

Flipped Classroom Method to Build Students' Critical Thinking Skills: A Study on the Indonesia Language and Literature Research Methodology Course

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Abstract

The transformation of higher education is essential to improve the quality of learning in line with technological advances, primarily through IT-based learning. One method that is considered adequate is the flipped Classroom, which creates a student-focused learning environment. This study aims to apply the flipped classroom method in learning language research methodology to develop students' critical thinking skills. The research method used is qualitative descriptive with a natural observation type. Data was obtained from observation of learning implementation, literature review, and interviews with lecturers and students. The analysis technique applied is content analysis with an explanatory approach. The study results show that learning language research methodology occurs in two environments: at home and in the classroom. At home, students learn through videos, slides, and e-books. In class, students discuss and clarify material with lecturers and peers based on the material that has been studied previously at home. This method can build students' critical thinking skills.

Keywords: flipped Classroom, building skills, critical thinking, learning model, research methodology.

Learning in higher education needs to pay attention to the needs of students for the quality of learning in today's digital era. Aaker & Bagozzi (1982) explained the need for reform in higher education in response to the emergence of technology, primarily through IT-based learning aimed at improving the quality of learning. Therefore, innovation in learning methods demands technological developments (Adedoyin & Soykan, 2023; Akour & Alenezi, 2022; Junedi et al., 2024). In recent decades, various variations of learning methods have been used by students due to the revolutionary factors that occurred ((Namaziandost & Çakmak, 2020a).

Problem-based learning methods (PBL), case-based learning (CBL), and team-based learning (TBL) show a revolution in achieving good learning quality ((Su et al., 2023).

The presence of digital media is the main factor in supporting learning innovation in the current technological era. Warschauer & Matuchniak (2010) outline that digital media has advantages in various fields. Especially in digital learning, which can help direct students as learning subjects so that students can collaborate and think critically (Jamaludin & Hung, 2016). Digital learning needs to integrate information and communication technology (ICT) into the

education system so that it can develop the knowledge of students and educators (Rikkerink et al., 2016). Educators, especially in the field of higher education, are very interested in technology-based learning that provides opportunities for learning innovation (Aljawarneh, 2020). This must be supported by the institution's innovatively utilizing digital technology in learning (Scully et al., 2021).

Language research methodology learning offers flexible time and place for students and lecturers through various digital learning media. In this case, digital media in language learning has many opportunities to explore language knowledge in various media compared to those available in the Classroom. These learning opportunities are more interactive, social, and independent (Richards, 2015). Digital-based language teaching effectively meets students' needs in building communicative, participatory, independent, and collaborative (Alakrash & Abdul Razak, 2021). The integrated approach to language learning through digital media is the basis for fostering students' critical and confident attitudes (Anderson et al., 2018). Through the language research methodology course, students are encouraged to develop an objective and critical scientific mindset and be sensitive to strategic issues in their field to provide practical solutions. Information technology media encourages the creation of innovative language research methodology learning without space and time limitations, switching from face-to-face to e-learning formats and learning outside the Classroom (Ainin et al., 2020). Online learning can help students find alternative solutions through critical thinking skills ((Krzyszowska & Mavrommati, 2021).

With the sophistication of the digital era, it is easy to adjust to innovative learning models. Technological innovation can increase students' interest and motivation to learn, providing more time for students to access materials, interact with opportunities, and feedback, and build students' thinking skills (Golonka et al., 2014). Technology-based learning can improve student

learning outcomes and improve teaching methods, so it is essential to utilize digital technology in education to maximize the potential of learning in the digital era (Alenezi, 2020). However, in the current digital era, learning methods do not prioritize an interactive approach through digital because they tend to be conventional. Some educators and students do not fully want to change from conventional methods to blended learning (Hadiyanto et al., 2021). Some learning platforms are closed and require a fee, limiting the accessibility of learning by students and teachers (Laini et al., 2021). In contrast, conventional learning is ineffective in developing the critical thinking skills needed in the 21st century (Wilson & Fowler, 2005).

