



An Evaluation of Flipped Classroom Approach through Online System

Fitria Ramadhani Manurung¹

¹ Ship Electrical System, Politeknik Pelayaran Malahayati, Indonesia

Article Info

Article history:

Received 2025-03-12

Revised 2025-05-18

Accepted 2025-06-28

Keywords:

Evaluation

Flipped Classroom

Approach

Online system

ABSTRACT

This qualitative research aims were to evaluate the effectiveness of implementing the flipped classroom model via online platforms and identify its strengths and limitations. Data collection involved classroom observations and interviews with an English instructor. Findings revealed that the educator successfully employed the flipped classroom method using digital tools like Google Classroom, WhatsApp, and email. Both the teacher and students experienced beneficial outcomes. The research identified several advantages and disadvantages of the flipped classroom for educators and learners. Key benefits included fostering student autonomy, encouraging self-directed learning, and supporting personalized education. However, challenges included low student engagement, technical difficulties like poor connectivity, and restricted data access.

This is an open access article under the CC BY-SA license.



Corresponding Author:

Fitria Ramadhani Manurung

Politeknik Pelayaran Malahayati, Indonesia

Email: fitri.manurung@poltekpelaceh.ac.id

INTRODUCTION

The development of information and communication technology (ICT) has significantly influenced human life across various sectors, including education. Traditionally, teachers served as the main source of knowledge for students within the classroom setting. However, today, students have the ability to retrieve educational resources online. The internet is now accessible to students regardless of location or time. As a result, learning is no longer confined to the time spent in the classroom with the teacher. Teachers must leverage this advancement effectively to ensure technology benefits education positively.

The flipped classroom approach is designed to enhance the efficiency of learning in the classroom. Conventional teaching methods often allocate significant time to lecturing, leaving minimal opportunities for students to analyze problems (Utami, 2017). A review of the flipped classroom approach revealed that students who participated in flipped classroom sessions achieved better or comparable learning outcomes to those in traditional classroom settings (Lo & Hew, 2017).

The flipped classroom is regarded as a novel concept in the realm of information and communication technology (ICT), drawing significant attention from researchers to explore and implement its various educational characteristics. This model fosters stronger teacher-student engagement, enabling educators to dedicate classroom time to interactive, experiential learning (Cole & Kritzer, 2009). Additionally, discussions surrounding the flipped classroom often emphasize its mobility and flexibility, as students have the ability to access videos anytime and from any location (Nouri, 2016).

An analysis of empirical research on flipped classrooms shows that students tend to perform better in terms of learning achievements, outcome scores, competency, and the acquisition of new skills compared to traditional classroom settings (Zainuddin, 2019). Research also suggests that flipped learning enhances student engagement, confidence, collaboration, and overall academic success (Zainuddin et al., 2019).

Flipped classrooms prioritize in-class discussions, collaborative tasks, and feedback, whereas students independently study materials beforehand. They construct their own knowledge by engaging with instructional videos and additional materials (Yavuz, Faculty, Ozdemir, & Faculty, 2019). Integrating Instagram into flipped learning encourages critical thinking, benefiting students in and beyond the classroom (Suplandi et al., 2019). It has also been found that students feel prefer using class time for feedback-driven activities over passive lectures, such as listening in the lecture only (Maharani, Hamamah, & Nurhayani, 2020). In general, the flipped classroom model positively affects learning habits among students.

This approach creates opportunities for greater student involvement in learning (Gannod, Burge & Helmick, 2008). The benefits of self-paced learning and location flexibility in flipped classrooms were highlighted by Bergmann and Sams (2014). It supports varied learning styles and compensates for missed classes through pre-recorded lectures and digital materials. In flipped learning, the instructor's role is primarily focused on guiding and organizing activities and skills, while students are expected to take on roles shaped by methods such as self-learning, preparing

lessons at home, and preparing for in-class discussions. The flipped classroom model suggests that students can prepare for lessons by completing assignments, quizzes, interacting with multimedia, and utilizing websites (Karlsson & Janson, 2016).

One of the challenges faced by most teachers daily includes dealing with inactive students, time constraints, and complaints about excessive homework. To address these issues, the flipped classroom model offers a solution, as it encourages active student participation, promotes support from both teachers and peers for handling homework, and provides more free time in class. This model appears to be particularly effective in higher education due to its focus on active learning. It blends face-to-face instruction with distance learning, allowing students to benefit from classroom group discussions, as well as online video lessons and assignments that they must complete outside of class. Garrison and Kanuka (2004) explain that the flipped classroom approach is “an integration of face-to-face and online learning experiences—not a layering of one on top of the other” (p. 99).

However, as mentioned earlier, there are still challenges in teaching and learning activities with the flipped classroom approach. Teachers, as noted by Yang, Yin, and Wan (2018), face certain obstacles. The first issue is that students often lack enough time to fully grasp the content before class and must study the material independently before class evaluations. The second challenge is that teachers must help students develop critical thinking skills. This requires support through higher-order thinking skills (HOTS) tasks and activities that enhance students' English proficiency. Additionally, due to the ongoing COVID-19 pandemic, many educators are now required to conduct online learning, shifting their teaching methods to e-learning systems. Consequently, it becomes essential to evaluate whether the flipped classroom approach, implemented through an online system, is effective and suitable for the teaching and learning process.

