

The Effects of Flipped Classroom on Form 4 ESL Learners' Speaking Performance in a Malaysian Secondary School

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Abstract. Concerns about insufficient speaking performance among ESL learners have led to innovative teaching methods. The Flipped Classroom, where learners learn content outside class and engage in discussions during school hours, offers a promising solution. Despite its success in tertiary and primary levels, its impact on speaking performance among Malaysian secondary ESL learners remained understudied. This study, conducted in a Putrajaya secondary school with 48 Form 4 ESL learners, investigates the effects of the Flipped Classroom on speaking performance using "Flip". By utilizing a quantitative approach, the study employed purposive sampling and collected data through pre-post-tests. The findings were promising, as learners exhibited significant improvement in speaking performance after adopting the Flipped Classroom approach. This research carries crucial implications for educators and policymakers. By integrating the Flipped Classroom approach, teachers can effectively enhance learners' speaking performance. The study's outcomes serve as a valuable guide, aiding teachers and policymakers in their mission to enhance learners' speaking performance.

1 Introduction

Malaysia, deeply influenced by its colonial history, has embraced bilingualism in its education system, compelling English language instruction at every educational tier [1]. This commitment reflects a nuanced strategy to harmonize national and international educational demands. The Standards-Based English Language Curriculum (SBELC) is a testament to this commitment, concentrating on honing English proficiency through the development of fundamental skills such as reading, writing, listening, and speaking. As Malaysia navigates the complexities of a swiftly evolving global landscape, policies like the Malaysia Education Blueprint 2013-2025 (MEB) [2] acknowledge the paramount importance of English competency. Specifically, Shifts 2 and 7 within MEB focus on fortifying English language skills and harnessing the potential of Information and Communication Technology (ICT) to meet the challenges of the 21st century [3].

While the emphasis on English language proficiency is evident, an equally critical facet is the development of speaking skills, recognized by the Ministry of Education (MOE) as a

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vital component. Secondary school, serving as a pivotal platform for academic and personal growth, assumes a significant role in nurturing learners' speaking abilities. This emphasis is reflected in the Sijil Pelajaran Malaysia (SPM) examinations, where the assessment scales and question types for English language papers align with the Common European Framework of Reference (CEFR) descriptors, emphasizing vocabulary, grammar, and communicative competence [4]. Despite these efforts, attaining the targeted CEFR proficiency level of B2 for school leavers remains a challenge, as indicated by a Cambridge baseline study, revealing that a considerable portion of Form 5 ESL learners still falls below the desired proficiency levels [5].

One pivotal initiative aimed at addressing these challenges is the adoption of the Flipped Classroom approach, set in motion by the Ministry of Education in 2013 as part of the Malaysia Education Blueprint 2013-2025 (MEB) [2]. This pedagogical shift marks a departure from traditional teaching methods, advocating for learners to engage with instructional content outside of regular class hours, often through digital means, and reserve in-class time for interactive and application-oriented activities. Despite its recognition for enhancing learners' performance, motivation, and independent learning abilities, the comprehensive implementation of the Flipped Classroom in Malaysia is still unfolding.

As education undergoes transformative shifts, it becomes increasingly apparent that learning is no longer confined to traditional classroom settings [6]. The infusion of technology into the flipped classroom model holds the potential to significantly amplify learners' autonomy and elevate their speaking abilities. Beyond nurturing self-directed learners, this pedagogical approach offers a flexible learning environment that encourages active learners' participation and information absorption, making it particularly well-suited for language classes [7]. However, despite its recognition as a modern teaching and learning approach, the full implementation of the flipped classroom has yet to be fully realized in the Malaysian educational landscape. Research on its impact on speaking skills in the Malaysian context remains limited.

This study addresses this gap by examining the effects of the Flipped Classroom on Form 4 learners' speaking proficiency in a school under the School Transformation Program 2025 (SLP25). The research employs pre-and post-tests to assess changes in speaking performance. Despite global recognition, the full implementation of the Flipped Classroom in Malaysia is still evolving, highlighting the need for further research in this context [6,7].

