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DIGITALISING LEARNING: INCORPORATING AUDIO RECORDING INSTRUCTION FOR TEACHING PRONUNCIATION ON JUNIOR SECONDARY STUDENTS' PERFORMANCE IN ORAL ENGLISH

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Abstract

The motivation for this research is to meet the United Nations Sustainable Development Goal 4, which is geared towards quality education, while enabling students' academic performance. Hence, the research examined incorporating audio recording instruction for teaching pronunciation on junior secondary students' performance in oral English among rural communities of Bwari, Abuja. A quasi-experimental design was adopted for the study. The population of the study consists of all junior secondary students in the rural communities of Bwari, with a total number of 9,137 students across 13 schools. A sample of 122 students from two schools was selected. One of the schools was assigned to the experimental group, while the other school was assigned to the control group. Data was collected using the Audio Instruction Performance Test (AIPT), which assessed students' performance in pronunciation. Findings from the study revealed that there was no significant difference in the pre-test performance of the students in both the experimental group and the control group. However, a significant difference was observed in the post-test performance of the students in the experimental group. The result suggests that when audio recording is incorporated into pronunciation instruction in oral English, it could positively improve students' performance in rural communities. The study also finds that the effective use of audio recording could enhance students' overall performance in the English language. Based on the findings of this research, it is recommended that English language teachers should incorporate audio recording for teaching oral English lessons.

Keywords: Audio Recording Instruction, Pronunciation, Teaching, Performance & Oral English

Introduction

Oral English is a vital aspect of the English language curriculum that students are expected to demonstrate proficiency in, so that their knowledge of pronunciation of words in the English

language for communication would be clear enough to enhance fluency, meaning, and comprehension. The English language in Nigeria, among other functions, serves as an official language, a language of instruction, and a language of the judiciary. For these reasons, students must be equipped with classroom instruction that ensures mastery of the subject for effective communication in both spoken and written language. The ability to communicate effectively in the English language is of great significance globally. Oral English entails accurate pronunciation, stress patterns, intonation, fluency, and clarity. Hence, it is pertinent for students to be exposed to adequate pronunciation instruction in Oral English in order to examine the effects it might have on their academic performance. Husman (2024) notes that the components of Oral English enable students to articulate their thoughts, engage in discussions, and present ideas effectively. Students' performance in pronunciation plays a major role in their ability to become active participants in classroom activities such as dialogue, oral examinations, and presentations.

In most rural communities in the Bwari Area, the teaching of pronunciation is generally teacher-centred. Teachers' lesson delivery is predominantly conventional, that is, lecture-based, where students receive classroom lessons through listening to the teacher's way of pronouncing words, copying the teacher's notes, and memorization, with little or no understanding of the subject matter. This approach to teaching pronunciation of English words often leads to a lack of engagement of learners and limited opportunities to practice and develop pronunciation exercises. As a result, students in rural communities in Bwari exhibit poor pronunciation skills, which affects their overall oral English performance. To improve students' pronunciation performance in oral English, there is a need to utilise more engaging and interactive teaching strategies, such as using the audio recording instruction, which involves recorded audio materials and tools like the MP3 player, mobile apps, and digital voice recorders to facilitate pronunciation practice. According to Ajayi (2019), Audio recording instruction can provide students with opportunities for self-monitoring, repeated listening, and feedback, which are all essential for improving pronunciation skills and overall communication abilities. These practices could aid students in rural communities in the Bwari Area to get proper pronunciation and intonation, giving them a better understanding of how to speak the English language effectively. Through listening and practicing with recorded materials based on native speaker pronunciation, students could become more engaged in their learning, and their English language skills could be improved in a fun and interactive way.

Effective communication is essential in everyday life because it enables individuals to communicate clearly and eliminate misunderstandings. Recca & Lasaten (2016) opine that mastering pronunciation in oral English is vital for students as it enhances clarity, boosts confidence and reduces miscommunication. In other words, clear pronunciation ensures that words are spoken correctly, preventing distortion of meaning that could arise from words that sound similar but carry different meanings in context and in content. Correct pronunciation of words in oral English by Junior Secondary students in rural communities in Bwari Area could support their academic performance in English language, as it is the language of instruction in the teaching and learning process, making it easier for students to better comprehend lessons, express their own ideas, and narrate experiences and events fluently. Similarly, Umeh & Udoh (2022) state that by improving fluency and communication skills, mastering pronunciation helped students express themselves naturally, making their speech more engaging and effective. Hence, pronunciation is seen to be an important aspect of effective communication that Junior Secondary students in rural communities in the Bwari Area must develop to improve academic performance, social interaction, and career success

Olaniyan (2021) highlights factors that could contribute to students' poor performance in pronunciation, including mother tongue interference, inadequate exposure to correct pronunciation models, and limited access to effective instructional materials. This implies that students in rural communities in Bwari are taught by teachers who may also be speakers of English as a second

language, thereby transferring the errors associated with the interference of their mother tongue to the pronunciation of words in the English language to students. This trend could affect students' performance in oral English. Effectively incorporating audio recording instruction in classroom lesson delivery could provide practical ways to assist students in overcoming the challenges of teacher-centred learning. Students can listen to their pronunciation by recording their speech, comparing it to the native speakers' pronunciation, and engaging in self-correction. Recorded materials could be used to reinforce students' pronunciation to enable an interactive approach that could motivate students to improve their pronunciation skills as well as their overall performance in oral English, through engagement and active participation in learning.

