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Assessing the Effects of Flipped Classroom to the Primary Pupils' English Learning Performance

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Abstract. In this era, implementing technology in teaching and learning process without affecting traditional teaching method is very important in the 21st-century education system, which can prevent pupils' from being outdated, as well as developing their thinking skills. Pupils in primary schools are having difficulty acquiring the fundamental abilities in the English language, encompassing speaking, listening, reading, and writing proficiencies. Therefore, it is crucial to identify effective strategies for enhancing the process of learning the English language within Malaysia's education system. This research concentrated on assessing the impact of Flipped Classroom learning on the English language proficiency of primary school students, specifically in four core language skills. In this quantitative analysis, 31 Year 3 students from a primary school located in the Kulai district were chosen through purposive sampling as participants in the study. Data collection involved surveys, pre-tests, and post-tests. The results indicated a moderately positive correlation between overall performance on these tests and a positive influence on Year 3 students' English skills in listening, speaking, reading, and writing. Additionally, students showed a strong positive acceptance of the Flipped Classroom learning method for these four essential English skills. However, it was found that the Flipped Classroom approach did not significantly alter the students' preferred learning methods. These findings suggest that the Flipped Classroom offers a valuable addition to the education sector, providing an alternative learning approach to enhance second language education and improving English language learning.

Keywords: Flipped Classroom; Listening; Speaking; Reading; Writing; Performance; Achievement

1. Background of the study

Education is basic human needs which can produce individuals who are intellectually, spiritually, emotionally, physically, and socially balanced and

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harmonious. However, in today's constantly changing environment, the traditional industrial-era educational paradigms are no longer relevant. Educational strategies should not only adapt, but transform to align the digital age to assist our young people to becoming the adults who are successful in the 21st century. Creating a 21st-century education system entails that all pupils are sufficiently equipped to thrive in a competitive environment, where highly talented individuals have many opportunities while the rest of them have few. The focus is on harnessing the potential of technology to enhance 21st-century competencies, facilitate innovative teaching and learning, and establish robust educational support systems (Vockley, 2007). One of the objectives outlined in the Ministry of Education, (2012) is to guarantee that every Malaysian has fair and equal opportunities to receive a top-notch education that meets international standards, as well as to use Information and Communication Technology (ICT) to scale up quality learning across the country.

However, despite of the digital age, we cannot avoid the traditional (face-to-face) instructional method which still prefer and familiar by the pupils and teacher nowadays which has a practice for thousands of years. Teachers for 21st century should be more creative and careful enough in choosing suitable and effective methods for teaching and learning, and at the same time, reaching the pupils' satisfaction. One of the best and effective methods, which is very popular is the reverse learning method called "Flipped Classroom". Flipped classroom method is created by Jonathan Bergmann and Aaron Sams in the early days to provide teaching and learning to pupils who do not attend school or face-to-face classes (Bergmann & Sams, 2008). According Paez-Quinde et al., (2022), the flipped classroom is an educational approach where students acquire new knowledge outside of the class, as opposed to the traditional method where learning occurs during class time. Its approach emphasizes on scheduling class time for activities, problem-solving and other forms of instruction. On the other hand, Ruiz-Jiménez et al., (2022) said that the flipped classroom method is a new pedagogical model where the teachers share pre-established digital resources with pupils through a digital platform outside of the classroom and related content taught asynchronously.

Besides that, the flipped classroom approach helps in the creation of active learning environment or classroom (Gustian et al., 2023; Siegle, 2014). This learning method encourages active participation by creating a workshop-like environment in which pupils can ask questions regarding their lessons and engage in hands-on activities with them. It is the most approachable and simple method of implementing technology in teaching and learning process without affecting traditional teaching methods, which hold the direct contact between the teachers and students, as well as between learners themselves, called the backbone of education (Shabibi et al., 2017). Due to the COVID-19 pandemic in 2020, the Malaysian government had issued a Movement Control Order (MCO) to manage the pandemic in an orderly manner, which led to all schools needed to be closed. On the other hand, teachers are expected to complete the syllabus or curriculum. As a result, the flipped classroom is strongly suggested as the best way to resolving the problem. It helps to uplift pupils' basic understanding about

a content and let them to create new knowledge independently by doing mastery learning with those digital materials before attending face-to-face class time after the school reopens. Studies show that flipped classroom had proven that it helped to motivate and increase pupils' performance (Elian & Hamaidi, 2018; Graham Brent Johnson, 2013).

