

Research Article

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Exploring the impact of kinesthetic learning strategies on speaking ability: A study for integrating movement and English language

Usuluddin^a, Zahratul Fikni^a, Muhammad Husnu^a, Riza Nadia^a

^aHanzanwadi University, Jl. Cut Nyak Dien No.85, Pancor, Kec. Selong, Kabupaten Lombok Timur, Nusa Tenggara Bar. 83611, Indonesia

usuludin15@gmail.com

Abstract

The purpose of this research is to investigate the effect of kinesthetic learning strategies on the speaking abilities of English students at Foreign Language Course (FLC). Employing a pre-experimental research design, the study involved 20 students from FLC course to participate in the study. The research utilized quantitative methods, specifically oral tests, to measure the effectiveness of kinesthetic learning strategies. The data were collected through pre-test and post-tests and analyzed using SPSS version 22 for windows. The findings result was a significant improvement in the speaking abilities of students who engaged in kinesthetic learning activities. The results of hypothesis testing showed a t-test value of 8.519 at $p < 0.01$, indicating that the null hypothesis was rejected and the alternative hypothesis was accepted. This suggests that kinesthetic learning strategies are effective in enhancing English speaking skills. The study concludes that integrating movement-based activities into language learning curricula can significantly benefit students' speaking proficiency. These findings support the adoption of kinesthetic learning strategies in language education, advocating for more dynamic and engaging instructional methods that cater to various learning styles.

Keywords: English; kinesthetic learning strategy, speaking skill

1. Introduction

Learning English is crucial in this day and age, because English is an international language. People cannot communicate with each other if they do not master the language, so it means that everybody needs to master at least one international language such as English. According to Ehrenreich (2009), "One of the main reasons for this is because English has become the Lingua Franca of business today in the world." Knowing that English is an international language used for communication worldwide, learning how to use it is vital. That is why learning English in a school environment is necessary for students, as it facilitates access to information and communication between people from different countries. Additionally, English plays a key role in accessing knowledge, science, and technology. Therefore, a good mastery of English can provide students with opportunities to access a wide range of scientific resources and open up various opportunities and insights in the international arena. English also plays a key role in accessing knowledge, science, and technology; therefore, a good mastery of English can provide an opportunity for students to be able to access a wide range of scientific resources and as an important tool to open up a variety of opportunities and insights in the international arena, therefore it is necessary for students at school to learn English.

In learning English, there are four language skills that must be mastered: listening, reading, writing, and speaking. Speaking, in particular, plays an important role in mastering English and

becomes a priority for learners aiming to develop proficiency. As a skill, Speaking is a skill that also has an important role in mastering English and becomes a priority skill for English study learners to develop proficiency in English. Chen Hsieh et al. (2017) state that success in speaking English is often associated with overall success in learning the language, as it indicates an ability to convey thoughts, ideas, and information effectively, fostering better interaction with others. The ability to speak English allows students to engage in everyday conversation, participate in social activities, understand local customs, and connect with native speakers on a deeper level because effective communication is essential to building relationships, both personally and professionally, (Chen Hsieh et al., 2017) says that success in spoken English facilitates networking and social skills development because effective communication is essential to building relationships, both personally and professionally.

Despite the importance of learning English many students encounter significant challenges in developing speaking skills. Learning to speak English is a fundamental aspect of language acquisition but the issue is that many students face significant obstacles when trying to acquire the core language ability of speaking English. Such as the learning difficulties encountered by students at Foreign Language Course (FLC) , one of the courses at east Lombok that accept students who desire to learn English. At the Foreign Language Course (FLC) in East Lombok, researchers observed that students struggled with speaking practice, appearing confused and passive. Present researchers have seen and observed that the condition of students who had difficulties in speaking practice while in English class process, students seemed confused to compile sentences from the vocabulary that had been spoken, then students were impressed passive and rigid in the learning process. Several students when a tutor asked to speak in front of the classroom feel ashamed and afraid to make mistakes and fear of being laughed at by other students when previously students have been given previous learning. They often felt ashamed and afraid of making mistakes.

