



Edukatif : Jurnal Ilmu Pendidikan Volume 4 Nomor 2 Tahun 2022 Halm 2238 - 2246

EDUKATIF: JURNAL ILMU PENDIDIKAN

Research & Learning in Education

<https://edukatif.org/index.php/edukatif/index>



The Application of Lesson Study in Improving the Quality of English Teaching

Adieli Laoli^{1✉}, Oskah Dakhi², Maria Magdalena Zagoto³

Universitas Nias, Indonesia^{1,2}

Universitas Nias Raya, Indonesia³

E-mail : laoliadieli65@gmail.com¹, pemdakabnisel@gmail.com², marya2949@gmail.com³

Abstrak

Tujuan dari penelitian ini untuk menganalisis proses lesson study dalam membina dosen pemula untuk meningkatkan kualitas pengajaran. Penelitian ini merupakan penelitian deskriptif kualitatif dengan melakukan observasi langsung, wawancara, dan dokumentasi. Siklus dalam pendekatan lesson study terdiri atas 3 tahapan utama: Plan, Do, dan See. Dari hasil wawancara dan dokumentasi yang dilakukan pada tahap perencanaan lesson study diketahui bahwa terdapat beberapa kendala yang dihadapi oleh dosen pemula saat mengajar mata kuliah Writing 2 antara lain kurang percaya diri dalam mengajar mahasiswa, kurangnya pengalaman, penggunaan metode yang monoton, media, dan teknik penilaian yang buruk atau tidak sesuai.

Kata Kunci: lesson study, kualitas mengajar

Abstract

The purpose of this study is to analyze the lesson study process in fostering novice lecturers to improve the quality of teaching. This research is qualitative descriptive research by conducting direct observation, interviews, and documentation. The cycle in the lesson study approach consists of 3 main stages: Plan, Do and See. From the results of interviews and documentation conducted at the planning stage of the lesson study, there are several obstacles faced by novice lecturers when teaching the Writing 2 course, including lack of confidence in teaching students, lack of experience, and the use of monotonous methods, media, and poor or inappropriate assessment techniques.

Keywords: lesson study, quality of teaching

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✉ Corresponding author:

Email : laoliadieli65@gmail.com

DOI : <https://doi.org/10.31004/edukatif.v4i2.2434>

ISSN 2656-8063 (Media Cetak)

ISSN 2656-8071 (Media Online)

Edukatif : Jurnal Ilmu Pendidikan Vol 4 No 2 Tahun 2022

p-ISSN 2656-8063 e-ISSN 2656-8071

INTRODUCTION

The demand for improving the quality of graduates at every level of education in Indonesia is a strategic orientation and choice to improve the quality of human resources. One of the crucial efforts to improve the quality of graduates is to improve the quality of learning at every level of education, both from the planning and process aspects. Through a practical planning and learning process, educational outcomes can be maximized. For the planning and learning process to be carried out optimally, classroom-based research is needed that examines and tests learning practices in the classroom. Through classroom-based research and testing of classroom learning actions and analyzing their impact on student learning outcomes, information can improve classroom planning and learning processes.

Therefore, the study of improving the quality of learning must start from how students learn and how lecturers teach, not solely on learning outcomes. Education reform must be interpreted as an effort to create programs that focus on improving teaching and learning practices, not solely on classroom design with a lecturer-proof curriculum (Amrin, 2021). Thus, learning is aimed at overcoming student failure in learning.

Currently, the Nias University campus functions as a learning environment for students (prospective teachers/educators) and a vehicle for lecturers to develop their professionalism. This is by the opinion (Dakhi et al., 2020; Indarta et al., 2021) that the learning paradigm of the current era is increasingly open, requiring education actors to respond wisely. The effectiveness of learning in the classroom is highly dependent on the ability and quality of the lecturers because the lecturers can be said to play a leadership role in the learning process, which ultimately determines the success of education, especially for students.