2 Literature Review

2.1 Flipped Classroom

The flipped classroom model has no specific framework [8]. However, it is acceptable to know that it shares common criteria where learners engage with instructional videos either outside the classroom or in advance of the scheduled class, leaving the face-to-face interaction in class [9,10]. It was pioneered by Colorado educators Jonathan Bergmann and Aaron Sams in 2006, as they addressed the inadequacy of classroom time for teaching and practice by recording lessons for homework to enable learners to learn at their own pace. It involves moving homework tasks to class time, coining the term “flipped classroom [11]. The flipped classroom is built on four pillars: adaptable environments, learning cultures, intentional content, and professional instructors [12]. This approach has gained widespread recognition as it empowers learners to absorb information on their own schedule, fostering a personalized learning experience ahead of the in-person session [13]. Moreover, it affords instructors the opportunity to maximize class time for hands-on activities, lively discussions, and meaningful interactions, elevating the overall educational experience.

However, its adoption is impeded by teachers limited technological expertise, especially in language instruction [7]. In addition to that, transitioning from a traditional to a learner-centred approach necessitates learners to take greater responsibility for their learning. In order to establish an engaging environment, teachers must deploy flexible and innovative methods to consistently foster language development [7]. The flipped classroom leverages online platforms and diverse teaching strategies, such as video clips and synchronous/asynchronous alternatives, as valuable tools [12]. Amid the pandemic, the technology-supported flipped classroom approach offers an innovative and flexible pedagogy. While applicable to all language skills, the flipped classroom technique proves notably effective in enhancing speaking performance, creating positive language acquisition experiences, and aligning them with the demands of 21st-century skills [14]. This is further reinforced when talking about 21st-century skills and flipped classrooms. Erdemir and Yangın-Ekşi (2019) and Riza and Setyarini (2019) assert that using digital tools and online platforms is crucial to engaging learners outside of the classroom because they allow them to access online resources, take part in interactive activities, enhance speaking performance, develop higher order thinking skills, and interact with peers and teachers [15,16].

Regarding the theoretical foundation, Vygotsky (1978) introduced the concept of the Zone of Proximal Development (ZPD), positing that learners, when provided with the appropriate support and motivation, can undertake tasks that would be challenging on their own [17]. This theory suggests that learners engage in problem-solving activities beyond their immediate knowledge with the guidance and support of both teachers and peers. Flipped classroom seamlessly integrates a social constructivist learning approach, utilizing collaborative group activities to grasp complex concepts [7]. This method allows learners to work in teams, fostering an environment where multiple perspectives are shared in a learner-centred setting. Consequently, learners become active participants and constructors in the learning process, particularly when immersed in the flipped classroom approach.

2.2 Speaking Performance

2.2.1 Speaking Performance in the English Language Classroom and Flipped Classroom Overseas

In recent studies by Pratiwi et al. (2022) and Sridhanyarat et al. (2022), the effectiveness of the Flipped Classroom approach in enhancing speaking skills was explored [18,19]. Pratiwi et al.'s quantitative study focused on online speaking classes, revealing that the Flipped Classroom, coupled with in-class feedback, significantly improved learners' learning outcomes, emphasizing skills like content organization, coherence, grammatical accuracy, and pronunciation. This success was attributed to ample practice opportunities in the online environment and the accessibility of learning materials. Meanwhile, the study by Sridhanyarat et al. (2022) aimed to boost Thai learners' confidence in English presentations using the flipped classroom model [19]. The research demonstrated that this approach increased learners' self-assurance during speaking tasks, primarily due to extended planning time and culturally aligned task design. Both studies contribute to the existing literature, confirming the Flipped Classroom's effectiveness in fostering speaking skills and boosting learners' confidence in English presentation activities.