Since student-centred learning is highly encouraged, the audio recording instruction would enhance students' involvement, active participation, and comprehension. Audio recording materials like the MP3 player could provide students in rural communities in the Bwari Area with real-life, engaging models that could improve their pronunciation and communication skills. Adam (2019) affirms that pronunciation is not only crucial for academic success but also for effective communication in the broader social and professional domains. To this end, it can be deduced that poor pronunciation in oral English could hinder students' ability to engage in meaningful discussions and social interactions outside the classroom, where the English language plays a vital role in communication. Therefore, this study seeks to examine whether the integration of audio recording instruction would improve the pronunciation performance in oral English of Junior Secondary students in rural communities in the Bwari Area in both classroom and social interactions.

Statement of the Problem

Junior Secondary students in rural communities in the Bwari Area struggle with pronunciation in oral English. This could be attributed to teachers' mother tongue interference and limited exposure to native speakers' models, which could limit students' ability to articulate sounds in the English language. Hence, this research is set to examine whether the utilisation of audio recording instruction would have any effects on students' performance in pronunciation.

Teachers in rural communities in the Bwari Area depend largely on conventional teaching methods that do not encourage class interaction and engagement. This method could make pronunciation lessons in oral English less interesting, less motivating for the students, resulting in poor performance in both local and standardised examinations. Therefore, the research seeks to find out whether the integration of audio recording instruction could expose students to inquiry-based learning and thus improve their communication skills.

Research Questions

1. What is the difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at pre-test?
2. What is the difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at the post-test?

Research Hypotheses

Ho1: There is no significant difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at pre-test.

Ho2: There is no significant difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at the post-test.

Literature Review

Dahir, A. (2021) carried out research on the effects of audio instruction on the performance of Junior Secondary school students in the English language in Zaria. Four research questions and four

hypotheses were generated to guide the study. Data were collected through pre-test and post-test administered to students in four government Junior Secondary schools in Zaria. Students from two schools were exposed to the audio instruction, while the students from the other two schools were taught without the intervention. Statistical analysis of the data was done using the t-test and analysis of variance. Findings revealed that the intervention had a more positive effect on the students who were exposed to the audio instruction than on those who were not exposed to the intervention. While Dahir's (2021) study focuses on students' learning in the English language, the current study aims at audio recording instruction on the pronunciation performance of Junior Secondary students in oral English.

Baba, L.N. & Ojakovo, E.E. (2021) investigated the effects of using audio materials on students' performance in listening comprehension in Senior Secondary schools in Gwagwalada, Abuja. They adopted the descriptive survey and quasi-experimental research design in collecting sample opinions from respondents. The population comprised all four thousand, three hundred and eighty (4,380) students from eight (8) public Senior Secondary schools in the area. A simple random sampling technique was used to sample one hundred (100) Senior Secondary Two students from the total population. The study used a questionnaire and a test to collect data from respondents. The simple percentage, mean, and t-test were used to analyse the data. The research showed that there is a significant difference in the listening comprehension performance of the students taught listening comprehension using audio materials. Based on the findings, the study recommended the provision of adequate and quality audio materials such as tape recorders, radios, and language laboratories, among others. The current research targets Junior Secondary students in rural communities in Bwar Area, while the focus of the previous research is on Senior Secondary Students in Gwagwalada Area.

Bankole, O.F. (2022) examined the effects of digital instructional application on Senior Secondary students' performance in phonics in Ekiti state. The focus was on a digital instructional application known as "Elsa speak" on Senior Secondary students' performance in oral English. A quasi-experimental research design was adopted for the study. The population of the study consisted of fourteen thousand, five hundred and thirty-three Senior Secondary Two students in Ekiti State. Fifty students each were randomly selected using a multistage sampling procedure from two schools in Ikere and Ado Ekiti. An instrument for data collection, titled the Oral English Performance Test (OEPT), was used for data collection. The data was analysed using Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA). The null hypotheses were tested at the 0.05 level of significance. Findings from the study showed a significant effect on "Elsa speak," a digital instructional application, on students' pronunciation of isolated and connected speech. Based on the findings of the study, it is recommended that there is a need for a relearning program for teachers teaching phonics. The above study researched a digital software application, while the current study's focus is on a hardware digital tool.