One innovation that is effective in changing conventional learning is the flipped Classroom. Most researchers recognize this model as a superior learning model (Namaziandost & Çakmak, 2020b). The flipped classroom method is a solution to these educational changes by creating an individualized learning environment centered on students (Aprianto et al., 2020; Han, 2022). The current condition encourages the application of the flipped classroom method in the development of teaching skills by utilizing audiovisual resources to improve the quality of learning (Collado-Valero et al., 2021). The flipped classroom method is not the only solution to all challenges in Indonesian language education. However, with the support of research with the flipped classroom method, it is a valuable paradigm for educators facing the new Indonesian language learning era (Mehring, 2016). The flipped classroom learning method combines learning before entering the Classroom with discussion and problem-solving learning in the Classroom to improve student understanding interactively (Sezer & Abay, 2019). The flipped classroom method helps lecturers develop exciting and effective learning methods in learning Indonesian (Tsai & Wu, 2020).

The experience with the flipped classroom method satisfies teachers who are also

researchers. Applying the flipped classroom method requires considering the curriculum, materials, classes, and assessment criteria and creating visual materials, such as edited video recordings (Lee & Wallace, 2018). Researchers are expected to be increasingly interested in the flipped classroom learning method in response to the significant shift to online learning (Vitta & Al-Hoorie, 2021). The flipped classroom method is suitable for developing science and technology in the Industrial Era 4.0. Lecturers can download materials from various learning management systems (LMS) and give them to students before entering class. It aims to increase learning effectiveness and build students' critical thinking skills (Hu et al., 2019).

The results of feasibility studies on several campuses in Indonesia that implement flipped classrooms show significant improvements in the quality of learning processes and outcomes. Students who participate in learning with the flipped classroom method show high learning motivation, increased creativity, greater responsibility, active participation in classroom learning, and better academic achievement compared to conventional learning methods (Nouri, 2016; Schmidt & Ralph, 2016). Several studies related to the flipped classroom method have been carried out, namely, Fisher et al., (2024)] in his research shows that the use of reverse learning in EFL teaching can improve understanding of language expressions, speaking and writing skills, motivation, and higher-level thinking skills. Linling & Abdullah (2023) reported through their research that in the flipped Classroom can increase involvement, autonomy, and responsibility for learning so that it can help students develop a passion for lifelong learning. Turan & Cimen (2020) showed that the flipped classroom method helped students improve their speaking skills, interaction with others, and overall learning achievement. In research, Zainuddin & Attaran (2016) show that most students positively respond to the use of the flipped classroom method, and many

recommend the flipped learning method for other courses and students.

Regarding student responses, most of them proposed that the flipped videos available on the SPeCTRUM website be attractive and concise, and have a high degree of authenticity context. Vitta & Al-Hoorie (2023) found that the flipped classroom method is more effective than conventional learning, especially on language proficiency. The effect is not affected by age, but the higher the proficiency, the greater the effect. The flipped classroom method also positively impacts overall language learning outcomes.

This research is a feasibility study of the Flipped Classroom method, especially in the Indonesia Language and Literature Research Methodology Course in encouraging critical thinking skills in students that have not been explored before. With the flipped classroom method, the goal of equipping students with the ability to think critically can be carried out correctly. Lecturers do not dominate the time in class, the interaction between lecturers and students is getting better and more fun. Learning BSI's research methodology, which involves searching for problems and finding solutions scientifically, will be better if the lecturer directs students to take advantage of watching videos of learning materials, and understand the subject matter at home and at the next meeting it will be discussed in class. Therefore, this article explores the feasibility study of BSI research methodology learning with the Flipped Classroom method to encourage students' thinking skills.