Based on some previous studies displayed above, the researcher might postulate that the implementation of the flipped classroom had a positive effect on the students' interest and understanding in the class. Furthermore, the researcher indicated that the flipped classroom can be used effectively for teaching English, especially maritime English. Therefore, the researcher conducts a similar study in a different case, and a little bit focused on the evaluation of the flipped classroom. The researchers have set research questions:

1. How is the flipped classroom implemented in learning English through an online system?
2. What are the advantages and disadvantages of using the flipped classroom model for learning English through an online system?

METHOD

Research Design

This research is a case study, with the basics of mixed-method. In this study, observation and interview were used together to investigate the process of flipped classroom approach through online system. This study aimed to find out how was the implementation and to find out the

advantages and disadvantages of flipped classroom approach in learning English. This research is conducted at Politeknik Pelayaran Malahayati Aceh.

Participant

The sampling method studied in this study is non-probability with purposive sampling technique; namely the determination of the sample by the qualifications of the research objectives based on certain considerations. However, the researcher took the purposive sampling to be involved in this research to gain the data. Nautical III B was selected to be observed because this was the only class that used the flipped classroom approach. The number of students in the class was 20.

Instrument

The research instrument is a measuring instrument used to collect the data (Sugiyono, 2016). According to Arikunto (1998), there are many types of instruments such as tests, questionnaires, interviews, observation, assessment, scale, and documentation. Instruments for collecting data aim to support successful research. This helps the researchers to obtain data and information about how well is the implementation of Flipped Classroom is and the advantages and disadvantages of it. To gain the data for this study, the researcher used two instruments to collect data. The data of the research were collected from observation and interviews. The researcher did an observation of the whole process of a lesson using a flipped classroom with the topic is Standard Marine Communication Phrases (SMCP), and an interview was conducted after the lesson. The instruments used in this study were an observation checklist, a list of interviews, recorded video of the lesson. An observation checklist was used as a guide for the flipped classroom process, and an interview was used as additional data to support the observation checklist and find out the advantages and disadvantages of a flipped classroom.

Data Collecting Technique

In this research, the observation was carried out during the research using observation checklist. In this study, the observation checklist was adapted from Abu Safiyeh, H. & Farrah, M. (2020), which consists of three stages related to the flipped classroom. Each of the stages explained the process of the flipped classroom implemented with the note of the researcher in each of it. The researchers observed the activities of the teacher and the students' activities during the whole implementation process.

The researcher obtained the data through an interview with the English lecturer, which consisted of 8 questions. The interview was held after the whole process has been done by the lecturer. The researcher met the respondent and she participated in answering the questions.

Data Analysis Technique

The research utilizes qualitative methods for analyzing data. Analyzing data, whether textual or spoken, forms an essential part of the investigation. As Burgess notes, qualitative studies

demand methodical, comprehensive, and perceptive examination centered on the research question. "In qualitative research, all researchers or researchers concentrate on the problem under investigation while guided by a conceptual or theoretical framework" (Sudarwan Dnim and Dervish, 2003, p:262).

In qualitative studies, researchers frequently analyze data simultaneously with gathering information. According to Ary et al. (2010, p. 283), this research's analytical approach incorporates multiple phases: categorizing information, condensing data, presenting findings, and formulating interpretations.

FINDINGS AND DISCUSSION

a. *Educational Activities Implementing the Flipped Classroom Model at Politeknik Pelayaran Malahayati*

The researcher observed instructional processes to evaluate the application of the Flipped Classroom model in digital learning environments. The study identified three distinct phases in the e-learning implementation of this pedagogical approach. Pre-class activities involved utilizing Google Classroom and WhatsApp for content delivery and preparation. The second stage took place during the class, where Zoom virtual meetings were utilized. The final stage occurred after class, involving a combination of Google Classroom and WhatsApp messages.

Each step of the teaching and learning activities was recorded and documented by the researcher following a predefined observation guide. A detailed account of these activities is provided below.

a) Observation of the Pre-Class Stage Using Google Classroom

The teaching and learning activities were observed by the researcher through access to the class on Google Classroom. The steps of the learning process were outlined as follows:

- *Preparation Activities*

The materials to be uploaded to Google Classroom were prepared by the lecturer. The content focused on Standard Marine Communication Phrases (SMCP). Relevant videos were searched for on YouTube, and once the appropriate ones were found, instructions for the learning process were created and uploaded to Google Classroom.

Prior to this, students had already created accounts on Google Classroom to access the material, as this was not their first time using the platform. For the first session, the lecturer shared the class join link, and SMCP was discussed in the sixth session.

- *Uploading Activities*

Once the lecturer finished preparing the material, she began uploading it to Google Classroom. She posted a YouTube video on SMCP and then uploaded an exercise related to the video. The students were instructed to complete and submit the exercise two days before the next class. In her instructions, the lecturer emphasized the importance of the lesson for their future careers. Afterward, she communicated the material to the students via WhatsApp.

