



## The Merits and Challenges of Flipped English Grammar Learning Among Indonesian First-Year Undergraduate Non-ELT Students

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### Abstract:

*Flipped learning has been considered a catalyst for teaching English grammar since it promotes active learning and higher-order thinking skills. Despite this potential, its implementation process in non-ELT classrooms has not received ample attention. This study seeks to examine the merits and challenges of implementing flipped learning in a grammar class for Indonesian first-year undergraduate non-ELT students majoring in Korean Language Education in an online learning environment. The students were divided into two groups (experimental group=35 students and control group=35 students). Using a quantitative and qualitative design, two grammar tests (pre- and post-tests) were administered to measure the effect of implementing flipped learning. A questionnaire was distributed to the students afterward, followed by interview sessions. While the quantitative data were analyzed using SPSS 23, the qualitative data were examined using an inductive thematic approach. The results showed that the implementation of the flipped learning approach could significantly enhance the students' grammar skills. In addition, the students perceived that flipped learning could elevate learning motivation, foster learner autonomy, and raise learning awareness. However, lower motivation, an uncondusive home environment during asynchronous sessions, and unstable internet bandwidth were the main challenges experienced by some students.*

**Keywords:** *challenges, flipped learning, Indonesian non-ELT students, learning grammar, merits*

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### 1. INTRODUCTION

Grammar has long been an integral part of second language learning (Harmer, 1987) and English grammar, in particular, serves as a fundamental component to communicate with others properly, convey clearer messages, and produce quality writing (Sioco & De Vera, 2018).

Typically, English grammar is learnt by reading textbooks or doing exercises through completing sentences with correct forms, causing a possible difficulty to apply such grammatical knowledge (Lin et al., 2020). Of many definitions of grammar in English language learning context, the current study adopts Berry's earlier and extended definition of grammar. The earlier version of his theory said, "Grammar is what turns words into language." (2018, p. 4). The extended version mentions, "Grammar is the system of rules that enables users of a language to relate linguistic form to meaning." (2021, p. 19). Richards (2016) provides a more specific definition that grammar emphasizes the knowledge of rules and language system within which parts of speech, tenses, phrases, clauses, and syntactic structures are exploited to create grammatically well-written sentences in English. Such definitions emphasize the use of grammatical items that are formed and rule-governed, such as words and structures, to express meaning. Hence, grammar skills can be understood as one's capacity to exploit grammatical repertoire to communicate to other people so that the meaning being conveyed can be well-digested.

However, previous literature has identified certain challenges in learning EFL grammar. Previous research (Akbari, 2016) has investigated EFL students' grammar skills. Some of the students in Iran viewed that lacking good grammatical repertoire has been an existing weakness or problem. It is no surprise then that learning grammar can be a tedious skill and failure to comprehend grammatical rules may cause barriers in communication (Al Bataineh et al., 2019). In the Indonesian context, Komara & Tiarsiwi (2021) reported that most Indonesian EFL students participating in their study experienced difficulties, although they agreed on the importance of having good grammar skills. Furthermore, the respondents encountered obstacles in learning grammar due to unclear instructions and a monotonous teaching model. In a similar vein, Sorohiti et al. (2024) revealed that challenges encountered by the students in learning English grammar were influenced by limited exposure to English so that they struggled to understand grammar concepts. The absence of intrinsic motivation was spotted as another contributing factor. The university students in Toba et al.'s (2019) study also posited that lack of grammar skills was one of the main issues they faced during the production of a writing, particularly an essay. In an academic writing course, Pasaribu et al. (2024) explained that university students still made grammatical errors in writing essays, such as syntactical errors, punctuation and capitalization, and morphological errors. In a nutshell, EFL students still find grammar skills challenging to master, which is the basis for the current study, which aims to improve their grammar skills using a particular instructional approach.

Considering that, the present study proposed flipped learning as the catalyst for enhancing English grammar skills particularly among first-year undergraduate non-ELT students. Flipped learning, based on the principles of active learning theory, encourages student-centered participation and the development of higher-level thinking skills (Hong et al., 2023). According to Bergmann & Sams (2012), flipped learning is similarly termed as "flipped classroom", "inverted classroom", or "reverted instruction." Flipped learning is conceptualized as a student-centred, personalized learning space, which reinforces the inverted learning process (Akçayır & Akçayır, 2018; Bergmann & Sams, 2012). Students are given the responsibility and autonomy to enrich their content knowledge through an online learning platform or media as a pre-class activity before participating in more meaningful and production-oriented in-class activities. The teacher should ensure that the learning atmosphere is active, dynamic, and interactive.

