LANGUE

Teachers' Perceptions Regarding the Flipped Classroom Method of Using Google Classroom During the Covid-19 Pandemic

Ezil Pawesti[1], Hadiyanto[2], Yanto[3]
Universitas Jambi. e-mail: ezilpawesti@yahoo.com

ARTICLE INFO	ABSTRACT
	This study focuses on identifying the teachers' perceptions regarding the flipped classroom method of using Google Classroom during the Covid-19 pandemic at a high school in Jambi city. Since the flipped classroom method utilizes technology to help the material delivery and teaching-learning process, then this study describes teachers' perceptions, experiences, and feelings as a participant and reveal how they apply the flipped classroom method using technology during the pandemic. This study uses qualitative methods because the analysis is in the form of descriptions, not numbers. The data were utterances containing the perception of the English teacher about the flipped classroom method, and the data source was from 2 female teachers who use this method in four classes. Some data were collected through open interviews in an observational study. The study revealed that there were some obstacles and merits to flipped classroom method of using Google classroom. In addition, researchers also suggest additional applications to assist teachers in teaching using Google Classroom to overcome ineffectiveness in providing instant feedback to students.

1. Introduction

The Coronavirus or known as Covid-19 has become a global pandemic since 2019. The massive spread of Coronavirus forces social distancing policy to minimize the space of the virus. According to UNESCO (2020), schools are closed in many countries due to a public health emergency. This policy forces all teachers in Indonesia to make the transition in the way they teach from face-to-face to online learning. So teachers should be able to adjust strategies to improve the learning process inside or outside of the classroom by using technology as the solution to help students learning in online.

This is such a challenge for the digital transformation of the education world in conducting the learning process. The existence of information and communication technology provides an opportunity to improve the quality of teaching and learning, namely with open access to find wide learning resources for students. This is the factor of a new learning orientation called student-centered learning. One of the implementations of student-centered learning itself is the existence of blended learning which is a form of learning blended between face-to-face learning and online learning. Furthermore, one of the learning models that can be applied when carrying out student-centered learning based on blended learning is the flipped classroom.

In flipped classroom implementation students' class time focuses on discussion, engaging with classroom activities, and feedback, outside the class the students have a responsibility for their learning, they form their knowledge via instructional videos and additional material (Yavuz et al., 2019). Then, Collado-Valero et al., (2021) identified significantly different improvements in the use of online digital resources under flipped classrooms, especially those related to video and audio resources providing more opportunities for students to share their learning experiences through online learning. However, teachers had to harness the best of flipped teaching and adapt it to a completely virtual context.

To facilitate the implementation of student-centered learning activities, teachers can take advantage of various LMS available, one of which is Google Classroom developed by Google and intended for the world of education. Teachers can effectively utilize classroom time by using Google Classroom on a flipped class implementation that helps the students to achieve higher-order thinking skills, so students show excellent progress both outside and in the classroom (Supiandi et al., 2019). Google Classroom has created an online learning environment as an easy and secure social network, so teachers can share content, create assignments for courses, then contact students to upload them before the due date.

The conclusion is the implementation of flipped classroom method provides a positive vibe to student learning behavior and teacher understanding of Google Classroom usage as educational technology in learning online during pandemic the Covid-19. Therefore, the professional development of teachers in digital skills is needed to prepare for future teaching activities. Since the context of this study is on teachers' environment, their experience helps them to understand the material while participating in flipped classrooms in online learning during the pandemic. For senior high school teachers in Jambi, Indonesia, online learning is still a new system for teaching. Teachers' perceptions of online learning are crucial to facilitating an effective online learning environment. Therefore, the purposes of this study are to examine: 1. Teachers' perceptions of the flipped classroom method of using Google Classroom. 2. How the teacher implement flipped classroom approaches in Google Classroom.