Amwazir et al. (2013) says that there are two problems that are related to students' self-efficacy in speaking class. First, students tend to be shy to speak louder in English because their friends are laughing when they speak in English, less self-confidence to practice English in speaking class because English is a foreign language that has different rules in written and spoken form. Second, students feel scared to sit at the front because teachers tend to call and ask questions for students who sit at the front. Students tend to sit at the corner when speaking class begins because they feel care when the lecturer ask them some questions and cannot answer them in English. Present researcher discovered that students' self-efficacy was affected by things like shyness, fear of judgment, and insecurity when speaking English. Additionally, Al Nakhalah (2016) noted factors like inhibition, fear of criticism, and low participation, which further hindered students' speaking proficiency. There are four factors that present researchers observe when looking at class conditions that make it difficult for students to learn English and practice speaking in the classroom such as 1) being ashamed of speaking practice in front of class, 2) afraid of being mistaken and laughed at by other friends, 3) drowsy in class and bored when described and 4) students having trouble learning English so they feel like giving up before trying. researcher observed that students have no motive to express themselves, low or uneven participation and mother-tongue use. Therefore, students have difficulty learning speaking in English and make students lack speaking proficiency, traditional teaching methods, which often focus on grammar and vocabulary, have not adequately addressed these challenges, leading to a need for innovative instructional strategies.

Recent research has highlighted the potential of kinesthetic learning strategies, which involves physical activities and integrated movement to improve student engagement and learning outcomes. Kinesthetic learning is a learning style in which individuals learn best through physical activities rather than through passive methods such as listening to a lecture or watching demonstrations. This learning style engages the learners' senses and body movements to facilitate understanding and retention of information. It is particularly effective in subjects that benefit from hands-on experiences, including language acquisition, science experiments, and physical education. Kinesthetic learning is widely defined as a learning style where individuals acquire knowledge more effectively through

physical activities rather than through traditional, passive learning methods. This definition is supported by the understanding that kinesthetic learners engage their bodies and senses to facilitate understanding and retention of information. However, this definition can be further nuanced to highlight its distinctive features and its application in modern educational contexts. Studies have shown that the effect of kinesthetic learning can improve speaking skill among students, based on (Siti Marhamah, 2017) there were significant effects of applying kinesthetic learning on the students' achievement in speaking. However, there is limited research specifically focusing on the impact of kinesthetic learning on speaking skills.

Although kinesthetic learning has been explored in general education settings, there is a noticeable gap in its implementation in courses such as FLC, particularly regarding its effectiveness in enhancing speaking ability. Initial observations showed that kinesthetic learning increased student engagement and enthusiasm, with students becoming more confident in speaking English. This study aims to further investigate whether the implementation of kinesthetic learning can significantly improve students' speaking skills in English.

2. Methods

Quantitative approach was applied in this research to explore the impact of Kinesthetic learning on speaking ability among students at Foreign Language Course (FLC). Quantitative research is the process of collecting and analyzing numerical data. Based on (Kerlingere) quantitative research is the systematic empirical investigation of social phenomena via statistical, mathematical, or computational techniques. Another expert in research, Creswell (2014) involves the collection and analysis of numerical data to identify patterns, relationships and trends. This approach allows for objective measurement and statistical analysis, providing a robust framework for evaluating the effectiveness of educational interventions.

This study was conducted at the FLC, using one class from the whole population by using Purposive cluster sampling. Purposive cluster sampling is a non-probability sampling technique in which researchers select certain clusters based on criteria or considerations relevant to the research objectives, rather than randomly (Burger & Silima, 2006) The researcher then collects samples from the members of that cluster for analysis after choosing the best cluster. Purposive cluster sampling was used to select samples from one location in the FLC Course, by selecting 20 students who were considered representative for analysis. This method was chosen to ensure that the data collected is relevant and informative, focusing on students who have characteristics or experiences that best suit the aims of this research.

In this research, present researcher used pre-experimental design. Researcher conducted a pre-test first, then treatment and afterward conducted a post-test at the end to see how effective the method implemented is. In this case the present researcher analyzed the student speaking ability for the student at Foreign Language Course before and after giving treatment by using integrating movement techniques. To be clear, the design of the research is shown in table 01.

Table 1. Scheme of pre-experimental design

| Experimental Group | Pre-test | Treatment | Post-test |
|--------------------|----------|-----------|-----------|
| A | Y1 | O | Y2 |

Notes:

Y1: Pre-test

O: Treatment

Y2: Post-test

3. Results

3.1. Finding

This study was conducted at Foreign Language Course (FLC) with a total population of 50 students in one class. The sample for the research was selected using a purposive cluster sampling techniques, resulting in a total of 20 students who were learning English at The FLC course. This method was chosen to ensure that the participants were relevant to the study's focus on kinesthetic learning strategies and their impact on speaking skills. The present researcher used video and oral interview in collecting data and gave the treatment in four meetings by applying kinesthetic learning strategy.