## **2. LITERATURE REVIEW**

The flipped learning in the present study emphasizes the flipped Bloom's Taxonomy (Hung, 2015) in which students strengthen their Lower-Order Thinking Skills (LOTS) outside the classroom as the basis to develop their Higher-Order Thinking Skills (HOTS) in the classroom. Both pedagogical orientations resonate with the F-L-I-P pillars (Flipped Learning Network, 2014) as the driving principles. First, the grammar learning environment intends to encourage flexibility, which allows appropriate modifications to promote student interaction and learning progress. Second, the learning culture enables the teacher to engage the students in various meaningful grammar activities in the classroom. Third, the content is created and carefully organized based on the learning objectives through the use of technology such as an accessible learning platform to cater to personalized pre-class sessions. Fourth, the teacher cultivates professionalism by guiding the pre-, in- and after-class sessions and conducting continuous reflections from observations and recorded data. In other words, teachers serve not only as the source of knowledge but also the guide, the class manager, the creative and supportive fellow, and the designer (Amiryousefi, 2017).

A recent study on flipped classrooms for English as foreign language (EFL) instruction in Asia has identified the benefits (Öztürk & Çakıroğlu, 2021; Safiyeh & Farrah, 2020). According to Zhang & Zou (2020), flipped classrooms have been demonstrated to enhance students' academic achievement, motivation, and higher-order cognitive abilities. They facilitate teacher-student engagement and optimize learning efficiency (Cabanilla & Pogoy, 2023). Additionally, Safiyeh & Farrah (2020) have found that flipped learning also improves general language skills. It enhances learner independence, enthusiasm, and active engagement (Lubis & Rahmawati, 2022; Singay, 2020; Yusmalinda, 2023).

Furthermore, flipped learning in EFL teaching and learning context has been integrated into grammar classes (Linling & Abdullah, 2023). For instance, flipped learning in Vietnam has shown promising results in the development of grammar and speaking abilities (Vu & Nguyen, 2023). Research conducted by Lubis & Rahmawati (2022) has demonstrated that flipped learning is effective in enhancing grammatical abilities across different levels of proficiency in Indonesia. This instructional method enhances the readiness for in-person sessions and improves the efficiency of completing grammatical exercises (Yanto et al., 2020; Yusmalinda, 2023). The flipped learning model also improved Iranian English learners' engagement and motivation in learning grammar compared to the traditional classroom (Afzali & Izadpanah, 2021). The finding aligns with Noroozi et al.'s (2021) study, which reveals that Iranian intermediate EFL learners perceive flipped learning as satisfactory, engaging, and effective in their grammar lessons.

However, several obstacles of incorporating flipped learning in EFL contexts remain apparent (e.g., Arslan, 2020; Garcia-Ponce & Mora-Pablo, 2020). Although flipped learning in an online English grammar course improved student achievement and was well received, the duration of virtual meetings was a challenge (Ahmad & Arifin, 2021). Several other obstacles encompass the preparedness of students, the acceptability of technology, and the necessity for thorough teacher training (Cabanilla & Pogoy, 2023; Turan & Akdag-Cimen, 2020). In the Indonesian context, some obstacles that arise are a restricted lexicon, difficulties in managing time, lack of knowledge on the part of students, technical limitations, and perceived augmented workload (Lubis & Rahmawati, 2022; Pilu et al., 2025). The increased workload is justified by previous research

(e.g., Amiryousefi, 2017; Haghighi et al., 2019) as the most frequently encountered situation by students. The increased workload causes a higher amount of time spent by students in accomplishing the assigned tasks and by teachers in preparing pre-class materials and in-class activities. Beyond these challenges, technology or internet-related problems and writing anxiety are also discerned. This echoes Mehring's (2016) argument that not all contextual constraints can be solved by flipped learning.

Taking into account of the results from previous studies discussed before, this study aims to contribute to the existing literature in three ways. First, it examines the influence of flipped learning on grammar learning in EFL settings, involving non-ELT students majoring in Korean Language Education, which are rarely investigated in previous research. Second, the present study integrates flipped grammar instruction into digital storytelling project, which extends the mere isolated form-focused exercises. Third, this study is situated within a fully online and remote learning in higher education context, offering insight into the previous flipped learning implementation where students still have face-to-face activities in the classroom. This is justified by Turan & Akdag-Cimen (2020), who state that the effect of flipped learning on EFL students' grammar knowledge should be taken into further account. Moreover, Mehring (2016) also pointed out that evidence of positive results from the implementation of flipped learning among Indonesian undergraduate non-ELT students from other majors is still scarce.

Specifically, this study is driven by the following research questions.

1. What impact does the implementation of flipped learning have on undergraduate non-ELT students' learning of grammar skills?
2. How do the students perceive the advantages and challenges of implementing flipped learning in learning English grammar?

The results of the present study can add evidence of the merits and challenges of incorporating flipped learning in learning English grammar among undergraduate non-ELT students. The results can serve as a reference for EFL teachers to develop the learning design, which can cater for the non-ELT students' psychological needs in a flipped learning environment.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Design and Context**

This research adopted both quantitative and qualitative designs. This approach was chosen to ensure that the statistical results regarding the effect of the flipped learning approach on students' English grammar skills, obtained through a quasi-experimental method, were analyzed separately from the students' perceptions of flipped learning during remote learning. Nevertheless, both types of data complemented each other in providing a comprehensive understanding of the issue being investigated.

