



P-ISSN 2355-2794
E-ISSN 2461-0275

Investigating the Impact of Flipped Classroom on Dual Language Learners' Perceptions and Grammatical Performance

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Abstract

Flipped classroom model has received massive attention from many researchers due to its innovative instructional strategy that offers a new perspective to the traditional classroom. However, not many studies have focused on dual language learners (DLL) who face challenges in grasping second language skills and knowledge, due to the multiple linguistic systems that they have to manage. By marrying communicative language teaching (CLT) approach with flipped technique, the present study, therefore, aims to explore dual language learners' perception towards flipped classroom model in learning English tenses as well as their learning progress using the method. The lessons were conducted using set of culturalised interactive materials. A number of 133 intermediate learners (age 18 to 25) from a vocational college in Malaysia were selected as the research participants and data were collected using one-group pre-test-post-test design, questionnaire and interview. Pre-test and post-test grammar questions were given before and after a six-week intervention program to identify the effectiveness of the materials and instruction. The findings indicated significant differences between the mean scores of the pre-test and post-test. The results also revealed learners' positive responses and improvement in English grammar

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Citation in APA style: Shaari, N. D., Shaari, A. H., & Abdullah, M. R. (2021). Investigating the impact of flipped classroom on dual language learners' perceptions and grammatical performance. *Studies in English Language and Education*, 8(2), 690-709.

Received October 20, 2020; Revised March 11, 2021; Accepted March 17, 2021; Published Online May 3, 2021

<https://doi.org/10.24815/siele.v8i2.18872>

through flipped classroom and culturalised interactive materials. This research has suggested some significant impacts of flipped classroom practices using familiar objects and culturalised learning materials. Apart from acknowledging the advantages of flipped classroom model in learning English grammar, the present study also proposes some additional strategies to achieve an effective flipped classroom lesson for dual language learners in Malaysia.

Keywords: Flipped classroom, dual language learners, English grammar, culturalising instruction, intervention.

1. INTRODUCTION

The global acceptance of Information and Communication Technology (ICT) in learning has acknowledged the development of various technology-oriented teaching methods in an education setting since the traditional approach might become a barrier in achieving 21st-century skills among young learners of the new millennium. Many factors spurred the change in the education landscape, but the main factor is the fact that technology has become part and parcel of almost all global transactions in today's world. It has become so ubiquitous and commonplace in our daily lives, and learning to use it for our activities has become an expected societal norm (Kessler, 2018). The widespread use of technology has engaged many areas, including the education sector. Teachers are expected to establish lessons that integrate 21st-century skills in preparing learners for future challenges and impediments. One of the newest teaching models that utilise ICT is the flipped classroom method (Martins & Gouveia, 2018).

Flipped classroom model has received massive attention from many researchers (Al-Harbi & Alshumaimeri, 2016; Başal, 2015; Bauer-Ramazani et al., 2016; Bergmann & Sams, 2012; Embi et al., 2014; Embi & Panah, 2014). However, not many focused on dual language learners who face challenges in grasping the English language skills due to the multiple linguistic systems they have to manage. Dual language learners (DLL) are defined as children who are learning and communicating in two languages (Barac et al. 2014; Hammer et al. 2014). Despite the increasing number of DLLs in Europe, America, and many Asian countries, little research has been conducted on language and literacy development among dual language learners (DLLs), mainly during their childhood and adolescent years (Hammer et al. 2014). This study's very poignant feature is that DLL in Malaysia who come from a multicultural society are acquiring English at school (as a second language) and practicing it at home but not necessarily with the right grammatical features and functions.

According to Hammer et al. (2014), DLLs have developed two language systems in their early life, but little is known about factors that influence DLLs' linguistic development, even though the amount of linguistic exposure of both languages appears as one of the main contributing factors. These learners acquire two linguistic systems and face challenges in distinguishing certain areas of language development such as grammar and vocabulary (Espinosa, 2015; Hammer et al., 2014). Bilingual or dual language learners embrace diverse cultural backgrounds and several language groups (Winsler et al., 2014). Espinosa (2015) postulates that dual language learners are

constantly “challenged with mastering the linguistic components of several different language systems” (Espinosa, 2015, p. 41).

Previous studies have shown how technology has helped language learners find their prospects and overcome various issues and quandaries (Darling-Aduana & Heinrich, 2018; Kasch, 2019; Pacheco et al., 2017). Due to its flexibility, the flipped classroom model has become one of the latest trends in English teaching and learning practices that cater to learners of different needs and conditions. It is one of the blended learning models that change the traditional classroom practices by replacing classroom lectures with online videos (and recorded lectures) delivered outside of the classroom and fully utilises the face-to-face hours with learning activities. The idea of flipping a classroom was based on several factors such as learners’ failure in catching up with the face-to-face lectures and learners’ poor understanding of key concepts (Bergmann & Sams, 2012). Flipped classrooms are significant in today’s world since they rely on technology, flexible, and appropriate for the 21st-century learning environment (Herreid & Schiller, 2013). The present study, therefore, generally aims to explore DLLs’ perception towards flipped classroom model in learning grammar and to identify DLLs’ progress in learning English tenses through flipped classroom teaching and learning approach. The research questions for this research are as follow:

1. What is the DLLs’ perception towards flipped classroom practice in learning grammar?
2. Is there any significant difference in the pre-test and post-test mean scores of grammar achievement using flipped classroom model?