The research gap lies in the absence of a systematic approach that integrates flipped classroom learning and digital resources to facilitate the development of 21st-century skills, particularly the 4C's (Critical thinking, Creativity, Collaboration, and Communication). Despite the potential of this approach to enhance student engagement and performance (Robinson et al., 2019), challenges such as students' limited exposure to technology and the need for tailored materials to accommodate varying cognitive levels remain unaddressed. Additionally, the study aims to explore the potential of flipped classroom learning to establish stronger teacher-student communication and foster active learning, which is crucial in a second language learning context (Wang & Yamat, 2019). By addressing these gaps, this research endeavors to contribute valuable insights into the effective utilization of flipped classroom learning in the Malaysian primary education system, ultimately enhancing students' English language proficiency and overall academic performance.

The main aim of this research is to determine the impacts of the flipped classroom on Year 3 pupils in terms of their English skills and how it impacts their performance and acceptance. Primary school pupils, especially in Malay schools are facing challenges in learning English as the second language due to the influence of their mother tongue, limitation of speaking ability, ignorance, confusion with the language and so on. To overcome this issue, teachers should engage pupils in learning the language constantly by using various and effective approaches which may change the pupils' perception positively about learning the second language and abolish the limitation of using the language among them by creating a quality learning process at school, as well as home. The factors that cause pupils' learning performance are such as, the form of questions, pupils' perspectives toward examinations, poor learning environment, teachers' quality and pupils' learning styles.

1.1 Conceptual Framework

This research had been implemented and chose appropriate theories and model as a guide to identify the effectiveness of flipped classroom learning. Thus, the framework for this research, is a revised version of Bloom's Taxonomy and had been mainly used as a lens for transmission of information, the Mastery learning model, Cognitive Constructivism and Social Constructivism theories were used to explain how learning occurs to master each level according the Taxonomy. Figure 1 below is the conceptual framework of this study.

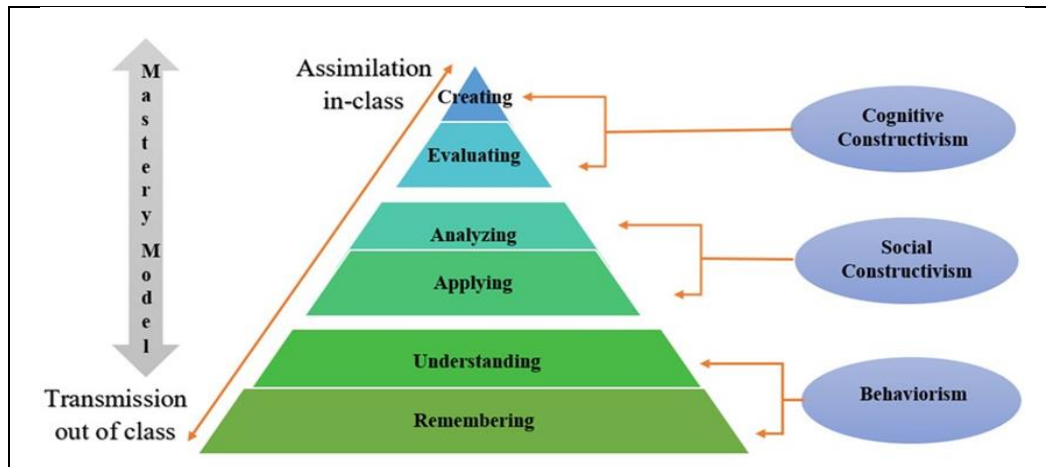


Figure 1: Synthesis of the models and theories associated with Flipped Learning

1.2 Scope of Research

This research is vital as it assesses the impact of the flipped classroom on primary pupils' English learning performance. Mastering the English language, especially in National schools, is challenging for primary students. Teachers must be innovative in changing the learning environment and strategies to suit students' cognitive levels and align with Malaysia's education system. The flipped classroom combines traditional and modern learning approaches to help students consistently develop their cognitive abilities using technology and traditional tools. This approach ensures students remain relevant in the 21st century. Additionally, it assists teachers in planning well-organized learning processes, ultimately boosting students' English performance.

1.3 Implications and Limitations of the Research

The implications of this study in the realm of language education, especially in English language learning within primary schools, are substantial. The Flipped Classroom method demonstrates potential in improving student engagement and proficiency across critical language skills, including listening, speaking, reading, and writing.