Theoretical Framework

This research is based on the theory of complete learning that is relevant to flipped classroom learning. This theory states that students can achieve the same level of understanding despite being in different learning conditions (Zainuddin & Attaran, 2016). The flipped classroom model is analyzed in two perspectives: social constructivist theory and

cognitive load theory, which positions the importance of learning styles and students' abilities as the center in the learning process (Singh, 2020). Constructivist theory of knowledge means a condition of understanding obtained from the continuous interaction between the environment and the individual (Sohrabi & Iraj, 2016). While cognitive load theory states that knowledge memory has a specific capacity for previous knowledge that affects its learning outcomes (Abeysekera & Dawson, 2015). Flipped Classroom replaces conventional teacher-centered learning, focusing on students as the center of learning activities (van Alten et al., 2019). Flipped Classroom directs students to watch learning videos online before class, and actively participate in interactivity during the learning process in the Classroom (Chen Hsieh et al., 2017; Aldouri, 2023).

Flipped Classroom involves students to receive computer-based instruction and read the material before entering class (Lo & Hew, 2017; van Alten et al., 2019). Thus, the flipped Classroom is a new technology-based learning to encourage active and problem-based learning methods to encourage students' thinking skills and motivate them to excel so that the flipped classroom method is widely applied in universities (Jang & Kim, 2020). Flipped classrooms have been recognized for providing many benefits for the learning process, including positive impressions from students, active involvement during class, excellent achievement of grades, and much better performance than conventional learning classes (Etemadfar et al., 2020). Flipped Classroom involves two learning models, namely face-to-face and digital learning. Digital learning requires a combination of teaching models and digital learning tools (Ramadhani & Fitri, 2020).

Methodology

3.1 Research Object

The research method to be used is a qualitative descriptive method of natural observation type. This research seeks to describe qualitatively and naturally make observations of a learning object or event. The research informants were fourth-semester students who took the Indonesia Language and Literature Research Methodology course at the Indonesia Language and Literature Education Study Program, Gorontalo State University. The researcher himself acts as the main instrument and is assisted by questionnaire sheets and observation sheets. The data is in the form of learning tools, learning processes, and student feedback questionnaires. Data sources are in the form of learning tools, learning processes, lecturers, and students. The data collection technique uses document techniques, observation sheets, interview guides, question and answer sheets, and questionnaire sheets. Meanwhile, the data analysis technique uses content analysis (content analysis) (Lasswell, 1960). The researcher uses content analysis with an explanatory approach. In this content analysis, the researcher is not only limited to describing the content of a message, but also tries to find the relationship between the content of the message and other relevant variables.

In analyzing the results of the questionnaire of student feedback on the learning of the Indonesian language and literature research methodology with flipped Classroom, it was described through a Likert scale model consisting of level qualifications from very positive to very negative, as shown in Table 1 below.

Table 1. Scale Likert

Information	Value
Strongly disagree	1
Disagree	2
Agree	3
Strongly Agree	4

After calculating the data, the researcher analyzed the questionnaire categories through the interval scores as follows:

$$\begin{aligned} \text{NJI (Interval Level Value)} &= \frac{\text{Max Value} - \text{Mean Value}}{\text{Number of Statement}} \\ \text{Scale Width} &= \frac{\text{Criteria}}{4} \\ &= 0.75 \end{aligned}$$

It can be concluded that:

- Minimum Index 1
- Minimum Index 1
- Maximum Index 4
- Interval $4-1 = 3$
- Interval Distance $(4-1) \div 4 = 0.75$

Table 2. Interval Scale Likert

Category	Scale
Very Not Good	1,00-1,75
Bad	1,76-2,50
Good	2,51-3,25
Excellent	3,26-4,00

3.2 Research Procedures

The learning process of BSI research methodology with the flipped classroom method to realize the critical thinking skills of Gorontalo State University students is carried out by collaborating with lecturers of the Indonesia Language and Literature Research Methodology Course (after this, abbreviated as BSI). Collaboration with lecturers is carried out to learn research methodology. Through collaboration, several agreements were reached regarding the learning format. The application of learning carried out in collaboration with lecturers is intended to obtain a common perception of the learning process carried out.

