IMPLEMENTATION OF BLENDED LEARNING TO INCREASE THE COMPETENCE OF NON-FORMAL EDUCATION UNDERGRADUATE STUDENTS IN THE SOCIOLOGY ANTHROPOLOGY COURSE

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Abstract

This study aims to improve the competence and cognitive learning outcomes of PLS students in the anthropological sociology course through the implementation of blended learning. This research is a class action research (classroom action research) model by Kemmis & McTaggart, which took place in two cycles. Each cycle consists of four stages, namely planning, implementation, observation, and reflection. The subjects of this study were ten students of the non-formal education study program at the State University of Manado. Data collection techniques are questionnaire techniques and test techniques. The research data were obtained using communication competency assessment instruments, collaboration competency assessment instruments, and pretest-posttest questions. The data analysis technique used descriptive qualitative data analysis techniques. The results of data analysis showed (1) the communication competence of students in the first cycle was in the less competent category, while in the second cycle they were very competent, (2) the collaboration competence of students in the first cycle was in the less competent category, while in the second cycle they were very competent, (3) students' cognitive learning outcomes showed achievement of 60% in the first cycle, then increased by 40% so that it became 100% in the second cycle. Based on the results of data analysis, we can conclude that the implementation of blended learning can improve the competence and cognitive learning outcomes of PLS students in the sociology of education anthropology course.
Keywords: Blended Learning, Competence, Sociology Anthropology

Abstrak

Penelitian ini bertujuan untuk meningkatkan kompetensi dan hasil belajar kognitif mahasiswa PLS pada mata kuliah sosiologi antropologi melalui implementasi pembelajaran blended learning. Penelitian ini merupakan penelitian tindakan kelas (classroom action research) model Kemmis & McTaggart yang berlansung dalam dua siklus. Setiap siklus terdiri dari empat tahap, yaitu perencanaan, pelaksanaan, pengamatan, dan refleksi. Subjek penelitian ini adalah mahasiswa semester V program studi pendidikan luar sekolah di Universitas Negeri Manado yang berjumlah 10 orang. Teknik pengumpulan data adalah teknik angket dan teknik tes. Data penelitian diperoleh menggunakan instrumen penilaian kompetensi komunikasi, instrumen penilaian kompetensi kolaborasi, dan soal pretest posttest. Teknik analisis data menggunakan teknik analisis data deskriptif kualitatif. Hasil analisis data menunjukkan (1) kompetensi komunikasi mahasiswa pada siklus I termasuk kategori kurang kompeten, sedangkan pada siklus II sudah sangat kompeten, (2) kompetensi kolaborasi mahasiswa pada siklus I termasuk kategori kurang kompeten, sedangkan pada siklus II sudah sangat kompeten, (3) hasil belajar kognitif mahasiswa menunjukkan ketercapaian sebesar 60% pada siklus I, kemudian mengalami peningkatan sebesar 40% sehingga menjadi 100% pada siklus II. Berdasarkan hasil analisis data, dapat disimpulkan bahwa implementasi pembelajaran blended learning dapat meningkatkan kompetensi dan hasil belajar kognitif mahasiswa PLS pada mata kuliah sosiologi antropologi pendidikan.
Kata kunci: Pembelajaran Campuran, Kompetensi, Sosiologi Antropologi

INTRODUCTION

The more advanced technology information and communication give a significant role in the world of education. Learning activity based on technology provides facilities for students so you can dig up more information easily. Rosenberg (2001) suggests that the development of information technology and communication lead to three changes in learning activities that are, (a) the classroom becomes where anytime and anywhere, (b) from paper assignments become online, (c) from facilities in the form of physical infrastructure into a network facility. Teaching and learning activities become an attraction for students because the process is different from face-to-face in general. Through the use of media learning by technology information and communication can spur students to learn independently by using various learning resources, and educators only act as facilitators.

The teaching and learning process in higher education requires students to study independently. The learning process is face-to-face and is accompanied by learning outside the classroom, namely e-learning. E-learning is learning online. The learning process can be done with distance learning techniques. Muthoharoh (2017) explains that distance learning is learning that involves long-distance interaction between instructors (lecturers or teachers) and students and allows reactions between instructors and students. Interaction occurs without having to meet face to face, so that teaching activities still occur separately.

