The Implementation Of Flipped Classroom In Promoting Students' Learning Autonomy In A Call Class

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Abstract. This research aims at investigating the implementation of a flipped classroom in CALL class and how it can improve students' learning autonomy. This research is a case study. The data gathering techniques used in this study were interviews, observations, and questionnaires, and it employed a descriptive analysis technique. The result showed that the flipped classroom in CALL class divided into two main categories, namely inside and outside class activities. The study also revealed that flipped classroom promoted students' learning autonomy in six aspects, namely helping the students determine their learning objectives, define the content and progression, select the methods and techniques to be used, monitor the procedure of their learning strategy, evaluate what they had acquired, and prepare themselves to become teachers.

Keywords: students' learning autonomy, CALL class, flipped classroom

1. INTRODUCTION

In the digital era, the use of technology has influenced many aspects of life, including education. The interactions that happen between one and another connected by devices such as Personal Computers, laptops, or smartphones. According to Kumar and Vigil, the millennial or net generation often uses technology to support their daily life, including their needs for education(Kumar & Vigil, 2011). Therefore, students nowadays need to learn something closely related to their life. Thus, in a classroom activity, a learning method that integrated with technology is also required to support the learning activities.

Moreover, in this 21st century, students are expected to gain 21st-century skills, which result in the mastery of 4C skills, namely creativity, collaboration, critical thinking, and communication skills. This 21st-century learning has the purpose of improving student outcomes called learner-centered education. Hence, one learning model that utilizes technology and integrates learner-centered strategy is the flipped classroom model.

The flipped classroom was invented by two science teachers Jon Bergmann and Aaron Sams, in 2008 (Bergmann & Sams, 2012). The flipped classroom is a learning model that inverts the common traditional teaching where the teacher usually starts to explain the material in the classroom. In the flipped classroom, students are given material as the preparation for the next class, so in the class time, they may focus on the activities, explore deeper the material, and make active learning based on teacher's guidance (Slomanson, 2014). Thus, this learning model gives the students the ability to be responsible for their learning to achieve their goals. Moreover, the capability of taking charge of one's learning leads the students to become autonomous learners.

The autonomous learner is capable of setting their own decisions about their learning. Learning autonomy itself is the ability to manage and choose their learning. Based on (Horváthová 2016)) students feel more comfortable in their learning when they are involved in making decisions about it. In other words, the teacher should encourage the students to be active in making decisions about their learning.

Furthermore, to improve the learning quality, Sanata Dharma University has developed a moodle-based learning management system (LMS) which is called Exelsa that can access
through [http://exelsa2012.usd.ac.id/](http://exelsa2012.usd.ac.id/). By using Exelsa, it expected that students would be responsible for their learning and also assignments because they can access it wherever and whenever they want as long as they connected to the internet. Does this research have a purpose that is to acknowledge the answer from these two research questions, namely (1) How is flipped classroom implemented in CALL class? And (2) To what extent flipped classroom promotes students' learning autonomy in CALL class? This research conducted in Computer Assisted Language Learning (CALL) class, which implemented a flipped classroom as the learning model. The students who were taking this course were ELESP students of Sanata Dharma University. They were in the fifth semester of 2018/2019 of the academic year.

Based on the problems mentioned above, the researcher wanted to know how the implementation of the flipped classroom in CALL class in promoting students' learning autonomy. Therefore, this literature review will discuss some related theories used in this research. The theory of the flipped classroom will explain first. The following discussion will include the theories about learning autonomy in language learning and the level of autonomous learner skills.

### 1.1 Flipped Classroom

The flipped classroom is a learning model when a teacher provides the material and asks the students to access and learn it before they are coming to class (Bergmann & Sams, 2012). Likewise, (Chen et al., 2017) state that a flipped classroom refers to an approach that reverses the role of classroom activities and homework. In the flipped classroom, the students obtain new knowledge at home by learning the material themselves and practice it in class when the teacher can monitor and give a correction to them. The activity in a flipped classroom model can break down into three parts, they are the activity before, during, and after class. The students are given homework, reading assignments, projects, or journal before the class meeting to develop their learning understanding first. It means that the students are given homework as their preparation for class, so in the classroom activity, they can spend active learning under the guidance of the teacher (Roach, 2014). By doing the self-study, students will obtain knowledge by *problem-first learning*, which requires the students to encounter a problem first in a learning process so they can achieve an understanding of the material (Gwee, 2009). Hence, in the flipped classroom class, the students will use the class time to discuss the material more in-depth by having a questions and answers section with the teacher, doing peer or group activity, or having a presentation about the material instead of spending the entire class time watching and listening to the teacher (Roach, 2014).