2. LITERATURE REVIEW

2.1 Embracing the 21st Century Learning: Blended Learning Approach and Flipped Classroom Model

The idea of 21st-century learning skills emerged along with the development of ICT. According to Chua and Jamil (2012), technology has become a strong foundation in establishing an innovative education system and interactive learning materials. Among the 21st-century skills are learning and innovation which includes critical thinking and problem-solving, communication and collaboration, and creativity and innovation (Trilling & Fadel, 2012). Critical thinking and problem-solving skills can be enhanced through collaborative learning and cooperative activities (Gokhale, 1995). This is in line with the notion of virtual education that encourages independent learning, facilitates critical thinking, and promotes curiosity to learn and discover new knowledge. However, language learning is unlike learning science or mathematics. The important components of language learning could be learnt from formal training or education, but the details and nuances that make up language skills is from using the language (Iyer, 2016, as cited in Kirkpatrick & Liddicoat, 2019).

There are different language teaching methods, of which communicative language teaching (CLT) is the world’s dominant approach. CLT approach in the language classroom is relevant for successful language learning in the 21st-century classroom. CLT highlights the aspect of communicative competence of language learners. According to Alamri (2018), to achieve teaching objectives, grammar teaching, and communicative practices should be mixed instead of choosing one

approach over the other. A combination of approaches to grammar, meaning, and communicative language teaching may also help achieve the desired level of language learning or teaching. Hence, this part of language skills should not be thought of in isolation from the communicative activities in the classroom. CLT approach gives room for both inductive and deductive learning of a language, which means that language can be learned in both ways. In the deductive approach, students will be given sets of grammar rules and practice them in the given opportunities. On the other hand, the inductive approach provides examples of sentences containing grammar rules and provides opportunities for students to discover the rules by themselves (Richards, 2005). Since grammar is essential to ensure students' competence in using English, selecting the suitable method to teach the component is significant. Flipped classroom model utilises the deductive approach by giving students exposure to the sets of grammar rules through activities and videos and allowing them to discover and understand the knowledge using the CLT approaches such as information gap activities and online group discussion.

Flipped classroom model is one of the six models of blended learning. It is an instructional strategy from the rotation model that switches the fixed lecture hours with online learning activities at home. It transforms conventional in-class lectures with recorded lessons that learners can view at their own pace before attending the class. Practical activities and projects, on the other hand, are performed in class with the teacher's assistance. The flipped classroom is not just inverting the classroom events but more to (1) utilising the time spent in the class with engaging activities, (2) discussing new and related concepts, (3) clarifying hard-to-understand information, (4) investigating questions related to content and (5) encouraging active learning (Başal, 2015; Bergmann & Sams, 2012). It is an educational technique that consists of interactive group learning activities inside the classroom and direct computer-based individual instruction outside the classroom (Bishop & Verleger, 2013).

The flipped classroom teaching model is a student-centred approach that is facilitated through various collaborative techniques (Bishop & Verleger, 2013). It allows freedom without hampering learning and competence building. It suits the characteristics and personal needs of the young generation who are more adaptive, confident, sensitive towards their surroundings and environment, more flexible and open-minded in accepting new things and challenges (Anatole, 2013; "Gen Y and gen Z global workplace expectations study", 2014; News@Northeastern., 2014). Traditional learning methods have suffered from several setbacks pertaining to the mismatch of young learners' needs and styles with teachers' conventional strategies and high expectations. Flipped classroom approach, therefore, fulfil both needs of students and teachers in many ways.

2.2 Understanding English Grammar: A Constant Challenge for Dual Language Learners (DLLs)

Grammar is an integral part of language learning that ensures effective communication. The acquisition of grammar knowledge is necessary to use a language properly (Leech & Svartvik, 2013). However, grammar is usually not a favourite subject among many language learners. According to Abdullah and Marriappen (2012), DLLs in Malaysia face language problems, especially in writing, due to the lack of English grammar foundation. The linguistic knowledge of English remains a

constant challenge even for dual language learners who have spent more than eleven years learning the language in school (Wong & Barrea-Marlys, 2012). They perceive grammar as a difficult subject area to master (Choy & Troudi, 2006), thus develop a wall between linguistic and pragmatic knowledge. Among the areas that learners usually face difficulties are tenses (Al-Shallakh, 2016). Rahman and Ali (2015) postulate that learners make mistakes in verb forms because they are confused with the concept of time in English tenses. Idek et al. (2014) found the 'be' verbs as among the most challenging topics for Malaysian DLLs to acquire due to the various functions and sentence structures that English has. Therefore, the instructional teaching strategy using flipped classroom model is seen as a suitable method that helps provide prior grammatical knowledge to language learners before they attend the class.