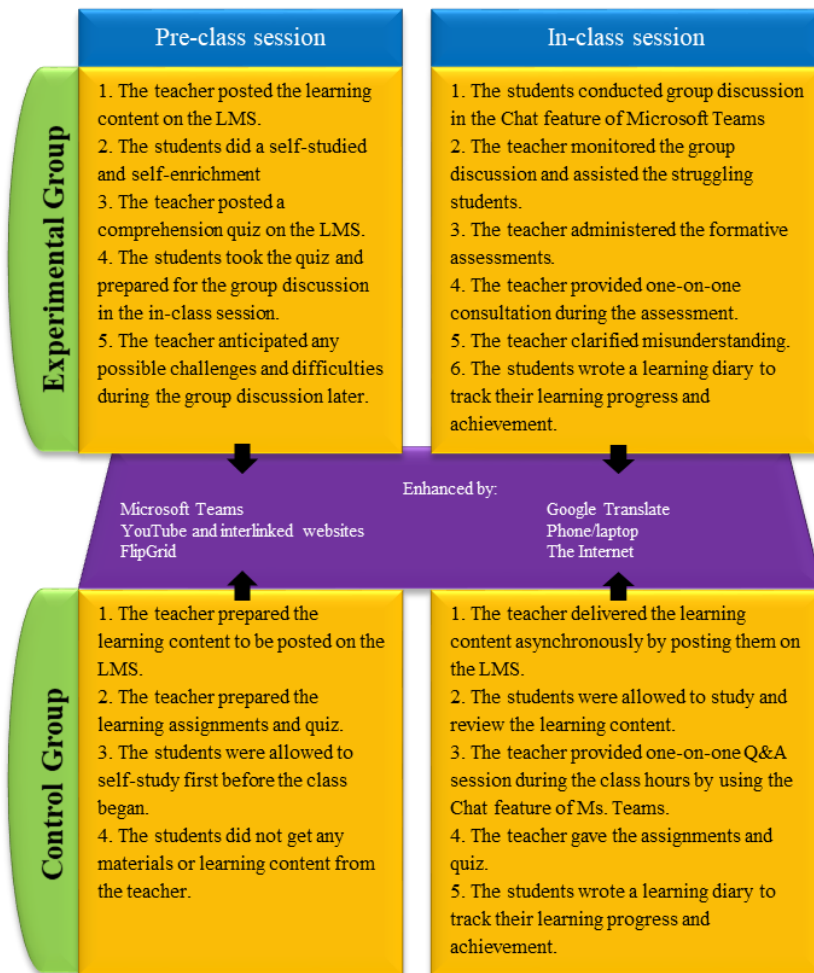
#### **3.2 Participants and settings**

Seventy (70) first-year undergraduate students majoring in Korean Language Education from a public university in Bandung, Indonesia, agreed to participate in this study. They were randomly assigned to two groups: experimental group (n=35) and control group (n=35). The reason for choosing the participants was that the English course provided in the first year of study was based on the current curriculum of the study program. However, the selection of participants from a single study program may restrict generalizability of the findings. Therefore, the results reflect

contextual characteristics of this particular group. We selected Microsoft Teams as the learning platform. This learning platform allowed the researchers to conduct a more interactive learning process because it enabled students and lecturers to post and store the learning contents, to communicate through the main interface or the Chat features, and to provide an immediate two-way feedback process.

### 3.3 Data Collection Procedure

In accordance with research ethics, the class rules, learning process scenario, and instructional approach were discussed with the students, and they agreed to participate. The course aimed to enhance the students' grammar skills for communicative purposes. Notably, the students were encouraged to complete a digital storytelling project using proper English grammar. The lessons covered parts of speech (determiners, nouns and pronouns, adjectives, verbs, adverbs, and conjunctions), types of sentences (simple, compound, complex, and compound-complex sentences), and tenses. Hence, this flipped learning was intended to elevate not only their English grammar skills but also their grammar competence by integrating grammar in the making of digital storytelling. Figure 1 demonstrates the entire learning design of the present study.



**Figure 1.** The learning process between the experimental and control groups

This study was conducted for one semester comprising 16 meetings, each of which lasted for 1 hour and 40 minutes. One session was an introduction to the syllabus, MS Teams and other supporting technologies, self-reflection through a learning diary writing sheet, assessment rubrics, and a pre-test. This was intended to familiarise students with operating the technology used so that they would feel more prepared to follow the activities, which might influence their learning motivation and learning outcomes, as per Zhang & Zou (2020).

The students' grammar scores were obtained from pre- and post-tests by using Google Forms. The questions were deliberately adapted from *The Complete Guide to the TOEFL Test PBT Edition*, written by Bruce Rogers (2011) and published by Heinle Cengage Learning. The reason for using the book is to connect the questions with the learning objectives. Additionally, the course also aimed to get students familiar with the TOEFL test questions, especially the structure and written expression section. This section was selected since it represents grammatical accuracy in context, which aligns with the learning outcomes of the course. The test consisted of 40 questions; each of the correct answers was scored one point with the maximum converted score as much 100. The question items were then validated by an ELT lecturer whose expertise is in English grammar. The validation process focused on the suitability of each item with the formulated grammar lessons to ensure the construct validity, showing the significance values of Kolmogorov-Smirnov and Shapiro-Wilk tests for the pre-test items .200 and .611, respectively and for the post-test items, .200 and .226, respectively.