Theoretically, this study is expected to contribute to adding references for the teacher who wants to implement the flipped classroom for teaching English and using e-learning as a learning media in first high education. Thus, the implementation of flipped classrooms will affect students in receiving the lesson. Practically, the results of the study can be a reference to other teachers who have the same interest in researching the use of Google Classroom in flipped learning.

2. Literature Review
2.1 Definition and Concept Flipped Classroom

The flipped classroom is defined as a class that is reversed. The concept of the flipped classroom itself is what is generally done in the classroom is now done at home and what is done at home is now done in class. It is also known as a student-centered approach to learning where the students are more active than the teacher in the classroom activity. In this case, the teacher acts as a facilitator to motivate, guide, and give feedback on students' performance (Bergmann & Sams, 2012).

Flipped Classroom allows students to focus on activities that enhance higher-order thinking skills. It is based on the fact that students have different independence in learning activities. The flipped classroom is instructed and represents a modification from passive to

active learning to focus on higher thinking skills such as applying, analyzing, evaluating, and creating (learning objectives of Bloom's revised taxonomy). There are six stages of learning level in Bloom's revised taxonomy which are remembering, understanding, applying, analyzing, evaluating, and creating.

To give the students preparation, teachers can give the students more time for integrating and applying their knowledge, and a variety of student-centered, active learning strategies such as conducting research or working on projects with classmates. Teachers also can use class time to check on each student's understanding and, if necessary, the teacher can help them to develop their fluency. Teachers can give individual feedback and individual support for students' work through the activities designed to help them master the material.

2.2 The Implementation of Flipped Classroom Approach

Armier and Wang (2021) said to consider the following flow activities you want students to do in your flipped classroom: BEFORE class → DURING class → AFTER class. When the flipped classroom approach is appropriately implemented, students can perform better due to higher intrinsic motivation. There are 4 steps in flipping a classroom according to Amanda Athuraliya (2022): (1) Introducing the task, (2) Selecting learning materials, (3) Evaluating what students have learned, and (4) Conducting in-class activities: Individual activities or group activities.

2.3 Effectivity in Google Classroom

The study conducted by Nadziroh (2017) regarding the Analysis of E-Learning Effectiveness states that Google classroom is an e-learning platform that has been used massively by students. E-learning effectively improves the learning process. However, the unavailability of virtual interface meetings, connection stability, and good training in using this platform is a challenge and a need to implement this platform in Indonesia. This is due to a lack of direct feedback, followed by unstable connections in various countries, and teachers and students still don't know how to operate the e-learning platform.

2.4 Flipped Learning Method Using Google Classroom

The Google Classroom application is a tool for teachers that helps manage tasks, create assignments, and mark grades. Students can check whether the work is completed as scheduled or not and can express comments. The benefits of using the Google Classroom for blended learning organization are as follows: real-time interaction of real-time learning subjects, which is particularly valuable if the volume of independent work is increased; the presence of constant pedagogical support and ensuring the integrity of both in-class and out-of-class work; increasing the visual aids in learning; development of critical thinking (Bondarenko et al., 2019).

3. Research Methodology
3.1 Research design and participants

In this study, the design of this study is qualitative by using interviews. The qualitative descriptive method was employed by involving English teachers in senior high school to be interviewed with open-ended questions, also to describe their perceptions based on their experience.

The participants are English teachers at one of the Senior High schools in Kota Jambi. The semi-structured interviews were conducted with two teachers from one school who have taught English experience through flipped classroom method by using Google Classroom during the Covid-19 pandemic for four classes at a senior high school. The participants were coded as Teacher #1 and Teacher #2 to maintain participant anonymity. In this study, the researcher used the purposive sampling technique in selecting the participants. So, the criteria that the researcher takes for the participants are that they already used this method in online learning using Google Classroom during the Covid-19 pandemic and are willing to participate in this research.

