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The Influence Of Ipads And Tablet Computers On The Development Of Oral And Listening Abilities In Young Students

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Abstract

This research looks at how using tablets like iPads affects the development of kids' listening and speaking skills. It is critical to comprehend the impact of educational technology on basic communication skills since it is becoming more and more incorporated into classrooms. Young students' capacity to express themselves verbally, participate in group discussions, and understand what others are saying is the primary emphasis of this study. In order to determine how well tablet-based learning aids work, the research uses a mixed-methods strategy, integrating quantitative tests with qualitative observations. Analysis of variance tests quantify changes in listening comprehension and verbal expressiveness. To put the numerical findings in perspective, qualitative insights are derived from interviews with educators and classroom observations. Evidence from early studies indicates that tablet computers may improve listening and speaking abilities via the provision of interesting, interactive material that demands engagement. Improving one's articulation and understanding may be possible with the help of educational applications made specifically for language development, which provide possibilities for practice and dynamic feedback. But how well these tools work depends on things like how often you use them, how well they integrate with conventional teaching approaches, and how good the apps are. The studies presented here shed light on the pros and cons of using tablets in preschool and elementary classrooms, highlighting the need for thoughtful content selection and methodical implementation. Tablets may help kids improve their listening and speaking skills, but the research says they shouldn't replace more conventional methods of teaching if researchers want them to reach their full potential as communicators.

Keywords: *I-pads, Tablet, Academic Achievement, Attitudes, Oral and Listening Skills.*

INTRODUCTION

The use of tablets and smartphones in the classroom has grown exponentially in recent years, and many schools now have these devices available to students. Traditional methods of instruction are being transformed by these technological advancements, which provide learning experiences that are interactive and multimedia rich. The development of listening and speech skills, which are essential for efficient communication, has attracted attention as a major area where technology might have a big influence on learning (Michelle & Neumann, 2020). A child's ability to communicate verbally and listen attentively is foundational to his or her future linguistic and academic achievement. Being proficient in these areas helps with more than just understanding and expressing yourself verbally; it also improves your social interactions and your brainpower. The impact of tablets and iPads on key areas of language development must be carefully considered by educators and lawmakers who are looking to use technology to help students with these basic abilities (Wang et al., 2020).

Tablet computers, like iPads, provide a wealth of digital resources for engaging students in active learning. To name a few examples, there are interactive audiobooks, storytelling applications, and instructional games that

encourage students to use both their listening and speaking skills. The use of these technologies has the potential to improve students' skills in various areas via the provision of compelling information, adaptive feedback, and personalised learning experiences (Al-Bogami & Elyas, 2020). Despite the advantages, concerns over the real effect of tablets on listening and speech skills have arisen due to their incorporation into the educational system. Do these gadgets really help students enhance these skills, or are they just extras with no real use in the classroom? In this introductory section, researchers lay the groundwork for a more in-depth examination of the ways in which these technologies influence the growth of young students' listening and speaking abilities, as well as the advantages and disadvantages of their usage in the classroom (Cho et al., 2018).

1. BACKGROUND OF THE STUDY

Important turning points in the evolution of educational technology have revolutionised the ways in which students learn and teachers instruct them. The introduction of personal computers and the subsequent growth of the internet in the late 20th and early 21st centuries had a profound impact on classroom dynamics. But a new age in educational technology began with the arrival of mobile devices and tablets in the early 2010s; iPads and other such devices quickly became standard classroom equipment (Neumann, 2018).

A watershed points in educational technology occurred with the debut of the iPad by Apple in 2010. Unprecedented possibilities for interactive and individualised learning were presented by its user-friendly design, mobility, and adaptability. Educators and administrators saw the potential for this new technology to engage kids in creative ways, therefore it gained momentum swiftly in educational settings. Tablet computers, such as the iPad and other Android tablets, started to be used in schools to improve several parts of the learning process (Ingram, 2020). The availability of educational applications (apps) tailored to younger students increased, providing them with engaging activities meant to foster proficiency in subjects like reading, arithmetic, and language arts. Interactive storybooks, games with voice-based controls, and apps for language practice were some of the apps that helped with listening and speaking abilities. There was a lot of curiosity and doubt about how tablets may affect language and hearing development (Aspiranti et al., 2020). Anecdotal evidence and preliminary study indicated that these devices might improve listening and oral communication abilities by increasing engagement and tailoring learning experiences. But worries about digital technologies' efficacy compared to more conventional approaches, content quality, and screen time continued. Knowing how tablets affect important language skills like listening and speaking is crucial as schools keep using them in the classroom. It is possible to assess the long-term effects of these gadgets on the learning of elementary school pupils by looking at how technology has changed and how it has found its way into classrooms (Domjanic Drozdek et al., 2020).

2. PURPOSE OF THE STUDY

The goal of this research is to find out how using tablets like iPads influences the way young pupils' listening and speaking abilities grow. To find out how well tablets work for improving speech expression and listening comprehension, the research looks at how interactive educational applications and digital technologies affect these basic communication skills. Educators and policymakers may use the data to better understand how to use technology to enhance the language development of young learners.