Liu and Zhang's (2022) study investigated the impact of the Production-oriented Approach (POA) Theory and the Flipped Classroom model on learners' oral English ability and attitudes [20]. Results indicated significant improvements in both spoken English competence and attitude toward oral English learning, offering empirical support for the implementation of the POA and Flipped classroom. The study reviews the importance for educators to consider task completion, learner acceptance, and learning effectiveness when

selecting teaching models. In a study by Phoeun et al. (2021) on the impact of a flipped classroom with a communicative language teaching approach on Cambodian undergraduates' English-speaking ability, significant enhancements in speaking proficiency, basic grammar, and vocabulary were observed [21]. Despite occasional pauses and initial hesitation, the flipped classroom approach proved beneficial for improving overall English-speaking performance, emphasizing the potential of this method in promoting effective language learning through cooperative strategies. Sudarmaji et al. (2021) addressed uncertainties about the Flipped Classroom's effectiveness in improving high school learners' speaking skills, confirming its positive impact attributed to material previewing [22]. The study raised questions about the necessity of previewing, but it concluded that the Flipped Classroom significantly promotes active learner engagement, leading to improved speaking skills.

2.2.2 Speaking Performance in the English Language Classroom and Flipped Classroom in Malaysia

Sani and Idris (2017) highlight inadequate learning time and a lack of emphasis on speaking skills as factors hindering ESL learners' effective communication in Malaysian classrooms [23]. The prevailing focus on reading, writing, and grammar instruction prioritizes a non-threatening, self-paced environment for learners to develop interpersonal skills and communicative competence [24,25].

Studies on Flipped Classrooms in Malaysia, primarily conducted at the tertiary level in fields such as Engineering, Nursing, Accounting, Pharmacy, and Dentistry [26-30], demonstrate positive outcomes, including enhanced academic performance and increased confidence. However, research specifically addressing speaking skills remains limited. Santhanasamy and Yunus's (2022) study on Flipped Learning and Blendspace highlights the positive impact of Blendspace on improving learners' speaking skills, fostering motivation for active participation both inside and outside the classroom [7]. Similarly, Sakinah and Yunus's (2020) research on Flipped Classrooms in ESL Primary Learners' tense learning reveals positive learner attitudes toward learning grammar through this approach despite a minority still preferring traditional methods [31]. The undeniable advantage of the Flipped Classroom lies in its fun, self-paced, and flexible environment, allowing learners to repeat video content for better comprehension.

A study on Flipped Classroom implementation in a writing class for low-proficiency EFL learners at a Malaysian private university indicates increased motivation and engagement [32]. The Flipped Classroom approach provides effective support, including flexible scheduling and immediate feedback, catering to the needs of low-proficiency EFL learners. Another study involving Year 4 Malaysian Chinese ESL learners underscores the method's benefits in promoting learner interaction, collaborative work, and improved command of adjectives through online resources like Edmodo [33]. The observed significant differences between control and intervention groups further validate the success of the Flipped Classroom. Despite these positive impacts, research on the Flipped Classroom's influence on ESL learners' speaking abilities at the Malaysian secondary level remains scarce, representing an unexplored area in language proficiency improvement.

2.3 Flip in Speaking Performance

The utilization of Flip as an interactive tool in this research demonstrates its efficacy in organizing and storing diverse materials on a single platform, catering to various learning styles and multiple intelligences. With its rich multimodal content, including videos, presentations, textual links, and images, Flip serves as a comprehensive resource for pupils. The researcher employed Flip within the flipped learning approach to enhance speaking

performance, leveraging technology to engage learners interactively. This methodology not only fosters twenty-first-century skills but also encourages learners to actively participate in speaking tasks within the Flip platform. By planning and creating lessons using Flip, the researcher facilitated the "outside classroom" phase, stimulating learners' interest and allowing them to guide their learning through Flip's adaptable styles. The incorporation of differentiated lessons and built-in assessments addressed speaking challenges, exemplifying the holistic approach facilitated by Flip, as illustrated in Figure 1.