After completing the post-test, all students gave their consent to fill out an online 19-item questionnaire developed by the researchers and to be involved in the follow-up interview sessions. The questionnaire sought to explore the students' perceptions of the influence of the teaching approach on three aspects: motivation, autonomy, and awareness (see Appendix A). The researchers first read some literature to understand the concepts of the three aspects mentioned before. The process continued with the formulation of the questionnaire items with a five Likert-scale response. All items contained a positive meaning (e.g., *Flipped learning can increase my motivation to learn English*) to ease the researchers in measuring the descriptive results of the students' responses. The blueprint of the questionnaire was first validated by an ELT lecturer to ensure the construct validity. All items were reported understandable by eight students before the final version of the questionnaire was administered to all students in the experimental group. Thirty-three students completed and returned the questionnaire. An interview session involving eight students was carried out. Five questions were asked to the students to further investigate their experiences and arguments of two themes: the advantages of the learning activities in the flipped learning process and the challenges (see Appendix B). The Indonesian language was employed for the questionnaire items or during the interview sessions to avoid misunderstandings and biased answers. The video-recorded reflection sessions were also transcribed and coded to strengthen the interview results.

### 3.4 Data Analysis and Trustworthiness

The students' pre- and post-test scores were analyzed using descriptive and comparative statistical procedures. The descriptive statistics included the mean, median, modus, highest and lowest scores, and standard deviation. The comparative analysis involved tests of normality and homogeneity of variance. In addition, independent samples and paired samples t-tests were conducted to determine whether there was a significant difference between the students' pre-test



and post-test results, along with a one-way ANOVA using SPSS 23. The hypotheses were formulated as follows.

H<sub>0</sub>: There is no significant difference between the pre-test and the post-test results of the experimental and control groups.

H<sub>1</sub>: There is a significant difference between the pre-test and the post-test results of the experimental and control groups.

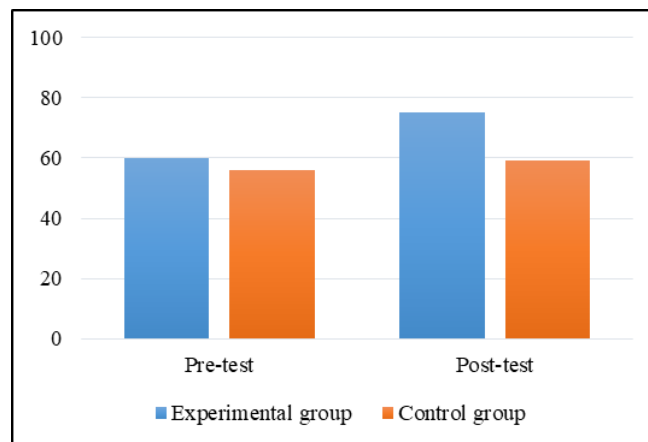
The validity of the questionnaire was measured. The Pearson product-moment correlation coefficient ( $r$ ) was above .42 on average, meaning that all items were valid. The reliability test was done afterwards and suggested an acceptable Cronbach's alpha Coefficient of .84, according to Cohen, et al. (2008) and Taber (2018).

Meanwhile, the analysis of the qualitative data began with translating the students' interview responses into English. The translated texts were then analyzed using an inductive thematic approach, which involved iterative processes of open coding, labeling, and categorization. The initial coding results served as a guide for analyzing the subsequent texts. Finally, peer debriefing was conducted by involving the same ELT lecturer to ensure the credibility of the final analysis results.

## 4. RESULTS

### 4.1. RQ 1: The effect of flipped learning on the non-ELT students' learning of grammar skills

This sub-section delineates the results of statistical analyses of the test scores between the experimental and control groups. Figure 2 depicts a bar chart of the comparative results of the means of both groups.



**Figure 2.** The comparative results of grammar pre- and post-test scores between both groups

The results showed that the mean scores of both student cohorts were not considerably different before the course began ( $\bar{X}$ =59.80;  $SD$ =14.72 and  $\bar{X}$ =56.17;  $SD$ =15.90). Although the lowest score in the control group was slightly higher than that in the experimental group, the highest score in both groups was 88. After completing the course, the experimental group obtained a higher mean score than the control group ( $\bar{X}$ =75.17;  $SD$ =11.25 and  $\bar{X}$ =59.37;  $SD$ =14.31). Both the lowest or the highest scores of the experimental group improved in the post-test compared with the pre-test. In contrast, the lowest score of the control group showed no improvement in

the post-test, and the highest score decreased five points compared with the pre-test. The results indicate that the students learning English with the flipped learning approach in an online learning environment performed better than those experiencing the conventional learning approach.