3.2 Data collection and analysis

The data were collected through interviews conducted with two teachers according to a semi-structured and detailed format using open-ended questions. Semi-structured interviews address what is important to participants and provide participants with more space to control the introduction and flow of topics (Adams, 2015). Before the interview, participants were given a consent form for research purposes and attached to permission approval from the school authorities. After obtaining approval, the interviews were scheduled at their convenience and conducted approximately within 25-30 minutes. Interviews were conducted in Bahasa and recorded using a mobile application. At the end of the interview, the researcher informed the teacher that may be scheduled a follow-up interview for clarification.

After data were collected, the researcher analyzed them by using thematic analysis. There are six steps covered in thematic analysis: (1) After completing data collection, the researcher may need to transcribe their data into written form (e.g. audio-recorded data such as interviews), (2) Create initial codes to make the constructs easy to be found and recognized, (3) Analyze themes in the interview transcript by using initial codes, (4) Reviewing the themes against the coded data, (5) Defining and refining existing themes presented in the final analysis assists the researcher in analyzing the data within each theme, and (6) After the final themes have been reviewed, the researcher begins the process of writing the final report.

3.3 Trustworthiness

The researcher conducted a member checking of the interviewee to ask if they want to clarify their response or check the accuracy of the interview that has been conducted.

4. Findings and Discussion

The researcher categorized the data based on the teacher's answers in the interview section related to the flipped-class method implementation study. In this study, there are two big themes, such as the teacher's perception and implementation. Then, in the first theme, the teachers' perceptions have two sub-themes: (1) Obstacles and (2) Merits. Afterward, the second significant theme is the implementation of flipped classroom approaches in Google Classroom has three sub-themes: (1) Prepare, (2) Practice, and (3) Process.

4.1 Teachers' perceptions of the flipped classroom method by using Google Classroom

The findings revealed that the teachers were likelier to have positive perceptions of the method for use in their classroom taught English using Google Classroom as the primary content delivery method. Some noted benefits include student responsibility for the content,

easy makeup for students' or teachers' absences, and teacher guidance during learning application.

Contrary, there were obstacles emerged when participants use this method. The most prominent obstacle in implementing the flipped classroom method is when it was carried out during a pandemic as online learning, thus making it less effective. However, this constraint is not the only reason that this method is less effective. Another reason is also related to the teacher's understanding of the application of the flipped classroom method. This is in line with other findings in this study.

- ***Obstacles to flipped classroom method by using Google Classroom***

With every success, there are many obstacles to be faced in the pandemic of covid-19. Studies in this area have shown that different types of challenges can hinder their success if not overcome. This is in line with the obstacles that can be classified into internal and external. Internal ones involve attitudes, beliefs, and tendencies of teachers that make it difficult to adopt innovative practices in the classroom. It is in line with the participant's statement in the result of the interview:

Teacher #2

The challenge was students should not do face-to-face learning in school, meaning that in-person meetings with students did not exist. So we as teachers had to think hard to see the feedback that exists from the flipped classroom method that we had given. Teachers had shared materials and tasks, but we could not see the feedback in person because there was no face-to-face meeting.

On the other hand, external barriers include the lack of an appropriate way to prove the accuracy of student achievement results in terms of understanding during online learning, which may be the main cause of teacher reluctance to rarely use technology in teaching and learning process. For some, this justification is acceptable and logical, as there is no solution yet that can control these external barriers. It is shown in the following data:

Teacher #1

... Unfortunately, since I only used Google Classroom, their achievement scores couldn't make me really sure if they were doing the task themselves, whether their understanding was getting there, or who was progressing well because in English lessons it's easy to figure out who can speak or who can't. It was really hard to be predicted.

Obstacles can also be classified into student-related and instrument-related. The critical student-related obstacles were students' conventional views of the difficulty in adapting to learning with flipped classroom method but done completely in online learning. More time spent at home, and the inability to do direct discussions or ask questions during video lectures, also reduced students' interest in the flipped classroom method of using Google Classroom and makes them careless about collecting assignments on time. This is shown in the interview result from the participant below:

Teacher #1

Usually, if the material was a bit difficult then I give it a week to collect, but if it was not so difficult, it just needs 24 hours or until midnight. The tasks given were usually multiple choices. But even then there were still many too late. Again like I said before, it is hard to do teaching and learn during the pandemic.