This research will involve a small sample limited to Year 3 pupils studying at a national primary school in the Kulai District. Therefore, the research findings are constrained to the sample group selected based on their similar background and English learning level, solely for assessing their viewpoint regarding the Flipped Classroom approach and how it influences their academic results

2. Literature Review

Previous findings of researchers regarding those issues and theories aligned with flipped classroom method in learning English had been discussed and used as a reference to lead this research more efficiently. Both educators and students need to acquire a fresh or broader set of skills, wherein the teacher designs interactive learning experiences to involve pupils beyond the traditional classroom setting and pupils are responsible for independently exploring resources outside of class, attempting to obtain basic information before class, and then actively applying that knowledge in the classroom (Brewer & Movahedazarhouli, 2018).

Flipped classroom method in teaching and learning process will lead the pupils to do independent learning by applying project base activities. It will encourage the pupils to search and read more resources besides text books or notes prepared by the teachers. Through this way, they will learn how to organise knowledge, develop presentation skills, increase their synthesize ideas, develop their communication skills and more. Other than that, flipped classroom learning explained four pillars of flip which makes it a more adaptable setting, conducive learning atmosphere, purposeful curriculum, and skilled instructor (Flipped Learning Network (FLN), 2014). Flipped classroom method bring a flexible environment to the pupils, which make a comfortable space for them to learn at home using various type of sources according to their flexible learning timeline.

The main principle in 21st-century learning in line with School Transformation Programme 2025 are: critical thinking, collaborative, creativity, communication, citizenship, character and one of the pedagogies is digital tools and resources. Thus, the flipped classroom method contained all the requirement of MOE to develop 21st-century education system. Flipped classroom method received positive responses and helped to improve the English grammar (Shaari et al., 2021; Vuong, 2023). Learning English, especially for pupils which English is not their native language, needs more guidance and effective methods to deliver the knowledge. Flipped learning is a versatile approach that can be effectively employed at any educational level (Fatimah Abd Rahman et al., 2019).

According Mandasari & Wahyudin, (2021), flipped classroom brings satisfaction to the pupils and easier to conduct learning process while providing a chance to create an independent learning environment along with improving English grammar knowledge. Learning English needs more practice with variety of study materials. Hence, the flipped classroom method gives a chance to pupils to learn independently using various resources that help them to understand better, faster and clear. Flipped learning method also helps to improve pupils' verbal English communication skill (Tazijan et al., 2017). Besides that, Su Ping et al., (2020) proved that flipped classroom improves pupils' English writing performance by fully engaging with them and increase their motivation level.

According to a study carried by Teo Woon Chun & Ramesh Sathappan, (2018), it is proved that flipped classroom learning method shows a positive perception among pupils, which provides an effective environment for them to communicate and collaborate with their peers and masters in particular skills taught by the teachers. Furthermore, pupils shared their perception about flipped classroom learning method, which is by creating a situation that the teachers direct to them as well as motivate, engage and structure their learning process (Cueva & Inga, 2022; Haghighi et al., 2019). According to Pavanelli, (2018), the flipped classroom approach is seen by students as a valuable educational resource and this method has enhanced their writing abilities within an engaging, cooperative environment. Those interactive learning resources prepared give an opportunity to them to use and explore the technology-based tools and learning materials. Moreover, those resources and classroom activities also bring the pupils to share knowledge

between their peers, help one another and turn it into a collaborative learning environment. The pupils' communication skills also improve tremendously here.

The flipped classroom learning approach proves to be a valuable tool for enhancing students' foundational English skills, including listening, speaking, reading, and writing. Yousufi (2020) emphasizes the remarkable impact of the flipped classroom method on improving students' listening abilities, suggesting that practicing listening activities and maintaining consistent engagement are essential for skill enhancement. Sudarmaji (2021) also affirms the effectiveness of the Flipped Classroom in bolstering students' English speaking skills by promoting increased communication between teachers and peers, fostering fluency and interactivity.

Ozturk (2021) further supports the use of the flipped classroom method, noting its ability to motivate and involve students in reading activities. The tasks and activities in this approach require students to independently read and follow provided instructions, thereby encouraging more reading and vocabulary acquisition. Additionally, Siswanto (2021) underscores that writing skills benefit significantly from the flipped classroom, as it enhances students' participation, confidence, and enthusiasm for learning. By providing diverse materials and approaches and boosting students' interest and confidence in writing tasks, the flipped classroom effectively nurtures and develops their English writing abilities.

3. Methodology

The methodology employed by the researcher was discussed in detail, beginning with the research design, the study's participants, research instruments, data collection, and data analysis. The researcher chose a quantitative approach for this research because the primary aim was to examine the impact of the flipped classroom on English language learning by assessing pupils' performance based on their test scores and gauging their perceptions of the learning method through questionnaire responses.