A Shapiro-Wilk test was then conducted to measure the significance of the difference between the observed scores and the normal distribution. The obtained values were all above  $\alpha=0.05$ . This implies that the distribution of scores of the grammar pre- and post-test of the students in the experimental and control groups does not significantly deviate from the normal distribution.

The normality of the distribution of the pre- and post-test scores in the experimental and control groups was further examined using SPSS 23 to measure the skewness and kurtosis. The z scores of the skewness and kurtosis of both tests in both groups were still between -1.96 and 1.96 at the significance level  $< 5\%$ . The results indicate that the distribution of the pre- and post-test scores in the experimental and control groups is still considered normal.

A homogeneity test was conducted to further examine the variances of the students' scores between the experimental and control groups. The Levene statistic obtained was 2.047 with  $df_1=3$  and  $df_2=136$  with the significance value of .110 at  $\alpha=0.05$ . Since the number of students in each group was equal ( $n=35$ ), a post-hoc Tukey HSD test was performed to determine whether the means of the homogeneous groups were significantly different. The results indicate that the mean of the post-test score of the experimental group is higher than that of the other three groups, with the significance value of .776 at  $\alpha=0.05$ . This finding suggests that the mean post-test scores of students who incorporated the flipped learning approach are significantly different from those of the students who applied the conventional learning method in this online English learning context. Table 1 shows the results of an independent samples test to measure whether the mean for the post-test score between the experimental and control groups significantly differs from each other.

**Table 1.** The independent samples test of the post-test scores between the two groups

|                       |                             | Levene's test for equality of variances |      | t-test for equality of means |        |                 |                 |                       |
|-----------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|
|                       |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean difference | Std. Error difference |
| Post-test mean scores | Equal variances assumed     | 4.067                                   | .048 | 5.441                        | 68     | .000            | 16.371          | 3.009                 |
|                       | Equal variances not assumed |   |      | 5.441                        | 62.627 | .000            | 16.371          | 3.009                 |

The results showed that the significance value was as much .000, indicating a significant difference between both groups at  $\alpha=0.05$  (2-tailed) with the mean difference as much as 16.371. This substantial mean difference indicates that flipped learning can elevate students' grammar skills through repeated exposure to pre-class materials. Furthermore, since the data were already normal and homogeneous, a parametric test through paired samples t-test was performed to



measure whether the mean difference between the pre- and post-test in each student group is significantly different from zero. Table 2 demonstrates that the paired samples in each student group significantly correlate with each other (Sig. value=.000 at  $\alpha=0.05$ ).

**Table 2.** The paired samples test results

| Measures<br>Category | Paired samples<br>correlation | Sig. of paired<br>samples<br>correlation | t-value | df | Sig. of Paired<br>samples test (2-<br>tailed) |
|----------------------|-------------------------------|--|---------|----|---|
| Experimental         | .634                          | .000                                     | -8.424  | 34 | .000  |
| Control              | .698                          | .000                                     | -1.600  | 34 | .119  |

The t values were also negative, representing the smaller means of the pre-test than those of the post-test before both flipped and conventional learning methods were implemented. It was also revealed that while the mean difference between paired samples in the experimental group was significantly different from zero (Sig. value=.000 at  $\alpha=0.05$ ), the mean difference in the control group was considerably close to zero (Sig. value=.119 at  $\alpha=0.05$ ). Further, the one-way ANOVA test results also exhibit a significant difference between both groups with the F value=13.902 and the Sig. value=.000. The results corroborate the evidence that the mean score of the experimental group outnumbers that of the control group.

The results of the parametric tests lead to the conclusion that the alternative hypothesis ( $H_1$ ): *There is a significant difference between the pre-test and the post-test results between experimental and control groups*, is accepted. In other words, the incorporation of the flipped learning approach can enhance the students' grammar skills better than the conventional learning approach through direct virtual monologue teaching from the teacher and assignments.

#### **4.2. RQ 2: The non-ELT students' perceptions of the implementation of flipped learning in learning English grammar**

This sub-section presents the students' perceptions of the factors influencing the effect of flipped learning on their grammar skill development, as well as the challenges they encountered. EP refers to Experimental Participant. The students reported that this was their first experience learning English grammar through a flipped learning approach in an online learning environment. Overall, they perceived that flipped learning helped deepen their understanding of English grammar and improve their English grammar skills. The students noted that they could grasp the materials more effectively because the lecturers provided a variety of learning resources.

However, a few students opined that they preferred the workload less. EP 2 stated, "*The heavy learning workload is quite cumbersome.*" Another student expressed during the interview session that flipped learning made her feel less confident about her grammar skills.

*It's difficult to ask some questions directly to others due to this current situation. Moreover, I was less confident at my grammar skills so that I couldn't check whether it's already correct. (EP3)*

The online learning situation affected the way she perceived her grammar skills because the communication flow might not be as direct as the face-to-face learning environment. Such a less direct learning process could lessen the opportunity for students to check the accuracy of their

grammar performance. The coding results of interview data also revealed three overarching themes: (1) motivational enhancement, (2) autonomy development, and (3) contextual and psychological challenges, which are elaborated in the following sub-sections.