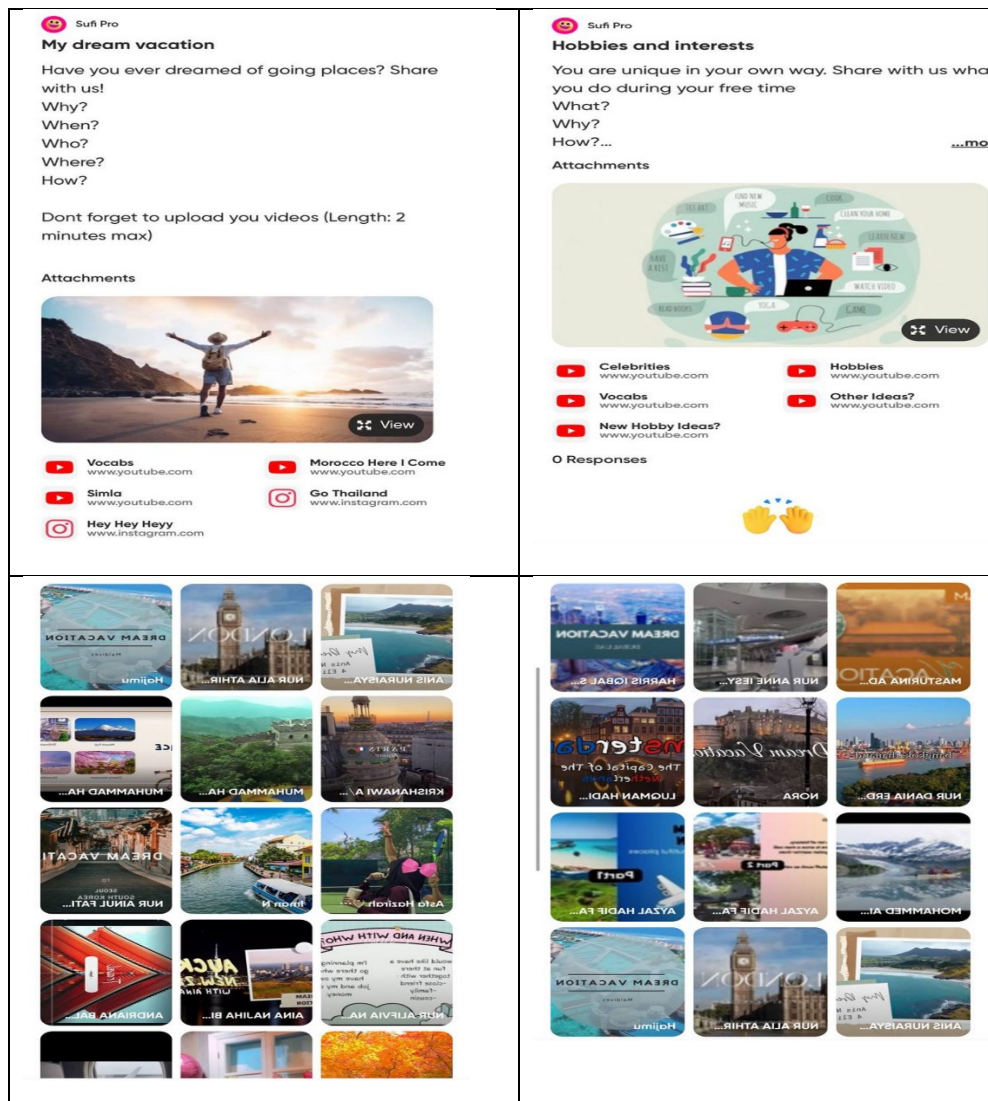


Fig. 1 A complete Flip tool

The researcher systematically structured and arranged the speaking content, aligning it with weekly themes. Clearly defined lesson objectives were established, supplemented by the distribution of relevant videos and links to guide learners in task execution. Subsequently, learners actively participated in speaking tasks, with the expectation that they familiarize themselves with the provided materials before attending class. Online discussions, both before and during physical class sessions, were actively encouraged. A distinctive aspect of

the methodology involved learners recording and uploading their final speaking videos on the Flip platform. This process served not only as a means of self-assessment but also as a catalyst for collaborative learning, enabling peers to offer constructive feedback on each other's videos. Additionally, learners were given the opportunity to revisit and refine their videos before the specified due date, further reinforcing the iterative nature of speaking development.