2.3 Culturalising Learning Materials and Grammar Instructions for Dual Language Learners

Culturalising instruction, according to Parsons (2003, p. 24), focuses on a "value-laden nature of teaching and the deliberate incorporation of different cultural values into teaching, and these are the exclusive foci of culturalising instruction. The instruction is positioned within multicultural education, with a movement to which multiple meanings are attached". The approach involves instructional strategies that perform as a platform for students who observe different cultures from the culture of teachers' targeted language in the classroom. Dual language learners, for instance, are compelled to observe more than one culture; a home-grown culture (culture of their mother tongue) and a foreign culture that comes with the language that they are also acquiring at home and practicing in school. This situation is not uncommon in Malaysia since many children are born and raised in an environment where parents and society communicate in at least two languages in their daily conversation. As a melting pot of different cultures, Malaysians embrace their multiple linguistic identities by acknowledging multilingualism dynamics in their country (Shaari, 2017). Children from inter-ethnic marriage families, for instance, will acquire at least two different languages used by their parents. Accordingly, Zaid and Mac (2017) explained that:

"Education, rural-urban migration, increased interracial interaction, and interracial marriages are among factors that influence language choice, especially in the home domain. Malaysians have the option of choosing which language(s) to use: Malay, the national language; English the second language; the native languages, or a mixed discourse comprising several languages" (Zaid & Mac, 2017, p. 15).

The juxtaposition of languages and cultures has often been challenging for children, especially when articulating cultural expressions in a language that comes in a different norm of interaction. Suitable language instructions and learning strategies are needed to fill in the gap of intercultural incompetence. The contextualisation of materials used in grammar lessons not only increases familiarisation, but also overcomes cultural incongruence (Matthews, 2013) and sociolinguistic barriers among dual language learners.

Communicative language teaching (CLT) has been part of language teaching in Malaysia and many Asian countries that utilise more than one medium of instruction in both formal and informal communication settings. In CLT, grammar competence does not aim learners to state the grammatical rules but more to interpretation, expression, or negotiation of meaning (Savignon, 1987). The position of grammar in the CLT approach is connected to learners' communicative competence. Hence, this part of language skills should not be thought of in isolation from the communicative activities in the classroom.

2.4 Marrying CLT with Flipped Classroom and Blended Learning Approaches

The online learning platform and materials (videos and WhatsApp) are part of an interactive multimedia environment which accommodates all materials and ICT tools that learners need in a hybrid learning platform. Some of the core concepts underlying its design are (1) communicative learning method, (2) integration of grammar knowledge using an inductive approach, (3) learner-fit delivery of content, (4) teacher-student and peer interaction through computer-supported collaborative and individual learning activities inside and outside the classroom, as well as (5) positive and corrective feedback through teacher evaluation and peer discussion. These core concepts derived from the CLT and flipped learning approach are essential in ensuring students' continuous engagement, keeping track of their progress, and achieving learning objectives (Bañados, 2006).

A flipped classroom helps teachers provide extra assistance and support to their learners through a blended learning approach by allowing more time for language activities inside and outside the classroom. The combination of CLT and flipped learning enhances students' engagement and gives teachers more opportunities to facilitate their students in formal and informal learning environments.

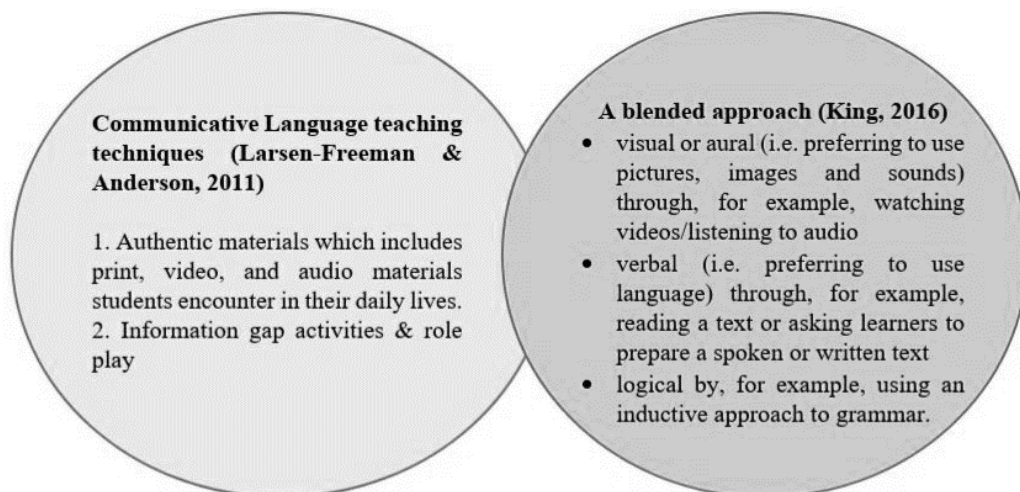


Figure 1. Marrying CLT with flipped classroom and blended learning approaches.