The research was done by Mega Wulandari conducted to find out the implementation of the flipped classroom model in the Language Teaching Media course and how it is perceived (Wulandari, 2017). Wulandari believes that flipped classrooms can be effectively used in the Language Teaching Media course since it can foster students' autonomous learning skills. She also argued that the flipped classroom model can drill students' ability to be independent and foster them always to develop, improve, and renew their knowledge (Wulandari, 2017). Wulandari also mentioned that students in the flipped classroom model could identify the learning needs, arrange the place and time to do the task independently, and they can preview the materials.

Furthermore, the flipped classroom model can help the students to be actively involved in the classroom learning activity. The students had learned the material before coming to class. So, in the classroom, they had a problem-solving activity that helped them to improve their understanding of the concepts. Moreover, because this flipped classroom model asks students to learn independently, it sharpened students' critical thinking whenever they
encountered some problems or questions related to the material. Wulandari also stated that students could do an independent evaluation by learning from others and the feedback given by the lecturer and friends (Wulandari, 2017).

1.2 Learning Autonomy in Language Learning

Learning autonomy means the learner is responsible for all the decisions that he makes for their learning and the implementation of his choice (Benson, 2007). According to Little (1991), as cited by ÇAKICI in, autonomy is an independent action that covers a decision-making process and a critical reflection of the decision made (ÇAKICI, 2015a). Therefore, students’ learning autonomy can identify when the learner is involved in his learning process and take a big responsibility for it (ÇAKICI, 2015a). Autonomous learners are those who have the consideration to choose the appropriate and best technique for their learning (Nematipour, 2012). Being an autonomous learner means taking charge of his learning, including planning, selecting the materials, monitoring his learning progress, and doing self-assessment of the learning process (Benson, 2007).

According to Holec (1981, as cited in Benson, 2007), there are five characteristics of an autonomous learner including determining the objective, defining the contents and progressions, selecting the appropriate methods and techniques to be used, monitoring the procedure of the learning strategy, and evaluating what have acquired. Determining the learning objective means the students should have a good understanding of the material. Therefore, the teacher should ensure that their students know the purposes of material and understand how those objectives will assess and whether they are on the right path to achieve the goals (Tai et al., 2018). Defining the content and progression means the students can formulate their learning objectives (Dickinson, 1993 as cited in B. In collaboration with the teacher, they can express their own learning goals (ÇAKICI, 2015).

Moreover, selecting the method and techniques to be used means the students can choose and apply appropriate learning strategies (Dickinson, 1993 as cited in Hobrom et al., 2006). Monitoring the procedure of the learning strategy means the students can monitor their use of policy (Dickinson, 1993 as cited in Hobrom et al., 2006). On the other hand, students are becoming more autonomous by taking control of the learning situation (Hobrom et al., 2006). Evaluating what have acquired means the students can do self-assessment or evaluating their learning (Dickinson, 1993 as cited in Hobrom et al., 2006). Moreover, Hobrom et al. said that students might have a reflection on their learning by thinking about the progress that they made, give a self-direction to motivate themselves, and develop their skills by obtaining new skills enhancing the previous skills (Hobrom et al., 2006).

1.3 The Levels of Autonomous Learners' Skill

Ndosi (2013) In implementing the autonomous model of language learning, the learners are briefly introduced by five levels of autonomous language learning by Nunan, namely awareness, involvement, intervention, creation, and transcendence (Nunan, 2014). The awareness level means students' sensitivity to learning some tasks and types of strategies (Liu & Qi, 2017). This level aims to raise students' awareness of the goals of the material, the contents, and the learning strategies (Sella, 2014). Moreover, the involvement level indicates that students can be more involved in the selection of tasks and methods to be used in the learning process (Liu & Qi, 2017). The third level is an intervention. Intervention refers to the teacher's role in learning facilitator and task negotiator (Liu & Qi, 2017). By this level, the students involved in modifying the materials for their own needs (Borg & Al-Busaidi, 2012). The fourth level of autonomous learners' skills by Nunan is creation.
(Nunan, 2014). The 'creation' means that the student is the inventor and creator for his learning objectives (Horváthová, 2016). Ndosi stated that by this level, students could create their learning tasks (Ndosi, 2013). The fifth level is transcendence. At this level, the students would connect the content of the material with the application in daily life, and they become teachers and researchers (Benson, 2007).

