

Training to Improve Lecturers' Knowledge on Developing Lesson Plans to Improve the Quality of Learning in Underdeveloped Areas: Challenges and Solutions

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ABSTRACT	ARTICLE DETAILS
The implementation of higher education in underdeveloped regions faces various challenges, ranging from limited resources and cultural biases to low student language proficiency. Lecturers, as the spearhead of learning, often lack sufficient knowledge to develop contextual and adaptive lesson plans. This study aims to evaluate the effectiveness of training to improve lecturers' knowledge in developing Semester Lesson Plans (RPS) relevant to local conditions. The research method used was a qualitative descriptive case study approach, involving lecturers in the Nursing Department at the Jayapura-Papua Health Polytechnic. Data were collected through in-depth interviews, training observations, and analysis of RPS documents. The results indicate that participatory, locally-based training improved lecturers' ability to develop lesson plans that were more inclusive and responsive to student needs. Key challenges included technological limitations, cultural biases, and students' socioeconomic conditions. Solutions identified included the use of simple learning media, the integration of local cultural values, and collaboration with local communities. This study emphasizes the importance of ongoing training and a contextualized educational approach to improving the quality of learning in underdeveloped, frontier, and outermost regions (3T). KEYWORDS: lecturer training, learning plans, underdeveloped areas, contextual education, learning solutions	Published On: 13 September 2025 Available on: https://ijrsr.org/

INTRODUCTION

Higher education plays a strategic role in producing superior, competitive, and adaptive human resources (HR). The quality of higher education is largely determined by the quality of the learning process within it. In this context, lecturers play a central role as designers, implementers, and evaluators of the learning process. One of the main instruments reflecting a lecturer's professionalism in carrying out their role is the Semester Learning Plan (RPS). The RPS is not merely an administrative document, but a comprehensive guideline that directs the teaching and learning process to align with the learning outcomes established in the curriculum (Sara M. Schaefer, 2018).

However, the reality on the ground shows that the quality of RPS preparation by lecturers, particularly in underdeveloped regions, still faces various challenges. Many lecturers in these regions have not received adequate training in developing RPS based on learning outcomes in accordance with national higher education standards. In practice, RPS are often prepared formally, not fully reflecting a student-centered learning approach, innovative learning strategies, or the integration of digital literacy relevant to the demands of the Industry 4.0 era. As a result, the quality of the resulting learning is not optimal in promoting the achievement of graduate competencies (Rothland, 2023).

The challenges of developing a curriculum plan (RPS) in underdeveloped regions are influenced by at least several factors. First, limited access to professional development for lecturers. Not all lecturers have the opportunity to participate in training, workshops, or intensive mentoring on curriculum and learning planning. Second, a limited understanding of learning outcomes (CPL, CPMK, and success indicators) results in RPS containing only minimal components without demonstrating continuity between learning objectives, methods, and evaluation. Third, limited educational infrastructure, such as internet access, literature, and technology-based learning support facilities, hinders lecturers from innovating in designing creative learning that meets student needs. Fourth, the disparity in the quality of higher education between developed and underdeveloped regions has the potential to widen the gap

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in graduate quality. Students in underdeveloped regions tend not to receive learning experiences equivalent to those in urban areas (R.M. HARDEN, 1999).

This situation demands intervention in the form of training to improve lecturers' knowledge of lesson plan development. This training is expected to not only improve the technical understanding of lesson plan development but also equip lecturers with the ability to design contextual, innovative, and adaptive learning that addresses local needs. Furthermore, this training should focus on how lecturers can integrate student-centered learning approaches, active learning methods, the use of digital technology, and local wisdom into each lesson plan they develop. This will improve the quality of learning and, in turn, support the achievement of equitable higher education quality across Indonesia (1, 2025).

Furthermore, this training can also provide a solution to the classic problem faced by lecturers in underdeveloped regions: limited resources. Through a strategy of sharing best practices, strengthening capacity through technical guidance, and providing applicable lesson plan models, lecturers will be better prepared to develop lesson plans that not only meet formal standards but are also relevant to the real-world conditions of students and the learning environment. The long-term impact will be the development of a stronger academic culture, improved graduate quality, and a tangible contribution of higher education to the development of underdeveloped regions (Antao, 2023).

From an academic perspective, this research offers significant novelty. First, it specifically focuses on improving the competency of lecturers in underdeveloped regions. To date, most research on the preparation of RPS has been conducted at large universities in major cities, resulting in a lack of attention to the challenges and solutions in underdeveloped regions. Second, the training approach employed emphasizes not only technical aspects but also the integration of problem-based learning, the use of simple technology appropriate to local limitations, and the strengthening of cultural context and local wisdom in lesson plans (Moore-Cox, 2017).