Based on the results of collaboration with teaching lecturers, BSI research methodology learning was successfully carried out in a flipped classroom to improve the critical thinking skills of students of the Department of Indonesia Language and Literature Education, Gorontalo State University. The characteristics of learning in a flipped classroom are as follows: The application of learning with a flipped classroom consists of six essential components, namely (a) introduction, (b) the concept of learning BSI research methodology with a flipped classroom,

(c) the advantages of learning BSI research methodology with a flipped classroom, (d) the learning objectives of BSI research methodology with a flipped classroom, (e) the characteristics of learning BSI research methodology with flipped Classroom, and (f) the implementation of BSI research methodology learning with flipped Classroom to realize the critical thinking skills of PBSI students, Gorontalo State University. The implementation of BSI research methodology learning with flipped Classroom consists of (a) preparation, (b) general explanation, (c) technical explanation, (d) stage of providing material at home or outside the Classroom, (e) clarification stage in the Classroom, and (f) follow-up stage.

Results and Discussion

In the flipped classroom learning method, the first step is to prepare learning materials based on the Semester Learning Plan (RPS) for the course. The learning materials are arranged in three primary forms: Learning Videos, Text Teaching Materials, and Resume Slides. In addition to these three types of material, examples of practice questions that students can use as independent exercises are also included.

Learning videos are a very effective medium in the flipped classroom model. With the material delivered through videos, students are more interested in learning and understanding the material's content. The flipped classroom learning method is not new; the model has existed for a long time and is used in the learning process, especially in countries that have implemented blended learning well and are carried out during the face-to-face or classroom learning process. However, this model has not been widely used in learning Indonesian language and Literature research methodologies.

The learning process of Indonesia Language and Literature research methodology with the flipped classroom method to achieve learning objectives is classified into two spaces: at home or outside the Classroom and in the Classroom.

The learning process outside the Classroom begins with preparing learning materials that refer to the RPS of the courses that have been prepared. The preparation of RPS and learning materials is divided into three forms: learning videos, text teaching materials, and resume slides. In addition to the three types of learning materials, examples of practice questions that can be done by students as practice while studying are also given.

After completing the material, the next stage is distributing the learning tools to students through the Google Classroom LMS platform. Materials are uploaded before the lecture starts so that students have enough time to study and prepare materials that can be discussed during the lecture in class. Outside the Classroom, students learn learning materials independently. Students are expected to reach levels C1 (remember) and C2 (understand) in Bloom's taxonomy at this stage. This achievement is essential so that discussions in lectures in class run effectively. Lecturers act as facilitators in classroom learning, which is carried out directly in the classroom. Lecturers provide directions and discussion topics based on the material that students have studied before. During the discussion, students are asked to apply, analyze, evaluate, and create ideas based on the material according to the cognitive levels of C3 to C6 in the Bloom taxonomy. Students can provide research examples from various national and international journals at the Applying level. At the Analyzing level, students review the content of research articles. At the Evaluating level, students evaluate the substance of the research and provide input/review. Finally, at the Creating level, students independently make a draft proposal for the study of Indonesian language and literature.

Furthermore, the activities carried out in the classroom are first lecturers facilitators of the learning process, who provide direction related to learning that is carried out directly. In the second activity, lecturers provide discussion topics that can be discussed with all students.

The topic taken is one of the learning materials that has been uploaded previously and has been studied by students. The activities of the three students began to argue related to the topics given, as well as responses and answers from other students, so the learning atmosphere became more interesting. During activities in the Classroom, the lecturer explains the learning process and the learning stages that are explained at the beginning of learning so that students can prepare themselves to interact with each other in the discussion process. When learning begins, and the lecturer describes the material in general, then the learning is student-centered. Students must integrate critical thinking skills into class discussions. Students must be able to provide examples of BSI research methodology to realize critical thinking skills; other students must provide responses and explanations related to BSI's research methodology to realize critical thinking skills. Critical thinking skills are skills to solve problems or decide on the problems faced.