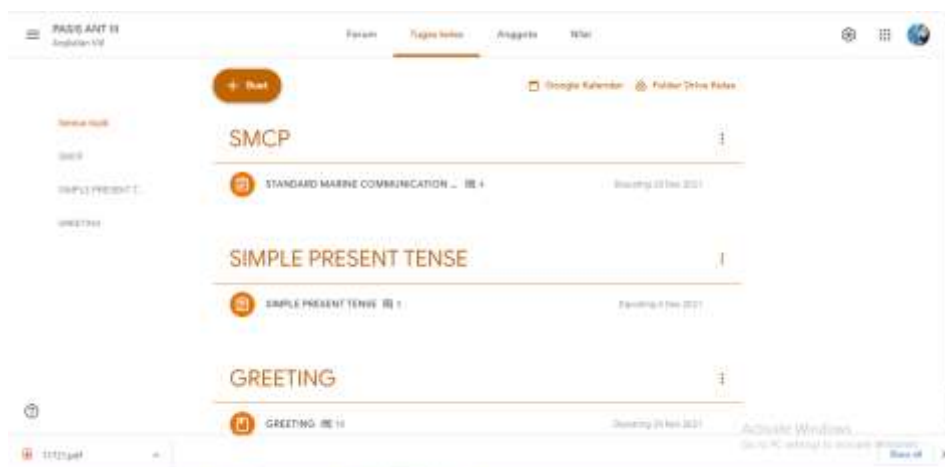


Figure 1: Uploaded video and exercise

The third topic was SMCP, with a learning duration of only 120 minutes, as outlined in the lesson plan. To make the topic easier for students and avoid confusion, the lecturer uploaded the SMCP video and exercise in a newly created folder on Google Classroom.

To create the folder, the lecturer clicked on "tugas kelas" (classwork) and then selected "buat" (new). This action prompted several options, such as assignments, quizzes, subject matter, etc. She then chose the "subject matter" option, entered the title and description for the subject, and proceeded to upload the video and the exercise.



Figure 2: Uploaded instruction material and Exercise

The organizational structure of the digital folder is presented in Figure 2. The folder contained a concise overview of the learning objectives and expected outcomes. The instructor provided comprehensive SMCP resources including instructional videos, reference materials, explanatory notes, and graded assignments. All of these materials were made available one week before the class, providing students with ample time to review the content and prepare any questions.

a) Observation of the In-Class Stage Using Zoom Meeting

The research methodology involved observational analysis of instructional delivery via Zoom's virtual platform. The pedagogical sequence consisted of the following components:

- *Introductory*

The instructional session commenced using Zoom's videoconferencing capabilities. She began by greeting the students and taking attendance individually. Initial procedures included personalized student greetings and individual attendance verification. The instructor acknowledged receipt of student submissions and previewed subsequent assignment analysis.

- *Primary*

The instructor disseminated Standard Marine Communication Phrases (SMCP) learning materials via Google Classroom prior to the session. This included a video explaining SMCP and providing examples. The video was played again by the lecturer, who then asked the students about its content. Five students eagerly raised their hands to respond. Following that, she opened the floor for questions, and the discussion began. Early discourse development was hindered by participant reticence. The educator adopted a directed questioning approach, targeting individual learners for video-related responses. Student A was first prompted to summarize the video's central themes. After hesitation, Student A cited comprehension barriers due to absent Indonesian subtitles and inadequate supplementary research. The lecturer then asked if anyone could explain the video's content. Ten students raised their hands in response, and she allowed Student B to explain. Student B explained the video's content smoothly, providing examples of each topic discussed. His explanation lasted for nearly 10 minutes, and he concluded with a summary of the key points. The lecturer and the other students applauded and thanked him for his excellent explanation. Afterward, the lecturer gave three other students the opportunity to share their understanding of the video. This discussion continued for about thirty minutes. The session concluded with instructor appreciation for student engagement, affirmation of conceptual mastery, and encouragement for continued participation.

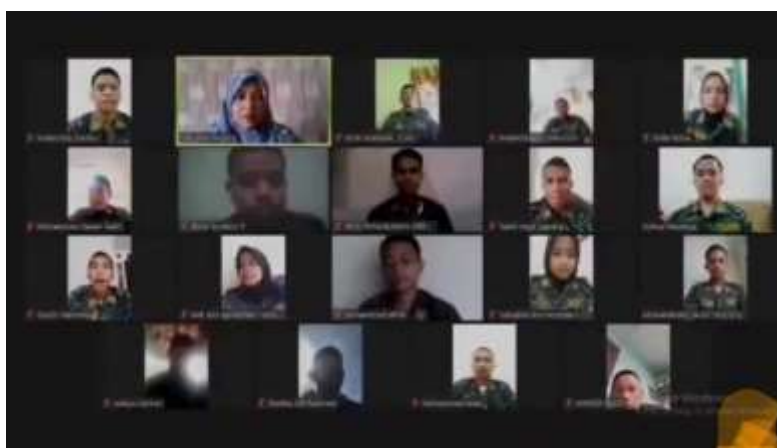


Figure 3: Process of discussion

The next activity involved a discussion of the assignments. The educator directed learners to re-examine their submitted work, before soliciting a response to the first question from a selected participant. The student read the question and answered confidently. The lecturer then asked two more students to respond to the same question. Afterward, she provided feedback on their answers and gave a brief explanation. After that, she moved on to the next question, asking another student