There are a limited number of studies on using the Flip tool formerly known as Flipgrid in Flipped Classroom. However, studies on Flipgrid alone offer notable insights. Allran et al. (2021) revealed increased fluency, boosted confidence, and enhanced interaction among learners during the Covid-19 pandemic [34]. Difilippantonio-Pen (2020) supports these findings, highlighting Flipgrid's role in providing equitable opportunities for English language learners [35]. The integration of digital video applications in Flipgrid, advocated by Shin and Yunus (2021) [36], has proven effective in promoting oral language development, particularly with appropriate support. Additionally, learner testimonials and Hashim et al.'s (2018) research emphasize Flipgrid's utility in developing English-speaking skills, showcasing improvements in vocabulary, heightened confidence, and increased interest in learning English through digital tools in the Flipped Classroom setting [37]. These studies collectively acknowledge Flipgrid's positive impact on language development, confidence-building, and genuine interest in English learning.

The study is, therefore, designed to address the research question:
What are the effects of Flipped Classroom on Form 4 ESL learners' speaking performance?

Hypothesis

H₀: There is no significant difference on Form 4 ESL learners' speaking performance after the implementation of Flipped Classroom

H_a: There is a significant difference on Form 4 ESL learners' speaking skills performance after the implementation of Flipped Classroom

3 Methodology

3.1 Participants

This study employs a quantitative descriptive approach with a quasi-experimental technique, specifically without randomization. Conducted from August to October 2023 at a Putrajaya school, the research focuses on examining the impact of the Flipped Classroom approach on the speaking performance of Form 4 ESL learners. The 48 participants were selected purposively based on weak proficiency levels identified through School-Based Assessment, and they needed access to technological gadgets for participation. The research spanned eight weeks, during which learners utilized the Flip tool within the Flipped Classroom framework to enhance their speaking performance. The teacher involved had at least 15 years of teaching English and at least three years of experience in handling ICT.

3.2 Research Instruments

To investigate the effects of Flipped Classroom on learners' speaking performance, two research instruments were used for pre and post-tests: CEFR Aligned SPM Speaking Test and CEFR Aligned SPM Speaking Assessment Scale [4]. 1 set of questions consisting of 3 parts (Interview, long run and collaborative task +further discussion task) was used for pre-

test and post-test. The three sets of questions were chosen because they were part of the current SPM English speaking format, which tests learners' speaking ability at the B1 level (intermediate). Participants in both groups were required to talk about General questions, introducing themselves and their daily routine for part 1, indoor activities or favourite gadgets for part 2, and ways to reduce rubbish in their neighbourhood for part 3. The same questions were asked for both pre and post-tests. The questions were adopted from the B1 speaking test from SPM 2021 questions. Referring to Appendix 1 and 2, each test will be administered for 10 minutes.

3.3 Procedure

The research procedures were divided into two sections, which are "outside class" and "inside class." In the first section, "outside the classroom," the researcher created a Telegram group to post any important information and instructions to the research participants. In the beginning, all the participants were given a speaking pre-test to assess their initial performance level. Then, the researcher posted Flip's activity link every week. There were eight modules that we used throughout this research. Each module complemented a topic in the Form 4 syllabus and was discussed each week subsequently. The researcher created content for the Flip according to the respective modules.

3.4 Data Collection

The data were collected from speaking pre-and post-tests. The speaking test focused on investigating whether there was any significant difference in speaking achievement before and after being taught using Flip. The pre-test was given at the beginning of the study to assess the learners' ability and initial speaking performance level, while the post-test was given at the end to assess the learners' speaking performance level. In the pre-test and post-test, learners were asked to answer the actual CEFR Aligned SPM Speaking Test, which was prepared for all A-level learners in Malaysia. The researcher recorded them according to the speaking rubric by the Ministry of Education, specifically for the Speaking Assessment Scale [4]. The rubric consists of three categories: vocabulary, grammar, and communicative achievement. The pupils were assessed, and the scores were recorded.