Various models can be implemented using the principles of e-learning and the sophistication of information technology, one of which is the Blended Learning model. Blended Learning is a learning model that combines a face-to-face learning system with e-learning that can be used by anyone (everyone), anywhere (everywhere), and anytime (anytime) (Sudarman, 2018). Face-to-face activities in learning should not be abandoned so that learning that combines face-to-face with e-learning makes learning effective and meaningful. Learning relies not only on technological sophistication but is essentially a process of interaction between educators and students. Garrison &

Based on the principles that continue to be held in the learning system, Blended Learning is one of the profitable learning models for students. Learning activities in universities that have problems meeting the number of face-to-face meetings once a week cause learning to be ineffective. In addition, learning through the blended learning model face-to-face meetings can be done using online learning. Blended Learning is done to complete group assignments, discussions, and other class projects that cannot be done in class. The advantages of the blended learning model include effective and efficient learning, time-saving and cost-effectiveness, discussions between lecturers and students can be carried out outside the classroom and can increase the attractiveness of learning (Waty et al., 2018).

Applying the blended learning model requires the appropriate media. Blended Learning is easily accessed by connecting online through Google Classroom. Each student is required to have an e-mail then can log in using e-mail. After logging in, students can carry out learning activities together with other members in writing. To carry out lecture activities properly, lecturers can post learning materials, assignments, share videos, information links, or announce

test scores. Students can play a role in providing comments, answering the lecturer's assignments to discuss with classmates. Based on the composition in learning activities,

Based on the above background, it is necessary to conduct research that aims to improve the competence and learning outcomes of cognitive Non-Formal Education undergraduate students in the Sociology Anthropology course through blended learning.

METHOD

This research is classroom action research (classroom action research). Classroom action research design refers to the model of Kemmis & McTaggart (1988), which consists of four components, namely planning, action implementation, observation, and reflection. The research location is in the Non-formal Education Study Program, Faculty of Education, Manado State University in Tomohon, held in the even semester of the 2020/2021 academic year. The population in this study were all students of the Non-Formal Education Study Program FIP UNIMA, while the samples in this study were ten fifth-semester students with details of four boys and six girls.

The data collection technique in this study used a questionnaire technique and a test technique. The research instrument used is communication competency assessment instruments and collaborative competency assessment instruments to assess student competencies and pretest and post-test test sheets to measure cognitive learning outcomes. The e-learning learning media used are Google Classroom, Google Forms, WhatsApp Group, and Zoom Cloud Meetings. The data analysis technique used descriptive qualitative data analysis techniques. The qualitative descriptive analysis technique refers to the analysis model of Miles and Huberman in Sugiyono (2013), which is carried out in three components, namely data reduction, data presentation, and conclusion drawing and verification.

RESULTS AND DISCUSSION

Results

Learning Cycle I

Activities carried out at the planning stage are making learning scenarios in the form of semester learning plans (RPS) as guidelines for implementing learning on anthropological analysis of the education system. In addition, researchers also prepared communication and collaboration competency assessment instruments to assess student competence and compile pretest and post-test questions along with their answer keys to measure cognitive learning outcomes. E-learning learning media in the form of Google Classroom, Google Forms, WhatsApp Group, and Zoom Cloud Meetings are also programmed to be used in lectures. Researchers also set up teaching resources in subject modules to be distributed to students uploaded to Google Classroom.

Implementation is an implementation activity of a previously designed learning plan. Lectures at the first meeting were face-to-face on May 11, 2021, while lectures at the second meeting were held online on May 18, 2021.

The observations were made during the blended learning-based lecture process. The student competencies assessed in this study are communication competence and collaboration competence. Research data on student communication competencies can be seen in Table 1, while student collaboration competencies can be seen in Table 2.