3.1 Research Design

The study's research methodology heavily emphasizes a quantitative approach, employing both test scores and survey responses as primary data sources. The quantitative aspect of the research involves the administration of tests meticulously crafted to assess pupils' performance across the four core language competencies: listening, speaking, reading, and writing. Aligned with the Year 3 English syllabus, these tests consist of a total of 40 marks, predominantly comprising multiple-choice questions. By utilizing these test scores, the research aims to quantitatively measure the influence of the flipped classroom method on pupils' English language learning outcomes, providing concrete data to evaluate its effectiveness. Additionally, this study adopts a quasi-experimental design, utilizing a single group of participants to assess the impact of the intervention.

In tandem with the quantitative assessment, the research incorporates a survey instrument, designed in the form of questionnaires, to collect invaluable insights

into pupils' perceptions following their engagement with the flipped classroom approach. These questionnaires are thoughtfully structured to capture pupils' feedback and perspectives regarding the flipped classroom method in English language learning. By analysing the quantitative data from the tests alongside the qualitative data gathered from the surveys, the study provides an extensive assessment of the influence and acceptance of the flipped classroom model within the realm of language education in primary schools.

In this study, the instructional design model implemented by the researcher was ADDIE model, which was developed by (Rossett, 1987) and used as a systematic work guide for the purpose of developing learning activities of flipped classroom learning method. The utilization of the ADDIE model process for product creation continues to stand out as one of the successful and efficient approaches because the process serves as a guiding framework for complicated circumstances plus suitable for developing educational products and other learning resources (Branch, 2010). The ADDIE model comprises five sequential stages in the work process: Analysis, Design, Development, Implementation, and Evaluation.

3.2 The participants of the study

The group samples were selected using a purposive method. A total of 31 third-grade students from a primary school located in the Kulai district were selected using purposive sampling to participate in this quantitative research. They were randomly selected from Year 3 pupils in the primary school who demonstrated similar levels of proficiency, standards, and ICT skills.

3.3 Research Instruments

The test questions were designed based on four fundamental language competencies: listening, speaking, reading, and writing, in accordance with the Year 3 English syllabus. This section of the test comprised a total of 40 marks and included multiple-choice questions. Additionally, a survey instrument was created by the researcher in the form of questionnaires to gather data on the pupils' perceptions after they had used the flipped classroom method in their English learning.

The questionnaires were generated through Google Forms and distributed to the sample group. The questionnaire consisted of two parts. Part A collected demographic information and details about the participants' experiences with the flipped classroom method in English learning. Part B focused on the participants' perceptions of their acceptance level of the flipped classroom method in English learning, specifically in relation to the four basic language skills. Responses were recorded on a 4-point Likert scale, with scores ranging from 1 to 4. This instrument facilitated the participants in expressing their opinions about the learning method and allowed the researcher to gather data for analysis.

Before commencing the actual research, twelve sets of questionnaires were administered as a pilot test to a sample group of 12 students. Cronbach's alpha was used to measure reliability, and the resulting Cronbach's alpha value in the pilot test stood at 0.88, indicating a strong level of internal consistency for the scale. Consequently, the questionnaire was deemed suitable for use within the

scope of this research. Both before and after the study, the content and structure of the questionnaire underwent rigorous examination and validation under the supervision of the head of the English Panel at a school in the Kulai district. Additionally, the researcher prepared a transcript and a marking guide to enhance marking standards and standardize the grading system for both tests.

3.4 Data Collection

Instruments played a crucial role in data collection for this study. If the instruments were unrelated or too complex for the participants to understand, it could potentially jeopardize the entire research, leading to invalid data. In this research, three distinct types of instruments were utilized. The pre-test and post-test assessments were aligned with the English Common European Framework of Reference (CEFR) learning content. Initially, the pre-test was administered before the researcher implemented the treatment, while the post-test occurred after the pupils had undergone the treatment, which involved the implementation of the flipped classroom learning method. The interval between these two tests spanned three weeks. Subsequently, a survey questionnaire was conducted after the pupils had completed the post-test to gauge their perceptions of the treatment. This questionnaire comprised two distinct sections, denoted as Part A and Part B.

The process of data collection was meticulously planned within a specific timeframe and involved the following activities:

- 1 week: Introduction of the topic (Year 3 English: Topic 2 Every Day)
- 1 day: Briefing the pupils/samples about the intervention and creating a WhatsApp group
- 1 day: Pre-Test
- 4 weeks: Intervention, involving the implementation of the Flipped Classroom learning method to enhance Year 3 pupils' English skills (Listening, Speaking, Reading, Writing)
- 1 day: Post-Test
- 1 day: Questionnaire

The research commenced with obtaining approval from the school administration to conduct the study among their selected Year 3 pupils. Ethical considerations were adhered to, as it is essential for researchers to seek administrative approval before conducting research within an educational setting. Following this, the research proceeded with the selection of the sample group, which was done using purposive sampling, as previously described. Subsequently, the research involved the administration of both the pre-test and post-test to the sample group. The post-test was conducted immediately after the pre-test, and it occurred subsequent to the implementation of the flipped classroom method, as per the researcher's planned timeline. Both tests were completed within approximately one hour, with clear instructions provided to the sample group beforehand.