By marrying CLT with flipped classroom and blended learning approaches, the present study, therefore, aims to unpack the following objectives:

- (1) To explore DLLs' perception towards flipped classroom model in learning grammar.

- (2) To identify DLLs' progress in learning English grammar through flipped classroom teaching and learning approach.

3. METHODOLOGY

The present experimental research employed a pre-test-post-test design. The mix-method approach is threefold: (1) one-group pre-test-post-test design, (2) survey, and (3) interview.

3.1 Sample

To avoid treatment diffusion, all intermediate learners (133 participants, ages 18 to 25) from a vocational college majoring in Engineering Course in Malaysia were selected as the research sample using a purposive sampling method. It is the process of selecting a research sample that suits certain characteristics of the targeted population (Gay et al., 2011). The participants were selected based on the following criteria:

- First-semester students who just enrolled in the college with an intermediate level of English proficiency (CEFR A2-B1). The Common European Framework of Reference for Languages (CEFR) is an international standard for describing language ability. It labels language skills and proficiency level on a six-point scale; from A1 for beginners to C2 for advanced. The scales are determined as follows: A1-A2: Basic, B1-B2: Independent and C1-C2: Proficient ("[International language standard](#)", n.d.). The CEFR level was measured based on the participants' language scores in the college placement test.
- First-semester students who are formally and informally learning and using two languages in their communication (at home and school); in this case would be Bahasa Malaysia and English.

These participants have completed both primary and secondary levels of education. They are currently taking several vocational courses (such as fashion design, automotive technology, electrical engineering, and multimedia design) in one vocational learning institution in Malaysia. Since the participants of this research came from the same higher learning institution, a one-group pre-test and post-test design were chosen to avoid treatment diffusion among the research participants. According to Gay et al. (2011), treatment diffusion occurs when different treatment groups communicate with and learn from each other. Twenty grammar questions specifically on the topic of verb tenses were developed for each test. The pre-test questions were adapted from Azar (1999) and were distributed to the participants a week before the intervention. The intervention was conducted in one hour/week for six periods. Six instructional videos based on some local scenarios were selected. The videos consist of local English advertisements and short videos derived from local English films and dramas. The videos demonstrate the Malaysian lifestyle in various aspects. These videos, even though produced locally, use standard Malaysian English that is internationally acceptable and intelligible. The duration of each video is between three to 10 minutes.

A questionnaire is also another instrument selected for the study. A set of questionnaires on students' perception towards flipped learning was developed and

administered to the experimental group. The questionnaires were amended due to some recommendations from the experts. The questionnaires are divided into two sections. The first section (Section A) contains the respondents' demographic information, whereas the second section (Section B) consists of 12 items designed to understand learners' perception of the flipped classroom model. These items were established based on previous findings and responses found by other researchers who had conducted the same studies (Al-Harbi & Alshumaimeri, 2016; Kim et al., 2014). In ensuring the validation of the questionnaire, a pilot test was conducted. Cronbach alpha coefficient was calculated to assess the internal reliability of all items and yielded a value of 0.81 (n=30). The questionnaire was then administered to all 133 participants after the intervention.

To support the quantitative findings, three students were selected for the research interview. The three students were selected based on their post-test results. The interview data was collected using audio- or video-taping, which provides a verbatim account of the session. The interview consists of seven questions about the students' perception of the videos, flipped classroom teaching models, and activities.

3.2 Culturalised Blended Teaching Materials

Four WhatsApp groups were established for interaction and discussion purposes. Six videos that contain local elements were uploaded to the WhatsApp Groups seven days prior to each stage of the intervention program. The videos are as follows:

- A video that demonstrates local celebrations such as *Eid al-Fitr*, Chinese New Year, and Deepavali with some usage of auxiliary verbs 'to be', 'to do', and 'to have'.
- A video that shows Malaysian cultural values and tradition in the family that contains verbs in the present tense.
- A video that describes one economic activity in the country which is the palm oil industry (working at oil palm plantations and palm oil mills). This video contains verbs in the present continuous tense.
- A video that shows the Malaysian pre-independence period and a historical story that contains verbs in the past tense.
- A video that demonstrates preparations of some Malaysian dishes that contains verbs in the past continuous tense
- A video that demonstrates the development of traditional arts and local music that contains verbs in the future tense.

Specific tasks were assigned to the students based on the videos to maintain their participation. Twenty questions were prepared for each video and posted to the groups every week. The teacher provided instant responses with answers and explanations about the topic to encourage learners' involvement and online participation.