to provide an answer. This activity continued for about an hour. Once the assignment discussion was complete, she opened the floor for a question-and-answer session. Rather than answering all the questions herself, she encouraged students to respond to their peers' questions as well. To wrap up the session, the lecturer instructed the students to make revisions to their assignments and submit them again.

- *Final*

The class concluded with the lecturer complimenting the students on their excellent performance. She reminded them not to forget to revise their assignments and submit them by the following day. If any students encountered issues submitting via Google Classroom, they were instructed to email the assignments to the lecturer. She expressed her gratitude for their participation that day and closed the class with a warm farewell.

b) Post-Instructional Phase Analysis via Digital Learning Platforms

The investigation extended to monitoring pedagogical interactions occurring through Google Classroom and email correspondence. The instructor systematically evaluated student submission statuses for revised assignments. Learners opting for Google Classroom submission were instructed to finalize their work within the platform's interface. This process involved accessing the designated exercise document and inputting responses digitally.

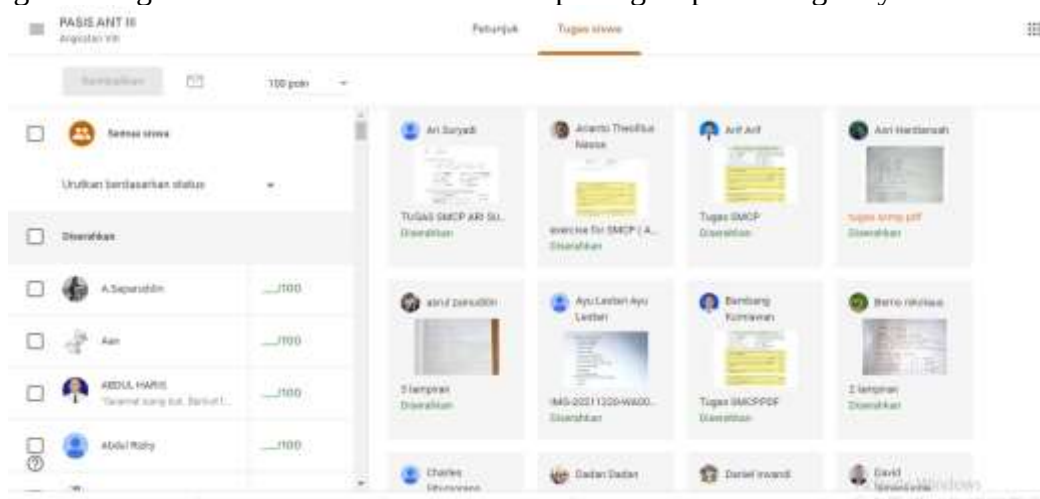


Figure 4: Students' assignment

Fifteen students submitted their assignments via Google Classroom, while the rest sent them through email. With a one-week submission deadline, only two students had not submitted their assignments. The lecturer asked the class chairman to contact those students. The chairman reported that the two students were facing internet access issues, which prevented them from uploading their assignments to Google Classroom or via email. Two days after the deadline, both students successfully submitted their assignments through email. Once all the assignments were submitted, the lecturer reviewed the answers and assigned scores.

b. The Advantages and Disadvantages of Using the Flipped Classroom Approach in Teaching English through an Online System at Politeknik Pelayaran Aceh

Classroom observations at the institution revealed multiple pedagogical benefits and implementation barriers encountered by educators. This analysis is further validated by data

obtained through interviews with the lecturers. The findings regarding these strategies are as follows:

a) Advantages of the Flipped Classroom Using an Online System

English language instructors at the institution adopted the inverted classroom approach to enhance instructional efficacy. Empirical data demonstrated perceived effectiveness by both educators and learners throughout the instructional cycle. During the preparatory phase, instructors disseminated topical video resources and learning guidelines. This design facilitated student acquisition of fundamental knowledge through autonomous study, enabling instructors to devote classroom time to advanced concept exploration rather than basic content delivery:

“Previously, students were limited to a single source of information on a topic—the material provided by the lecturer in class. However, with the flipped classroom approach, students have the opportunity to explore a variety of sources. This access to multiple resources enhances their understanding of the subject matter.”

This approach allowed students to access various resources to support their understanding of the topic and helped them analyze the video more deeply. By engaging in this process, they could develop self-motivation and curiosity, often without even realizing it. They were also able to overcome any challenges they faced in comprehending the video. The instructor encouraged students to answer topic-related questions, using this as a scaffold to reinforce comprehension. The video succinctly clarified Standard Marine Communication Phrases (SMCP), aiding students in mastering onboard communication protocols. By uploading the video, students were able to watch it multiple times if needed. This method was beneficial for students who were slower in grasping the material, as it allowed them to review the content at their own pace. The instructor observed that this strategy improved subject comprehension and boosted students’ motivation to participate in English lessons. With sufficient time to review the video, students could absorb the necessary information to improve their comprehension.

