPG students come from. 89.2% of respondents said that the PPG program produces a positive impact because it can create better learning programs. The PPG students have increased knowledge on how to make better teaching plans, learning models, and utilize learning media. Other responses show that teachers become more creative and innovative in teaching, and more disciplined, understanding their duties better. The result is very positive because the PPG students become more active and creative, and better manage classes. Other respondents said that the PPG program can increase education quality in schools, both online and face-to-face, regarding pedagogical competence, spiritual and professional personality, and improve teacher welfare.

4. CONCLUSION

The perceptions of PPG students regarding the effective implementation of the program at UIN Datokarama Palu show that the students view the PPG program at UIN Datokarama Palu as having improved their teaching quality, which impacts the quality of education at the schools where they come from. However, they also view the PPG program as lacking practical knowledge. In addition, the students also experience a lack of a mentoring system and field experience training. Meanwhile, factors that affect the program's effectiveness include external and internal factors that influence student achievement in the PPG program at UIN Datokarama Palu. External factors such as internet access, support from lecturers and mentor teachers, and administrative support are essential in determining student success. Meanwhile, internal factors include tiredness because of assignment load and time management ability.

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