In face-to-face lessons, the instructional videos were reviewed to allow students to ask questions that they have on the topics or clarify certain issues raised during the online discussion that took place on WhatsApp. Lesson plans for classroom activities were adapted from Watcyn-Jones and Howard-Williams (1995). Table 1 demonstrates the implementation of flipped classroom model in teaching tenses.

Post-test was conducted a week after the intervention program. The questionnaire on learners' perception towards flipped classroom model was administered to all participants in the experimental group after the post-test. To support the quantitative findings, three students were chosen to be interviewed.

Table 1. The implementation of Flipped Classroom Model in teaching verb tenses.

Weeks	Interventions*	Titles	Classroom activities**
Week 1	Video 1 – 05.30 minutes	Auxiliary Verb ‘to be’, ‘to do’ and ‘to have’	Lesson 1 – Integration tenses with information gap activities
Week 2	Video 2 – 06.91 minutes	Present Tense	Lesson 2 – Integration tenses with information gap activities
Week 3	Video 3 – 03.49 minutes	Present Continuous Tense	Lesson 3 – Integration tenses with information gap activities
Week 4	Video 4 – 08.86 minutes	Past Tense	Lesson 4 – Integration tenses with information gap activities
Week 5	Video 5 – 06.31 minutes	Past Continuous Tense	Lesson 5 – Integration tenses with information gap activities
Week 6	Video 6 – 07.81 minutes	Future Tense	Lesson 6 – Integration tenses with information gap activities

* Videos Uploaded to WhatsApp group a week before classroom meeting with 20 questions to be discussed in the WhatsApp group.

** Conducted a week after uploaded the instructional videos (Duration: 3-10 minutes).

Since qualitative research does not have a specific number of participants allocated for the interview method (Becker & Stamp, 2005), three participants were chosen based on their significant variation in terms of grammatical competency. This was measured through their post-test results, which is sufficient in measuring the specific grammar knowledge and skills involved in the study.

The participants were selected based on their scores: participant A scored the highest at 95%, participant B scored the average mark of 60%, whereas participant C scored the lowest mark of 35%. According to Guest et al. (2006), in order to enhance the validity of data, an in-depth inquiry in a naturalistic setting with a small number of cases is sufficient in facilitating findings within a limited context and purpose.

The interview consisted of six open-ended questions on participants’ experience with flipped classroom activities. The questionnaires were analysed using descriptive statistics, and the interview responses were recorded verbatim. Meanwhile, the result of the pre-test and post-test was analysed using Paired Sample T-Test.

4. FINDINGS AND DISCUSSION

4.1 DLLs’ Perception towards Flipped Classroom Model in Learning Grammar

Descriptive statistics of learners’ perceptions towards the flipped classroom model revealed the findings as shown in Table 2.

Table 2 shows that with the mean of 4.3, more than 95% of the respondents agreed to the statement of ‘combining new information before, during and after the lesson has helped them learn English grammar better’. It is learned that by associating knowledge before and during the activities, learners were able to perform their tasks effectively. This might be because learners have gained more confidence and are motivated to share their knowledge with others during the activities. Learners helped each other to complete the given tasks. About 59.4% of respondents agreed that the instructor’s explanations and others’ feedback before class have allowed them to understand the grammar lessons better, whereas outside the classroom learning activities have enabled them to have casual communications (with confidence and

ease) among each other, without teacher's observation. Learners' positive feedback indicates that preliminary input on verb tenses from the instructors and their classmates' feedback has helped them understand the grammar lesson.

Table 2. Students' perception towards the flipped classroom.

Students' perception	Percentage (%)	Mean score
Combining new information before, during, and after lessons helps me learn better.	95	4.3
My instructor's explanations and other feedbacks before class allow me to understand the grammar lessons better.	92.4	4.2

Meanwhile, Table 3 shows that 84.2% agreed that in-class group discussion and group collaboration had helped them improve their learning, and 82.7% of the respondents stated that the out-of-class learning activities enable them to collaborate with other students. This indicates learners' preferences in learning verb tenses through group discussions and group collaboration-activities. However, 20.3% of the respondents felt ambivalent about having another set of grammar lesson using video activities at home. Five respondents disagreed to participate in future in-class group discussions and group collaborations as they found these activities were not helpful enough in strengthening their grammar understanding and knowledge. However, the percentage of learners who disagreed with the idea of having flipped classroom activities in English grammar lessons is relatively small (1.5%) and does not reflect the overall perception.

Table 3. Students' feedback on out-of-class activities.

Students' perception	Percentage (%)	Mean score
In-class group discussion and group collaboration help me improve my learning experience during the grammar lessons.	84.2	4.1
The out-of-class learning activities enable me to collaborate with other students.	82.7	4.0

Three students were selected based on their grammar post-test results for the interview sessions. Participant A (advanced learner) scored 95%, Participant B (intermediate learner) scored 60 %, whereas Participant C (beginner) scored 35%. Aspects that enhance the flipped classroom method were investigated through interviews. Through a thematic analysis, the researchers have identified several themes and employ them to address and discuss the issue. The unstructured data, even though quite limited, serves as part of the basis for this study. The emerging themes are 1) accessibility and length, 2) culturalised and consistent content delivery, and 3) motivation enhancement through guided self-learning techniques.

