

Teachers' Use of PowerPoint Presentations as Determinant of Students' Attitude Towards English Vocabulary in Calabar Municipality, Nigeria

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Abstract

The unsatisfactory attitude of students towards the learning of English vocabulary in Nigeria has always been and continues to call for serious attention. Since vocabulary development is one components of English language that has a lot of bearing on outcomes in English language, this study investigated the teachers' use of PowerPoint presentations as a determinant of students' attitude towards English vocabulary development learning in Calabar Municipality, Cross River State, Nigeria. The study sought to find out how PowerPoint presentations affect students' attitude towards English vocabulary development learning. The study adopted quasi-experimental design that involved pre-test, post-test and control groups. One research question guided the study while one hypothesis was formulated and tested. A sample of 93 SS 2 students was drawn from two secondary schools in the area. One intact class was used for the experimental and control groups. The instrument for data collection was Students' Attitude Questionnaire (SAQ). Cronbach coefficient Alpha reliability method was used for the test of reliability. Reliability estimates of the sub scales of the instrument ranged from 0.85 to 0.87. Consequently, the instrument was found to be adequately reliable for use in the study. Mean and Standard Deviation were used to answer the research question. Analysis of Covariance (ANCOVA) was used to analyze collected data for the hypothesis at 0.05 level of significance. One hypothesis was tested at 0.05 level of significance. The result revealed that PowerPoint presentations had a significant effects on students' attitude towards English vocabulary development learning. It was recommended among others that, teachers should use high-quality images, info-graphics, and videos relevant to the words being taught. Visual aids can help students make connections between new vocabulary and their meanings, making it easier to remember words.

Keywords: PowerPoint presentations, students' attitude, English vocabulary development learning,

Digital tool

Introduction

The importance and dynamic status of the English language in Nigeria have always been, and will continue to be, a hot topic in discussions on matters pertaining to language proficiency. This may be due to its role(s) in politics, business, and education in the country. Obiekezie (2018) states that English language serves as lingua franca (a language adopted as a common language between speakers of different languages within the nation) and as well as language of education at all levels.

It serves as the vehicle for conveying the desired and planned knowledge to the learners. One of the basic components of English language at the senior secondary school level of education is the vocabulary development. It refers to the process by which people acquire words in the language. English vocabulary development are the topics and text items (spelling, words nearest in meaning, words nearly opposite among others) which are all subsumed in the grammar of a language. English vocabulary development is crucial in the multifaceted landscape of communication, education, and global connectivity. The acquisition of a robust vocabulary in the English language is a cornerstone in the mastery of the language, significantly influencing learners' reading comprehension, communication skills, and overall academic success. As the lingua franca of international business, science, and the internet, English serves as a bridge connecting individuals across diverse cultural and linguistic backgrounds.

The development of a rich English vocabulary not only enhances comprehension and expressive capabilities but also fosters cognitive growth, academic achievement, and career advancement opportunities. As reported by Zhang (2023), individuals with extensive vocabularies are better equipped to articulate thoughts and ideas, negotiate with precision, and resolve conflicts through dialogue, thereby advancing in multicultural environments. Effective communication is pivotal in both personal and professional realms. English, being the dominant language in international business, science, and diplomacy, requires a strong command of vocabulary for clear and persuasive communication.

In an era of globalization, English acts as a key to unlocking doors to diverse cultures, philosophies, and worldviews. A deep vocabulary allows individuals to engage with a wide range of texts, including literature, news, and digital content, fostering a greater understanding of global issues and cultural nuances (Williams, 2022). This not only enriches personal knowledge and empathy but also enhances intercultural communication skills, crucial in today's interconnected world. Thus, the development of English vocabulary is a lifelong pursuit with far-reaching implications for cognitive development, academic success, effective communication, and professional growth. As globalization continues to draw cultures closer together, the ability to communicate in English with a rich and varied vocabulary becomes increasingly important. Through intentional learning strategies and a commitment to continual improvement, individuals can unlock the vast potential that proficiency in English offers. Students need to develop positive attitude towards the learning of vocabulary for a better understanding of English language.