3. LITERATURE REVIEW

A lot of studies have looked at how using tablets like iPads in the classroom affects students' speaking and listening skills, among other areas of development. Preliminary research indicates that digital tools, such as tablets, might provide novel ways to bolster these abilities. Because of the interactive and multimedia information available on tablets, language learning may be accelerated (Greitemann & Melle, 2020). According to their research, educational applications made for younger students may provide interesting settings that encourage kids to take part in spoken language exercises. Apps with voice-recording and interactive storytelling capabilities, for instance, may provide a fun and engaging environment for pupils to practice speaking and listening (Huovinen & Rautanen, 2020).

Similarly, language games played on tablets improve both listening comprehension and the ability to express

oneself verbally. Young learners may benefit from the interactive features of these games since they provide an opportunity for adaptive learning and quick feedback. The variety of auditory stimuli and chances for verbal engagement provided by this interactive learning environment are conducive to the improvement of listening abilities. Nevertheless, there is some research that highlights the difficulties of using tablets in the classroom (Santamaria et al., 2023). The second research warns that kids who use tablets a lot may be less engaged in face-to-face activities and more likely to be distracted. To make sure that tablets help with language development rather than hurt it, the evaluation stresses the importance of limiting screen time and combining digital tools with conventional ways of instruction (Lundtofte, 2020).

Ultimately, the success of using tablets and iPads in the classroom depends on how they are implemented and used, even while there is evidence that they may be helpful resources for improving students' listening and spoken communication abilities. Researchers need more studies to figure out how to utilise them best to help young pupils' communication skills (Ariani et al., 2024).

4. RESEARCH QUESTION

i. How to find out the impact of tablets and I-PADs on young students in education sectors?

5. METHODOLOGY

Finding out if giving third graders iPads made a difference in their academic performance and motivation was the main goal of this research. Detailed descriptions of the procedures followed over the course of the inquiry will appear in the section that follows. Findings relevant to the study's objectives were derived via exploratory case studies. In this method, quantitative and qualitative information was gathered from a quasi-experimental context. The current plan is to "collect information that is qualitative as well as quantitative consecutively in two phases, without one form of data collection following & influencing the other." This style is often used in academic studies due to its ability to enhance students' topic knowledge. This layout's popularity stems from this same reason. Taking a similar tack helped shed light on the effects of the iPad intervention from the vantage points of the collaborating administration and the participating teacher.

Population and Sampling: Students in grades kindergarten through five were housed in the NPS Elementary School, which was the site of the data collection for this research. Roughly forty miles east of New York City, in a suburban environment, researchers may find the National Park Service (NPS) headquarters. Here is a breakdown of the school's student body demographics: The student body is mostly Black or African American (40%), Hispanic or Latino (57%), Asian or Pacific Islander (2%), and Caucasian (1%). Sixty-nine percent of the students qualify for free or reduced-price lunches. A little or no proficiency in English is shown by 22% of the student body. Based on the answers of one hundred thirty-four third graders who took the New York State Mathematics Assessment in 2012–2013, here is a rundown of the findings. 42.5 percent got level one, 39.6 percent got level two, 13.4 percent got a level three, and 4.5 percent got a level four score. The percentage of students who passed the state test in mathematics was 17.9% in 2013, as reported in the "New York State Testing Programme Grade 3 Common Core Mathematics Test". Table one, which is seen below, describes the different performance levels. The results are applicable to the practices presently used by the organisation as the site of the research is now involved in a debate about the permissibility of tablet computers in the classroom.

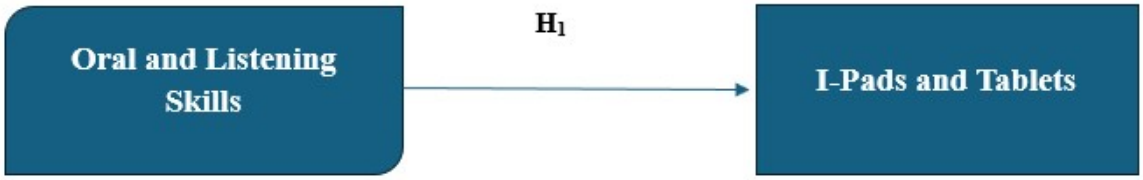
The researchers were aiming for the 119 third graders from the 2013–2014 school year and the 114 students from the 2014–2015 school year who were registered at this elementary school. Although there are around 750 students in total at this school, the third graders who attended in 2013–2014 and 2014–2015 were the intended recipients. On the 2013–2014 school year, 86 students were enrolled in kindergarten, 131 in first grade, 126 in second grade, 119 in third grade, 123 in fourth grade, and 142 in fifth grade. This data was collected from the research school. It's worth noting that out of 779 students registered for the 2014–2015 school year, 124 are in kindergarten, 124 are in first grade, 146 are in second grade, 114 are in third grade, 133 are in fourth grade, and 138 are in fifth grade. Nineteen third graders participated in the research; nineteen from the 2013–2014 school year served as

controls, while nineteen from the 2014–2015 school year served as experimental groups. In order to do a one-way ANOVA, the control and treatment groups' sizes need to be comparable. A one-way analysis of variance (ANOVA) indicates that in order to conduct the experiment, a minimum of 19 students are required for both the placebo and experimental groups.