4.1.1 Accessibility and length

Firstly, teachers need to provide accessible videos that are short but arranged in an ordered sequence of frames in terms of their learning outcomes, topics, and syllabus. All participants stated that they could easily access the videos, which has helped them learn difficult grammar concepts at their own pace.

Participant A:

"Watching video lectures before class was beneficial to me because...I don't need to spend much time to learn English, just some...just need to take like 10 minutes' break doing something to learn English from the video".

Short videos have made it easier for learners to download and save files. Short videos also help teachers to engage learners who have short-attention-span with tedious and challenging content. Previous researchers suggested five to ten minutes as the optimal length for flipped classroom videos (Musib, 2014; Zainuddin & Attaran, 2016) due to learners' different capabilities, cognitive functioning, and attention span. Since grammar is not a favourite subject among learners (Abdullah & Marriappen, 2012; Al-Shallakh, 2016; Rahman & Ali, 2015; Wong & Barrea-Marlys, 2012), teachers might have to reconsider feeding complicated contents, all at once.

Frydenberg et al. (2005) perceive learners' engagement as an inexplicit subject influenced by various factors such as ethnicity, age, gender, and learning capabilities. Participant C, for instance, confessed that even though the videos were relatively easy to understand, it took him a couple of hours to digest the content due to his language limitation. This is in contrast with participant A, who only took 10 minutes to understand the content of each video. Flipped classroom method is seen as a great learning platform for both learners to adjust themselves with their ability to process and comprehend new information.

4.1.2 Culturalised and consistent content delivery

Previous studies have found that interest is associated with focused attention, better cognitive performance, and learning (Ainley et al., 2002; Köller et al., 2003). Whether or not a lesson is interesting is one of the critical dimensions on which learners perceive their learning experience in the classroom. All three participants expressed their high interest in instructional videos that revolved around homegrown issues and used phrases and expressions associated with the local cultures. Participant A said, "I am excited to learn because the content is easy to understand," whereas participant C claimed, "for me, grammar is very difficult. Luckily, the videos are easy. It makes learning less difficult". Musib (2014) suggested that the material used in flipped learning videos should not be too difficult for learners to comprehend.

Participant B:

"Not difficult, the videos were not difficult to understand because of the content delivery was according to the step by step".

One of the participants found the content comprehensible because he can relate to the content, ideas were clearly delivered, and the explanations were properly structured. Recorded materials can be more effective if they are organised in certain ways that learners find easy to follow (Hung, 2015). This is probably because prepared instructional videos require teachers to consolidate, organise and rehearse before delivering the content. If conventional in-class lectures are impromptu and spontaneous, the process of creating and managing video contents in a flipped classroom, on the other hand, involves thorough preparation and editing.

According to Tsai et al. (2008), people's interests may improve through effective interaction between the person and his or her surroundings. Content familiarity improves engagement, thus help learners relate with the topics using their background

knowledge. This enhances curiosity and maintains their enthusiasm for learning a complicated subject matter. Creating and selecting the right interactive videos can be a challenging process that determines the success of each lesson. Good videos not only present their content but also contain integrated skills and knowledge that learners might inadvertently acquire while viewing them. Participant C, for instance, is motivated to improve his speaking skills after listening to the speaker's language and familiar expressions when viewing the videos. Tsai et al. (2008) claim that "certain features of the learning situation are assumed to be capable of arousing the individual's curiosity or interest, regardless of personal preferences" (p. 460).

According to Ausubel (1963), meaningful learning may require all aspects that influence learning but, most importantly, what learners are familiar with and what they have previously learned and experienced. Understanding what learners already know is more than just "identifying their representations, concepts, and ideas, because it requires consideration of the totality of the cultural/social being in their manifestations and bodily, affective and cognitive languages" (Agra et al., 2019, p. 249). For this, teachers can facilitate learning through familiar objects and materials so that learners can contextualise and incorporate learning with their life experience and relate with the existential conditions in making their learning process more fun and digestible.

4.1.3 Enhancing motivation through guided self-learning

Motivation is vital in promoting learners' engagement. Frydenberg et al. (2005) define motivation as "energy and direction" (p. 5) that is useful in advocating engaged learning. Motivation is triggered when certain psychological aspects are present in the learning environment, such as self-efficacy and achievement anxiety. Most of the research participants expressed their interest in self-learning with the teacher's assistance in the classroom. Discussion about cultural issues highlighted in the videos while relating with selected tenses helps them understand the lesson and the functions of selected grammatical aspects.

Participant A:

"Yes, I do feel motivated to learn verb tenses using the video because when I found things that I don't understand, I will use a dictionary to understand the content of the video".