Following the test phase, the survey method was employed, utilizing a questionnaire distributed via Google Forms to gather information about the pupils' perceptions after experiencing the flipped classroom approach. The researcher provided a concise briefing and explanation to the sample group prior

to their completion of the survey, a process that typically took around 30 minutes to finish. Subsequent data analysis of the pre-test, post-test, and survey responses will be conducted using SPSS, with the final results discussed and summarized by the researcher.

3.5 Data Analysis

In this research the collected data were analysed, computed, summarised and transcribed using Statistical Package for Social Science (SPSS) software.

3.5.1 Analysis of Primary Pupils' Perception

The questionnaire form uses of 4-point of Likert scale and the scoring of items used ordinal measurements. To analyse the primary pupils' perception towards flipped classroom learning method, the researcher used descriptive analysis to find out the mean and standard deviation.

3.5.2 Analysis of Primary Pupils' English Learning Performance

Both Pre-test and Post-test final results completed by samples of the research were analysed by generalising the data to compare the significance of correlation level. Firstly, Shapiro-Wilk normality test was conducted to find out the normality of data. Subsequently, the researcher runs parametric test which is the Wilcoxon signed-rank test since the data was normally distributed.

3.5.3 Analysis on the Relationship Between Primary Pupils' English Overall Performance Before and After Using Flipped Classroom

Researchers analyse the relationship between data from the sample before and after applying the learning method. Therefore, firstly the Shapiro-Wilk normality test was conducted to detect the normality of the data before run the analysis. Next researcher followed by using either Spearman's rank-order correlation coefficient (data are not regularly distributed) or Pearson's correlation coefficient (data are normally distributed) to determine the relationship between primary pupils' overall English performance on both exams.

3.5.4 Analysis of the Influence of Flipped classroom on Year 3 Pupils' English Overall Performance

For this analysis, the researcher conducted simple linear regression process to analyse the data of overall score of both Pre-test and Post-test. This process started with summary of the model in simple linear between the overall score of post-test and pre-test to find out how strong the relationship between both tests. Next researcher carried out the ANOVA test. The ANOVA test is to show the statistical differences between the means of post-test and pre-test. At the ending the coefficients analysis was used to find out the strength of the linear relationship between both tests. In addition, to present a clear and descriptive data, the scatterplot chart was included in this analysis.

4. Results

4.1 Analysis of Primary Pupils' Perception

Table 1 present the pupils perceptions and acceptance of flipped classroom learning method in English learning in terms of listening, speaking, reading, and writing skills.

Table 1. Mean value and standard deviation based on English listening, speaking, reading and writing skills

| No | English basic skills | Overall Mean | Std.Deviation |
|----|----------------------|--------------|---------------|
| 1 | Listening Skills | 3.81 | .342 |
| 2 | Speaking Skills | 3.79 | .409 |
| 3 | Reading Skills | 3.75 | .414 |
| 4 | Writing Skills | 3.79 | .410 |

The table above shows the respondents' acceptance of flipped classroom learning method in English learning based on four basic skills. The overall mean for all the skills is 3.81, 3.79, 3.75 and 3.79. The standard deviation, for the all skills are 0.342, 0.409, 0.414 and 0.410. Based on these results, it shows that the pupils' has positive response towards implementing flipped classroom learning method in learning four English basic skills.

4.2 Effect of flipped classroom learning method on pupils' English performance based on Listening, Speaking, Reading and Writing Skills

Table 2. Negative Ranks and Positive Ranks data of listening, speaking, reading, writing skills post-test and pre-test

| Ranks | | Listening Skill | Speaking skill | Reading skill | Writing skill |
|-------------------------|---------------------|-----------------|----------------|---------------|---------------|
| Post test - Pre test | Negative mean Ranks | .00 | 3.00 | .00 | .00 |
| | Positive mean Ranks | 15.50 | 15.93 | 16.00 | 16.00 |
| | Sum of Ranks | 465.00 | 462.00 | 496.00 | 496.00 |