This method enabled peer-to-peer teaching, empowering students to learn from one and another. With no restrictions on available study resources, this method fostered peer-to-peer learning, which was particularly beneficial for shy or less confident students. It allowed them to gain insights from their classmates. During synchronous sessions, the instructor facilitated structured discourse analyzing the SMCP video's content and conceptual framework. Guided by preparatory assignments, learners engaged in self-directed questioning and peer response mechanisms. Such participatory behaviors evidenced heightened learner investment, manifested through autonomous research, task completion, and substantive topic discourse. In contrast, traditional teaching methods typically involve the lecturer providing all the information. The flipped classroom model put students at the center, allowing them to be more successful in their learning while also enabling the lecturer to assess their capabilities and study styles.

During the post-instructional phase, students were directed to refine and resubmit their assignments through digital platforms such as Google Classroom or email. The instructor emphasized in interviews that this method facilitated autonomous learning by enabling students to progress according to individual timelines and preferences. The revised assignments were necessary for the lecturer to assess how well students understood the video. Despite identical submissions from a minority of learners, the instructor concluded that the flipped model effectively enhanced video-based learning outcomes.

b) Disadvantages of the Flipped Classroom Using an Online System

Data collected through observations and interviews revealed multiple implementation barriers encountered by the instructor. Initial hurdles included the instructor's need to attain proficiency with digital platforms like Google Classroom and Zoom. Furthermore, she was responsible for ensuring student competency in navigating these tools, including account setup. For the first session, she spent an entire hour teaching the students how to use Google Classroom, which felt like a waste of time. However, by the sixth session of the SMCP (Standard Marine Communication Phrases) course, the students were already familiar with the tools. Another obstacle was that the lecturer had to either find or create appropriate videos to explain the SMCP topics. Lacking resources for original video production, she relied on curating YouTube content. As a first-time instructor in the Nautical Department, she faced constraints in both preparation time and instructional resources

At the in-class stage, some students struggled to understand the video content. As a result, the lecturer asked other students to explain the material, and she also had to supplement the explanation herself to ensure that all students grasped the key points. This challenge was observed by the researcher during the observation and interview, which was summarized as follows: During the pre-class stage, the lecturer first needed to familiarize herself with the online systems, specifically Google Classroom and Zoom. She also had to ensure that all students were acquainted with these platforms and had set up their accounts. During the first session, she spent a whole hour teaching the students how to use Google Classroom, which was time-consuming. However, by the time of the sixth session, which covered the SMCP lesson, the students had become proficient with the application.

further pedagogical obstacle involved the instructor's requirement to source or develop appropriate instructional media for SMCP content delivery. Due to constraints preventing original video production, the educator utilized YouTube as a resource repository. As a novice instructor in the Nautical Department, she encountered significant preparation challenges stemming from temporal and material resource limitations. During the in-class stage, some students had difficulty understanding the video. This necessitated implementing peer explanation techniques supplemented by instructor-led clarification to guarantee comprehensive content mastery. These pedagogical challenges were empirically documented through researcher observation and are characterized below:

Students	: Yes, Miss.
Lecturer	: Excellent. We shall now analyze the SMCP video content. Khalid, please provide your interpretation.
Student	: (No verbal response)
Lecturer	: Khalid, is your audio connection functioning?
Student	: Yes, I can, Miss.
Lecturer	: Proceed with summarizing your comprehension of the video's key concepts
Student	: Apologies Miss, despite viewing the material, I failed to grasp its content.
Lecturer	: Please identify the specific elements causing difficulty
Student	: The entire content remained unclear due to the absence of subtitles in the English-language video
Lecturer	: Did you consult supplementary SMCP learning materials?
Student	: No, Miss.

A limitation of vocabulary and knowledge, combined with a lack of motivation, posed a significant problem for the students. To address this, the lecturer selected a simpler video to explain SMCP, choosing one with straightforward explanations so that students could use dictionaries or other resources to find meanings on their own. The lecturer hoped that the lack of motivation would be mitigated by providing no restrictions on using additional resources for better understanding.

During the in-class stage, the lecturer aimed to foster an active learning environment by encouraging discussions among students. Out of the 20 students in attendance, only 10 were actively engaged in the class. The assignments given were reviewed to check whether the students' answers were correct. At this stage, the lecturer worked to build a supportive environment and motivate the students by offering opportunities for others to answer questions and share opinions. She served primarily as a facilitator and motivator.

However, when the lecturer asked students about any obstacles they faced during the lesson, three main issues emerged: the first was technical problems. During the observation, the researcher found that some students had poor internet connections, which disrupted the progress of discussions. This also hindered students from accessing additional resources to support the topic in class. Poor connections made the class less engaging, and students with these issues struggled to grasp the material and often needed to have the lesson repeated.