Malaysian students are more instrumentally than integratively motivated to acquire English (Thang et al., 2018). This is probably due to their strong desire to have a brighter future since English is always associated with knowledge, career advancement, technology, and future success (Gill & Shaari, 2019). A suitable and relevant interactive content might enhance learners' motivation since it is less dry than a traditional grammar lesson. A challenging subject like grammar requires suitable content for teachers to ground their teaching and students to establish their learning. This education method places students at the centre of teaching and learning and guides teachers in their process of planning, prioritising, and reviewing how lessons should be implemented and conducted. Previous researchers have found that most Malaysian DLLs are generally more extrinsically motivated than intrinsically driven in learning a second language (Bidin et al., 2009; Parilah, 2002; Zubairi & Sarudin, 2009). Extrinsic motivation, "usually associated with instrumental orientation, is a learner's desire for achievement to get an external reward" (Thang et al. 2018, p. 42).

In the flipped classroom, the reward may come in various forms, such as teacher's acknowledgment in the public online chatroom that brings good reputation to the learners, better grades, and compliments. Apart from that, guided self-learning helps reinforce knowledge and increase motivation as it allows learners to seek clarification on certain parts of the lesson (Al-Harbi & Alshumaimeri, 2016). Even though the instructional videos have helped learners understand the topic, some learners preferred classroom activities and group discussions to assist their learning. For example, one of the participants preferred to learn verb tenses in the classroom. This participant found that learning without his friends was difficult, and learning collaboratively in the classroom is more exciting and meaningful. On the other hand, another research participant feels more confident and motivated to communicate online since he does not have to face direct criticisms or negative comments when making mistakes.

Since face-to-face lectures were replaced with online videos posted before the lessons, teachers have time to plan more engaging class activities on grammar during a face-to-face meeting with students. Flipped classroom gives learners the privilege to claim and enjoy ownership of their learning process without disregarding the teacher's assistance (Bauer-Ramazani et al., 2016). Teachers can keep track of learners' progress through online and face-to-face discussions and collaborative learning activities in the classroom.

4.2 DLLs' Progress in Learning English Tenses through Flipped Classroom Teaching and Learning Approach

The final section discusses the significant differences found in pre-test and post-test mean scores in the grammar reinforcement test during the flipped classroom session. Paired sample t-test was used to analyse the data and record the differences.

Table 4. Paired sample t-test result comparing pre-test and post-test mean scores.

		Mean	N	Std. Deviation
Experimental	Pre-test	45.28	133	14.87
Group	Post-test	68.42	133	15.33

The results of the tests are shown in Table 4. The mean value for the pre-test score is 45.29, whereas the mean value for the post-test score is 68.42. The mean score reported after the intervention is 23.14 higher than the pre-test mean score. The p-value for the experimental group is .00 is lower than the .05. This indicates a significant difference between the mean score of the pre-test and post-test. The findings indicate students' improvement in their post-test results after the intervention program of flipped classroom method. This finding is similar to several previous studies (Al-Harbi & Alshumaimeri, 2016; El-Bassuony, 2016; Hung, 2015) that reported significant improvement in respondents' post-test scores in their flipped classroom intervention research studies.

The improvement is due to the following reasons. Firstly, some grammar exercises were posted after each video was uploaded online. It is observed that almost all students took the opportunities to respond to the consolidating questions and corrected each other's mistakes. Some of them explained grammar rules and functions while rectifying their friends' errors. Apart from that, teachers' feedback that were shared on WhatsApp groups has encouraged students to learn from others' mistakes,

recognise their issues in grammar, and improve themselves. Finally, presentations of online materials have showcased linguistic complexities in a simplified manner, thus helping learners comprehend the topics and apply the concepts in more practical ways such as in speaking and writing. Some students claimed the videos were interesting and learner-friendly as they could discuss the subject in an online group discussion or during classroom activities.

4.3 Discussion on Flipped Classroom: Grammar Lessons using Culturalised Materials for Dual Language Learners

The instructional practice of blended learning evolves due to the development of educational technology. It is known to be one of the best instructional models that support learners in their learning process (Embi et al., 2014). Blended learning, also known as 'hybrid learning', combines the best features of traditional schooling with the advantages of online teaching and learning instructions (Powell et al., 2015). The research participants of the present study who experienced blended learning have gained benefits of both face-to-face instruction and online education at the same time. Most participants agreed that additional supervision from teachers, provided through online communication is more effective in learning since it caters to their personal needs and learning issues that are different from one another.