After that, obstacles regarding instruments could relate to their misunderstanding of the managing flipped classroom method and the lack of another app to support the process of this method. Since Google classroom they couldn't do face-to-face discussions, therefore the feedback on the material which was shared in Google Classroom was only limited to leaving comments on the chat board.

Teacher #1

... if it was purely using Google Classroom, that was the problem, but if it was combined with other applications, it might be more effective.

Teacher #2
I think it would be effective if it was combined with the Zoom app. The material could be shared in Google Classroom, and then the discussion was done through the Zoom app. So the flipped classroom method would be run well. Unfortunately, I didn't use Zoom at all during this online learning.

Bergmann and Sams (2012) pointed out that discipline issues could be better managed in a flipped classroom because the teacher is not wrapped up in delivering a lecture to the class. Meanwhile, other obstacles arose because the application of the flipped classroom method was not optimal, it looked a little tricky when the process of this method only relied on Google Classroom since there would not be many active interactions from students as the teacher expected. Interestingly, teachers in this study did not see improved student discipline in a flipped classroom, especially when the teachers perceived a decrease in student-to-teacher interaction in the flipped classroom. These obstacles regarding instruments could relate to their misunderstanding of managing the flipped classroom method and the lack of another app to support the process of this method. Based on the explanation above, this method is not related to the Taxonomy of Bloom (1969), where students are expected to be able to recognize and recall the information they receive; they also try to understand the basic concepts and principles of the content they have learned, and students also cannot demonstrate their understanding, interpret the information, and summarize what they have learned because the application is a limited feature.

- ***Merits in flipped classroom method by using Google Classroom***

Google Classroom allows the delivery of teaching materials in the form of video tutorials. According to Hidayat et al., (2019); Stiglitz (2016) says YouTube has a video-sharing site pre-linked in Google Classroom, Google forms is a tool for creating questionnaires and exams to sync, Google Calendar supports agenda and activity planning, and Gmail acts as the main entry point for all Google tools. In this way, all class time is fully devoted to discussion, and doing quizzes or hands-on exercises. This is evidenced by the participant's statement:

Teacher #1
On the teacher's side, it felt more structured when using Google Classroom. Since by using it on one laptop, attendance and values could be summarized there, so it was not scattered. Then, the uploaded material was well organized, making it easier to teach it.

Teacher #2
There are so many benefits. Compared to the application I mentioned earlier, Google Classroom is managed better because the material will not disappear. There are many parts of the room inside, such as some for interaction forums, some specifically for assignments, and some for quizzes. Even if there are other materials, it is very easy for us to attach them to Google Classroom. It is like we do an exam using Google form, then it can also be attached there.

Through videos, students can learn at home what their instructor would explain in class using conventional teaching. In the classroom, students carry out activities and practice what they have learned at home dynamically and interactively by itself changing the role of the teacher to become a guide and supervisor. The flipped classroom method through Google classroom allows all students to receive the same learning content, regardless of the constraints. This is shown in the interview result from the participant below:

Teacher #2

... have any classes at the same level, was faster to teach because it can be all at once. Therefore, I think it was more helpful for teachers than just using Zoom which can only be done for one class at a time.

One important merit is that it helps teachers deliver learning content to students before they come to class and interact actively with them using a series of activities related to the lesson content. Through Google Classroom, this method is considered easier for teachers because it can be uploaded at once for all classes at the same level. It is also very efficient because teachers can save their and students' time. According to Garrison and Kanuka (2004), the blended learning approach is a combination of face-to-face learning and online experiences, combining synchronous (classroom) and asynchronous (text-based) learning, integration between intentional, effective learning and the implementation of innovative designs that can support learning and deep meaning.