The significance of students' attitudes towards English vocabulary development in enhancing their overall performance in English language cannot be overstated. A positive disposition towards learning vocabulary not only facilitates language acquisition but also contributes to a broader comprehension and proficient use of the language. Attitude refers to the manner of one's disposition (favourable or unfavourable) towards English vocabulary development learning. Bolarinwa and Okolocha (2016) note that majority of the secondary school students failed to develop positive attitude towards their academic achievement. Some of the students dislike the learning of English vocabulary development. This negative attitudes of students towards the learning of English vocabulary development seems to have effect on their overall performance in the English language. Kassa, Arficho and Mulatu (2022) found a strong positive relationship between students' attitudes towards vocabulary learning and the breadth, depth, and fluency of their English vocabulary knowledge. The study further revealed that students' attitude towards vocabulary learning predicts their fluency of vocabulary knowledge by a significant percentage, emphasizing the crucial role of attitude in language proficiency.

Also, Pariwat (2020) reported that positive attitudes towards language learning, including vocabulary acquisition, are linked to higher motivation levels and successful language learning outcomes. Students with positive attitudes are more likely to integrate with the language actively and achieve their language learning goals. Attitudes play a critical role in language performance, with positive attitudes strengthening motivation and contributing to better learning outcomes. This implies that students' attitudes correlate with their proficiency level in learning English vocabulary. It also means that positive attitudes not only drive motivation but also correlate strongly with improved breadth, depth, and fluency of vocabulary knowledge, ultimately leading to better overall language proficiency.

In the 21st century, digital technological tool such as PowerPoint presentations has a role to play in students' learning of English and vocabulary in particular. The use of PowerPoint presentations in the educational process, particularly in the field of language learning, has shown a remarkable effect on students' attitudes and engagement. This digital tool, when integrated into English vocabulary development courses, can significantly enhance the learning experience, making the acquisition of new words less tedious and more interactive. PowerPoint presentations offer a multimedia learning environment, which is crucial for vocabulary acquisition. Mayer's Cognitive

Theory of Multimedia Learning (2009) suggests that people learn better from words and pictures than from words alone. This theory underscores the effectiveness of PowerPoint in vocabulary teaching, as it allows the integration of visuals, sounds, and text, making learning more engaging and effective (Mayer, 2009). For instance, Lin, Hwang, and Fu (2021) demonstrated that students exposed to vocabulary through PowerPoint presentations with embedded images and pronunciation guides showed significantly higher retention rates than those who learned through traditional methods.

The dynamic nature of PowerPoint presentations can lead to increased student engagement. According to Jones (2020), the use of animated slides, interactive quizzes, and multimedia content in PowerPoint presentations can capture students' attention and sustain their interest in the subject matter. This engagement is crucial for language learning, where motivation plays a key role in the students' ability to acquire new vocabulary. PowerPoint presentations cater to various learning styles, making vocabulary learning accessible to a broader range of students. As Fleming's VARK model (2021) suggests, learners have different preferences, including visual, auditory, reading/writing, and kinesthetic. PowerPoint presentations can incorporate elements that appeal to each of these learning styles, thus providing a more inclusive learning environment that can improve students' attitudes towards English vocabulary development (Fleming, 2021).

The use of PowerPoint in teaching English vocabulary also facilitates greater teacher-student interaction. Interactive elements such as question-and-answer slides or vocabulary games can encourage students to participate actively in the learning process. This interaction not only aids in the retention of new vocabulary but also builds a positive learning environment that fosters a good teacher-student relationship, which is vital for effective learning (Robinson & Choi, 2022). Therefore, incorporating PowerPoint presentations into English vocabulary development courses offers a multifaceted approach to enhancing student learning. By leveraging visual aids, interactive content, and catering to diverse learning styles, PowerPoint presentations can significantly improve students' attitudes towards learning English vocabulary. This digital tool not only makes learning more engaging and effective but also fosters a positive educational environment conducive to language acquisition.

The use of PowerPoint presentations in education has been an active area of debate. Some previous researches such as Effiong and Ekpo (2016), Aloraini (2019) and Abu-Mansour (2019) have different views on the use of PowerPoint presentations in the teaching and learning process.

PowerPoint presentations have become a staple in educational environments, offering a dynamic and interactive way for teachers to present new information, including vocabulary, to students. The use of PowerPoint in vocabulary learning engages various sensory modalities through visuals, sounds, and animations, potentially enhancing memory retention and making the learning process more enjoyable. Research indicates that the use of PowerPoint presentations in vocabulary instruction can significantly affect students' engagement and attitudes towards learning. For instance, Aloraini (2019) found that students showed greater interest and motivation in lessons where PowerPoint was used to introduce new vocabulary. The visual aids and interactive elements of PowerPoint presentations can transform mundane vocabulary lessons into engaging and stimulating experiences, fostering a more positive attitude towards learning new words.