The next day, students summarize the entire learning process, submit their work, and take an after-class test based on the initial evaluation conducted by the lecturer. This interactive evaluation method can effectively stimulate students' interest in learning and creativity, and most students can seriously prepare for presentations. Furthermore, at the end of the semester, the lecturer gave a questionnaire related to the student's responses to Flipped Classroom learning to explore this model as a very effective model for learning the Indonesian language and literature research methodologies in higher education.

The following are the results of a questionnaire on the flipped classroom learning scale on the knowledge, skills, and involvement of students of the Department of Indonesia Language and Literature Education Semester 4 of Gorontalo State University in learning consisting of 15 statements. The recap results for the first statement show the understanding of

concepts through the flipped classroom, as seen in the following table.

Table 3. Recap of Statement Questionnaire 1

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
Learning with <i>the flipped classroom</i> model makes me more understand the concept.	0 (0%)	4 (13,8%)	18 (62,1%)	7 (24,1%)	90	3,10	Good

Based on Table 3, it is clear that learning by applying the flipped classroom model helps students understand the concept better. It can be seen that as many as 86.2% of students agree and strongly agree with this statement, and there are 13.8% of students disagree.

Furthermore, the table below shows the results of the questionnaire recap of students' enthusiasm in participating in classroom learning.

Table 4. Recap of Statement Questionnaire 2

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
I am excited to participate in classroom learning.	0 (0%)	3 (10,3%)	18 (62,1%)	8 (27,6%)	96	3,17	Good

Based on Table 4, it can be concluded that students are enthusiastic about participating in classroom learning. This is evidenced by the percentage of results shown; as many as 89.7% of students agree and strongly agree, and 10.3% disagree with this statement.

The following table is a recap of the statement that taking notes or studying material through interactive videos before coming to class makes students more motivated and confident.

Table 5. Recap of Statement Questionnaire 3

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
Taking notes or studying material through interactive videos before coming to class makes me more motivated and confident.	0 (0%)	3 (10,3%)	18 (62,1%)	8 (27,6%)	92	3,17	Good

Based on Table 5, it is a fact that by taking notes or studying material through interactive videos before coming to class, students are more motivated and confident. This was obtained from

existing data; as many as 89.7% of students agreed and strongly agreed with the above statement, and there were 10.3% of other students disagreed.

Table 6. Recap of Statement Questionnaire 4

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
Interactive videos support me to understand and master the material in a course.	0 (0 %)	3 (10,3%)	18 (62,1%)	8 (27,6%)	92	3,17	Good

Based on Table 6, it can be concluded that interactive videos help students understand and master the material in a course, with a total

percentage of agreeing and strongly agreeing, 89.7% and 10.3% of students disagreeing.

Table 7. Recap of Statement Questionnaire 5

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
With the existence of the Flipped Classroom learning through very interactive video media affect my learning attitude.	0 (0%)	3 (10,3%)	18 (62,1%)	8 (27,6%)	92	3,17	Good

Based on Table 7, it is known that the flipped classroom learning model through interactive video media greatly influences students' learning

attitudes, as 89.7% of students express their agreement and strongly agree, while 10.3% disagree.

Table 8. Recap of Statement Questionnaire 6

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
Learning media with interactive videos makes me more excited about learn.	0 (0%)	2 (6,9%)	18 (62,1%)	9 (31%)	94	3,24	Good

Based on Table 8, 93.1% of students who decided to vote agreed and strongly agreed, while another 6.9% voted against it. So, it was

concluded that learning media with interactive videos made students more enthusiastic about learning.

Table 9. Recap of Statement Questionnaire 7

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
By listening to interactive videos, learning activities are not dull.	0 (0%)	4 (13,8%)	19 (65,5%)	6 (20,7%)	89	3,07	Good

Based on Table 9, students felt that listening to interactive videos did not make learning activities boring, with a total percentage of as

many as 86.2% of students stated that they agreed and strongly agreed, while another 13.8% stated that they disagreed.