4.2 Implementation of flipped classroom approaches in Google Classroom

From the interview results, implementing the flipped classroom approach using Google Classroom during the Covid-19 pandemic shows activities out-class (prepare and process) and in-class (practice) that also has been done as online classes. The following describes the steps, how they provide instruction and how they interact with the flipped classroom approach through Google classroom.

- *Prepare*

To apply the flipped classroom approach during the Covid-19 pandemic, there are several modifications that the teacher must make. Firstly, teachers need to choose other media to use, namely Google classroom. This was expressed by the participants below:

Teacher #1

I purely used Google Classroom and that's been the case since online learning during this pandemic.

Teacher #2

Most only use Google Classroom, because there was never face-to-face learning in school, so almost all materials had to use google classroom ...

Before starting the class, the teacher prepares teaching materials for the flipped classroom approach so that it can be implemented accordingly. They usually take videos as material from the internet or youtube. Some teachers prepare to teach materials based on the syllabus, then proceed to the lesson plans used in Google Classroom. They also give deadlines for providing materials depending on the level of difficulty. This is supported by the statement below:

Teacher #1

In mine, I usually take the material from youtube. For example, if there is a lesson about narrative, you may search on youtube about narrative for eleventh grade, and later appears all materials about it up to its listening activities. So, I downloaded it there. Meanwhile, for the student understanding section, I looked for written documents or materials. So besides videos, there were also documents

Teacher #2

It all started from the syllabus, then went to the lesson plan. Maybe a little different was the lesson plan used on Google Classroom. It was even more simple because short and dense. Well, the lesson plan that I would explore, is usually the materials got through browsing the internet.

The next finding is to give instructions for students to do before class activities, so teaching and learning content is delivered to students easily. Direct instruction is used in teaching certain concepts and then videos can be employed to foster and practice the concepts learned. It is all shown in the interview result below:

Teacher #1

... the instruction was like "Please watch the video and comprehend it". Then I asked students to make a summary.

Teacher #2

The instructions were usually simple, with a brief explanation of the material. Then there would be instructions on what students should do, such as "Read this material" or "Please watch the following video". Very short and dense.

- *Practice*

In implementing the flipped class approach using Google classroom, during in-class activities the teacher and students should have active interactions such as group discussions, presentations, or questions and answers about the material. As stated in the interview results:

Teacher #1

Unfortunately, interactions hardly occurred. Unless we interacted about tasks or materials. There is a comment field in Google Classroom, and if routinely I checked the task, sometimes there were students who write the comment "Sorry ma'am for collecting assignments late" or "Ma'am this part seems to blah blah blah...". Nevertheless, I only found one or two students who were willing to interact like that ...

Teacher #2

The interaction was a bit difficult, mainly due to time constraints. Meanwhile, there did need to be a discussion, but not all materials can be done like that. Sometimes they had problems with the material in Google Classroom but asked me through the WA app.

Learning activities in the flipped classroom are focused on increasing collaboration and interaction between students, peers, and teachers. Flipped classrooms which are conducted virtually only through Google classroom create discussions or question-and-answer sessions, and also giving questions in the form of quizzes is not done directly, so it is difficult for two-way interaction. As mentioned below:

Teacher #1

... The tasks given were usually multiple choices. But even then there were still many too late to do. Again like I said before, it is hard to do teaching and learn during the pandemic.

Teacher #2

Meanwhile, in Google Classroom there was a comments field indeed, and it was used. But maybe because the instructions were clear enough so students used them rarely. Sometimes they had problems with the material in Google Classroom but asked me through the WA app.

- *Process*

Most of the class time is allocated to students' practical skills or applying the knowledge learned in doing assignments and then evaluating it, so the teacher must always provide feedback to students. teachers must be skilled in providing feedback for future evaluation and improvement of learning depending on their observations of student work and interactions in the google classroom. Unfortunately, it doesn't work as expected. No face-to-face learning can give them immediate feedback, as mentioned below:

Teacher #1

To be honest, it was not the students' fault completely, I also took part in it. Since tasks uploaded in Google Classroom were already set there, so I did not check at the beginning of the time after the tasks were collected, even sometimes in the middle of time. Therefore tasks had accumulated, and I had just checked them. Ideally, if an assignment is given this week, it has to be checked and commented on immediately by the teacher. Then, the feedback will not be too delayed.