2. METHOD

This research aims to examine how a flipped classroom implemented in CALL class and how it improves students' learning autonomy. The researcher used descriptive qualitative research to answer the research questions. The participants of this research were thirty Computer Assisted Language Learning (CALL) students and the CALL lecturer of class B academic year 2018/2019. To answer the two research questions, the researcher uses three instruments, namely observation, in-depth interviews, and questionnaires. The researcher intended to focus on the flipped classroom activity done by the students and how it improves their learning autonomy. The observation conducted to gather information about the learning process, specifically the implementation of flipped classrooms in CALL class. The next instrument is an in-depth interview. The purpose of having this in-depth interview is to gather complete and accurate data from students' perspectives about the implementation of flipped classrooms in promoting their learning autonomy. The last instrument is a questionnaire. In this research, the researcher used the closed-ended questionnaire items. Closed-ended items require the respondents to choose or select their answer(s) based on the list that has been provided by the researcher (Heigham & Croker, 2009). The questionnaire uses a Likert scale, which has a range from 1 to 4. All statements and questions were developed based on three theories. The first theory is the implementation of the flipped classroom (Bergmann & Sams, 2012), the second and the third theory are about the autonomous learner skills (Dickinson, 1993; Holec, 1979).

Furthermore, to analyze the observation result, the researcher interpreted the processes and interactions that happened in the classroom where the lecturer implemented the flipped classroom model. However, to explain the result of the interview, first, the researcher made a transcription of the interview answers. In the second step, the researcher did coding in the transcript. Third, the researcher reduced information that was not related to the research intention. The last, the researcher compared the data with some theories related to flipped classroom and students' learning autonomy. Moreover, for the questionnaire, the researcher analyzed the data by finding the mean. The mean used to find out the average score for each item in the questionnaire to represent the entire data with a single value. The mean or average formula used to calculate the data from the questionnaire described as follows:

\[
\bar{x} = \frac{\sum x}{n}
\]

Where:
- \(\sum x\) = the summation of the scores
- \(n\) = the number of samples

The researcher also provided the score of each item to determine whether the mean result of each item categorized as high or low score responses.

| No. | Score Range | Scale Range |
|-----|-------------|-------------|
| 1.  | 1 – 2       | Low         |
| 2.  | 2.1 – 3     | Moderate    |
| 3.  | 3.1 – 4     | High        |
4. **Very high**

By comparing the data, the researcher was able to know whether there were improvements in students’ learning autonomy after they implemented the flipped classroom as a method in CALL class.

3. **RESULT**

3.1 **The Procedure of Flipped Classroom Activities in CALL Class**

A flipped classroom is one of the learning models for active student learning (Karlsson & Janson, 2016). So, in the flipped classroom model, students became more productive, and the teacher becomes the facilitator. It also supported by the statement of the lecturer in the interview:

*I choose a flipped classroom as a learning model in CALL because it integrates technology. The flipped classroom is very suitable for the nature of the course of CALL class itself. The lecturing activity is less than the practice. So, I use the flipped classroom to expose the students to practice more than memorizing the theory.*

The statement indicated that a flipped classroom is one of the learning models that applies an active learning process and a learner-centered paradigm (Roehl et al., 2013). In the class, the lecturer wanted to introduce the students who were pre-service teacher candidates with a variety of applications that could be used and applied when they became teachers in the future. Therefore, the lecturer decided to use the flipped classroom as the learning model because she believed that this model was very suitable for the nature of the course, where it dealt with the underlying principles of the use of technology in the language classroom. Moreover, the flipped classroom itself also integrated technology in its implementation. The flipped learning model itself emphasized the activeness and independence of the students’ learning. Hence, students played a full role in the classroom while the teacher becomes a facilitator in the classroom.

On the other hand, the flipped classroom forced the students to participate actively in the learning process. Furthermore, the flipped classroom has a procedure that can be done outside and inside the classroom. Based on Demirel, the method is planning the material before the class, giving the content to the students before class, doing the activities in the class, and reviewing the material provided (Demirel, 2016).