In the teaching and learning process, lecturers must have strategies to learn effectively and efficiently regarding the expected goals (Masril et al., 2020). One of the steps to having that strategy is to master presentation techniques and teaching methods. In the learning system, teaching methods are an integral part that cannot be separated; teaching components are interwoven as interconnected systems and influence each other (Novalinda et al., 2020; Zagoto et al., 2019). The method was chosen as a bridge or medium for transforming lessons towards achieving the goals. The task of the lecturer is to choose various appropriate methods to create a teaching and learning process. Using teaching methods depends on the objectives, content of the teaching and learning process, and teaching and learning activities.

As one of the determinants of learning success, lecturer skills must always be evaluated and improved to achieve the quality standards set (Laoli, 2021; Mahayanti, 2016; Meha & Bullu, 2021). This is because the quality of inadequate lecturers in teaching practice will negatively impact student learning conditions. This condition will certainly reduce the quality of learning because measuring and improving the quality of teaching lecturers is essential. As one of the majors at Nias University, the English Education Study Program understands the importance of improving the quality of teaching lecturers. Therefore, Nias University campus feels the need for coaching that improves the teaching quality of their lecturers. Moreover, the English Education Study Program has accepted several new lecturers who do not have much teaching experience in the past year. In this regard, the best thing that these novice lecturers can do is always improve their professional abilities by constantly assessing the learning process.

From the results of interviews conducted with 5 young lecturers in the Department of English Education, it is known that these lecturers feel that they need intensive coaching to improve their teaching skills. Responding to this situation, it is felt that they have not contributed optimally in improving the teaching abilities of novice lecturers because what they need is the opportunity to teach accompanied by senior lecturers and get input and improvements related to the learning they have done. This can be interpreted that the teaching ability of these young lecturers still needs to be improved through targeted coaching.

In connection with this problem, coaching efforts, especially learning, need to be applied in order. The implementation of lesson study can increase basic knowledge in learning, increase the professionalism of

educators, and build a learning community. The same thing is said by (Deswita, 2019; Handayani et al., 2015; Mahayanti, 2016), and the expansion of the learning process through the implementation of lesson study can be used as a professional development program. Implementation of lesson study as a solution to solving learning problems can facilitate whatever method is used.

Lesson study is a model for fostering the teaching profession through collaborative and sustainable learning studies based on collegiality and mutual learning principles to build a learning community (Azmir, 2018; Lestari, 2018; Linuhung & Suryadinata, 2017; Sairo, 2021). Lesson Study is a way for lecturers to improve their teaching practice and develop knowledge related to developing their teaching skills (Deswita, 2019; Simatupang & Aryeni, 2018). Thus, lesson study refers to a process in which lecturers progressively seek to improve their teaching methods through collaboration with other lecturers to assess and provide input on their teaching techniques.

By applying lesson study, the teaching ability of each lecturer will continue to improve because it is constantly evaluated by a third party so that it will have an impact on improving learning and student learning outcomes in the Department of English Education at the University of Nias.

RESEARCH METHODS

In this study, the research subject is a novice lecturer at the Department of English Education, Nias University, who has served less than 1 year. In addition, the observer lecturer who will guide the novice lecturer is a lecturer in writing 2 who has taught the same subject for more than 5 years. This research is a qualitative descriptive study. The research was carried out by following the collaborative and collaborative lesson study steps involving novice lecturers, the research team, students, and the participation of senior lecturers as observers.

The researcher categorizes the lesson study cycle in this study into 3 stages, namely: plan, do, and see, as shown in the following figure:

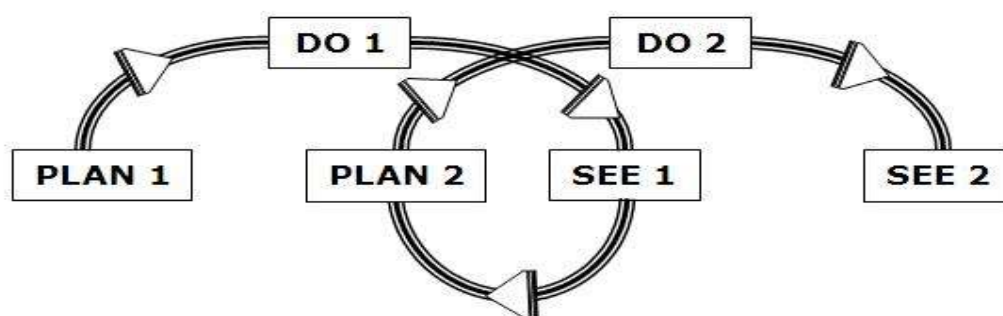


Figure 1. Lesson Study Cycle

Data collection techniques were carried out through observing the activities of students and novice lecturers, distributing questionnaires, conducting interviews, and recording learning activities during the process of implementing Lesson Study in the form of audio videos. The data analysis used in this study is qualitative, namely, research that analyzes data before the researcher enters the field. The author makes formal observations to find out how to implement Lesson Study in the English Education Department of Nias University. Then the resulting quantitative data is changed into qualitative data, namely by describing the results of processing quantitative data from the formula below into qualitative descriptive. The formula used to calculate the questionnaire data is as follows: $P = F/N \times 100\%$

Where:

P = Percentage

F = Frequency

N = Respondent Value

RESEARCH RESULTS AND DISCUSSION

Research Result

Beginner lecturers and observer lecturers conduct focus group discussions to discuss problems faced by novice lecturers in teaching the Writing 2 course and in-depth discussions with observer/senior lecturers, draw up lesson designs, and chapter designs, formulate methods, models, or techniques, making teaching materials, making learning media, making student discussion sheets, making observation sheets, and preparing tools needed in the learning process and documentation equipment.

The focus group discussions results and in-depth interviews with novice lecturers revealed that the primary barrier encountered by novice lecturers was a lack of teaching experience. The novice lecturer stated that his prior teaching experience, specifically with children, differed significantly from teaching students (adult learners). As a result, novice lecturers occasionally lack confidence when delivering material. Additionally, the project-based and monotonous teaching method of writing in each type of paragraph create the impression that learning is not enjoyable for novice lecturers. Additionally, it was revealed that students' writings had been corrected solely by lecturers, which takes over a week to check one type of paragraph in a single class and is considered inefficient. The limitations of learning media are also acknowledged as a weakness of the young lecturer's approach to teaching Writing 2. Due to a lack of LCDs in the department and a lack of other ideas for media use, the lecturer believes that teaching Writing 2 is tedious.

In addition to interviews with novice lecturers, interviews were also conducted with two observers/senior lecturers regarding how ideally it is to teach Writing 2. Based on the previous syllabus, several topics must be taught in the Writing 2 course. The topics include a definition of the paragraph, topic sentence, elements of topic sentence, the way to decide a topic for a paragraph, the way to decide controlling ideas to limit the topic, making an outline, writing coherent sentences, writing concluding sentence, and 7 types of paragraph development, namely narrative, procedure, descriptive, expository, argumentative, persuasive, comparison and contrast, and cause and effect.

According to the interview findings, the observer/senior lecturer suggested that Writing 2 was taught using various methods, including lectures, observations, worksheets, and projects. Additionally, it was stated that the assessment is an evaluation of the process by which students develop writing skills, not just the outcome of the writing, but also their progress or lack thereof throughout the lecture. As a result, he continued that portfolio assessment is the most appropriate evaluation type.

In examining their duties, self-assessments, peer assessments, and assessments from the lecturers themselves are used as a reference for improving the quality of writing. Unlike the first observer/senior lecturer, the second observer/senior lecturer also uses various methods and chooses a portfolio assessment in the Writing 2 course. However, there are different innovations made by the lecturer. The second observer/senior lecturer uses Schoology as an additional medium where student writings are uploaded in Schoology and can be commented on openly by other friends. Thus, it is explained that students learn from their mistakes and the input of other friends. Based on the results of the two interviews, in the first FGD, it was agreed to design 2 meetings.