Table 1. Student Communication Competence in Cycle I

No	Communication Competency Indicator	Average	Competency Category
1	Listen and respect the opinions of others.	2.00	Competent
2	Demonstrate confidence in communicating.	1.60	Competent
3	Able to express ideas or ideas that are owned in public.	1.10	Less Competent
4	Be honest and responsible for the ideas or ideas that have been put forward.	1.10	Less Competent
5	Able to communicate using a logical and structured flow of thought.	0.90	Less Competent
6	Able to ask questions to groups of presenters.	1.90	Competent
7	Able to provide criticism and suggestions if there is a material that is considered lacking or wrong.	1.50	Less Competent
8	Able to provide rebuttal opinions that strengthen the group's answers to other students' questions.	1.20	Less Competent
9	Dare to ask questions and give opinions on the lecturer's additional explanations	0.90	Less Competent
10	Use good and correct Indonesian, and be polite when communicating.	1.40	Competent
	Average Score	1.36	Less Competent

(Source: Primary Data)

Table 2. Student Collaboration Competencies in Cycle I

No	Collaboration Competency Indicators	Average	Competency Category
1	Demonstrate a cooperative attitude with other members of the group.	1.80	Competent
2	Able to coordinate group members.	0.80	Less Competent
3	Carry out their duties actively and responsibly.	1.10	Less Competent
4	Have a sense of empathy for fellow group members.	1.50	Less Competent
5	Appreciate and respect the different perspectives shown by group members	1.10	Less Competent
6	Able to compromise with other members to achieve group goals to be achieved.	0.90	Less Competent
7	Able to apply the principles of cooperation in group activities.	1.50	Less Competent
8	Appreciate the contributions and work of group members.	2.10	Competent
	Average Score	1.35	Less Competent

(Source: Primary Data)

The learning outcomes Students' cognitive abilities were obtained from working on post-test questions at the end of the cycle and the results of working on pretest questions at the beginning of each cycle as an assessment. The pretest and post-test questions cover the material learned in each cycle. The criteria for complete learning for all students are if at least 70% of the total students achieve a minimum of 2.75 (B). The pretest and post-test questions in cycle I each consisted of 5 different essay questions. The following are the results of students' cognitive learning in cycle I, as shown in Table 3.

Table 3. List of Pretest and Posttest Values Cycle I

Student Code	Pretest Score	Posttest Score
M01	2.48	2.72
M02	2.24	2.96
M03	2.88	3.12
M04	2.56	3.04
M05	2.24	2.48
M06	2.56	2.96
M07	2.32	3.04
M08	2.24	2.96
M09	1.76	2.32
M10	1.84	2.48
Average	2.31	2.81
Complete	10%	60%
Not Complete	90%	40%

(Source: Primary Data)

The results of observations in the form of assessments during lectures in cycle I showed that students were still less competent in terms of communication and collaboration. The assessment results show only three competent students in communication competence, while seven other students are still less competent. M02 is the student with the highest score of 2.30, while M10 has the lowest of 0.60. In collaboration competence, the assessment results show that as many as five students are competent, four are less competent, and one is incompetent. M03 is the student with the highest score of 2.13, while M10 is the lowest score of 0.50. In addition, the assessment of cognitive learning outcomes shows the average value of students' overall cognitive learning outcomes, which is 2.81, including the complete category. Nevertheless, only 60% of students have completed so that they do not meet the criteria for learning completeness of at least 70% of the total students. The observations in this cycle indicate that corrective actions are still needed and possible in the next cycle.

Learning Cycle II

Learning activities in cycle II are improvements from actions in cycle I. Reflections in cycle I provide information that students are still less competent in communication competence and collaboration competence. In addition, cognitive learning outcomes overall students also have not reached 70%. This then became the basis for the implementation of cycle II. The implementation of the second cycle is not much different from the first cycle, which is still based on blended learning, namely the first face-to-face meeting and the second online meeting using e-learning. Lectures at the first meeting will be held on May 25, 2021, face-to-face, while lectures at the second meeting will be held on June 1, 2021, online.

Based on observations made in cycle II, data on student communication competencies were obtained in Table 4, and Table 5 showed data on student collaboration competencies in Table 5.