3.2 **Outside Class Activity**

The outside class activity happened when the lecturer uploaded the materials on the Exelsa so the students could access and download the materials. From the gained data, it meant that the lecturer prepared the documents before the class. So, in the classroom, the students have an active learning process under the guidance of the lecturer (Roach, 2014). The materials itself were journals about various kinds of application and their uses. The students had to read the chronicles before the class started to prepare themselves to participate in the class. The journals that had given later will use as their references during the presentation. In groups, the students must present the theories contained in the journals.

3.3 **Inside Class Activity**

3.3.1 **Grouping**
Based on the interview in the CALL class, the class divided into several groups. A social strategy that required the students to cooperate with others (Oxford, 2003). Each group consisted of four people. One group was in charge of one material in the form of a journal that would present in the presentation and workshop. The lecturer also had decided on the date for the group presentation and workshop. Hence, before the class meeting, the group which was in charge of doing the presentation or workshop had to prepare themselves by reading the journal given and developing the activities that they would do in the classroom. It expected that the group could be the “expert group,” which could help the audience to understand the given journal so everyone in the class could learn the material better with peer discussion.

3.3.2 Grouping Presentation

After the group had formed, the lecturer decided the material for each group, the group in charge presented the journal given along with the concept that they had learned. Each group must be responsible for the content that they had explained, and they must ensure that the audience understood the material that they had conveyed. In the presentation, each group explained more theories about the applications that would be used later at the workshop. The methods that must describe in the introduction took from the journal that had been given by the lecturer. Apart from the journal, the students also have to find other sources to support the presentation. During the performance, a question and answer session also held to help the students who had difficulty understanding the journal.

3.3.3 Quiz

Based on Karlsson & Janson, the activities that should finish in a flipped classroom class must be able to clarify any understanding that the students got from the preparation (Karlsson & Janson, 2016). In this CALL class, the lecturer gave quizzes after group presentations to ensure the students’ understanding of the material that had presented and to assess whether the audience had read the journal before the class began or not. After the presentation finished, the presenter asked to return to their seats because the quiz was given for both presenters and audience. The grade itself would be added to their individual points.

3.3.4 Group Workshop

In the group workshop, the presenters who had explained the journal in the group presentation would demonstrate how to use specific applications, for instance, Edmodo, Piktochart, and LyricsTraining. The presenters guided the audience to operate the app and make an English learning material with the application. The presenters should explain the steps of how to use the app and also should show the example of the content created from the app. Since this CALL class located in the “Multimedia” I Laboratory, which has 32 PC units, all the audience had the chance to apply the application that they learned. After all the audience had done with their materials, they had to upload it on the Exelsa to assess. It expected that the audience could maximize the use of some applications to make good English learning material when they became teachers in the future.

3.3.5 Evaluation and Feedback

After all of the activities had been done, both presenters and the audience got some feedback from the lecturer. The evaluation and feedback aimed to tell the students what should be corrected and improved, so they did not only learn the materials based on their understanding but also learn the material from the lecturer’s perspective since the lecturer became the facilitator in the classroom. The feedback was given in both written and oral. The lecturer gave a rubric assessment for the written feedback. The rubric itself consisted
of the good points of the group and some suggestions of what should be improved. Moreover, the audience could also give some feedback and recommendations to the presenter orally after the presenter done the presentation or workshop.

3.4 The Benefits of Implementing Flipped Classroom in CALL Class

3.4.1 Expose the Material to the Students

Flipped classroom applied a student-centered paradigm where the students became the central part of the class, and they would not be bored just by listening to the teacher’s explanation. Flipped classrooms provided opportunities for the students to do problem-solving, skill development, and gaining a deeper understanding of the material given (Bergmann & Sams, 2012). In the flipped classroom class, the students had read the content before coming to class, so in the classroom, they had already had the material in their mind.

3.4.2 Force the Students to be More Actively Involved in Class

In the interview, the lecturer said that in the flipped classroom class, the role of the lecturer changed from a person who lectures becomes the facilitator. So, the lecturer is no longer the presenter of the information, but she will become the tutorial role for the students (Bergmann & Sams, 2012). In the flipped classroom applied in CALL class, the students could express their ideas through the presentations. The students could also check their understanding of the material that had presented through the quizzes. From the questionnaires, the students could monitor their progress and what things had been and had not understood. In the workshop, the students could also try directly the application that had presented. The activity had ethical impacts on the students because they can learn something from reading and having hands-on experience.