#### 4.2.1 *Flipped learning as a means of elevating learning motivation*

The development of students' grammar skills was closely linked to their learning motivation. Even while studying during an emergency remote learning context, flipped learning was perceived as effective in enhancing their overall motivation to learn English (mean = 3.76, SD = 0.708) and specifically English grammar (mean = 3.52, SD = 0.939). Additionally, it stimulated their motivation to participate actively in the grammar class (mean = 4.06, SD = 0.788).

*I think flipped learning is good and effective enough to **elevate learning motivation**, although the assignments are quite many. **It motivates me** to do a self-study. (EP 4)*

*By doing repeated form-focused grammar exercises, **we are motivated to keep enhancing our English skills**. (EP 6)*

Flipped learning challenged the students to enrich themselves before the synchronous in-class learning activities were done. Other students asserted that because the in-class hours were spent mostly on meaningful activities such as group discussion and grammar exercises, EP 2 felt encouraged to maintain her English skills

#### 4.2.2 *Flipped learning as a means of fostering learner autonomy*

The students' positive perceptions of the development of their learner autonomy support the effect of flipped learning. The questionnaire results indicated that they became more autonomous in studying English grammar in a remote learning context (mean = 3.76, SD = 0.792). Specifically, the students perceived that flipped learning encouraged them to manage their learning during both the pre- and in-class sessions. During the pre-class session, they were able to plan their learning activities (mean = 4.03, SD = 0.847) and understand the learning materials provided by the lecturers (mean = 4.24, SD = 0.792), as well as explore additional sources through self-study and self-exploration (mean = 4.30, SD = 0.810).

During the in-class session, the students also viewed flipped learning as a medium to enhance their autonomy in doing the tasks (mean = 3.91, SD = 0.843). However, flipped learning in this online learning environment could not convincingly develop students' autonomy in managing the time to finish the assignments (mean = 3.48, SD = 1.004). The students could also be more independent in solving the encountered problems during the learning process (mean = 3.88, SD = 1.083) and in asking for help from their friends to get solutions to the problems (mean = 3.79, SD = 1.023).

After they accomplished the assignments, the students further perceived that flipped learning encouraged them to evaluate their English skills (mean = 3.67, SD = 0.816) and their learning outcomes and progress (mean = 4.36, SD = 0.549). They also had the opportunity to develop their autonomy in evaluating their learning attitudes (mean = 3.76, SD = 0.902).

*I couldn't work together with my classmates effectively during this situation. I **trained myself** to do the best **independently**. (EP 4)*

*We **can develop and expand our understanding** from other learning resources, **not only from those given by the lecturers**. (EP 6)*

As uttered in the excerpts above, the learning activities in flipped learning matched some of the students' personalities, who were not particularly fond of working together. During the pre-class session, the students could enrich their understanding of the learning materials because they were encouraged to maximize the self-study process before they conducted the in-class session.

#### **4.2.3 Flipped learning as a means of raising language learning awareness**

Driven by increased learning motivation and learner autonomy, flipped learning can raise the students' learning awareness during this online learning situation. They were able not only to regulate their learning but also to contribute to the group's success by participating actively in the weekly group discussion. Hence, they admitted that they became more aware of their responsibilities (mean = 4.36, SD = 0.549). These circumstances led to a greater number of student initiatives to share learning materials with classmates, although the increase was moderate (mean = 3.67, SD = 0.957), to assist classmates in understanding the materials (mean = 3.64, SD = 0.895), and to explain the assignment details to peers while completing tasks (mean = 3.61, SD = 0.827). Consequently, interactive communication and collaboration among the students intensified (mean = 3.88, SD = 0.960).

*I admit that it's quite difficult for us to keep the communication active. Fortunately, Teams Chat feature eases us to ask for questions or clarification regarding the learning materials. (EP 1)*

*I think Chat feature in Microsoft Teams does helps me to be aware of establishing togetherness and collaboration. Additionally, if some of my classmates find it difficult in understanding the materials, we could exchange ideas and share information. (EP 6)*

The excerpt above showed that the in-class activity in flipped learning, enhanced by the Teams Chat feature, encouraged and trained them to be autonomous and cooperative students. Although they found it difficult to actively communicate with one another, the Teams Chat feature enabled them to be more aware of asking for clarification from their classmates if the information was not clear or sharing knowledge with other classmates within the group.

However, a few students argued that sometimes they did not feel confident enough to be active or to participate in the group discussion during the in-class session. Some of their classmates excel more at English, as uttered by one of them below.

*One of my classmates in the group was really good at English grammar. She could answer almost all questions from other group members. So, I just add some more information, not covered by her. (EP 3)*

The excerpt above justified the exclusiveness of participation among the higher-achieving students. In other words, the less rigid rules in conducting the group discussion may lead to passivity among the students who do not excel at English grammar and feel unable to contribute to the group's success because the higher-achieving students may not be aware of mutual responsibility and peer empowerment.