Learning involves a connection with surroundings and other human beings, be it teachers, peers, family, or any casual events and life experience. In flipped classroom activities involved in the present research, teacher-student interaction and peer discussion were activated through localised language learning materials that students found easier to relate to and comprehend. The online learning environment has provided additional avenues for learners and teachers to communicate and discuss the lessons before and after the class by relating the videos with their own experience and practicing grammar more casually. Most participants observed guided self-learning as effective in strengthening new knowledge while reinforcing the existing ones. One novice learner who was interviewed (participant C) admitted that online discussion with peers is more exciting and helpful in strengthening his language skills and knowledge. In addition, online group discussion based on prepared instructional videos serves as part of scaffolding strategies that help move learners progress toward a better understanding of the concepts and greater independence in the future learning process. Culturalised materials that allow them to relate with previous experience and background knowledge have made learning more convenient and easier.

In flipped classroom lessons, passive learners can participate and ask questions through the online communication platforms prepared by teachers. This helps boost their self-confidence and motivation. Participant C, for instance, enjoy online discussion with teacher and friends since he can communicate without any fear of being judged or criticised in public. Virtual communication not only reduces social distances but also acts as a shelter for learners with low self-esteem to practice English without fear due to the non-existence of body language and eye contact (Shaari, 2017).

4.4 Research Implications

The present research has several implications for teachers and learners. Firstly, it acknowledges the benefits and advantages of the flipped classroom model as a

suitable method in teaching and learning English grammar. This is proven through the research findings, which indicated a significant improvement in grammar achievement after the intervention program. Furthermore, the results also revealed a significant relationship between students' perceptions and their grammar-test achievement. These are among the substantial pieces of evidence that support our claim on the effectiveness of flipped classroom model in the teaching and learning of English grammar among Malaysian students.

Next, the flipped classroom model has several advantages to ESL learners as it allows them to study at their own time and pace, based on their learning capabilities. Since learners are born with different cognitive abilities and performance levels, the flipped classroom model gives learners autonomy to monitor their learning progress. Teachers get to relinquish control while empowering their students. They can prepare more language enhancement activities that are student-centred, and more time can be allotted on the discussion of selected topics after part of the learning process has taken its place at the individual level.

The traditional classroom model does not permit students to learn independently. Its instructional format is predominantly face-to-face, mostly involving teacher talks and presentations of content materials, and each group of students works through a single, unified syllabus that might not suit various learning capabilities and interests. However, new learning models are arising and open extensive opportunities for teachers to empower students to drive their learning while teachers move to facilitate students in some other ways. The major technical innovation behind these new models is blended learning that reduces the task of transferring knowledge directly to the hands of students for them to control themselves.

5. CONCLUSION

This research was conducted to identify the significance of flipped classroom model in the 21st-century classroom and its implementation in teaching verb tenses to a group of dual language learners in Malaysia. The findings of the threefold method indicated that the flipped classroom model can enhance students' grammar knowledge and understanding through activities and participation inside and outside the class. Flipped classroom model has allowed knowledge to be acquired through active and constructive processes. The instructional strategy in flipped classroom model also gives learners the ownership to monitor their learning progress. It is the learners' responsibility to organise their learning progress and develop their knowledge before, during, and after the lesson. This new teaching approach has transformed the conventional classroom practices and relinquished teachers' role as an exclusive knowledge feeder in learning institutions. The culturalised and home-grown materials that were used throughout the lessons have several advantages. First, home-grown materials have increased students' interest and motivation through familiarisation of content. Next, they developed curiosity and critical thinking skills among students by helping them to relate new experience with their background knowledge. Finally, culturalised materials have reduced students' anxiety in learning challenging subjects and skills through recognisable topics and content.

Flipped classroom model, however, has several advantages and drawbacks. The model helps busy students through its flexibility, and assists teachers who are

struggling with underachieving students since they give more individualised attention and provide specific guidance. It supports students of all abilities to excel in learning. Besides, flipping also enables students to repeat recorded lectures, overcome learning anxiety, and substitutes lessons for absent teachers (Embi & Panah, 2014). However, various issues and factors need to be considered before implementing this method. Some of the difficulties come from students who resist changing their learning style since this approach requires them to do their homework before face-to-face lectures (Embi & Panah, 2014). In addition, unprepared students may attend class and participate in classroom activities without prior knowledge. As this model relies heavily on students' early preparation prior to the lesson, teachers need to recognise interesting videos that keep students' interest and motivation. Future research could study teachers' perceptions and motivation in employing this model as they are the key players who determine the effectiveness of teaching activities and lessons.

Being the knowledge workers for society, language teachers need to constantly upgrade their technology-integrated pedagogical practices in order to inspire and motivate students. It is a heavy baggage being placed on teachers' shoulders, but this is critical in keeping up with the modern lifestyle and new education system. For a generation born as digital natives, engaging them with interactive and meaningful materials in a virtual language learning environment will provide a more significant educational experience. Therefore, future studies on the use of various online tools such as YouTube videos and other virtual learning platforms are highly needed to facilitate effective learning and help teachers utilise these available platforms and free-accessible materials wisely.

ACKNOWLEDGEMENTS

This study was made possible from a research grant provided by the MPOB (Malaysian Palm Oil Board) -UKM Endowed Chair Research Grant (Research code: EP-2019-050).

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