4 Findings

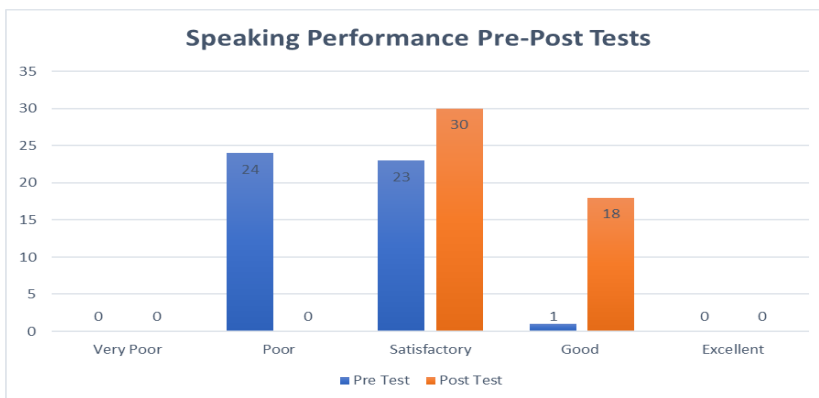


Fig. 2 Speaking performance pre-post tests

Table 1. CEFR Aligned level of speaking performance.

Pre	Level of speaking performance	Post	Level of speaking performance
0	Very poor	0	Very poor
24	Poor	0	Poor
23	Satisfactory	30	Satisfactory
1	Good	18	Good
0	Excellent	0	Excellent

Figure 2 and Table 1 present a comparative analysis of learners' speaking performance before and after the implementation of the Flipped Classroom. Notably, the post-test reveals a substantial improvement, with 18 out of 48 learners achieving a "Good" categorization, a stark contrast to the single learner in the same category before the Flipped Classroom was introduced. Moreover, a positive trend is observed as 30 learners demonstrated enhancement, moving from a "Satisfactory" classification in the pre-test to 23 learners in the initial assessment. Particularly noteworthy is the complete absence of learners in the "Poor" category after the 8-week Flipped Classroom treatment, indicating a notable positive impact on overall speaking proficiency.

Speaking Achievement Between Before and After Being Taught Using Flip, a paired sample t-test was conducted to analyze the results of the research question. Table 2 shows the results of the pre-test and post-test.

Table 2. Mean scores of pre–post-tests.

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre	10.85	48	2.552	.368
	post	14.25	48	2.227	.321

The data analysis indicates that the speaking performance of learners, assessed before and after the Flipped Classroom treatment, both fall within the "satisfactory" category with average scores of 10.85 and 14.25, respectively. Despite the consistent categorization, the noteworthy aspect lies in the observed improvement, as evidenced by the difference between the two means. The increase from 10.85 to 14.25 suggests a positive impact of the Flipped Classroom approach on learners' speaking abilities. This improvement underscores the

effectiveness of the instructional method in enhancing overall speaking performance among the learners.

Based on the statistics, the findings indicate that the pupils showed improvement in their pre-test and post-test. The results showed a significant increase in the marks of the pre-test ($M = 10.85$, $SD = 2.552$) to the post-test ($M = 14.25$, $SD = 2.227$), $t(47) = -16.507$, $p < 0.05$). This demonstrates that learners' speaking performance has improved after being taught with Flip. Table 3 shows the results of the paired sample t-test.

Table 3. Paired sample test

		Paired Differences					t	df	Sig. (2-tailed)
Pair	pre-post	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
1		-3.396	1.425	.206	-3.810	-2.982	-16.507	47	.000

Assuming the level of significance (α) as 0.05 and the degree of freedom (df) as 47, the result showed a significant increase ($t = -16.507$, $p = 0.000$). The paired sample t-test results show that the participants scored higher scores on speaking post-tests. The application of Flip in the flipped classroom significantly impacted the learners' speaking performance. This means there is a significant difference in the learners' speaking performance after the implementation of Flipper Classroom. Therefore, H_0 is rejected. There is a significant difference on Form 4 ESL learners' speaking performance before and after the implementation of Flipped Classroom.

Meanwhile, the effect size was calculated using eta square. The effect size was 7.34 when representing a large effect size, indicating that Flip has a high effect on improving pupils' speaking skills through the flipped learning approach.