Studies by Nguyen and Boles (2021) underscore the importance of interactive elements in PowerPoint presentations, noting that they can lead to higher levels of engagement and, consequently, better retention of new vocabulary. The interactivity afforded by PowerPoint presentations can also play a crucial role in vocabulary acquisition. Features such as clickable links, embedded quizzes, and the incorporation of multimedia elements can facilitate active learning and better retention.

Previous researches have been carried out by different scholars in different dimensions, for instance Effiong and Ekpo (2016) carried out a study on interactive effect of PowerPoint instructional package and academic performance of educational technology students in the University of Calabar. The study examined the interactive effect of PowerPoint instructional package on academic performance of Educational Technology students in the University of Calabar. One null hypothesis was formulated to guide the study. The study employed the pre-test – post-test non-randomized control group design to select 180 Educational Technology students. Educational Technology Performance Test (ETPT) was the instrument used for data collection, with reliability co-efficient of 0.72. The data from the respondents were analysed using analysis of covariance (ANCOVA). The finding of the study revealed that there was a significant difference between the performance of students taught Educational Technology using PowerPoint instructional package and those taught using the conventional expository method, in favour of those taught using PowerPoint instructional package.

The relevance of this study to the present study lies in the fact that both studies focused on effectiveness of PowerPoint presentations in improving learning. Both studies also utilized pre-test and a post-test quasi experimental research design in Calabar. However, both studies slightly differ in their contents, scope; the reviewed study extended to the interactive effect of PowerPoint instructional package and academic performance of educational technology students; the present study focused on PowerPoint presentations and students' attitude towards English vocabulary development learning. The two studies also differed in their respondents. The respondents of the reviewed study were University students while the respondents of the present study are secondary school students. Thus, the differences in the study have created gaps in academics which were filled by the present study.

Similarly, Abu-Mansour (2019) carried out a study on the impact of using PowerPoint Presentations on students' achievement and information retention in teaching English Language at public schools in Amman. This study aimed at exploring the impact of using PowerPoint presentations on students' achievement and the retention of information of the tenth grade students. Quasi-experimental method and constructed a pre and post-test to achieve the reliability of the instrument. The sample in this study comprised 66-female students who was selected purposively from Um Amara Public Secondary School in Amman. The students were divided into two groups, experimental and control. The experimental group ,which comprised 34 students, was taught English(Action Pack 10) by using PowerPoint presentations while the control group ,which comprised 32students, was taught by using the traditional techniques such as the blackboards and direct lectures(when the role of the students is just to sit, listen and have no space to participate). Data was analyzed by applying (T-test) and (ANCOVA). The result showed that there were statistical differences in the students 'achievement and their information retention in favour of using PowerPoint presentations. An analysis of the results of the current study showed that PowerPoint presentations are an effective method in teaching English.

This study is related to the present study because both examined PowerPoint Presentations in the teaching and learning of English Language. Both studies utilized quasi experimental research design. However, both studies slightly differ in their contents, scope; the reviewed study extended to impact of using PowerPoint Presentations on students' achievement and information retention in teaching English Language; the present study focused on PowerPoint presentations and students' attitude towards English vocabulary development learning. Differences also exist in the

location where both studies were carried out; whereas the reviewed study was carried out in Amman, the present study was carried in Nigeria. The differences create a gap to be filled by the present study

The researchers have observed the lukewarm attitude of students towards English vocabulary development learning in Calabar Municipality, Cross River State and the country at-large. This is not unconnected with the dwindling level of performance in the English Language overtime. It has been observed that a remarkable percentage of students do not still measure up to the expected level of pass in English Language in public examinations. Students' performance keeps dwindling for the past many years. West African Examination Council (WAEC) Chief Examiners report on the English Language show that for the past seven years, students' performance keeps dwindling in the Public Examination. The report revealed that the results of the English Language in West African Examination Council (WAEC) 2015 - 2022 shows the percentage pass of 38.68%, 52.97%, 59.22%, 54.59%, 64.18%, 81.7% and 76.36% respectively (See Table 1). Some basic comments made in the reports centered on students' poor knowledge of vocabulary development: wrong spellings, lack the ability to identify words that are nearest in meaning and opposite in meaning. In the same vein, it is therefore necessary to place much emphasis on the worrisome comments on public examination results and English Language Test as a measure of students' accomplishments in order to address it. Students' low performance appears to have played a part in their inability to be admitted for further studies. Even though, there seems to be some slight improvements in students' performance, performance pass is yet to reach 50% and above average. Therefore, there are rooms for improvement.