3.5 Flipped Classroom Promotes Students’ Learning Autonomy

3.5.1 Flipped Classroom Helps the Students Determine Their Learning Objective

According to Dickinson (1993, as cited in Hobrom et al., 2006), one of the characteristics of an autonomous learner is determining the objective. Determining the objective means the students know and understand one particular topic after they learn the material. Nunan also said that the students achieved the level of awareness if they understand the goal of the material, the contents, and also their learning strategies (Nunan, 2014). In the CALL class itself, the students asked to read and understand the material before the class began, and after that, they had to present what they got in a presentation.

| No. | Statements                                                                 | Strongly Disagree | Disagree | Agree | Strongly Agree | Mean |
|-----|---------------------------------------------------------------------------|-------------------|---------|-------|---------------|------|
| 1.  | I read the material before the class begins to understand the topic better.| 1 (3%)            | 12 (40%)| 14 (47%)| 3 (10%)       | 3.20 |
| 2.  | After I read the material, I find the main point of what will learn on the topic.| 2 (7%)            | 7 (23%)| 18 (60%)| 3 (10%)       | 3.53 |
| 3.  | After I read the material, I determine the goal that I should              | 2 (7%)            | 10 (33%)| 16 (53%)| 2 (7%)        | 3.20 |
The implementation of flipped classrooms in CALL class allowed the students to read and understand the material before the level began. The content given was available to anyone because it could download from the Exelsa. Before the class started, the students knew the material that would be learned in the classroom, read the content, and prepared themselves to take part in the classroom learning activity. From the interview result, some of the students also admitted that they understand the material before the class begins. The students said:

I usually read the material first. Whether I do a presentation or not because after every presentation, we will have quizzes. (P2/03)
Yes, I have to read the material first, although not all of them are easy to understand. Usually, I do the scanning technique, so I’m only looking for the crucial points. For the detailed explanation, I can get it from the explanation during the presentation. (P4/03)
I usually only read at a glance if it’s not my turn to do the presentation, but if it is my turn to present, I will try to understand and dig into the material in more detail. (P5/03)

a. Flipped Classroom Helps the Students Define the Content and Progression

The second characteristic of an autonomous learner is defining the content and progression. Determining the content and sequence means the students can formulate the learning objective and know how their learning progression is (Dickinson, 1993 as cited in Hobrom et al., 2006). Based on Çakıcı to achieve this characteristic, the teacher should help the students to develop the students’ abilities, make them responsible for their learning, and have an excellent strategy to work inside or outside the classroom (ÇAKICI, 2015).

| No. | Statements                                                                 | Strongly Disagree | Disagree | Agree | Strongly Agree | Mean |
|-----|----------------------------------------------------------------------------|-------------------|---------|-------|---------------|------|
| 4.  | After I read the material, I can identify which parts I should pay more attention to. | 2 (7%)            | 6 (20%) | 19 (63%) | 3 (10%)       | 3.50 |
| 5.  | I do the task before the class begins, and it helps me to get some information related to the material. | 1 (3%)            | 16 (53%)| 13 (43%)| 0 (0%)        | 2.83 |
| 6.  | By studying the material before the class begins, I know what the next meeting will be. | 1 (3%)            | 12 (40%)| 14 (47%)| 3 (10%)       | 3.20 |

Based on the result of the questionnaire, the flipped classroom model encouraged the students to explore further the material given. The flipped classroom model also provided an overview for the students to know what content and activities that would teach at the next meeting. Hence, when the classroom began, the students were ready to learn because they already know what material would discover that day. Moreover, Nunan also said that the students achieved the level of intervention when they are involved in modifying the materials and strategies for their own needs (Nunan, 2014). In the interview, the students also admitted that the students...
also tried their approach to understand and deliver a material when they asked to do a presentation in class. The students said:

*Usually, before I make a presentation, I will read the material, I highlight the essential points, and I will take note.* [...] *(P1/10)*

*Before the presentation, we will divide the parts of the journal for each member, and we will allow each person to read and understand by themselves. After that, we will gather again and exchange ideas about the things we have learned, so the material is easier to understand and, in its delivery, also become easier.* *(P2/10)*

From the results of the interview, it could see that the students tried to apply their strategies when they had to prepare material for the presentation. For example, P1 tried to highlight important information in the journal and rewrite the points, whereas P2 tried to divide each part to be learned by every member of the group.