The topics discussed at the first meeting were about the definition of the paragraph, topic sentence, elements of topic sentence, the way to decide a topic for a paragraph, the way to decide controlling ideas to limit the topic, while at the second meeting discussed outlining, writing coherent sentences, and writing concluding sentences. For the first meeting, the teaching method used was lecture and question and answer. In addition, students are also given worksheets to identify topic sentences and control ideas. The media used in the form of power points help novice lecturers when presenting the material. The form of assessment used is self-assessment and peer-assessment; the results will be put into a large brown envelope which will be each student's portfolio for 1 semester.

At the second meeting, it was agreed that the methods used were lectures and group work. Students are explained how to make coherent sentences, make concluding sentences, and make outlines. After that, they were divided into several small groups and assigned to work on the worksheets provided and outline a short paragraph consisting of 1 topic as a homework assignment. After that, the assessment will still use self-evaluation and peer evaluation, and the results will be additional student portfolio data and the media used in the form of PowerPoint.

Next, after the preparation stage, namely the FGD conducted between novice lecturers and 2 observer lecturers, the implementation of teaching was carried out. The two observer lecturers were present together in the Writing 2 class, assisted by novice lecturers to observe the course of learning and note the advantages and disadvantages of teaching novice lecturers. In addition, the observer lecturer also monitors whether the learning process is going according to the plan at the previously agreed stage. During the learning process, the two lecturers did not talk to each other and did not comment on the learning process.

At the first meeting, the novice lecturer opened the lesson by greeting the students and asking them how. After that, the two observer lecturers were introduced, and the novice lecturer explained that the presence of the two lecturers was an effort to improve the teaching quality of novice lecturers. Students are asked to study appropriately without being disturbed by the presence of the observer lecturers. After that, the novice lecturer started learning by explaining the topic sentence and controlling ideas with the help of PowerPoint media. The novice lecturer explains for 30 minutes, followed by a question and answer session related to the material explained for 10 minutes. The learning was continued by giving a worksheet containing several examples of paragraphs for students related to identifying topic sentences and controlling ideas. The time allotted is 30 minutes.

When students complete the exercises, the novice lecturer maintains control and circulates to assist students who require clarification or explanation of concepts that have not been grasped. After students complete the exercises, peers conduct peer reviews in which one student's work is exchanged and checked with the work of another. The novice lecturer allots ten minutes to this activity. The novice lecturer used the next 15 minutes to discuss the results of student exercises and to have students complete a self-evaluation sheet. The aggregated results of the exercise, peer assessment, and self-evaluation are placed in a brown folder/envelope labeled for each student, collected, and distributed again at the following meeting. After the meeting, the novice lecturer concluded the lesson by thanking and greeting the students.

According to the observer lecturers' observations, it was determined that the novice lecturers followed the agreed-upon learning plan. However, several weaknesses of novice lecturers were discovered during the learning process that should be addressed at the next meeting, most notably the lack of interaction during the material presentation process. Beginner lecturers continue to use one-way communication, lecturers explaining to students. This affects the students' lack of enthusiasm during the material presentation session. Some students were seen conversing with their classmates, while others yawned several times. These symptoms indicate a deficiency in student motivation to listen to the novice lecturer's presentation. Additionally, the inexperienced lecturer made no reprimand or warning to the student. The inability of novice lecturers to manage classes is a weakness that must be addressed.

After the learning process, students were asked to fill out a questionnaire related to the teaching competence of the novice lecturer. The questionnaire contains 4 main competencies, namely pedagogic, professional, personality, and social competencies. The results of the questionnaire can be seen in the following table 1.