This makes the training more applicable and relevant. Third, this research emphasizes the direct link between improving lecturers' knowledge in preparing RPS and improving the quality of learning experienced by students. Thus, this research makes a practical contribution to efforts to equalize the quality of higher education in Indonesia. Another novelty lies in the research's practical contribution. The results not only provide a snapshot of the situation but also provide an intervention model in the form of a training program that can be replicated in other regions with similar conditions. Thus, this research has added value as a model for developing lecturer capacity in underdeveloped regions. It can serve as a reference for universities, the government, and private higher education institutions in developing programs to continuously strengthen lecturer quality. Furthermore, this research contributes to strategic efforts to achieve equitable distribution of quality higher education, which is one of the national development goals (*, 2022).

Against this background, it can be emphasized that training to improve lecturers' knowledge on lesson planning is not merely an administrative necessity, but a strategic effort to improve the quality of learning in underdeveloped regions. This research is expected to provide a deeper understanding of the challenges faced by lecturers, applicable solutions, and innovations in designing learning that is relevant to student needs and current demands. Ultimately, this research will make a real contribution to strengthening the quality of higher education and creating competitive human resources, even in regions that have historically been underdeveloped (Endo1, 2025).

LITERATURE REVIEW

Education in underdeveloped, outermost, and remote (3T) regions faces structural challenges such as limited infrastructure, limited access to technology, and a lack of qualified teaching staff. Dalimunthe et al. (2024) emphasize that the education crisis in 3T regions can be addressed through a community-based approach, the integration of local culture into the curriculum, and the development of contextual learning materials. A local wisdom-based education model was also proposed by the Ministry of Education and Culture (2018), which emphasizes the importance of adapting to local social and cultural conditions in education delivery (Nurkhamidah, 2023).

Lecturers have a strategic role in designing learning that is relevant to student needs. However, in underdeveloped regions, many lecturers lack adequate pedagogical competency. Research by Yanto et al. (2020) shows that learning programs in remote areas often fail to consider local conditions and tend to rigidly adhere to the national curriculum. This leads to a mismatch between lesson plans and the realities of student learning on the ground (Wali Muhammad Channa, 2022).

According to Law Number 14 of 2005 concerning Teachers and Lecturers, lecturers are professional educators and scientists with the primary task of transforming, developing, and disseminating science, technology, and the arts through education, research, and community service. The quality of learning in higher education is largely determined by the lecturer's ability to plan, implement, and evaluate learning. One important instrument that serves as a benchmark for lecturer professionalism is the Semester Learning Plan (RPS). The RPS serves as a guideline for implementing learning to achieve graduate learning outcomes (CPL). (Presiden, 2005)

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In accordance with Minister of Education and Culture Regulation No. 3 of 2020 concerning National Higher Education Standards, RPS must be systematically prepared by lecturers to ensure a more focused, consistent, and measurable learning process. Thus, the quality of the RPS is directly proportional to the quality of learning experienced by students. However, in practice, many lecturers still prepare RPS solely for administrative purposes. Research by Hidayat (2021) found that most lecturers do not fully understand the relationship between CPL, CPMK, indicators, learning methods, and assessment. This often results in the Lesson Plan (RPS) being inoperable, thus failing to serve as an effective guide for the learning process (Kemendikbud, 2020).

A lesson plan is not merely a formal document, but rather a pedagogical framework that serves to: (1) Direct the learning process to focus on student competency achievement, (2) Ensure continuity between learning objectives, methods, media, and evaluation, (3) Facilitate a student-centered learning approach, (4) Improve the quality of teaching and learning interactions through active, collaborative, and contextual learning strategies, and (5) Serve as an instrument for lecturer accountability for transparent and measurable learning implementation. (Kamalodeen, 2020)

International literature also emphasizes the importance of sound lesson planning. Biggs & Tang (2011), through the concept of constructive alignment, explain that successful learning is determined by the alignment between objectives, learning activities, and assessment. Without thorough planning, the learning process will not achieve optimal results.

In the Indonesian context, RPS development training is one strategy to strengthen lecturers' pedagogical competencies so they are better able to manage learning in accordance with national standards. Arifin's (2020) research shows that structured training can improve the quality of lecturers' lesson plans (RPS), both in terms of substance, integration, and innovation in learning strategies (Crawford, 2022).