The second problem was a lack of motivation. The researcher observed that student participation and interaction during classroom activities were minimal. Many students were passive in the discussions, and their assignment answers were nearly identical. This was attributed to the students' insufficient internet data and poor signal quality, which made it difficult for them to find adequate resources to support the lesson. Some students also expressed that they did not know enough English to understand the video, making it challenging to use a dictionary or other resources to comprehend the content.

The third issue was the quality of the material. The lecturer had to either create or find high-quality video content to maintain students' enthusiasm. In the interview, she acknowledged that time constraints in preparing the material impacted her ability to select an appropriate video. The video chosen for the lesson had poor sound quality, making it difficult for students to follow the explanation. Although the explanation was simple, the poor video quality made it harder for students to understand. The lecturer assured that she would ensure better video quality for future lessons.

Discussion

Based on the results, it was observed that the lecturers had successfully implemented the Flipped Classroom Approach. This approach had a positive impact on the teaching and learning process. The lecturers applied this method with the understanding that by using the flipped classroom model, students would become more accustomed to the tasks assigned to them. Additionally, it would naturally foster motivation for autonomous learning. Students would be encouraged to learn independently, even when not at school. They would take the initiative to read books without anyone requiring them to do so. This aligns with the concept shared by Hamdan et al. (2013), who described the four pillars of F-L-I-P as Flexible Environment, Learning Culture, Intentional Content, and Professional Educator.

The flipped classroom framework enables diverse instructional methods, where educators adapt the learning environment to accommodate activities like collaborative projects or self-paced

study. She created adaptable learning spaces, allowing students to choose their study schedules and locations. Additionally, she found that her classes were flexible in terms of expectations regarding students' learning timelines and the methods used for assessment.

While conventional teaching relies on the instructor as the main knowledge provider, the flipped classroom deliberately transitions to a learner-focused methodology. This approach dedicates class sessions to in-depth topic analysis, fostering richer learning experiences via student-driven methods. As a result, students actively engage in the knowledge-building process, participating in and assessing their own learning in ways that are personally relevant to them.

The educator systematically assessed strategies for utilizing the inverted classroom model to strengthen conceptual understanding and skill acquisition among learners. This process necessitated deliberate reflection on both pedagogical approaches and curated materials for autonomous student engagement. Tailoring content to specific academic levels and disciplines, the instructor employed purposefully designed materials to maximize instructional efficiency, integrating diverse methodologies including collaborative learning frameworks, peer-mediated instruction, and inquiry-based educational approaches.

Throughout instructional sessions, the educator conducted ongoing formative assessments, offering real-time evaluative commentary while monitoring student performance. Complementing this practice, the instructor adopted a reflective pedagogical stance—curating optimal instructional materials, incorporating peer feedback, and facilitating structured yet dynamic learning environments. The fundamental aim of this inverted learning model centered on fostering learner autonomy and self-regulation. This approach transcended compliance-based learning by instilling intrinsic motivation and metacognitive awareness of the learning journey.

From the observation, the researcher also noted that the lecturer incorporated some characteristics aligned with previous research. According to the University of Minnesota (2013), there are three key characteristics of the Flipped Classroom. First, the in-class learning environment is highly structured. Second, in-class activities are designed to encourage students to solve problems, answer quizzes, and apply or retrieve content from the flipped video. Lastly, students are strongly encouraged to complete out-of-class work and participate in face-to-face sessions via assessment protocols, interactive learning tasks, and instructor-established benchmarks. The instructor operationalized two of these three pedagogical elements. Her methodology incorporated problem-solving exercises and formative quiz assessments to evaluate comprehension. Furthermore, she promoted comprehensive assignment completion and substantive content engagement to facilitate advanced knowledge acquisition.

Additionally, from the interview findings, the researcher identified several advantages and disadvantages of the flipped classroom, which were similar to those found in other studies. R. Srilatha (2018) identified numerous benefits, which she grouped into four major categories. The first benefit was fostering a research mindset in students. In a flipped classroom, students are encouraged to explore concepts that are not immediately obvious to others and to think creatively. The teacher introduces concepts in class, and then students go home to research these concepts independently. They take notes in their own unique way, leading to a distinctive and personalized understanding of the material.

The flipped classroom technique facilitates multimodal expression of conceptual understanding among learners. Students can annotate content during multimedia engagement with instructional materials. This represents a departure from traditional linear notetaking that frequently led to information gaps, as the digital format now enables content control through pause, review, and archival functions for subsequent utilization. Such functionality provides educators

with diagnostic insights into individual learning trajectories, enabling differentiated instructional modifications. Ramrez, Hinojosa, and Rodriguez (2014) documented multiple pedagogical advantages inherent to the inverted classroom paradigm. Foremost among these was the temporal and spatial adaptability of video-based instruction. Learners particularly valued the asynchronous accessibility and location-independent nature of the multimedia resources. The capacity for repeated viewing enabled deeper information processing and enhanced comprehension of complex concepts. Additionally, students benefited from preparatory video engagement, which extended opportunities for pre-class skill rehearsal and concept familiarization.