Table 2. Data Pre-test and Post-test

| No | Nama Sample | Trait Based Assesment | |
|----|-----------------------|-----------------------|-----------|
| | | Pre-test | Post-test |
| 1 | M. Ziad Ulumuddin | 80 | 90 |
| 2 | Aulia Ramadani | 72 | 85 |
| 3 | Rihlan Fadlan | 65 | 80 |
| 4 | Lalu zalfa | 60 | 70 |
| 5 | Laudzani Hanifa | 60 | 90 |
| 6 | Novita Nurmayanti | 58 | 80 |
| 7 | Alia Permata | 57 | 60 |
| 8 | Baiq Nabila | 54 | 65 |
| 9 | Sulistia | 53 | 60 |
| 10 | Laela Nadia | 52 | 75 |
| 11 | Andi Mayhidin | 50 | 75 |
| 12 | Erlina Fatmawati | 50 | 60 |
| 13 | Lalu Gede Kusuma Jaya | 50 | 65 |
| 14 | Ahmad Nurul Islah | 47 | 85 |
| 15 | Nur Aliya Nafisa | 46 | 78 |
| 16 | Agnal Ghina Rizqi | 46 | 60 |
| 17 | Zulian Permata Tari | 45 | 80 |
| 18 | Naura | 43 | 60 |
| 19 | M.Faruq | 42 | 70 |
| 20 | Kharil Saputra | 40 | 70 |

Based on the data obtained, the highest pre-test score among 20 students was 80, and the lowest score was 42, with an average pretest score of 53.50. In contrast, the post-test results showed that the highest score was 96, and the lowest score was 52, with an average of 72.90. This indicates an increase in the average score of 19.40 after the instructional period. Additionally, the standard deviation for the pre-test was 10.221, and for the post-test, it was 10.377. This demonstrates that the score distribution for both tests was almost the same, meaning that the variation in students' scores from the average did not change significantly before and after the instruction. Despite the similar score distribution, there was a significant increase in the average score by 19.40 after the implementation of the kinesthetic learning style. The paired t-test results also support these findings with a p-value of 0.000, indicating that the score increase

is statistically significant. Therefore, it can be concluded that kinesthetic learning is effective in improving students' English-speaking skills. Based on the results of the data pre-test and post-test, it is possible to conclude that the mean score and standard deviation of students in the post-test were higher than the mean score in the pretest. This suggests that there was a change in the students' speaking after and before using kinesthetic learning strategy. The table 3 below shows it.

Table 3. Descriptive Statistic on pre-test and post-test

| Pair 1 | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|----------|---------|-------|----------------|-----------------|
| | | Pretest | 53.50 | 20 | 10.221 |
| | Posttest | 72.90 | 20 | 10.377 | 2.320 |

This demonstrates that the score distribution for both tests was almost the same, meaning that the variation in students' scores from the average did not change significantly before and after the instruction. Despite the similar score distribution, there was a significant increase in the average score by 19.40 after the implementation of the kinesthetic learning style. The paired t-test results also support these findings with a p-value of 0.000, indicating that the score increase is statistically significant. Therefore, it can be concluded that kinesthetic learning is effective in improving students' English-speaking skills. Based on the results of the data pre-test and post-test, it is possible to conclude that the mean score and standard deviation of students in the post-test were higher than the mean score in the pretest. This suggests that there was a change in the students' speaking after and before using kinesthetic learning strategy.

Table 4. Paired Samples Test

| | Paired Differences | | | | | | T | df | Sig. (2-tailed) |
|----------------------------|--------------------|-------------------|--------------------|--|---------|--------|----|------|--------------------|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | | |
| | | | | Lower | Upper | | | | |
| Pretest t - Posttest | -19.400 | 10.185 | 2.277 | -24.167 | -14.633 | -8.519 | 19 | .000 | |

Source: Primary data (pre-test post-test) was processed in July 2024 by SPSS 22

Hypothesis testing was done to determine whether the alternative hypothesis was accepted or rejected. To determine whether or if "Kinesthetic strategy" was effective in increasing students' speaking ability at Foreign Language Course, the current researcher employed a pair sample T-test. The matched Sample T-test determines if matched samples have significant changes based on their significance value. This value determines the study's decisions. A significance value of < 0.05 indicates a significant difference between before and after teaching vocabulary using Kinesthetic learning strategy. While a significance value greater than 0.05 suggests that there is no significant difference between before and after teaching using Kinesthetic. The study found a significant difference in mean scores between pre-test and post-test ($df=19$)-8.519, $p < 0.000$. It signifies that the hypothesis was approved that kinesthetic learning strategy was significantly effective in improving speaking ability. It was shown by table 4.

4. Discussion

Based on the findings of this study, it can be conclusively stated that the kinesthetic learning strategy significantly improves speaking skills among students in the Foreign Language Course (FLC) and is effective in enhancing English language speaking abilities.