### 3.5.2 Flipped Classroom Helps the Students Select the Methods and Techniques to be Used

Holec, as cited in Benson, stated that the third characteristic of an autonomous learner in selecting the methods and techniques to be used (Benson, 2007). Selecting the methods and techniques means the students can choose and apply the appropriate learning strategy for them (Dickinson, 1993 as cited in Hobrom et al., 2006).

| No. | Statements                                                                 | Strongly Disagree | Disagree | Agree | Strongly Agree | Mean |
|-----|---------------------------------------------------------------------------|-------------------|----------|-------|----------------|------|
| 7.  | I try to find information from some resources such as books and the internet every time I meet difficulty or confusion about the material given. | 1 (3%)            | 7 (23%)  | 18 (60%) | 4 (13%)        | 3.57 |
| 8.  | I discuss the material with my friends before the class begins to have a better understanding. | 2 (7%)            | 12 (40%) | 15 (50%) | 1 (3%)         | 3.03 |
| 9.  | I ask questions to the lecturer every time I have questions related to the material. | 0 (0%)            | 14 (47%) | 16 (53%) | 0 (0%)         | 3.07 |

Based on the result of the questionnaire, the flipped classroom model encouraged the students to apply the appropriate method and technique that the students used to understand the material. These results indicated that most of the students tried to find other references to help them understand the content provided.

### 3.5.3 Flipped Classroom Helps the Students Monitor the Procedure of Their Learning Strategy

According to Holec, 1979, as cited in Benson, 2007, the fourth characteristic of an autonomous learner is monitoring the procedure of the learning strategy. Following the process means the students can control their use of policy (Dickinson, 1993 as cited in Hobrom et al., 2006).
| No. | Statements                                                                 | Strongly Disagree | Disagree | Agree | Strongly Agree | Mean |
|-----|-----------------------------------------------------------------------------|-------------------|----------|-------|----------------|------|
| 10. | The involvement of the internet and books helps me to understand the material better before the class begins. | 1 3%              | 2 7%     | 21 70%| 6 20%          | 3.97 |
| 11. | I can find some new insights and information from the discussion with my friends related to the material given. | 0 0%              | 4 13%    | 24 80%| 2 7%           | 3.80 |
| 12. | By using the flipped classroom model, I can prepare the material independently, which makes me ready to come and study in the class. | 1 3%              | 5 17%    | 23 77%| 1 3%           | 3.60 |

Based on the result of the questionnaire, the way the lecturer gave assignments in the form of a journal before the class could encourage the students to monitor themselves whether their learning strategies could help them understand the material. From the data above, it could see that the flipped learning model triggered the students to apply their learning strategies.

From the workshop activities in the classroom, the students could also monitor whether their explanations in the presentation were clear enough, and the audience could understand the material by giving the task for the audience to try to use the application that had explained before. According to Nunan, by creating a job based on the material that has been defined(Nunan, 2014), it means that the students had achieved the level of “creation.” In the interview, the student explained:

*We will give the audience a task to finish. It finished measuring the understanding of an application. Sometimes, some audiences can create something that exceeds our expectations. From this result, it means that the audience already understood about the workshop that we gave, and we succeeded in delivering the material. If some students cannot do the task correctly, that means we have to evaluate the group. (P5/11)*

From these results, it could see that the students tried to give tasks to be done by the audience after the workshop conducted. Thus, it meant that the audience already understood the workshop given by the group, and the presenters had succeeded in delivering the material well. If some audiences did not do the task well, that meant the group had to do an evaluation.

### 3.5.4 Flipped Classroom Helps the Students Evaluate what had Acquired

The fifth characteristic of an autonomous learner is evaluating what has acquired.

Evaluating means the students can self-assess or assess their learning (Dickinson, 1993 as cited in (Hobrom et al., 2006)).
Based on the result of the questionnaire, the flipped classroom model encouraged the students to do self-assessment after they finished their learning. This item 15 showed moderate within the level of agreement. From the result, it could see that half of the students were able to reflect since they tried to do self-evaluation by comparing their tasks with others. In statement 17, all students agreed that the feedback from the lecturer gave them new insight. This item has a very high level of agreement with all students who responded to either “agree” or “strongly agree” (M = 4.23).