The second benefit was a better understanding of the context. Learners requiring sequential information processing particularly benefited from the structured, video-based instructional format, which facilitated improved academic outcomes. Educators developed concise pre-class instructional videos supplemented by post-class explanatory materials addressing identified knowledge gaps.

A further benefit manifested through elevated learner self-efficacy stemming from preparatory subject exposure. Participants reported that the accessible, user-friendly format contributed to heightened academic confidence and reassurance. Notably, the multimedia format enhanced intrinsic motivation through its interactive and appealing instructional design.

However, one of the most crucial aspects of the flipped classroom is the availability of computers and internet access at home. Students and schools with limited access to these resources face significant challenges when attempting to implement the flipped classroom. Power outages and disruptions in internet connectivity further exacerbate this issue, making it difficult for the flipped classroom model to function effectively. According to Hertz (2012), as cited in Nawi et al. (2015), the primary challenge in implementing the flipped classroom, whether in rural or urban areas, is the accessibility of lessons outside the classroom, which relies heavily on computer and internet access. Poor internet connections can discourage students from engaging with online lessons. In such situations, teachers are encouraged to be creative in finding alternative solutions. This challenge was also observed in the research findings.

Before entering the classroom, alternative teaching strategies should be prepared. Additionally, the limited access to the technology required for successful flipped classroom instruction was identified as a significant barrier. The lecturer mentioned that not all students had the necessary digital devices (e.g., laptops or tablets) or a reliable internet connection to access course content outside of class. Essentially, students' ability to participate in flipped classroom learning is influenced by their family's socioeconomic status.

Darinka Ramrez, Carlos Hinojosa, and Francisco Rodríguez (2014), along with R. Srilatha (2018), highlighted nearly identical disadvantages of the flipped classroom model. The first issue revolves around technology: Internet access is necessary for students to complete assignments and projects. Without technical knowledge or access to technology, students cannot make progress. Another concern is that students may spend excessive time in front of screens, which increases the likelihood of distractions.

Teachers who recognize the drawbacks of traditional teaching methods may not hesitate to implement the flipped classroom; however, this transition requires a significant level of efficiency, patience, adaptability, and self-motivation. Teachers must undergo extensive training to stay current with new teaching trends and adopt innovative strategies. The more challenging the teacher's role becomes, the more dedicated they must be to motivating their students. Additionally, it remains uncertain whether the desired outcomes can be consistently achieved.

Despite the supportive facilities and well-prepared teachers, there was a case where students lacked motivation in the flipped classroom. According to Nawi et al. (2015), the most significant challenge in implementing the flipped classroom was a lack of student participation and interaction during classroom activities. This hindered the goal of fostering an active learning environment. In agreement with this, McCallum et al. (2015) emphasized that flipped classrooms rely heavily on students being self-motivated. However, some students are less motivated than others, and this teaching method may allow those students to achieve less. As a result, the learning process may become suboptimal, as the flipped classroom requires strong collaboration between teachers and students to facilitate autonomous learning. If students dislike the flipped classroom, they may ignore the teacher's instructions to watch the videos prepared in advance.

The findings and discussions above reflect that teaching English using the Flipped Classroom approach through an online system can be effectively implemented and yield positive results. Based on the findings, it was evident that the lecturer needed to thoroughly prepare the material and ensure that students had watched or read the content before the class began. Technical issues, such as internet connectivity and the availability of necessary technology (e.g., smartphones or laptops), must also be considered when applying this approach. Despite these challenges, the lecturer still found the use of the Flipped Classroom approach in the context of the pandemic to be very beneficial. This method allowed for more effective knowledge transfer at an appropriate time and shifted the roles of the lecturer and students. It enabled the lecturer to better utilize their expertise and skills by spending less time on lecturing and more time assisting students in developing a deeper understanding. Meanwhile, students became more active and independent learners. They were able to build a stronger comprehension of topics and more easily catch up when absent.

CONCLUSION

In higher education, the flipped classroom serves as a modern pedagogical tool, catering to university students' needs by advancing critical thinking and analytical abilities. Throughout this research, both positive and negative aspects of implementing the flipped classroom were discussed. However, after weighing the various advantages and challenges, the researcher concludes that the benefits of adopting this format outweigh the potential obstacles. The instructor's findings revealed that even imperfect implementations of the flipped classroom yield benefits for educators and learners.

Based on the results from the observation and interview, the flipped classroom approach had a positive effect on teaching English. The process followed a three-phase structure: pre-class preparation, in-class interaction, and post-class revision. The pre-class stage involved preparing the Standard Marine Communication Phrases (SMCP) material and uploading it onto the online system. The in-class stage focused on discussions about the SMCP video and solving questions provided beforehand. The final stage, the post-class stage, required students to revise their assignments and submit them again via Google Classroom or email.