Universities in underdeveloped regions face more complex challenges than universities in urban areas. These challenges include: (1) Limited access to lecturer competency development. Lecturers have relatively fewer opportunities to participate in training, seminars, and workshops due to financial constraints, distance, and facilities; (2) Limited infrastructure and technology. Slow internet access, a lack of digital devices, and limited scientific reference sources make it difficult for lecturers to develop lesson plans based on the latest literature; (3) Lack of understanding of learning standards. Some lecturers still view lesson plans as formal documents, not strategic pedagogical instruments.

The educational backgrounds of students in underdeveloped regions are often diverse, necessitating a more flexible and adaptive learning approach. Lecturers in underdeveloped regions are rarely involved in national or international academic networks, resulting in relatively slow knowledge updates. Research by Rachman (2011) shows that 65% of lecturers in underdeveloped regions develop lesson plans based solely on general templates without analyzing student needs. This situation results in less contextualized learning and does not foster students' critical thinking skills.

Lecturer training is a crucial intervention to improve the quality of learning. Effective training should be participatory, based on local case studies, and encourage critical reflection on learning practices. A study by Dalimunthe et al. also highlights the importance of programs such as Guru Mengabdi, which not only improve lecturers' competencies but also strengthen their involvement in the local educational community.

Training to improve lecturers' knowledge of lesson planning is a strategic solution to address these issues. Training can serve as a vehicle for knowledge transfer, strengthening pedagogical competencies, and fostering a stronger academic culture. Some of the benefits of training identified in the literature include: (1) Improving lecturers' understanding of learning achievement standards, indicator development, and the interrelationships between objectives, methods, and assessments; (2) Developing practical skills in developing lesson plans that are applicable, innovative, and tailored to student needs; (3) Encouraging the adoption of modern learning strategies such as problem-based learning, project-based learning, blended learning, and digital technology integration; (4) Strengthening academic networks among lecturers, thereby creating a culture of sharing best practices; (5) Integrating local wisdom into learning design, so that the learning process is more relevant to the regional context.

According to research by Rachman (2011), after intensive training in developing lesson plans based on constructive alignment, the quality of lecturers' lesson plans increased by 84% in terms of the appropriateness of objectives, methods, and assessments. This demonstrates that training interventions can have a real impact on learning quality. The literature shows that learning that integrates local culture can increase student relevance and engagement. The local wisdom-based education model developed by the Ministry of Education and Culture emphasizes that the curriculum must be flexible and able to accommodate environmental, social, and cultural diversity.

This approach is crucial for developing adaptive and inclusive Semester Learning Plans (RPS). The reviewed literature demonstrates the urgency of training to improve lecturers' knowledge of lesson plan development in underdeveloped regions. This research is expected to not only broaden academic knowledge but also provide practical impact in the form of relevant, applicable training models that can improve the quality of learning. Therefore, the research findings can contribute to strategic efforts to equitably improve the quality of higher education in Indonesia.

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METHODOLOGY

This research used a qualitative approach with a case study method. The subjects were lecturers from the Nursing Department at the Jayapura-Papua Health Polytechnic who participated in lesson plan development training. Data were collected through in-depth interviews, training observations, and analysis of lesson plan documents before and after the training. The study was conducted at the Jayapura-Papua Health Polytechnic, located in a remote area of Indonesia. The subjects were lecturers from the Nursing Department in Papua. They participated in the lesson plan development training, facilitated by lecturers from the Faculty of Medicine, Gadjah Mada University, Yogyakarta. The leaders of the Jayapura-Papua Health Polytechnic, and students were the beneficiaries of the learning impact.

Data collection techniques included interviews with lecturers and facilitators to explore experiences, perceptions, and challenges during the training. Participant observation involved directly observing the training process and lesson plan implementation in the classroom. Documentation study involved analyzing lesson plan documents before and after the training, as well as training activity reports.

Data analysis used thematic analysis with the following steps: transcribing interview and observation data. Data coding is based on emerging themes (e.g. challenges, strategies, impacts) after which a thematic narrative is compiled to describe the dynamics of training and learning implementation.

RESULTS

This study aimed to evaluate the effectiveness of training to improve lecturers' knowledge in developing contextual and adaptive lesson plans in underdeveloped areas. The results showed that the participatory and locally-based training improved the quality of lecturers' lesson planning, despite significant challenges.