Methodology

This study adopted a pre-test, post-test quasi-experimental design. The design was chosen in order to test the null hypotheses on the utilisation of the MP3 audio recorder for the teaching of oral English and its effects on Junior Secondary students' performance in pronunciation. Intact classes were used for the study to ensure the same learning abilities and learning exposure. The independent variable in the study is the MP3 audio recorder, while the dependent variable is the performance of Junior Secondary students. The experimental group was exposed to classroom instruction in pronunciation using the MP3 audio recorder, while the control group received instruction without the MP3 audio recorder. The design enabled the researcher to conduct a pre-test, administer the intervention, and also conduct a post-test on the sample.

The population of the study consists of nine thousand, one hundred and thirty-seven Junior Secondary students who offer oral English as a subject, with pronunciation as an aspect of the subject, from thirteen Junior Secondary schools in the rural communities in the Bwari Area, as at the time of this research. The sample of one hundred and twenty-two students was drawn from the total population of nine thousand, one hundred and thirty-seven, from two Junior Secondary schools in the rural communities of Bwari Area. The sample drawn from the population consists of the total number of students in the experimental group (60) and the control group (62).

The sample size consists of students in the intact classes of Junior Secondary schools in the rural communities in the Bwari Area. The sampled schools were selected through random sampling. One of the schools was assigned to the experimental group, while the other school was assigned to the control group. The assignment of the schools was done through simple balloting.

The instrument for data collection, Audio Instruction Performance Test (AIPT), was administered to thirty students who are part of the population of the study, but did not form part of the sample of the study. This was done to enable the researcher to find out whether the questions in the instrument were clear. It was also to have a general knowledge of how the results of the test would be on the general population.

To answer the research questions and to test the hypotheses raised in this research, mean and standard deviation were used to answer the research questions, and an independent simple t-test was used to test the hypotheses at a 0.05 level of significance. The level of significance adopted formed the basis for accepting or rejecting each of the null hypotheses. Before the application of the treatment, a test of homogeneity was conducted to ascertain whether or not the two groups that were randomly selected for the study were homogeneous in terms of their mean performance.

Findings

Research Question 1: What is the difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at pre-test?

Pre-test mean score analysis showing the difference between the experimental group and the control group performance of students in oral English pronunciation instruction.

Group	N	Mean	Std. Deviation	Mean Difference
Experimental	60	31.32	12.141	0.026
Control	62	31.29	10.200	

The table above implies that both groups are homogeneous, though with a slightly insignificant difference in the mean scores.

Research Question 2: What is the difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at the post-test?
Post-test mean score analysis showing the difference between the experimental group and control group performance of students in oral English pronunciation instruction.

Group Difference	N	Mean	Std. Deviation	Mean
Experimental	60	65.83	10.175	13.737
Control	62	52.10	9.033	

The table above shows that the mean score of the experimental group is greater than that of the control group. This means that the students in the experimental group performed better than their counterparts in the control group.

Test of Hypotheses

The null hypotheses formulated were tested at a 0.05 level of significance using a t-test.

Ho1: There is no significant difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at pre-test.

Group Decision	N	Mean	Std. Deviation	df.	t-cal.	P-value	Sig.
Experimental	60	31.32	12.141	120	0.013	0.990	0.05
Not sig.							
Control	62	31.29	10.200				

From the table above, the figures indicate that there is no significant difference in the mean score performance between the experimental group and the control group at pre-test in oral English pronunciation instruction. Therefore, both groups performed almost homogeneously.

Ho2: There is no significant difference in the mean score performance between the experimental group and the control group in oral English pronunciation instruction at the post-test.

Group and the control group in order to know the manifestation of the post test							
Group Decision	N	Mean	Std. Deviation	df.	t-cal.	P-value	Sig.
Experimental	60	65.83	10.175	120	7.892	0.000	0.05
Significant							
Control	62	52.10	9.033				

The above table reveals that there was a significant difference in the post-test mean score performance between the experimental group and the control group using audio recording for teaching pronunciation in oral English. Therefore, the experimental group performed better than the control group in the post-test results.

Conclusion

This research established that utilising audio recording for teaching pronunciation in oral English could significantly enhance students' performance in the subject, especially among junior secondary school students in Bwari rural communities. The study showed that students who were exposed to

pronunciation instruction in oral English using audio recording performed significantly better in the post-test than the students who were taught without the audio recording. The improvement in the performance of the students in the experimental group shows the effects of audio recording as an effective instructional tool for developing students' abilities in oral English pronunciation lessons, as well as their overall performance in the English Language.

Recommendations

The following recommendations were made based on the findings of this research:

1. Teachers of oral English should incorporate audio recording while delivering lessons on pronunciation in the classroom to enhance students' comprehension of English words and their use.
2. Teachers should be exposed to training on the use of audio recorders, such as the MP3, for teaching pronunciation lessons to students.
3. School administrators should ensure that laboratories are available for students to practice pronunciation on their own, rather than relying on classroom lessons alone.

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