Moreover, the findings of this research revealed several advantages and disadvantages faced by both the lecturer and students when using the flipped classroom approach through an online system at Politeknik Pelayaran Malahayati Aceh. Challenges included low student involvement and technical barriers, such as unreliable internet connectivity and insufficient data allowances. Learners reported feelings of isolation and detachment from instructors, while some struggled with

motivation owing to comprehension hurdles in the online format, and students incurred additional expenses due to the requirement for extra internet data. Additionally, the learning process demanded that both parties have functional devices (e.g., laptops, phones) and stable internet access.

The study demonstrates the flipped classroom's effective application, suggesting that English educators explore its adoption as a viable teaching alternative, as it leads to greater satisfaction and enjoyment for both students and teachers.

REFERENCES

- Arikunto, S. (1998). *Prosedur penilaian*. Jakarta: Rineka Cipta.
- Bergmann, J., & Sams, A. (2014). Flip your classroom: reach every student in every class every day. *Teaching Theology & Religion*. <https://doi.org/10.1111/teth.12165>
- Cole, J.E., & Kritzer, J.B. (2009). Strategies for success: Teaching an online course. *Rural Special Education Quarterly*, 28(4), 36-40. <https://doi.org/10.1177/875687050902800406>
- Garrison, D. R., & Kanuka, H. (2004). *Blended Learning: Uncovering Its Transformative Potential in Higher Education*. *Internet and Higher Education* 7, 95-105.
- Gannod, G.C., Burge, J.E., & Helmick, M.T. (2008). Using the Inverted Classroom to Teach Software Engineering. <https://doi.org/10.1145/1368088.1368198>
- Hertz, M. B. (2012). The flipped classroom: Pro and con. Retrieved from <http://www.edutopia.org/blog/flipped-classroom-pro-and-con-mary-beth-hertz>
- Karlsson, G., & Janson, S. (2016). The flipped classroom: A model for active student learning. In De Corte, E., Engwall, L., & Teichler, U. (Eds.). *From books to MOOCs? Emerging Models of Learning and Teaching in Higher Education*. *Wenner-Gren International Series*, (88, 127), 136. Portland Press Ltd.
- Lo, C. K., & Hew, K. F. (2017). *A Critical Review of Flipped Classroom Challenge in K-12 Education: Possible Solutions and Recommendations for Future Research*. Hongkong: University of Hongkong.
- Maharani, A., Hamamah, H., & Nurhayani, I. (2020). Indonesian Undergraduate EFL Students' Perceptions toward Flipped Classroom. *Edcomtech Jurnal Kajian Teknologi Pendidikan*, 5(1), 1-10. <https://doi.org/10.17977/um039v5i12020p001>
- McCallum, S., Schultz, J., Sellke, K., & Spartz, J. (2015). *An examination of the flipped classroom approach on college student academic involvement*. *International Journal of Teaching and Learning in Higher Education*, 27(1), 42-55.
- Nawi, N., Jawawi, R., Matzin, R., Jaidin, J. H., Shahrill, M., & Mundia, L. (2015). To flip or not to flip: The challenges and benefits of using flipped classroom in geography lessons in Brunei Darussalam. *Review of European Studies*, 7 (12), 133-145
- Nouri, J. (2016). The flipped classroom: for active, effective and increased learning – especially for low achievers. *International Journal of Educational Technology in Higher Education*, 13(1). <https://doi.org/10.1186/s41239-016-0032-z>
- Ramirez hernández, Darinka, Hinojosa, Carlos & Rodríguez, Francisco. (2014). Advantages & Disadvantages of Flipped Classroom: Stem Students' Perception. <https://doi.org/10.13140/RG.2.1.2430.8965>.

- R. Srilatha. (2018). *Flipped Classrooms: Advantages and Disadvantages*. International Journal of Interdisciplinary Research in Arts and Humanities, Volume 3, Issue 1, Page Number 307-309.
- Sugiyono. (2016). Metode penelitian kuantitatif, kualitatif, dan R&D. In *Book*. Bandung: Alfabeta.
- University of Minnesota. (2013). Flipped classroom field guide, 1–25. Retrieved from http://www.cvm.umn.edu/facstaff/prod/groups/cvm/@pub/@cvm/@facstaff/documents/content/cvm_content_454476.pdf
- Utami, S. (2017). *Pengaruh Model Pembelajaran Flipped Classroom Tipe Peer Instruction Flipped Terhadap Kemampuan Pemecahan Masalah Matematika Siswa (Unpublished master's thesis)*. Jakarta: Universitas Islam Negeri Syarif Hidayatullah.
- Yavuz, F., Faculty, N. E., Ozdemir, S., & Faculty, N. E. (2019). World Journal on Educational Technology : Current Issues Flipped classroom approach in EFL context : Some associated factors, 11(4), 238–244.
- Zainuddin, Z., Haruna, H., Li, X., Zhang, Y., & Chu, S. K. W. (2019). A systematic review of flipped classroom empirical evidence from different fields: what are the gaps and future trends? *On the Horizon*, OTH-09-2018-0027. <https://doi.org/10.1108/OTH-09-2018-0027> . [https://doi.org/10.1016/s2212-5671\(15\)01104-1](https://doi.org/10.1016/s2212-5671(15)01104-1)