Table 10. Recap of Statement Questionnaire 8

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
The presentation of material through the flipped classroom learning model with interactive video learning media encouraged me to discuss with other students._____	0 (0%)	5 (17,2%)	14 (48,3%)	10 (34,5%)	92	3,17	Good

Based on Table 10, presenting material through learning with a flipped classroom model through interactive video media encourages students to discuss with others. The results of the

data obtained evidence this; as many as 82.8% of students admitted to agreeing and strongly agreeing with the above statement, and another 17.2% disagreed.

Table 11. Recap of Statement Questionnaire 9

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
The delivery of material through interactive video learning media encouraged me to write back to what I already understood.	1 (3,5%)	3 (10,3%)	19 (65,5%)	6 (20,7%)	88	3,03	Good

Based on Table 11, it was concluded that the delivery of material through interactive video learning media encouraged students to rewrite what they already understood, with 86.2% of

student data agreeing and strongly agreeing and another 13.8% disagreeing and strongly disagreeing.

Table 12. Recap of Statement Questionnaire 10

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
I'm willing to ask questions to lecturers when experiencing difficulties.	0 (0%)	4 (13,8%)	18 (62,1%)	7 (24,1%)	91	3,14	Good

Based on Table 12, students are willing to ask lecturers questions when they experience difficulties, which is shown in the total

percentage of 86.2% of students agreeing and strongly agreeing, while as many as 13.8% of students stated that they disagreed.

Table 13. Recap of Statement Questionnaire 11

Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
After watching and reviewing the material via video interactive makes me able Answer or respond to questions quickly and well.	2 (6,9%)	2 (6,9%)	19 (65,5%)	6 (20,7%)	87	3	Good

Based on Table 13, it is known that after watching and relearning the material through interactive videos, students can answer or respond to questions quickly and well, which is

shown in the percentage of 86.2% of students who voted to agree and strongly agree, while 13.8% of other students decided to disagree and strongly disagree.

Table 14. Recap of Statement Questionnaire 12							
Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
The flipped classroom <i>learning model</i> through video interactive learning media is very flexible and by my learning needs.	0 (0%)	2 (6,9%)	19 (65,5%)	8 (27,6%)	93	3,21	Good

Based on Table 14, it can be concluded from the perspective of students that the flipped classroom learning model through video interactive learning media is very flexible and

follows the learning needs of students, with a total percentage of 93.1% of students who agreed and strongly agreed, while 6.9% of other students disagreed.

Table 15. Recap of Statement Questionnaire 13							
Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
I am willing to express my opinion to other lecturers and students during the learning process.	0 (0%)	4 (13,8%)	17 (58,6%)	8 (27,6%)	91	3,14	Good

Based on Table 15, students are willing to voice their opinions in front of lecturers and other students during the learning process. This

is evidenced by 86.2% of students voted in favor and strongly agreed, while 13.8% voted against it.

Table 16. Recap of Statement Questionnaire 14							
Statement	Number of Answers and Percentages				Sum	Mean	Category
	1 (STS)	2 (TS)	3 (S)	4 (SS)			
I try to find material references from books and other learning resources when I have difficulty understanding material.	0 (0%)	4 (13,8%)	17 (58,6%)	8 (27,6%)	91	3,14	Good

Based on Table 16, it is known that students make an effort to find literature and other learning references when facing problems in mastering learning materials, which can be

proven by the results of the data recap from the above statement, as many as 86.2% of students voted to agree and strongly agree. In comparison, another 13.8% voted to disagree.

Table 17. Recap of Statement Questionnaire 15							
Statement	Number of Answers and Percentage				Sum	Mean	Category
	1	2	3	4			
	(STS)	(TS)	(S)	(SS)			
I do not give up easily in doing practice questions/quizzes/assignments given.	0 (0%)	3 (10,3%)	16 (55,2%)	10 (34,5%)	94	3,24	Good

Based on Table 17 above, it can be seen that students do not give up easily when doing the exercises/quizzes/assignments given. This statement is obtained based on the results of the questionnaire data calculation. From the data obtained, as many as 89.7% of student data agreed and strongly agreed, while 10.3% disagreed with the statement.