#### **4.2.4 The challenges of learning English grammar through flipped learning among non-ELT students**

The existing challenges were divided into three domains: psychological issues, environmental issues, and technological use. Regarding the psychological issue, EP 6 stated, *"I could not really get into the learning atmosphere due to this online and online learning environment."* It made

the participant's motivation fluctuate during the course. EP 5 also mentioned, *"Sometimes we are struggling not to be lazy to do the assignments."*

The learning environment at home was identified as another challenge in flipped English grammar learning. EP 5 has very young siblings at home, so sometimes such an environment could distract from concentration during the learning process. Moreover, since everything was done at home and online, EP 5 could barely manage the time between doing the assignments and helping parents with housework. Time management issues were also experienced by another student. EP 2 said, *"The challenging situation is when I have to compete with the deadline of the assignments, but I still don't have sufficient knowledge."* EP 1 clarified, *"Sometimes, it's hard for me to understand the materials, especially the videos given."* The participant felt that the videos given were not sufficiently understandable, so this circumstance might cause the feeling of not having sufficient knowledge to do the assignments.

Concerning technology use, most of the students accessed Microsoft Teams and other related technological tools using their smartphones or laptops. In addition to unstable internet bandwidth, which led to increased lagging when attending synchronous video meetings, the endurance of the students' devices was another issue. EP 3 expressed, *"Sometimes, my laptop is lagging, so it hinders me to accomplish the assignments."* The researchers also experienced technical problems using the desktop-based Teams, such as an inability to sign in or to load the updated activities within that platform. The ease of access sometimes posed another challenge to the students to keep being honest while doing the tests or assignments. EP 3 also admitted that the Internet could influence her motivation to commit plagiarism because she was not confident enough with her answers.

## 5. DISCUSSION

The present study sought to examine the merits and challenges of incorporating flipped learning in teaching grammar for first-year undergraduate non-ELT students majoring in Korean Education. Concerning the impact of implementing flipped learning on students' English grammar learning, the statistical analysis shows that the post-test scores of the experimental group were significantly higher than those of the control group. The results imply that the incorporation of the flipped learning approach can significantly enhance the grammar skills of Indonesian undergraduate EFL students in an online learning environment. The findings of the present study extend the positive trend of flipped learning in learning English grammar, as reported in the previous research (Lubis & Rahmawati, 2022; Öztürk & Çakıroğlu, 2021; Safiyeh & Farrah, 2020; Saidah, 2019).

The results mentioned above are justified by the students' perceptions that the integration of Microsoft Teams during the pre- and in-class activities is useful to accommodate their learning processes. The use of MS Teams helps students monitor their learning progress since the activities are sequenced from the provision of the learning contents and quizzes before the learning schedule is held, enabling self-paced preparation toward more readiness to deal with the more HOTS-oriented activities in the online classroom sessions.

The questionnaire results reveal that flipped learning can elevate learning motivation, foster learner autonomy, and raise learning awareness. These three aspects contribute to the development of the students' grammar skills. The findings echo previous research (Tsai, 2021; Webb & Doman, 2016). The researchers underscore the usefulness of learner training, enabling

the student to have better preparation and understanding in conjunction with follow-up meetings in this online learning environment. The significance of learner training resonates with Shyr and Chen (2018), finding that familiarity with the learning context has an impact on the students' increased learning motivation.

The increased learner autonomy is associated with the nature of flipped learning, which underscores an active, student-centred, collaborative learning atmosphere. We highlight the importance of group discussion as the primary in-class activity, which can encourage students to manage their learning process and progress independently, as found in Tsai's (2021) study. During group discussions, students share and evaluate their understanding, promoting peer learning and self-evaluation through reflection on others' perspectives. This reflective thinking enhances problem-solving abilities, demonstrating metacognitive skills that are crucial for fostering learner autonomy in flipped learning (Shih & Huang, 2020; Tsai, 2021).

The group discussion using the Chat feature in MS Teams can have an impact on increased learning awareness. Its flexibility also enables the students to use the mobile version so that they can be more engaged with the discussion. It is strengthened by recent literature reviews (Shu et al., 2018; Zhang & Zou, 2020) on the usefulness of MALL activities to increase the students' level of engagement. Group discussion, along with guidance from the teacher, also makes them aware of the importance of social presence and teacher presence toward better learning outcomes. Such strategies enable the students to understand the value of being connected psychologically and physically through interaction. Rapanta et al. (2020) also notice that teacher presence to maintain the students' interaction through discussion is essential because discussion triggers peer teaching and peer empowerment. One of the students during the class reflection session mentioned that group discussion within flipped learning enabled her to teach others and learn from her classmates. Such a collaborative atmosphere also echoes with Bandura's (1986) social cognitive theory that learning occurs when there is an interaction with the environment or Vygotsky's (1978) constructivist learning theory that discussion instils interaction and active and collaborative learning experiences as an indicator of a constructive learning process. Contrastingly, Smoyer, et al (2020) underscore that the learning environment, which lacks social interaction during this challenging time, may inhibit students' awareness of maintaining their engagement and motivation.