Data and Measurement: Primary data for the research study was collected through a questionnaire survey and the semi-constructed interview. Secondary data was collected from multiple sources, primarily internet resources.

Statistical Tools: Descriptive analysis was applied to understand the basic nature of the data. The validity and reliability of the data were tested through ANOVA and ATMI T-tests.

5.1 Conceptual Framework



6. RESULT

- **Dependent Variable**

- **I-Pads and Tablets**

The tablet is an umbrella word for a variety of portable electronic devices that are almost universally controlled by touch screens. The features and specs of these gadgets, however, may differ from one maker to the next. When it comes to tablets, Apple has their perspective on the iPad. Most tablets utilise Android, Google's mobile operating system, with the iPad being an exception (Aspiranti et al., 2020).

- **Independent Variable**

- **Oral and Listening Skills**

Many contexts call for the use of spoken language for the transmission and reception of meaning. This range of methods is what the phrase "speaking and listening" alludes to. A mastery of appropriate vocal and nonverbal cues for delivering information to certain audiences and situations is essential (Greitemann & Melle, 2020).

Based on the above discussion, the researcher formulated the following hypothesis, which will analyse the relationship between Oral and Listening Skills and iPads and Tablets.

$H0_1$: There is no significant relationship between Oral and Listening Skills and iPads and Tablets.

H_1: There is a significant relationship between Oral and Listening Skills and iPads and Tablets.

Table 1: ANOVA H_1 table

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	74506.340	11	4372.768	249.346	.000
Within Groups	1382.580	8	16.831		
Total	75888.890	19			

In this study, the result is significant. The value of F is 249.346, which reaches significance with a *p*-value of .000 (which is less than the .05 alpha level). This means the *"**H_1: There is a significant relationship between Oral and Listening Skills and iPads and Tablets**."* is accepted and the null hypothesis is rejected.

Table 2: ATMI T-Test Results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Scores	Equal variances assumed	1.854	.182	.058	36	.954	.36842	6.38218	-12.57524	13.31208
	Equal variances not assumed			.058	35.007	.954	.36842	6.38218	-12.58799	13.32484

With the use of a t-test, researchers looked for statistically significant differences between the two groups' means on the Attitudes Towards Math Inventory. When comparing the two groups' means on the Attitudes About Math's Inventory, it was discovered that there was little to no difference. The threshold for establishing statistical significance is a p-value lower than 0.05. The results of the t-test may be seen in Table 2.

The benchmark p-value shows that there is less likelihood of a discrepancy among the number of samples if there is no difference in the population. There seems to be no statistically significant difference between the control and experimental groups with respect to ATMI scores, since the p-value in this case is.954. There is a 95% probability (t=.058, df=36, p=.955) that the observed difference in the sample is due to chance rather than representing the population as a whole. The fact that there is a 95% chance that the sample is representative of the population provides strong evidence of this.

7. DISCUSSION

The purpose of this research was to examine the impact of iPad use on the mathematical attitudes and performance of third graders in a public elementary school located about twenty km east of New York City. A school was located in the Garden State. To compare the academic performance of two groups, one that got instruction via iPad devices and another that did not, a one-way ANOVA was performed (after validating the necessary assumptions). This was done using the following steps: giving kids a math pre-test at the beginning of third grade, introducing a programme that incorporates technology, giving them another arithmetic exam after the programme, and finally, giving them an attitude inventory about math. To determine whether there was a statistically significant difference between the two groups, researchers used a t-test to compare the means of the Attitude to Math Inventory.

Along with quantitative data, interviews were conducted with the participating teacher and the study's supervising administrator. The purpose of these discussions was to get a better understanding of how teachers perceive and evaluate their students' development and demeanour as they use iPads in the classroom. Disagreements between both qualitative and quantitative information have grown over time, according to this investigation's conclusions. Students whose instructors made use of iPads in class were demonstrably more involved than those whose instructors did not, according to interviews with study adults; this finding persists even after controlling for statistical significance in the post-test & ATMI data. Although the post-test and ATMI failed to reveal a statistically significant difference, this remained true. The study examines the findings, explores alternative interpretations, analyses them in connection to the literature and theoretical framework, determines their importance, discusses their limits, and suggests further study.

8. CONCLUSIONS

In conclusion, instructional apps for tablets like the iPad and Android have shown promise in helping young pupils improve their listening and speaking skills. These tools provide engaging, interactive ways to practice speaking and listening in a fun way. But how well these technologies are used in the classroom and the quality of the

material determine how successful they are. To get the most out of it and avoid the worst of it, use it moderately in conjunction with more conventional forms of instruction. The full realisation of tablets' educational potential in improving young learners' communication abilities requires ongoing study and smart implementation.

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