Firstly, the kinesthetic strategy's impact on speaking skills among FLC students is evident from the substantial improvement in their test scores. The highest pre-test score was 80, while the lowest was 42, with an average score of 53.50. After the treatment, the highest post-test score increased to 96, and the lowest score was 52, with an average score of 72.90. This notable increase of 19.40 points in the average score highlights the effectiveness of the kinesthetic learning strategy in enhancing students' speaking abilities. Furthermore, the standard deviations were similar (10.221 for the pre-test and 10.377 for the post-test), indicating that the variation in scores remained consistent, even though the overall performance improved significantly.

Secondly, the effectiveness of kinesthetic learning in improving English language speaking skills is further supported by the paired t-test results. The t-test indicated a significant difference in mean scores between the pre-test and post-test, with a t-value of -8.519 and a p-value of 0.000. This p-value is well below the significance threshold of 0.05, confirming that the increase in scores is statistically significant and not due to random chance.

In this research compares to other studies, the results are not much different. For instance, in the study "The effect of Applying Kinesthetic Learning Strategy to Improve Students' speaking skills at Eight Grade of SMP PAB 3 Saentis at Academic Years 2016/2017." Written by Siti Marhamah, and the study titled "Teaching Speaking for Students with Kinesthetic Learning Style at Thamavitya Mulniti School, Yala, Southern Thailand" written by Sayyidati and Novia Nur'aini. These two studies produced the result that research on learning using kinesthetic strategies was effective in learning speaking.

Furthermore, in another study titled "The Implementation of Visualization, Auditory, Kinesthetic (VAK)" written by Sri Wahyu Indrawati, it is stated that the kinesthetic aspect of the VAK model is effective in learning speaking as it fosters engagement, builds confidence, enhances retention, caters to diverse learning styles, and is supported by statistical evidence of improved performance. These factors collectively contribute to a more effective and enjoyable learning experience for students, ultimately leading to better speaking skills.

Therefore, the conclusion from this research and previous studies is that kinesthetic learning strategy in learning speaking is effective for students so the hypothesis that kinesthetic learning strategy significantly enhances students' speaking abilities is accepted.

5. Conclusions

The kinesthetic learning strategy significantly improves speaking skills among students in the Foreign Language Course (FLC) and is effective in enhancing English language speaking abilities. The substantial increase in test scores, coupled with statistical validation, underscores the positive impact of kinesthetic learning on students' speaking proficiency. This approach not only helps students express their ideas and become more active in the learning process but also provides a practical and engaging method for teaching speaking skills in the classroom. Therefore, the kinesthetic learning strategy is recommended as an effective instructional method for improving speaking skills in language learning contexts.

Therefore, this study provides strong evidence that the kinesthetic learning strategy is an effective instructional method for improving speaking skills among students in the FLC and for enhancing English language speaking abilities in general. The significant improvement in test scores and the statistical validation of these results underscore the positive impact of kinesthetic learning on students' speaking proficiency.

Based on the findings and analysis of the data regarding the effectiveness of the kinesthetic learning strategy in improving speaking skills among students, several recommendations can be made for educators, curriculum developers, and future researchers.

Firstly, incorporating kinesthetic learning strategies into the language learning curriculum is highly recommended. Activities such as role-plays, physical demonstrations, and interactive games that require movement can significantly enhance students' speaking skills. To support this integration, teachers should receive training and professional development opportunities focused on effectively implementing kinesthetic learning strategies. Workshops and seminars can equip teachers with the necessary skills and techniques to engage students kinesthetically, thereby improving the overall teaching and learning experience.

Moreover, curriculum developers should design and provide kinesthetic learning materials that align with language learning objectives. These materials can include lesson plans, activity guides, and multimedia resources that facilitate the integration of movement and physical activity into language instruction. By promoting greater interaction and communication among students through group activities and collaborative tasks, teachers can help students practice speaking in a more natural and engaging context, thus improving their fluency and confidence.

Future research should explore the long-term effects of kinesthetic learning on language proficiency and its applicability across different age groups and educational settings. Studies can also investigate the effectiveness of specific kinesthetic activities and their impact on various language skills, such as listening, reading, and writing. Teachers should consider the individual learning styles and preferences of their students when incorporating kinesthetic strategies, personalizing the approach to ensure that all students benefit from the activities and improve their speaking skills effectively. Continuous evaluation of the effectiveness of kinesthetic learning strategies is essential. Teachers should regularly assess students' progress and adjust their teaching methods accordingly to address any challenges or areas for improvement. Feedback from students can also be valuable in refining and enhancing the kinesthetic learning experience.

In conclusion, the data from this study highlight the significant benefits of kinesthetic learning strategies in improving speaking skills among language learners. By implementing these suggestions, educators and curriculum developers can create a more dynamic and effective language learning environment that supports the development of speaking proficiency and overall language competence.

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