Teacher #2

Teachers had shared materials and tasks, but we could not see the feedback in person because there was no face-to-face meeting.

The comments section in Google Classroom can not solve it for instant feedback. In implementing the flipped classroom approach from Google classroom, teachers should choose affordable or free authoring apps to create interactive course content such as videos

or there should be other applications for providing verbal or direct feedback to each student about their performance. This was stated by the two participants:

Teacher #1

If it was purely using Google Classroom, that was the problem, but if it was combined with other applications, it might be more effective.

Teacher #2

We were advised there should be one meeting in one semester with students even though it was online, so it could be using the Zoom app. I had chosen, at least once a semester to use the Zoom app during this pandemic.

Teachers need to hold students accountable for their own progress. There must be discipline in access and use of materials, and timely submission of assignments as well. This helps the teacher to know how well the students have understood the material before the actual class activity. So that the teacher can assess the assignments given to students objectively. The following can be seen from the following interview results:

Teacher #1

The actual evaluation could be done through a given task. So the evaluation was no problem without a single exam as long as the task was still being done. For example, the material is about listening, so in the video, there are already listening tasks. If it is done seriously, it also can be adjusted how far they understand ...

Teacher #2

I could not measure whether the ability of these students had been maximal or not because all the evaluations were done remotely. So far, exams and repetitions carried out using Google forms, Alhamdulillah had varied grades from low, medium, and high, although few did get high scores. So I assumed the evaluation was correct. But again, it depended on the students' honesty.

Judging from its findings, 3 important points emerge, namely about prepare (before class), practice (during class), and process (after class). In the implementation of the flipped classroom approach during the Covid-19 pandemic, there are several modifications that teachers had to make. Where teachers need additional media, namely Google classroom. According to Bajunury (2014), this can be categorized as a partially flipped classroom.

Based on the theory in the literature review, it is stated that there are several things that the teacher does before class in implementing the flipped classroom approach, it is called 'prepare'. According to Athuraliya (2022), the goal of the very first step is to increase student participation and prepare them for activities that they will do online and in class during flipped classroom sessions. Therefore, some participants prepared teaching materials based on the syllabus, then continued with lesson plans used in Google Classroom. They select videos as material to upload to Google Classroom, then the teacher makes instructions for students to study the material at home using Google Classroom.

In the findings of the interview results, during class activities or called by practice, it is known that the interaction that occurs is very minimal. If there are questions and answers regarding the material being discussed, students rarely do it in Google Classroom. They sometimes interact directly with teachers via Whatsapp.

This is also not in line with Armier and Wang (2021), who said that activities during class are carried out in real-time. Meanwhile, teachers admitted that they did not check at the beginning after the tasks were submitted, sometimes even in the middle of time. Hence, the tasks pile up. Ideally, it should be immediately checked and commented on by the teacher. Then, the interaction will be less delayed.

The flipped class method should allow them to get step-by-step feedback along the way and make necessary adjustments before final submission. This is might the only thing that covered one of the six Bloom Taxonomy levels (1969). That is evaluating and creating,

where the student had feedback to assess their achievement and make a judgment on how far they successfully learned.

In addition, teachers must be experts in how feedback is provided for future instruction evaluation and improvement depending on their observation of the student's work and interaction inside the google classroom. Depending on the teacher's understanding of the main requirements of flipped classroom method, they can employ the flipped classroom method as a new teaching method as it should be.

5. Conclusion and Recommendations

This study shows that the nature of flipping the class is perceived more positively by teachers who usually use lectures as the main means of delivering material. Meanwhile, teachers with a more interactive and discussion-oriented way of delivering material consider this method to be familiar to them. Both participants mentioned that teachers' beliefs significantly influenced the methods teachers used and the technology teachers used in their classes. Research that mentions the need for a shift in the teacher's role by giving more responsibility to students for more independent learning tends to perceive this method positively for their class even though it needs further improvement in several aspects. Like, using an additional application to make an approach to this method easier.