Moreover, the students tried to take note of some essential points in the class discussion. The mean of the statement number 20 was 3.87, which included in high within the level of agreement. Most of the students who were 25 students (83%) agreed with this statement. They chose either “agree” or “strongly agree” only five students disagreed.

3.5.5 Flipped Classroom Helps the Students Prepare Themselves to Become Teachers

Moreover, Nunan said that the students had achieved the level of “transcendence” when the students can connect the idea of what they have learned with the real action or example (Nunan, 2014). In other words, they can share the lesson with the other friend and become teachers. In the interview, the students also admitted that they had to teach the other students about the journal given and give the workshop with a sense of responsibility. In the interview, the students explained.

Even though I was very nervous, I realized that I had to understand the contents of the journal. I have a responsibility that the audience must understand and be able to do tasks, so we, as a group, must accompany them. (P1/12)

I feel burdened because I have a responsibility to teach them. So, when my group prepares for the presentation and workshop, we make the material well. Even though it’s hard, but we try. (P4/12)

From these results, it shows that the students had reached the level of “transcendence” because they had to share the information with other people during the presentation and workshop full of responsibility. The students acknowledged that they were very nervous when they wanted to do the presentation or workshop because they had to teach and explain something to the audience, convey the information correctly, and make the given information useful for the audience as well.

From the data acquired above, it could conclude that students’ learning autonomy could improve by having a flipped classroom as a learning model in the school. The students had a sense of responsibility to read the material before the class began. They also tried to understand the content provided by looking for some crucial points, even though the document had never taught before. Thus, by having a flipped classroom learning model in the CALL class, it increased the students’ learning autonomy by asking them to read the material before class so they could determine the purpose or the goal of the content.

Moreover, the flipped classroom also helped the students to understand and prepare themselves. Having the materials before the class begins helped the students to know how far they know the stuff and identify which parts that they must understand more deeply. It also helped the students to prepare themselves for the classroom learning activities because they already know what material they would teach at the meeting. In the interview, some students...
also admitted that they tried to apply their strategies when preparing the content for the presentation. This result was in line with the theories by Nunan (1997) that students achieved the level of intervention if they are involved in modifying the materials and strategies for their own needs. Most of the students tried to find other references to help them understand the material provided. These things revealed that the students were not only relying on the given journal, but they also autonomously applied to learn methods and techniques to help them increase their insight. When they had some journals to read before class, the students used various strategies. After applying those strategies, the students could monitor themselves to know how far they understand the material. By reading books, looking for other references on the internet, as well as discussing with friends, the students could get additional information and insight, especially when they felt it difficult to understand the material.

The flipped classroom also encouraged the students to do self-evaluation by comparing their tasks with others, having some feedback from the lecturer, and taking notes of some essential points in the class discussion. These results indicated that after the students compared their task, they got some new insights that they have not reached before. By comparing task with others, it could help them in developing their ideas. According to Harris (1997), when students could do a self-evaluation, it means that they become an active autonomous learner because they already had the responsibility for their learning. Moreover, the feedback from the lecturer also helped the students to evaluate themselves. According to Researcher et al. (2016), providing quality information to the students is very important to ensure students learning. The students could check their progression by the feedback from the lecturer. Most of the students also tried to take some important points in the class discussion. These results indicated that most of the students understand that they should take some notes, especially at some important points, to remember it. Lastly, the implementation of a flipped classroom in CALL class also helped the students to become teachers and achieved the level of “transcendence” (Nunan, 2014). As mentioned in the results above, there was a “workshop” activity in class that asked the students to teach the other students about how to use a certain application.