Tabel 4. Student Communication Competence in Cycle II

No	Communication Competency Indicator	Average	Competency Category
1	Listen and respect the opinions of others.	2.80	Very Competent
2	Demonstrate confidence in communicating.	2.60	Very Competent
3	Able to express ideas or ideas that are owned in public.	2.20	Competent

No	Communication Competency Indicator	Average	Competency Category
4	Be honest and responsible for the ideas or ideas that have been put forward.	2.30	Competent
5	Able to communicate using a logical and structured flow of thought.	2.20	Competent
6	Able to ask questions to groups of presenters.	2.80	Very Competent
7	Able to provide criticism and suggestions if there is a material that is considered lacking or wrong.	2.30	Competent
8	Able to provide rebuttal opinions that strengthen the group's answers to other students' questions.	2.40	Competent
9	Dare to ask questions and give opinions on the lecturer's additional explanations	2.00	Competent
10	Use good and correct Indonesian, and be polite when communicating.	2.40	Competent
	Average Score	2.40	Competent

(Source: Primary Data)

Tabel 5. Student Collaboration Competence in Cycle II

No	Collaboration Competency Indicators	Average	Competency Category
1	Demonstrate a cooperative attitude with other members of the group.	2.90	Very Competent
2	Able to coordinate group members.	2.00	Competent
3	Carry out their duties actively and responsibly.	2.70	Very Competent
4	Have a sense of empathy for fellow group members.	2.60	Very Competent
5	Appreciate and respect the different perspectives shown by group members	2.30	Competent
6	Able to compromise with other members to achieve group goals to be achieved.	2.60	Very Competent
7	Able to apply the principles of cooperation in group activities.	2.50	Competent
8	Appreciate the contributions and work of group members.	2.70	Very Competent
	Average Score	2.54	Very Competent

(Source: Primary Data)

Learning outcomes Students' cognitive abilities were obtained from working on post-test questions at the end of the cycle and working on pretest questions at the beginning of each cycle as an assessment. The pretest and post-test questions in cycle II include material about science from a socio-anthropological perspective that is studied. The criteria for complete learning for all students are if at least 70% of the total students achieve a minimum of 2.75 (B). The pretest and post-test questions in cycle II each consist of 5 different essay questions. The following are students' cognitive learning outcomes in cycle II as shown in Table 6.

Tabel 6. List of Pretest and Posttest Values Cycle II

Student Code	Pretest Score	Posttest Score
M01	2.64	3.60
M02	2.80	3.92
M03	2.88	3.76

Student Code	Pretest Score	Posttest Score
M04	2.24	3.60
M05	2.32	3.68
M06	2.56	3.76
M07	2.32	3.60
M08	2.56	3.68
M09	2.32	3.52
M10	2.08	3.44
Average	2.47	3.66
Complete	20%	100%
Not Complete	80%	0

(Source: Primary Data)

The results of observations in the form of assessments during lectures in cycle II showed an increase in students' competence communication and collaboration competence and student cognitive learning outcomes from cycle I to cycle II. Communication competence in the first cycle is categorized as less competent, while in the second cycle there is an increase so that it is included in the competent category. There was a rapid increase in collaboration competence from the less competent category in the first cycle to the very competent category in the second cycle. Students' cognitive learning outcomes also increased scores from 2.81 with a 60% completeness percentage in the first cycle, to 3.66 with a 100% completeness percentage in the second cycle. Thus, the average value indicates that the student's cognitive learning outcomes have met the criteria for learning completeness of at least 70% of the total students.

Discussion

The research that has been carried out aims to improve the competence and cognitive learning outcomes of non-formal education undergraduate students in the sociology anthropology course through blended learning. Graham (2004) states that blended learning is a combination of face-to-face learning with a computer approach. This research that has been done combines classroom learning with online learning assisted by e-learning. In face-to-face learning in the classroom, the researcher uses a learning model with an appropriate scientific approach. Meanwhile, in online learning, researchers use e-learning in Google Classroom, Google Forms, WhatsApp Group, and Zoom Cloud Meetings. The type of blended learning used in this study is face-to-face-online, where the introduction and some of the learning materials are delivered first in a face-to-face session. Students are asked to elaborate on the learning materials, discuss, make presentations, and work on questions online, assisted by e-mail. -learning.