The results of students filling out the questionnaire showed that using flipped classrooms in the learning process of Indonesia Language and Literature Research Methodology was in the overall good category. The flipped classroom method integrated with Bloom's taxonomy makes learning Language Research Methodology more exciting and motivates students to think critically. The Google Classroom LMS platform supports distributing learning materials and information more effectively. Learning in the Classroom allows interaction between lecturers and students. Lecturers direct students to achieve the goals planned in the RPS. Flipped classrooms involve activities outside and inside the Classroom that support each other. Outside the Classroom, students study material focusing on C1 and C2 (Remembering and Understanding). Students are given enough time to study and take notes on things for discussion. In the Classroom, the lecturer explained the learning stages. After the lecturer gave an overview of the material, student-centered learning integrated the C3-C6 level in the Bloom taxonomy. During the discussion, students could provide examples of research articles and even prepare a draft research proposal. Some students have been able to provide responses and explanations related to the research methodology of Indonesia's language and literature. The flipped classroom learning model in learning language research methodology provides many valuable experiences. This model can realize critical thinking skills for students. Flipped classrooms change the traditional way of learning by placing students as the center of learning, encouraging

them to be independent in understanding the material.

Discussion

The use of technology is a fundamental thing that lecturers need to consider today. Technology is a tool that can be used to create meaningful experiences in the learning process. This can be done by applying the flipped classroom method in learning. This method has been widely used in improving student achievement in language learning (Li & Li, 2022). Through research on learning the research methodology of Indonesian language and literature using the flipped classroom method, the activity was divided into two, namely before the class started and when the class started. Before the class starts, students have studied the material to be discussed. At that stage, the ability expected of students is to remember and understand the material. At the beginning of the class, students can apply and analyze BSI research methodology materials through various interactive activities in the Classroom. The flipped classroom method has a significant impact on lecturers and students. The big impact is that learning with the flipped classroom method leads to SCL (student-centered learning) learning. This means that students are the ones who need to learn, so all activities of the learning process lead to students starting with planning, implementation, and evaluation. Students who plan, implement, and evaluate the learning process itself. Students are active learners. Students solve problems, answer questions, formulate their questions, and discuss and explain them during class. The flipped classroom method also includes cooperative learning; students work in teams on problems, working on projects from their lecturers.

The flipped classroom method in learning BSI's research methodology has encouraging results, and the quality is better than before for those who practice conventional methods. Students who practice the flipped classroom method have high learning motivation, increased creativity, and increased responsibility. Students

are more active in the learning process in the classroom, and their academic grades are better than those of conventional learning methods. Likewise, the lecturers feel they have more time to interact with students. As in the research by Widyaningrum et al. (2020), flipped classroom learning better influences students' creative thinking skills in the Indonesia Language and Literature Studies course. As explained by Listiqowati et al. (2022), the same research shows that flipped classrooms can improve critical thinking skills through online learning with synchronous and asynchronous strategies, proving it theoretically and practically practical. It is recommended that lecturers in higher education apply it. Critical thinking skills and proposal preparation projects are more effective using the flipped classroom method than the conventional method.

Based on the reflections, the learning methodology of Indonesian language and literature research using the flipped classroom model has proven very effective. This method increases students' motivation to understand the material. Students also get an independent learning experience, become more disciplined, and can work together to understand the material and complete assignments. Flipped Classroom is a learning model that encourages students to be active and think critically because the material is given before learning activities so that during learning, focus on discussion and application of learning outcomes. Thus, the flipped classroom

learning model effectively teaches Indonesia's language and literature research methodology in this digital era. However, successfully implementing this method requires support in improving the digital skills of lecturers and students to overcome existing technological barriers. With this approach, students are allowed to play the role of learning subjects, develop creativity, and adjust their learning styles, making this method a relevant solution in today's digital era, especially in developing critical thinking skills. They can be used as a reference for lecturers in universities.

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