Table 3. Result of Wilcoxon signed-ranks test between listening, speaking, reading, writing skills pre-test and post-test

| Test Statistics ^a | b | Listening Skill | Speaking skill | Reading skill | Writing skill |
|------------------------------|-----------------------|-----------------|---------------------|---------------------|---------------|
| Pre-test - Pro-test | Z | -4.871 | -4.735 ^b | -4.891 ^b | -4.909 |
| | Asymp.Sig. (2-tailed) | .000 | .000 | .000 | .000 |

Based on the table 2 and 3 above, the positive mean ranks of all the skills are 15.50, 15.93 and 16.00 which the mean are greater than negative mean ranks. Sum value of positive ranks are 465.00, 462.00 and 496.00, exposing that there is improvement in pupils' scores from pre-test to post-test. According to the tests results, it can be

shown that there was a statistically significant difference between the listening, speaking, reading and writing skills pre-test did generate a statistically significant different with the score of post-tests ($Z = -4.871, p=0.000$), ($Z = -4.735, p=0.000$), ($Z = -4.891, p=0.000$), and ($Z = -4.909, p=0.000$). These results revealed the effectiveness of the flipped classroom learning method and enhanced the reading, writing, speaking, and listening skills of Year 3 pupils.

4.3 Relationship between the English overall performance of pupils before and after using flipped classroom learning method

Table 4. Result of Spearman's rank-order correlation coefficient between score of Pre-tests and Post-tests

| Correlations | | | Pre-test | Post-test |
|----------------|-----------|-------------------------|----------|-----------|
| Spearman's rho | Pre-test | Correlation Coefficient | 1.000 | .445* |
| | | Sig. (2-tailed) | . | .012 |
| | | N | 31 | 31 |
| | Post-test | Correlation Coefficient | .445* | 1.000 |
| | | Sig. (2-tailed) | .012 | . |
| | | N | 31 | 31 |

There exists a relationship between the total scores in both assessments. The findings above indicate that there is a statistically significant moderate positive correlation between the overall score on the pre-test and the overall score on the post-test, or $r=0.445$, which is between 0.40 and 0.59. The impact of the flipped classroom learning method on the overall English performance of Year 3 pupils before and after its implementation was statistically significant ($r=0.445, n=31, p=0.012$).

4.4 Influence of flipped classroom learning method on Year 3 Pupils' English Overall Performance

Table 5. Summary of the Model in a Simple Linear Regression Analysis between the Overall Score of Post-test and the Overall Score of Pre-test

| Model Summary | | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .353 ^a | .124 | .094 | 6.108 | 1.999 |

Table 6. Analysis of Variance (ANOVA) Table for a Simple Linear Regression Examining the Overall Score of the Post-test in Relation to the Overall Score of the Pre-test ANOVA^a

| Model | Sum of Square | df | Mean Square | F | Sig. |
|--------------|---------------|----|-------------|-------|-------------------|
| 1 Regression | 153.518 | 1 | 153.518 | 4.115 | .052 ^b |
| Residual | 1081.966 | 29 | 37.309 | | |
| Total | 1235.484 | 30 | | | |

Table 7. Table of Coefficients in a Simple Linear Regression Analysis for the Overall Score of the Post-test and the Overall Score of the Pre-test Coefficients^a

| Model | Unstandardized B | Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|--------------|------------------|-------------------------|--------------------------------|--------|------|
| 1 (Constant) | 77.120 | 2.586 | | 29.821 | .000 |
| Pre-test | .180 | .089 | .353 | 2.028 | .052 |

According to tables 5, 6 and 7 above, there is a moderate positive correlation is evident between the overall scores of the pre-test and the post-test, as indicated by the model summary in the simple linear regression analysis for the overall score of the post-test and the overall score of the pre-test, with an R-value of 0.353. While R square value is equal to 0.124, which means independent variable is the overall score of pre-test less influence the dependent variable (overall score of Post-test), which is only 12.4%. P value is 0.052, which is more than 0.001. Thus, based on the linear regression analysis, it can be concluded that there is no linear relationship between the overall score of the post-test and the overall score of the pre-test. Hence, this outcome can also be supported by referencing Figure 2, a scatterplot generated using SPSS. The horizontal line positioned at 0 indicates the absence of a linear relationship between the overall scores of the post-test and pre-test when subjected to linear regression analysis.