Table 1
Student Assessment Results against Beginner Lecturers

No	Rated Aspect	Score Percentage				
		1	2	3	4	5
1	Ability to give lectures and practice	-	-	12,3%	87,7%	-
2	Regularity and order in the administration of lectures	-	-	-	93,5%	6,5%
3	Ability to liven up the classroom atmosphere	-	-	36,5%	63,5%	-
4	Clarity of delivery of material and answers to questions in class	-	-	9%	80,5%	10,5%
5	Utilization of the latest media and technology in learning	-	-	64%	27%	9%
6	Diversity of ways to measure learning outcomes	-	-	-	90%	10%
7	Giving feedback on assignments	-	-	17%	56,5%	26,5%
8	The suitability of the test material and assignments with the objectives of the course	-	-	2,5%	97,5%	-
9	Appropriateness of the value given with learning outcomes	-	-	5%	86,5%	6,5%
10	Clarity of delivery of material and answers to questions in class	-	-	4%	66%	30%
11	Ability to provide relevant examples of the concepts being taught	-	-	-	85,5%	14,5%
12	Ability to explain the relevance of the field being taught with other fields	-	-	-	73,5%	26,5%
13	Ability to explain the relevance of the field being taught with the context of life	-	-	8%	86,5%	5,5%
14	Mastery of the latest issues in the field being taught	-	-	32,5%	56%	11,5%
15	Use of research results to improve the quality of lectures	-	71%	29%	-	-
16	Involvement of students in research/study or engineering/design development by lecturers suitability of the test material and assignments with the objectives of the course	-	8,5%	91,5%	-	-
17	Ability to use various communication technologies	-	-	53,5%	46,5%	-
18	Wisdom in making decisions	-	-	0,7	99,3%	-
19	Be an example in attitude and behavior	-	-	-	64,5%	35,5%
20	Ability to control oneself in various situations and conditions	-	-	21%	79%	-
21	Ability to express opinions	-	-	-	62%	38%
22	Ability to accept criticism, suggestions, and opinions of others	-	-	9,5%	39,5%	51%
23	Get to know the students who take the course well	-	-	11,5%	40%	48,5%
24	Easy to get along with colleagues, employees, and students	-	-	-	13%	87%

According to table 1, 87.7 percent of students believed that novice lecturers could deliver lectures and engage in effective practice. At the same time, 12.3 percent stated that it was moderate. Concerning the regularity and orderliness of lectures, 93.5 percent of students stated that novice lecturers maintained a good level of organization, while the remaining 6.5 percent stated that they maintained a very high level of organization. In illuminating the classroom atmosphere, 63.5 percent of students stated that novice lecturers possessed excellent abilities, while 36.5 percent stated that they possessed average abilities. At the fourth point in the questionnaire, it was discovered that 9% of students believed novice lecturers were very good at delivering material and responding to class questions, 80.5 percent believed they were good, and 10.5 percent believed they were moderate. Regarding the use of new media and technology in education, most students rated it as moderate, at 64%, while another 27% rated it as good, and the remaining 9% rated it as very good.

From the results of the questionnaire analysis, it can be concluded that the quality of novice lecturers in learning is quite good. However, several points need attention to be improved, such as the use of media and learning technology, the use of research values to improve the quality of lectures, the involvement of students in studies or design. Conducted by lecturers and the ability to use various communication technologies. In this

regard, it is necessary to reflect on these matters. In the next stage, another FGD was conducted to discuss the weaknesses/weaknesses of novice lecturers that should be improved during the implementation stage and the advantages/strengths that should be maintained and nurtured. The FGD was conducted immediately after the learning took place so that the observations made by the observer lecturers could be conveyed immediately. At that time, the FGD lasted approximately 120 minutes.

Based on the observations from the observer lecturers and student questionnaires, it is known that novice lecturers still have limitations in media use. Related to this, in the FGD, it was agreed that at the next meeting, apart from using power points, other media, namely Schoology, would be used to discuss the exercises that were made. By using groups in Schoology, each student can comment on the topic sentence and control ideas they make. In addition, they can learn from comments on other friends' work.

In addition to the use of media, novice lecturers' ability to present material also needs to be improved. Based on the results of the FGD, it is better if communication is not only one-way in presenting the material. In explaining, the lecturer should also ask some questions to the students so that there is a more lively interaction in learning. In addition, novice lecturers are advised to monitor each student so that their attention remains focused on the explanation.