The researchers also observed that the poor attitude of students towards English vocabulary development learning maybe due to the lack of integration of technological tools such as PowerPoint presentations in the teaching and learning of the content which had led to their decreased engagement, lower retention rates, increased frustration, difficulty in understanding context, lack of motivation, reluctance in participation, negative feedback, among others. Nigerian complain the performance of students in public examination especially WAEC; as year in year out, students' performance is not meeting the expectations of their parents and the general public.

The English Language Teachers' Association of Nigeria (ELTAN) is said to have made tremendous efforts to improve students' academic performance in vocabulary development with the intention to improve the overall performance in English Language by organizing seminars and workshops that

would equip teachers' knowledge on the use of PowerPoint presentations that would help students learn. Yet, there has been a decline in students' English language proficiency. Based on this, the present study therefore, poses the question: do teachers' use of PowerPoint presentations affect students' attitude towards English vocabulary development learning? The main purpose of this study thus, was to assess the effectiveness of PowerPoint presentations on students' attitude towards English vocabulary development learning in Calabar Municipality, Cross River State, Nigeria.

Table 1: WAEC Chief Examiners' Reports (2015 - 2022)

Year	Total Sat	N0 with Credit 1-5	Percentage (%)
2015	1, 593, 442	616, 370	38.68%
2016	1, 605, 613	878, 040	52.97%
2017	1,471,151	923,486	59.22%
2018	1,572,396	858,424	54.59%
2019	1,590,173	1, 020, 519	64.18%
2021	1,560,261	1,274,784	81.7%
2022	1,601,047	1,287,920	76.36%

Source: Statistics Office WAEC, Lagos (2023)

Research Question

1. What is the difference in the mean scores of students' attitude towards English vocabulary development learning taught English vocabulary development learning using PowerPoint presentations and those taught using conventional strategies?

Research Hypothesis

This null hypothesis was formulated and tested at 0.05 level of significance:

H₀1: There is no significant difference in the mean scores of students' attitude towards English vocabulary development learning using PowerPoint presentations and those taught using conventional strategies.

Methodology

The study area is Calabar Municipality. Calabar Municipality is one of the eighteen Local Government Areas of Cross River State. It is situated in the south-south region of the Federal Republic of Nigeria. It occupies a landmark area of about 142km² (Density) and an estimated population of 461,796 (NPC, 2016). Calabar Municipality lies between latitude 4°56' and 5°45'

North of the equator and longitude 8°18' and 9°30' East of the Greenwich Meridian. It is bounded to the north by Akampka Local Government area, South by Calabar South Local Government Area, east by Akpabuyo Local Government Area and west by Odukpani Local Government Area. However, Calabar Municipality is made up of three indigenous ethnic communities namely Qua, Efut and Efik. It is also made up of ten (10) wards, fourteen (14) clans and one hundred and forty-seven (147) villages. There are sixteen (16) public secondary schools in the Local Government Area.

The participants of the study are Senior Secondary School two (SS2) students in the public secondary schools in Calabar Municipality, Cross River State, Nigeria. The study adopted quasi-experimental design that involved pre-test, post-test and control groups. A sample of 93 SS 2 students was drawn from two secondary schools in the area. The teaching covered six (6) weeks concurrently using PowerPoint presentations on students' attitude towards English vocabulary development in one intact class was used for the experimental group (n = 44), while one intact class for the control group participated in a conventional method (n = 49). The instrument for data collection was Students' Attitude Questionnaire (SAQ) to measure students' attitude in learning English vocabulary development. SAQ was designed to find out students' feelings, and values in English vocabulary development. It was constructed using a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D) Strongly Disagree (SD) coded 4, 3, 2, and 1. The scale had twenty (25) and was validated by experts by Language Education and Measurement and Evaluation experts respectively. The reliability coefficient of SAQ yielded a high-reliability coefficient of .87 and it was obtained via Cronbach alpha reliability.

Results

Mean and Standard Deviation were used to answer the research questions while Analysis of Covariance (ANCOVA) was used to analyze collected data for the hypothesis at 0.05 level of significance.

Research Question

1. What is the difference in the mean scores of students' attitude towards English vocabulary development learning taught English vocabulary development learning using PowerPoint presentations and those taught using conventional strategies?