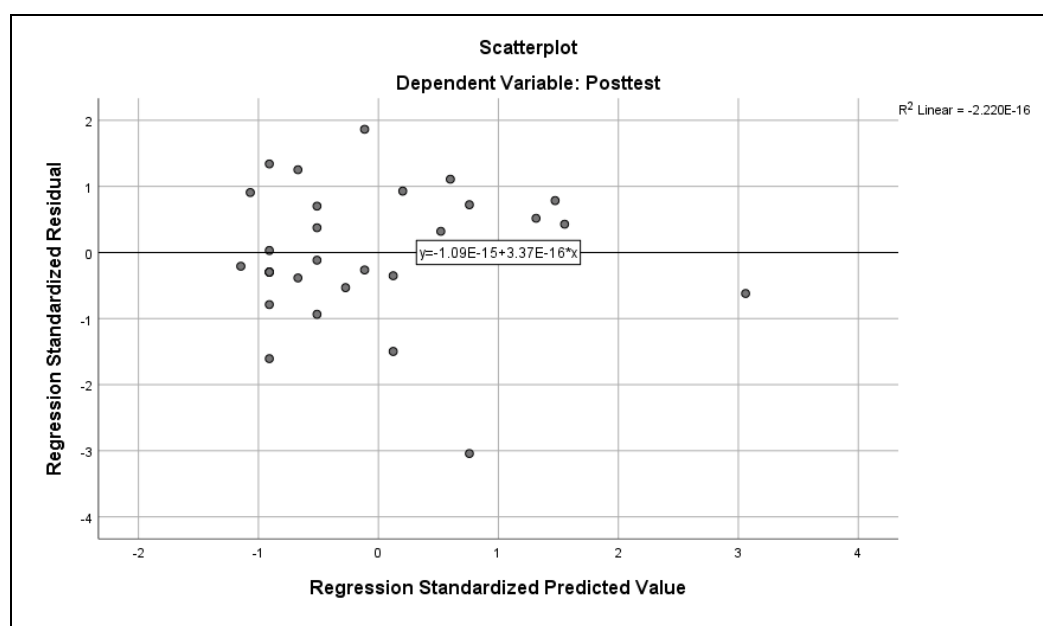


Figure 2: Displays a scatterplot illustrating a simple linear regression analysis between the combined scores of the post-test and those of the pre-test

5. Discussion

In the initial section of the study, the results indicated a strong endorsement of the Flipped Classroom learning approach, particularly in the context of Year 3 students' English listening skills. The data suggested that the participants acknowledged the effectiveness of the Flipped Classroom method in enhancing their English listening abilities. The statement was similar with the findings of

(Yousufi, 2020) who stated that flipped classroom learning method shows a remarkable effect on improving learners' listening skill. Furthermore, the second part of the survey shows the Year 3 pupils' acceptance of flipped classroom learning method based on English speaking skills. This section also received positive response from the items stated about the flipped classroom learning method on English speaking skills of the respondents. This discovery shared a comparable scenario with the research conducted on Abdullah et al., (2019) who stated that technology tools used in flipped classroom learning method are helpful, encourage and engaging learning environment to build up learners abilities along with being the solution of learning and teaching of speaking skills problem. Next, it is followed by the section which the items related with the Year 3 pupils' acceptance of flipped classroom learning method based on English reading skills, which the pupils gave positive feedbacks too. This finding can be supported by the study of Öztürk & Çakiroğlu, (2021), find that flipped classroom learning method encourage and engage pupils' in reading activities and (Gok et al., 2023) which conclude that flipped classroom learning method improve pupils' English reading skills. The last section of the survey is about the Year 3 pupils' acceptance of flipped classroom learning method based on English writing skill and overall respondents gave positive feedback. The finding also similar with a study carried by Siswanto, (2021) stated that writing skills has improve pupils' participation, confidence and happiness to learn which lead them to develop their English writing skills.

The Wilcoxon signed-ranks test was used to evaluate the effect of the flipped classroom learning method on Year 3 pupils' based on English listening skills. Referring to the data, there is a significant difference between English listening pre-test and English listening post-test. Therefore, this finding meant that flipped classroom learning method is effective on Year 3 pupils' English listening performance. It can be justified by referring the mean value in listening post-test, which is bigger than listening pre-test and it showed that there is a positive effect on the pupils' English listening performance after going through the flipped classroom learning method. This finding is similar with the study of Yousufi, (2020) who said that flipped classroom learning method brought a incredible effect on improving learners' listening skill. Furthermore, the Wilcoxon signed-ranks test was used to examine the effect of the flipped classroom learning strategy on the English performance based on year 3 pupils' speaking skills. The data presented demonstrates a significant difference between the students' performance in the speaking pre-test and their performance in the speaking post-test. Hence, we can conclude that flipped classroom learning method is effective by improve on Year 3 pupils' English speaking skill. It can be proved by referring to the mean value of speaking post-test, which is greater than speaking pre-test. This finding justified that there is a positive outcome by using flipped classroom learning method on Year 3 pupils' English speaking skill. This statement also aligned with the study of Sudarmaji et al., (2021) who stated that Flipped Classroom is effective in increasing pupil's performance on English speaking skills.