5 Discussion

The findings revealed significant improvements in speaking performance among weak learners when Flip was utilized in the Flipped Classroom. The mean score from post-test results strongly indicated that integrating Flip in the Flipped Classroom notably enhanced the speaking performance of less proficient Form 4 learners as the score increased by 3.396. Beyond serving as a storage platform for speaking materials, Flip also provided spaces for comments and various speaking tasks, contributing to heightened interest among pupils in home-based speaking practice. Consequently, the application of Flip emerged as a valuable factor in enhancing overall speaking performance among learners. The results are in line with past studies conducted [7,13,18,19,21,31-33]. This outcome reinforces the current concerns regarding the importance of previewing materials in the Flipped Classroom, emphasizing its role in enhancing learners' speaking performance [22]. The study indicates that when learners

were provided the chance to preview the material before class, allowing them more time to practice the target language, they demonstrated improved performance.

It's worth acknowledging that the Flipped Classroom has significantly contributed to their success in speaking despite learners typically reaching only a Satisfactory level. This highlights the effectiveness of scaffolding within the Flipped Classroom, aligning with Vygotsky's Zone of Proximal Development (ZPD) (1978) [17]. The supportive environment and scaffolding in the flipped classroom setting play a crucial role in facilitating gradual improvements in learners' learning, showcasing their positive impact on speaking skills. Lee et al. (2020) supported this notion when they claim that the Flipped Classroom approach offers valuable support, incorporating flexible scheduling and prompt feedback, specifically addressing the requirements of low-proficiency EFL learners [32].

The success in improving learners' speaking performance hinges on the consistent practice of speaking, both within and outside the classroom [7]. The flipped learning approach, utilizing tools like Flip, empowers learners to proactively engage in language practice, thereby making substantial strides in enhancing their speaking abilities. Through observations in the classroom, the Flipped Classroom approach not only heightened motivation but also fostered increased class participation and extended speaking durations. This aligns with findings from other studies [34-36], which emphasized the effectiveness of Flip (formerly known as Flipgrid) in enhancing fluency, boosting confidence, helping learners to understand the speaking lesson meaningfully and fostering interaction among learners. These studies highlight Flip's capacity to provide equitable opportunities for ESL learners and its effectiveness in promoting oral language development, especially with appropriate support.

6 Limitation

This research has certain limitations, including a small sample size. Future studies could benefit from larger participant groups for enhanced generalizability. This research is also limited to English Speaking performance for Form 4 learners only. Therefore, adjustments in findings and lesson content are essential to tailor them to different learners, ensuring improvements in their speaking performance. The study duration of 8 weeks was also affected by factors such as learners participating in external competitions and the teacher's absence, potentially influencing the results. Additionally, the diverse backgrounds of learners led to the occasional use of the Malay Language before activities. Despite these challenges, noteworthy improvements in speaking performance were observed among the learners.

7 Conclusion

The findings of this research bear significant implications for the field of language acquisition within the context of the flipped learning approach. The Flipped Classroom approach, employing Flip as a tool, effectively enhances the speaking performance of weak Form 4 learners. The substantial difference in speaking performances before and after the use of Flip in the Flipped Classroom is evident, providing learners with dedicated time both inside and outside the classroom for speaking practice. Observations support these results, demonstrating increased class participation and extended speaking durations. This research not only promotes active learner engagement through digital technology but also represents a positive paradigm shift, particularly in sustaining teaching and learning processes in the post-pandemic era. Beyond academic contributions, the study offers practical insights for educators, policymakers, and curriculum developers regarding the effective implementation

of the Flipped Classroom in striving to create positive and equitable learning environments for all learners.

8 Suggestion

The flipped learning technique has demonstrated its potential to improve learners' speaking abilities, yet there is room for future research expansion in this area. While this study primarily focuses on enhancing speaking skills, it is suggested that future research address challenges in other language skills such as listening, reading, and writing. This comprehensive approach would enable learners to enhance their language proficiency holistically. Additionally, there is a need for more research specifically targeting secondary and primary school learners.

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