In this stage, novice lecturers will find it easy to realize their shortcomings and mistakes in teaching. In the reflection FGDs, there was mutual questioning of the basic assumptions held by the novice lecturers and each observer lecturer about teaching. In addition, in this reflective dialogue, both novice lecturers and observers will build mutual commitment and contribute to improving the quality of learning. Based on the results of these reflections, planning for the next meeting and implementation was carried out again. And so on, the lesson study cycle takes place.

Discussion

The lesson study conducted at the English Education Department of IKIP Gunungsitoli in the Writing 2 course is not a strategy or method in learning. However, it is one of the coaching efforts to improve the quality of the learning process carried out by young lecturers collaboratively and sustainably, starting from planning, implementing, observing, and reporting learning outcomes. (Sairo, 2021) suggested that the implementation of lesson study is a solution to solving learning problems because lesson study can facilitate whatever method is used. The lesson study in question is also not a momentary project but a continuous activity that does not stop and is an effort to apply the principles of total quality management, namely improving the process and student learning outcomes continuously.

This is in line with what (Lestari, 2018; Linuhung & Suryadinata, 2017) conveyed, which states that lesson study is an activity that can encourage the formation of a learning community (learning society) that consistently and systematically carries out self-improvement, both at the individual and managerial levels. Furthermore, (Handayani et al., 2015; Simatupang & Aryeni, 2018) stated that lesson study provides a real opportunity for lecturers to witness teaching and student learning in the classroom. The implementation of lesson study in the Department of English Education can guide lecturers, especially young lecturers, to focus their discussions on planning, implementing, observing, and reflecting on learning practices in class. So that the implementation of lesson study can increase basic knowledge in learning, increase the professionalism of educators and novice lecturers, and build a learning community. The same thing was expressed by (Handayani et al., 2015), that the expansion of the learning process through the implementation of lesson study can be used as a professional development program.

So that through lesson study, novice lecturers can show the actual learning process in the classroom and get input from observer lecturers so that lecturers can develop a shared understanding or picture of what is meant by effective learning. Lesson study is a model for fostering the teaching profession through collaborative and sustainable learning assessments based on collegiality and mutual learning principles to

build a learning community. This will ultimately impact students' understanding of the material they are learning.

CONCLUSION

According to the findings of interviews and documentation conducted during the lesson study's planning stage, novice lecturers face several obstacles when teaching the Writing 2 course, including a lack of confidence in teaching students, a lack of experience, and the use of monotonous methods. Moreover, media, as well as ineffective scoring techniques, are all inappropriate. Additionally, senior observers/lecturers have suggestions for improvement in terms of topic-specific methods, the use of innovative media, and assessments that place a premium on process evaluation. The novice lecturer implemented the learning according to the observer lecturer's agreed-upon plan. However, there are still some shortcomings in its classroom application, such as the use of media and learning technology and the ability to present material during lectures. As the subsequent stage, FGD, which resulted in enhancements to the planning and implementation of the subsequent stage, such as the addition of Schoology as a medium for discussing the tasks assigned to students and adjusting the way the material is presented by inserting questions and answers while still explaining the material.