Next, using the Wilcoxon signed-ranks test, the effect of the flipped classroom learning method of year 3 pupils' on their English performance of reading skills was examined. Next, the effect of flipped classroom learning method on Year 3 pupils' English performance according to their reading skills was analysed by using Wilcoxon signed-ranks test. The finding displayed that there is a significant difference between Year 3 pupils' performance on English reading pre-test and English reading post-test. Refer to the mean value stated, there is a positive rising in English reading post-test compared with the mean value of English reading pre-test. Therefore, the findings show that there is a positive effect on pupils' reading skills after using flipped classroom learning method and it's similarly aligned with the study of (Reflianto et al., 2021) said that flipped learning improving students engagement and reading comprehension skills. Lastly, the effect of flipped classroom learning method on Year 3 pupils' English writing skill performance had been examined by using Wilcoxon signed-ranks test. Based on the result, it showed that there is a significant difference between the pupils' performance in English writing pre-test and English writing post-test. These findings clearly indicate that there is an effect on flipped classroom learning method on pupils' English writing performance. The positive increase in mean value of English writing post-test proved that there is a positive effect of flipped classroom learning method on Year 3 pupils' English writing skills. This research is substantiated by the study on Indayani et al., (2022) said that pupils' writing skills improved crucially when conducting teaching and learning process using flipped classroom through a WhatsApp group.

According to Year 3 pupils' English overall performance before and after applying flipped classroom learning method had been analysed by using Spearman's rank-order correlation coefficient analysis. The result showed there is moderate positive correlation between the overall pre-test score and overall post-test score. That means the increase or decrease of overall students' performance of post-test are significantly related to the overall students' performance of pre-test. The overall students' performance, slightly shows that the interrelation between both tests are strong. The relationship between both tests reveal that the flipped classroom learning method is an effective method of improving pupils' performance in all English skills (Listening, Speaking, Reading and Writing). The findings are totally align with a study of Mooneeb Ali et al., (2021) said that learners who went through the learning process by utilizing the Flipped classroom method got higher score in the test carried out and shows a good performance.

After Spearman's rank-order correlation coefficient analysis had been completed, the linear regression analysis had been carried out by using both sets of overall score pre-test and post-test data for the intent whether there is an influence of flipped classroom learning method after used on Year 3 pupils' English overall performance. The discovery revealed that there is no influence of flipped classroom learning method on Year 3 pupils' overall performance in English and this statement also supported from a study conducted by (Wagner, 2020), suggested that the Flipped Classroom demonstrates more pronounced effects on subjects in the STEM field (science, technology, engineering, mathematics)

compared to languages and humanities. In conclusion, this research reveals that the objective of the study has been accomplished. It can be proved by referring to the pupils' results in English achievement test, which has increased drastically after utilising the flipped classroom learning method. Moreover, pupils also give a positive perception towards the learning method after experienced the learning method.

6. Conclusion

In light of the research problem, where English serves as a second language for Malaysian pupils, with limited opportunities for practice and varying cognitive learning levels, the findings emphasize the appropriateness and effectiveness of implementing the flipped classroom learning approach in primary school English language instruction. Year 3 pupils, facing challenges in language retention and retrieval due to their linguistic backgrounds, showcased a notable level of acceptance and satisfaction when engaging with the flipped classroom approach, encompassing all four essential language skills: speaking, listening, reading, and writing. Furthermore, the study illuminated a discernible positive impact on Year 3 pupils' English language performance following the adoption of the flipped classroom learning method. Recognizing the individual differences in learning pace and the need for additional support, this approach allows for tailored resource selection, catering to students' diverse levels and educational requirements. This alignment with the Malaysian educational framework positions the flipped classroom as a compelling pedagogical tool, advocating for its broader adoption in primary school language instruction. Notably, the flipped classroom model extends its benefits beyond students, empowering educators to curate dynamic teaching and learning experiences that align with 21st-century learning objectives, integral to the Malaysian education system. This model's capacity to foster an active and enriching learning environment ultimately enhances the overall educational journey of primary school students. In summary, this research underscores the suitability and efficacy of the flipped classroom learning approach in addressing the challenges posed by English language instruction for Year 3 pupils in Malaysia. By accommodating individual learning needs, promoting active communication, and aligning with educational objectives, the flipped classroom emerges as a valuable tool in the realm of primary school language education.

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