Table 3: Mean of pre-test and post-test scores of the use PowerPoint Presentations in students' attitude towards English Vocabulary Development Learning in the Treatment and Control Groups

Treatment groups	N	Pre-test mean scores	Post- test mean scores	Mean gain scores
PowerPoint	44	36,3182	74.9091	38.5909
Conventional method	49	34.7959	51.4694	16.6735

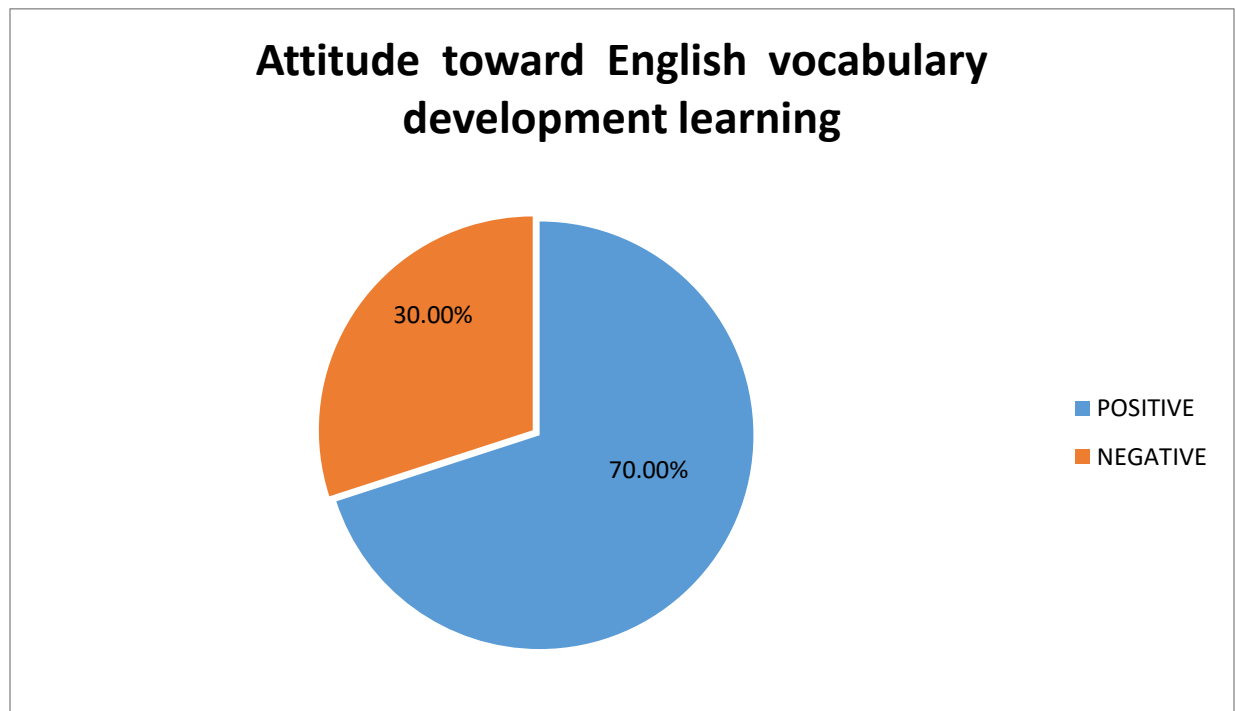


Figure 1: *Pie chart showing level of students' attitude towards English vocabulary development learning*

The result presented in Table 3 revealed that the mean scores of students' attitude towards English vocabulary development learning using PowerPoint presentations (38.5909) is greater than the mean gain score of students' who are taught with conventional method (16.6735). This implies that students taught English vocabulary development using PowerPoint presentations has greater effects on English vocabulary development learning than those taught with conventional method.

Research Hypothesis

- There is no significant difference in the mean scores of students' attitude towards English vocabulary development learning using PowerPoint presentations and those taught using conventional strategies. To test this research hypothesis, Analysis of Covariance (ANCOVA) was used to analyze collected data for the hypothesis at 0.05 level of significance.