REFERENCES

- Amrin, S. (2021). Analisis Keterampilan Mengajar Mahasiswa Pendidikan Ekonomi Universitas Flores. *Edukatif: Jurnal Ilmu Pendidikan*, 3(1), 58–65. <https://doi.org/10.31004/edukatif.v3i1.233>
- Azmir, S. (2018). Lesson Study Meningkatkan Kreativitas Guru Dan Aktivitas Siswa Dalam Pembelajaran. *Prosiding SEMNAS Pendidikan Matematika IAIN Ambon*, 162–170.
- Dakhi, O., Jama, J., Irfan, D., Ambiyar, & Ishak. (2020). Blended Learning: A 21st Century Learning Model At College. *International Journal of Multi Science*, 1(7), 17–23.
- Deswita, H. (2019). Lesson Study pada Perkuliahan Microteaching. *Mat-Edukasia: Jurnal Pendidikan Matematika*, 4(2), 1–9.
- Handayani, R. D., Ryskiadi, A., Machrus, A., & Acik, R. (2015). Penerapan Lesson Study Untuk Meningkatkan Kemampuan Mengajar Mahasiswa Calon Guru Fisika. *Jurnal Pengajaran Matematika Dan Ilmu Pengetahuan Alam*, 20(1), 27–31. <https://doi.org/10.18269/jpmipa.v20i1.558>
- Indarta, Y., Jalinus, N., Abdullah, R., & Samala, A. D. (2021). 21st Century Skills : TVET dan Tantangan Abad 21. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 4340–4348.
- Laoli, A. (2021). Improving English Speaking Skills Through Debate Methods in Students Junior High School. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 5240–5246. <https://doi.org/10.31004/edukatif.v3i6.1706>
- Lestari, R. (2018). Pengaruh Model Lesson Study Terhadap Kemampuan Dasar Mengajar Mahasiswa Biologi Universitas Pasir Pengaraian. *Bio-Lectura: Jurnal Pendidikan Biologi*, 5(1), 103–110.
- Linuhung, N., & Suryadinata, N. (2017). Pembinaan profesionalisme calon pendidik melalui Microteaching berbasis lesson study. *Prosiding Seminar Nasional Pendidikan FKIP Universitas Muhammadiyah Metro*, 25–32. <http://repository.ummetro.ac.id/files/semnasdik/19b9ecf6e1b9e58be885609067e83d00.pdf>
- Mahayanti, N. W. S. (2016). Implementasi Lesson Study Sebagai Upaya Peningkatan Kemampuan Mengajar Dosen Pemula di urusan Bahasa Inggris. *Jurnal Bahasa, Seni, Dan Pengajarannya*, 11(1), 37–47.
- Masril, M., Dakhi, O., Nasution, T., & Ambiyar, A. (2020). Analisis Gender Dan Intellectual Intelligence Terhadap Kreativitas. *Edukasi: Jurnal Pendidikan*, 18(2), 182–191. <https://doi.org/10.31571/edukasi.v18i2.1847>

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DOI: <https://doi.org/10.31004/edukatif.v4i2.2434>
- Meha, A. M., & Bullu, N. I. (2021). Hubungan Kesiapan Mengajar Dan Proses Praktik Pengalaman Lapangan Dengan Keterampilan Dasar Mengajar Mahasiswa Pendidikan Biologi. *Edukatif: Jurnal Ilmu Pendidikan*, 3(2), 412–420. <https://doi.org/10.31004/edukatif.v3i2.323>
- Novalinda, R., Dakhi, O., Fajra, M., Azman, A., Masril, M., Ambiyar, A., & Verawadina, U. (2020). Learning Model Team Assisted Individualization Assisted Module to Improve Social Interaction and Student Learning Achievement. *Universal Journal of Educational Research*, 8(12A), 7974–7980. <https://doi.org/10.13189/ujer.2020.082585>
- Sairo, M. I. (2021). Pelaksanaan Lesson Study Menggunakan Metode Pembelajaran Mind Mapping. *Journal for Lesson and Learning Studies*, 4(1), 26–32. <https://doi.org/10.23887/jlls.v4i1.32188>
- Simatupang, H., & Aryeni. (2018). Model Pendekatan Lesson Study Untuk Meningkatkan Keterampilan Mengajar Mahasiswa Pada Mata Kuliah Microteaching. *Jurnal Biolokus*, 1(2), 77–83. <https://doi.org/10.30821/biolokus.v1i2.347>
- Zagoto, M. M., Yarni, N., & Dakhi, O. (2019). Perbedaan Individu Dari Gaya Belajarnya Serta Implikasinya Dalam Pembelajaran. *Jurnal Review Pendidikan Dan Pengajaran*, 2(2), 259–265. <https://doi.org/10.31004/jrpp.v2i2.481>