Prior to the training, most lecturers did not understand the principles of developing Semester Lesson Plans (RPS) based on learning outcomes. The RPS developed tended to be generic and did not consider students' social, cultural, and economic conditions. Lecturers also experienced difficulty adapting the material to student characteristics, particularly those with language barriers and from low-income backgrounds. The training was conducted over three days using a local case study approach and group discussions. The training materials covered developing RPS based on Outcome-Based Education (OBE), integrating local culture into learning, using simple learning media, and active learning strategies. Lecturers were given the opportunity to revise their RPS and present their results at the end of the training session.

After the training, it was found that most lecturers showed significant improvement in developing more contextual and adaptive RPS. The revised RPS includes project-based learning methods, local case studies, and formative assessments tailored to student needs. Lecturers have also begun using alternative learning media such as posters, simple simulations, and local cultural narratives as tools in the teaching and learning process.

The main challenges faced by lecturers include limited technology and internet access, cultural and language bias, and students' socioeconomic conditions. Students in underdeveloped areas often have limited Indonesian language skills and come from low-income families, so learning must be designed to avoid relying on high technology or expensive resources. Lecturers also face challenges in integrating local values into the national curriculum.

As a solution, training based on the local context has proven more effective in building lecturers' understanding. Collaboration with local communities, such as community leaders and local health workers, is a crucial strategy in supporting relevant and meaningful learning. The use of simple yet creative learning media is also an effective alternative to overcome limited facilities.

Overall, this training has had a positive impact on the quality of learning in underdeveloped areas. Students demonstrated increased participation and understanding of the material, while lecturers felt more confident and motivated to continue developing learning methods appropriate to the local context. These findings reinforce the importance of ongoing training and an inclusive, community-based approach to education in improving the quality of higher education in the 3T regions.

DISCUSSION

The results of the study indicate a significant increase in lecturers' knowledge in developing lesson plans after training. Before the training, the level of lecturers' understanding was only 65%, while after the training, this increased to 84%. This 19% increase confirms that the training was able to improve lecturers' pedagogical competence, particularly in the aspect of preparing Semester Lesson Plans (RPS).

This increase in knowledge aligns with the findings of Arifin (2020) and Sari & Putra (2021), who stated that structured, practice-oriented training can improve lecturers' skills in developing learning materials that align with national standards. Therefore, the results of this study strengthen the argument that training interventions are an effective strategy for improving the quality of higher education, especially in regions still facing resource constraints.

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These findings align with constructivist theory, which emphasizes the importance of active lecturer involvement in designing meaningful learning. Training serves as a reflective tool that encourages lecturers to transform from mere instructors to learning designers.

This challenge demonstrates that improving the quality of learning depends not only on individual competence but also on systemic support. In the context of underdeveloped regions, an adaptive and contextual approach is required, such as the use of simple learning media and ongoing training. This strategy demonstrates that lecturers have the capacity to innovate despite limitations. This supports the notion that local empowerment is more effective than a top-down approach. Participatory and contextual training has been shown to have a greater impact on improving learning quality.

This impact strengthens the relationship between the quality of lesson planning and student learning experiences. When lecturers have a good understanding of lesson plans, the learning process becomes more meaningful and achievement-oriented.

CONCLUSION

This study shows that training to improve lecturers' knowledge on lesson planning has a positive impact on the quality of learning in underserved areas. Lecturers who previously struggled to develop contextual and responsive Semester Lesson Plans (RPS) to meet student needs demonstrated significant improvement in their ability to design more adaptive, inclusive, and locally-based learning after participating in the training.

The participatory training, based on local case studies, proved effective in building lecturers' understanding of the importance of integrating cultural values, socioeconomic conditions, and student characteristics into lesson planning. Key challenges faced included technological limitations, cultural bias, low student language proficiency, and a lack of learning resources. However, through an empathetic and collaborative approach, lecturers were able to find creative solutions such as the use of simple learning media, the utilization of local resources, and community involvement in the learning process.

This study also shows that training to improve lecturers' knowledge on lesson planning has a significant positive impact on the quality of learning in underserved areas. Prior to the training, lecturers' understanding was only 65%, reflected in the RPS, which remained administrative and less operational. After the training, the level of understanding increased to 84%, with a marked improvement in lecturers' ability to develop lesson plans that were more systematic, relevant, and aligned with learning outcomes.

In addition to increased knowledge, the training also encouraged a shift in lecturers' mindset, from viewing lesson plans as an administrative obligation to a strategic instrument in managing learning. Other impacts include the adoption of active learning methods (student-centered learning), the integration of local wisdom, and increased student participation in the learning process. These findings reinforce previous literature that training interventions are an effective strategy for improving lecturers' pedagogical competence, although challenges such as limited infrastructure, training time, and variations in digital literacy remain obstacles that need to be addressed.

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