However, the present study has noted two of the three major challenges. First, technological problems such as unstable internet connections at home, the endurance of the electronic devices, and errors while using the technology. Those problems echo with what Pilu et al. (2025) found in their study from Indonesian EFL teachers' viewpoint. Second, since flipped learning in the present study encourages autonomous learning in a fully online setting, several students encountered psychological issues such as laziness and lack of confidence in doing the assignments, leading to the practice of academic dishonesty. Both psychological issues emerge because their motivation fluctuates over the whole course. Students who experienced heavy workload during the flipped learning implementation may stem from the transition of responsibility from teacher-directed instruction to a student-led learning model. The unfamiliarity with this new approach renders cognitive overload and resistance. Also, since motivation is an important factor in second language learning (Dörnyei, 2001), lack of motivation may trigger the students further to commit plagiarism (Blau & Eshet-alkalai, 2017). Since some students may not be accustomed to this self-directed learning model, where language inputs are transmitted passively to them before synchronous sessions, they may feel less confident to truly



participate in group discussions. Hence, they prefer to commit plagiarism in doing the assignments to keep up with the learning pace with other students.

Overall, the findings imply that the implementation of flipped learning in a foreign language classroom requires systematic teacher training, particularly concerning instructional design and digital pedagogy. Previous studies (König et al., 2017; Moradkhani & Rahimi, 2020) reported that teacher education could enhance L2 teachers' pedagogical content knowledge. Strengthening the integration of technological pedagogical content knowledge is crucial to help teachers better serve EFL non-ELT students' needs in learning and mastering grammar skills.

## 6. CONCLUSION

This study examined the effect of implementing flipped learning on the development of Indonesian first-year undergraduate non-ELT students' grammar skills in an online learning environment. The findings indicate that flipped learning can significantly enhance students' grammar skills. This is attributed to the integration of ICT tools, such as Microsoft Teams, which enables students to optimize both their learning preparation and progress. Additionally, this approach helps increase learning motivation, foster learner autonomy, and heighten learning awareness.

Considering the existing challenges in the present study, it is recommended that endeavours are undertaken to find strategies for creating optimal online learning environments for students with diverse learning styles, to improve evaluation models, and to use technology. Pedagogically, EFL teachers can provide a structured scaffolding for the students during pre-class preparation. The use of quizzes and prompting questions following the materials given to the students can help develop their cognitive skills before involving them in classroom discussion. Providing alternative materials with minimum internet bandwidth is crucial as well to eliminate technical barriers. Teachers can also monitor students' workload balance by allowing them to review the materials and tasks regularly throughout the course. To tackle academic dishonesty, continuous training during task preparation and feedback after completing the task is required so that the students can participate actively without breaking the ethical rules.

This study extends the merits of flipped learning in the higher education context during an online learning situation. However, future research may examine the longitudinal effects of implementing flipped grammar learning on students' grammar performance across different majors. This study has also suggested more quantitative inquiry on the impact of group discussion in the in-class session on the students' engagement level and grammar uptake as a contributing factor to increased learning outcomes and satisfaction.

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#### Appendix A. The questionnaire items

Response options: 1=Strongly disagree, 2=Disagree, 3=In-between, 4=Agree, 5=Strongly agree

1. I access, study, and understand the lecture material before the lecture schedule.
2. Flipped learning can help increase my motivation to learn English.
3. Flipped learning can help increase my motivation to learn English grammar.
4. Flipped learning can help increase motivation to learn English actively in class.
5. Flipped learning makes me more independent in learning English grammar.
6. Flipped learning makes me more independent in planning my English grammar learning activities.
7. Flipped learning makes me more independent in understanding the lecture material.
8. Flipped learning makes me more independent in finding lecture material from other sources.
9. Flipped learning makes me more independent in completing assigned assignments.
10. Flipped learning makes me more independent in solving problems encountered during the learning process.
11. Flipped learning makes me more independent in managing my time to complete assigned assignments.
12. Flipped learning makes me more independent in asking my friends for help when I encounter difficulties.
13. Flipped learning makes me more independent in evaluating my English language skills.
14. Flipped learning makes me more independent in evaluating my English learning attitude.
15. Flipped learning makes me more independent in evaluating my learning progress.
16. Flipped learning makes me more aware of my responsibilities.
17. Flipped learning increases my awareness and initiative to help disseminate lecture materials from other sources to my friends when needed.
18. Flipped learning increases my awareness and initiative to help friends who don't understand the lecture material.
19. Flipped learning increases my awareness and initiative to explain assignments to friends who don't understand.
20. Flipped learning increases my awareness and initiative to communicate and collaborate with other friends.

#### Appendix B. The interview questions

1. How can online learning using the flipped learning method help increase your motivation to learn English? Why?
2. How can online learning using the flipped learning method help improve independence and collaboration in learning English? Why?
3. What challenges did you face while learning English online and remotely using the flipped learning method? Why and how?
4. How can online learning and distance learning using the flipped learning method help improve character education? What activities can stimulate character development?

5. How can teachers play a role in maximizing the implementation of online flipped learning in the EFL classroom?