4. CONCLUSION

The implementation of flipped classrooms in CALL class divided into two main categories, namely outside and inside class activities. Outside class activities consisted of the lecturer uploads the material to the Exelsa, and the students got the chance to read the journal material before the class meeting. Moreover, the inside class activities consisted of five events, namely grouping, group presentation, quiz, group workshop, and evaluation. Furthermore, the flipped classroom helps students perform autonomous learning, which can be characterized by five aspects of independent learner characteristics by Holec (1981, as cited in Benson, 2007). From the findings, the flipped classroom effectively helped the students to determine their learning objectives, define the content and progression, select the methods and techniques to be used, monitor the procedure of their learning strategy, and evaluate what they had acquired. It could see from the mean results of the questionnaire that included in very high, high, or moderate within the level of agreement. Furthermore, from the result, it also indicated that the students also achieved the standards of autonomous learner skill by Nunan (1997). From the interview with some students, the results obtained were the students completed the levels of awareness, intervention, creation, and transcendence, however, since the lecturer did not give a choice for the students to choose what learning activities that the students want, so the “involvement” level has not achieved in this class.
REFERENCES

Benson, P. (2007). Autonomy in language teaching and learning. *Language Teaching*, 40(1), 21–40. https://doi.org/10.1017/S0261444806003958

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for technology in education.

Borg, S., & Al-Busaidi, S. (2012). Learner autonomy: English language teachers’ beliefs and practices. *ELT Journal*, 12(7), 1–45.

ÇAKICI, D. (2015). Autonomy in language teaching and learning process. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 16(1).

Chen, C.-W., Beyer, C., Liu, J., Maier, C., Li, C., Trinh-Minh, T., Xu, X., Cole, S. H., Hsieh, M. H., & Ng, N. (2017). Pharmacological inhibition of porcupine induces the regression of experimental skin fibrosis by targeting Wnt signaling. *Annals of the rheumatic diseases*, 76(4), 773–778.

Demirel, E. E. (2016). Basics and key principles of flipped learning: Classes upside down. *International Journal of Languages, Literature, and Linguistics*, 4(3), 109–112.

Dickinson, L. (1993). Talking shop: Aspects of autonomous learning. Dalhousie University: *ELT Journal*, 47(4), 330–336.

Gwee, C. (2003). Language learning styles and strategies: Concepts and relationships. *Oxford, R. L.* (2003). *Language learning styles and strategies: Concepts and relationships*. Oxford: Atrribution-ShareAlike 4.0 International License.

Hobrom, A. I., Horwitz, E. K., & Resta, P. E. (2006). Online resources and learner autonomy: A study of college-level students of Arabic. *Graduate School*.

Holec, H. (1979). *Autonomy and foreign language learning*. Strasbourg (France): ERIC.

Horváthová, B. (2016). Development of learner autonomy. *Nitra: How to Teach in Higher Education: selected chapters*, 120–136.

Heigham, J., & Croker, R. (2009). *Qualitative research in applied linguistics: A practical introduction*. Springer.

Kumar, S., & Vigil, K. (2011). The net generation as preservice teachers: Transferring familiarity with new technologies to educational environments. *Journal of Digital Learning in Teacher Education*, 27(4), 144–153.

Liu, H., & Qi, W. (2017). Establishing Learner Autonomy in China’s Universities through Achievement Presentation. *Journal of Language Teaching and Research*, 8(3), 588–593. http://dx.doi.org/10.17507/jltr.0803.18

Ndosi, K. E. (2013). *Disposal of assets in government executive Agencies: The case of Tanzania Institute Of Accountancy (TIA)–Dar Es Salaam*.

Nematipour, M. (2012). A study of Iranian EFL learners’ autonomy level and its relationship with learning style. *English Linguistics Research*, 1(1), 126–136.

Nunan, D. (2014). Designing and adapting materials to encourage learner autonomy. Dalam *Autonomy and independence in language learning* (p. 192–203). Routledge.

Oxford, R. L. (2003). Language learning styles and strategies: Concepts and relationships. *International review of applied linguistics in language teaching*, 41(4), 271–278.

Roach, T. (2014). Student perceptions toward flipped learning: New methods to increase interaction and active learning in economics. *International Review of Economics Education*, 17, 74–84. https://doi.org/10.1016/j.iree.2014.08.003

Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family & Consumer Sciences*, 105(2), 44–49.

Sella, Lavinia. (2014). *A study on autonomy and its influencing factors in adult language*
Slomanson, W. R. (2014). Blended learning: A flipped classroom experiment. *J. Legal Educ.*, 64, 93.

Tai, C.-C., Moran, R. M., Robertson, L., Keith, K., & Hong, H. (2018). *Handbook of Research on Science Literacy Integration in Classroom Environments*. IGI Global.

Wulandari, M. (2017). Fostering learning autonomy through the implementation of flipped learning in language teaching media course. *International Journal of Indonesian Education and Teaching (IJIJET)*, 1(2), 194–205.