Table 3: One-way Analysis of Covariance (ANCOVA) on the effect of treatment on students' attitude towards English vocabulary development learning

Source	Type III Sum of Squares	df	Mean Square	f	Sig.	Partial Eta Squared
Corrected Model	14241.580 ^a	2	7120.790	220.129	.000	.830
Intercept	2299.681	1	2299.681	71.091	.000	.441
PRE	1504.495	1	1504.495	46.509	.000	.341
GROUP	11213.339	1	11213.339	346.644	.000	.794
Error	2911.345	90	32.348			
Total	381122.000	93				
Corrected Total	17152.925	92				

a. R Squared = .830 (Adjusted R Squared = .826)

The results presented in Table 3 below shows that there is a significant difference in the mean scores of students' attitude towards English vocabulary development learning using PowerPoint presentations and those taught using conventional strategies ($F=346.644$; $p=.000$). Therefore, the null hypothesis was rejected at .05 level of significance. The result also shows the partial Eta squared estimate which is a measure of effect size as .794. This implies that treatment accounted for 79.4 percent of variance observed in the post-test scores of PowerPoint presentations. Also the adjusted R squared value is .826. This suggests that about 82.6 percent of the variation in the independent variable (PowerPoint presentations) can be accounted for or by difference treatment and pre-test.

Discussion of Findings

The result revealed that there was a significant main effect of treatment – using PowerPoint presentations in students' attitude towards English vocabulary development learning. As shown in Table 3 indicates that there is a significant main effect of treatment. The possible reason for the improved attitudes among students towards English vocabulary development when taught using

PowerPoint presentations could be attributed to the fact that PowerPoint presentations can incorporate images, colors, and animations that help in the visualization of vocabulary words, making it easier for students to understand and remember them. Visual aids can significantly aid memory retention and recall. Another possible reasons for the observed improvement when using PowerPoint presentations may be attributed to the fact that the dynamic and interactive nature of PowerPoint presentations can capture and maintain students' attention more effectively than traditional teaching methods. Engaging students in this way encourages active participation in the learning process.

This finding supports the findings of Effiong and Ekpo (2016) who found that there was a significant difference between the performance of students taught Educational Technology using PowerPoint instructional package and those taught using the conventional expository method, in favour of those taught using PowerPoint instructional package. The finding is in agreement with Kassa, Arficho and Mulatu (2022) who found a strong positive relationship between students' attitudes towards vocabulary learning and the breadth, depth, and fluency of their English vocabulary knowledge. The study further revealed that students' attitude towards vocabulary learning predicts their fluency of vocabulary knowledge by a significant percentage, emphasizing the crucial role of attitude in language proficiency. The finding is also in consonance with Abu-Mansour (2019) who found that there were statistical differences in the students' achievement and their information retention in favour of using PowerPoint presentations. An analysis of the results of the current study showed that PowerPoint presentations are an effective method in teaching English.

Conclusion

PowerPoint presentations are a great technological tool that secondary school students in Calabar Municipality, of Cross River State can use to get good grasp of the basic subject contents, regain confidence in their ability to learn, and improve their attitude toward developing their vocabulary in English. Students' enthusiasm in learning English vocabulary growth increases significantly when they use and engage with PowerPoint presentations. The study unequivocally demonstrates that including PowerPoint presentations into conventional techniques of improving students' attitudes about studying English vocabulary growth could make the subject matter more engaging for them. The results of this study indicate that using PowerPoint presentations to improve students'

attitudes toward learning English vocabulary growth can help them acquire new words and basic language skills.

Implications of the study for Teaching English as a Second Language

- **Integration of Technology in Curriculum:** This finding reinforces the importance of integrating technology into the English as Second Language curriculum. Schools and language institutes should consider allocating resources for training teachers in the effective use of PowerPoint and other presentation software. This involves not just technical training but also pedagogical training on how to design engaging and educationally effective presentations.
- **Enhancing Student Engagement:** The positive impact of PowerPoint presentations on students' attitudes suggests that incorporating multimedia elements into lessons can make learning more engaging and enjoyable. Teachers should be encouraged to use visuals, animations, audio, and video clips in their presentations to capture the interest of students and cater to various learning styles, including visual and auditory learners.
- **Improving Vocabulary Retention:** Given the positive attitude shift, it's reasonable to infer that students might be more inclined to actively participate in vocabulary learning activities presented via PowerPoint. Engaged students are more likely to retain new vocabulary. Therefore, incorporating interactive elements like quizzes, flashcards, and games into presentations could further enhance vocabulary retention.

Recommendations

Based on the positive impact of PowerPoint presentations on students' attitudes towards learning English vocabulary, it was recommended among others that:

1. Teachers should use high-quality images, info-graphics, and videos relevant to the words being taught. Visual aids can help students make connections between new vocabulary and their meanings, making it easier to remember words.
2. Teachers should customize presentations to match the interests of your students. For example, if they are interested in sports, use sports-related vocabulary and imagery. This relevance can increase engagement and motivation.

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