The data in this study were obtained through the communication competency assessment instrument. The collaboration competency assessment instrument was adapted from Purnawirawan (2019) and then modified by the researcher to be adapted to the research objectives. In addition, pretest and post-test questions were also used to measure students' cognitive learning outcomes.

The application of blended learning-based learning increases student communication competence from cycle I to cycle II. In the first cycle, there were no very competent students. In contrast, in the second cycle, two students (20%) were very competent, likewise in the competent category where in the first cycle there was an increase in the second cycle, namely eight students (80%). On the other hand, as many as seven students (70%) were categorized as

less competent in the first cycle, while in the second cycle, there were no more students (0%) who were less competent. Furthermore, the average score of student communication competence in the first cycle, 1.36, has increased to 2.40 in the second cycle. This shows that students' communication competence has increased by 34.67%.

Based on the research results obtained, it is clear that blended learning-based learning in the Sociology Anthropology course can improve the communication competence of PLS students. This is in line with the results of similar research but on a different topic by Rizqi (2016), who revealed that problem-solving-based blended learning could develop students' mathematical communication skills. In addition, the results of research by Setiawan et al. (2020) also revealed that communication skills, especially the orientation and syntax aspects of experimental group students, were higher than control group students through the application of problem-based learning with the blended learning method.

The application of blended learning-based learning also increases student collaboration competencies from cycle I to cycle II. In the first cycle, there were no students (0%) who were very competent, while in the second cycle, there were five students (50%) who were very competent. On the other hand, there were five students in the competent category in both cycle I and cycle II each (50%). In contrast to the less competent category in the first cycle, namely four students (40%), there were no more students (0%) who were less competent in the second cycle. Likewise, with the incompetent category in cycle I, there was one student (10%), while in the second cycle, there were no more incompetent students (0%). Furthermore, the average score of student collaboration competence in the first cycle, which is 1.35, has increased to 2.54 in the second cycle.

Based on the research results obtained, it is clear that blended learning-based learning in the Sociology Anthropology course can improve the collaboration competence of PLS students. This is in line with the results of a similar study but on a different topic by Kholifah (2019), which revealed that the average score of the collaboration ability of student groups taught using blended learning was higher than the average score of groups of students who were not taught using blended learning.

This study also succeeded in improving student cognitive learning outcomes in the anthropological sociology course. The results of data analysis showed an increase in student cognitive learning outcomes from each cycle. At the beginning of the first cycle, students' cognitive learning outcomes taken from the pretest showed as many as nine students (90%) got a score of 2.75, 1 student (10%) got a score of 2.75, and an average score of 2.31. This shows that the pretest in the first cycle is still low because less than 70% of the total students who scored according to the criteria for completeness were 2.75. In the second cycle, the pretest score increased considerably compared to the first cycle, where the average value increased to 2.47, and two students (20%) scored 2.75. Other than that, Posttest is also given at the end of each cycle as a reference to see student cognitive learning outcomes. In the post-test results of cycle I, six students (60%) got a score of 2.75. Then it increased in the second cycle as many as ten students (100%) who got a score of 2.75. This shows that students' cognitive learning outcomes have increased by 40% in the second cycle. Therefore, it can be said that the students' cognitive learning outcomes have been completed.

Based on the research results obtained, it is clear that blended learning-based learning in the Sociology Anthropology course can improve cognitive learning outcomes of PLS students. Similar research but on a different topic by Setyoko & Indriaty (2018) revealed that students'

cognitive learning outcomes increased significantly through the application of blended learning-based problem-based learning. In addition, Rachman et al. (2019) also revealed that applying the blended learning model can improve student learning outcomes.

CONCLUSION

Based on the research results obtained, we can conclude that blended learning can improve competence and cognitive learning outcomes of non-formal undergraduate students in the Sociology Anthropology course.

Based on the discussion and conclusions above, the suggestions that researchers can put forward include: (1) research on blended learning should be carried out further by further researchers on different topics and situations in terms of improving student competence and learning outcomes, (2) considering the learning process during a pandemic like this, then it is necessary to integrate a more innovative learning model based on blended learning in supporting the lecture process in the classroom so that the expected learning competencies are following 21st century learning achievements.

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