One of the difficulties of the flipped classroom method in this study is the limitation of students to get direct feedback on their work after completing it in class, which is under the supervision of a teacher. Some of the concerns about using the flipped classroom method using Google Classroom during the Covid-19 pandemic expressed by teachers in this study have been addressed by researchers in previous research because of the built-in support and accountability, including instant feedback mechanisms, interactive quizzes, and worksheets. If this technique is used with proper design, including built-in support, some of the initial concerns of the teachers interviewed for this study can be allayed.

From this study, some suggestions can be drawn to improve implementation for further research. First, teachers must be given the choice to use various online apps to support the learning process with the flipped classroom method so that activities are not limited to giving and collecting written assignments. Second, using the flipped classroom mastery model (Bergmann & Sams, 2012) can allow students to learn through the material and master course objectives at their own pace. The flipped classroom method mastery model is a combination of the flipped classroom method and mastery learning: students can master the various course objectives at their own pace at a later time and are given a formative assessment for self-examination along with a summative assessment at the end. Last but not least, the platforms chosen for uploading pre-viewing materials should have a function of checking the views: checking students' notes, requiring every student to ask at least one question related to the materials, and doing the self-check quizzes. There needed mechanisms to monitor students' self-study hours with the materials before class.

References

Armier, David. D., & Wang, S. (2021). *Flipped Classroom Method*. University of Connecticut. Flipped Classroom Methods | Knowledge Base (uconn.edu).

Athuraliya, A. (2022). A Comprehensive Guide to 'The Flipped Classroom'. What is a Flipped Classroom | The Complete Guide with Tools and Tips (creately.com).

Bergmann, J., & Sams, A. (2012). Flip Your Classroom: Reach Every Student in Every Class Every Day. *Washington, DC: International Society for Technology in Education.*

Bloom, B. S. (1969). Taxonomy of Educational Objectives: The Classification of Educational Goals. *Handbook 1. David McKay Company, Inc*.

Collado-Valero, J., Rodriguez-Infante, G., Romero-Gonzalez, M., Gamboa-Ternero, S., Navarro-Soria, I., & Lavigne-Cervan, R. (2021). Flipped Classroom: An Active Methodology for Sustainable Learning in Higher Education During Social Distancing due to COVID-19. *Sustainability* 2021; 13(10):5336. https://doi.org/10.3390/su13105336.

Garrison, D. R., & Kanuka, H. (2004). Blended Learning: Uncovering Its Transformative Potential in Higher Education. *The Internet and Higher Education,* 7(2), 95–105. https://doi.org/10.1016/j.iheduc.2004.02.001.

Hidayat, M. L., Prasetiyo, W. H., & Wantoro, J. (2019). Pre-Service Student Teachers' Perception of Using Google Classroom in A Blended Course. *Humanities & Social Sciences Reviews,* 7(2), 363-368. https://doi.org/10.18510/hssr.2019.7242.

Supiandi, U., Sari, S., & Subarkah, C. Z. (2019). Enhancing Students Higher Order Thinking Skill through Instagram-based Flipped Classroom Learning Model. *Advances in Social Science, Education and Humanities Research*, 253. https://doi.org/10.2991/AES-18.2019.55.

Stiglitz, J. (2016). Google Apps in Classrooms and Schools.

UNESCO. (2020). School Closures Caused by Coronavirus (Covid-19). https://en.unesco.org/covid19/educationresponse.

Yavuz, F., Faculty, N. E., & Ozdemir, S. (2019). Flipped Classroom Approach in EFL Context : Some Associated Factors. *World Journal on Educational Technology : Current Issues,* 11(4), 238–244. https://doi.org/10.18844/wjet.v11i4.4296.