The Role of Tablets in Improving Students' English Reading Skill

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Abstract
The aim of this study is to identify the role of tablets in improving students' English reading skill within classrooms. To achieve that, I use a mixed method that includes qualitative and quantitative tools such as Interview, survey, observation, and reports. The sample consists of 17 students at grade 7 who read for 55 minutes per day, five times a week. The study argue that teachers should maximize their efforts to find support in order to help them show the required progress. Therefore, I suggest tablet integration into their learning as the idea to initiate as a tool for enhancing their reading skills. The study reaches several results, the most important of which are: first, all students with a learning difficulty or disability should have access to technological means to help them improve their skills. Second, school administrators should support teachers to conduct more studies on their students and encourage them to integrate technology.
Keywords: English, Reading, Student, Tablet.

Introduction
        English has been the most dominant language in the world. Therefore, there is an urgent need to learn and practice it to increase our involvement in our surrounding environment. Schools and universities always attempt to provide English skills to their students. Experts say that reading skill should be skillfully mastered by students because it is the window to the world. As a result of that, providing students with learning difficulties with a variety of options is one way to encourage reading. The competence to use technology as a means of reading is one way to provide a different option to students and can participate greatly in reading development. Technology has become an integral part of K-12 classrooms in the 21st century. More schools are embracing the latest technology such as tablets to inspire teaching and learning and are incorporating them into the lessons and instruction. Contemporary, neuroimaging tools have been used not only in marketing, neuromarketing, and medical

sectors but also in education. For example, the electroencephalography has used to examine the spent time in the reading text [e.g., skim and depth reading) (Alsharif et al., 2021b; 2021c; 2021e; 2021g; 2022, 2022).

The tablet offers several applications that can be beneficial to students with learning difficulties and learning experiences related to reading instruction. The applications can be used to enhance different texts being read in the classroom as well as to provide resources for understanding the material further in terms of extending and assessing reading comprehension. The tablet can also be used to access e-books, which will provide students with a multimodal reading experience that will engage them with animation and sound.

This study discusses the role that tablets play in improving English reading skill of a class that consists of 17 students at grade 7 who read for 55 minutes per day, five times a week. With what has been said about the challenges facing our students in their reading classes, we should maximize our efforts to find support in order to help them show the required progress, tablet integration into their learning is the idea I suggested to initiate as a tool for enhancing their reading skills.

Literature Review

Reading is one of the main necessary skills for students to develop and increase their knowledge and interaction with the world. It is not an easy skill that is born with us but it has to be acquired and enhanced through various methods and means. It has become a prerequisite of school offers, and if students do not demonstrate that they possess the required level of reading, they will be asked to take pre-sessional courses to improve reading along with other skills (Baroudi & Eppard, 2019). This entails that reading has to develop students' comprehension which can fail when students have difficulties with several skills, including: deciphering words, reading with suitable and accurate speed, digesting the meanings of words, connecting text to previous knowledge, conducting comprehension techniques and strategies, and following up understanding (Blonder et al., 2018; Carlisle & Rice, 2002; National Institute for Literacy, 2001; RAND Reading Study Group, 2002).

Tablets play a vital role in improving and developing reading skills for students and learners. Integrating tablets within the educational system can insert fun to the learning process and can ultimately encourage students to use more technological tools in their learning process. It is significant that technological tools in general, and tablets in particular, are every where in this world. Therefore, using tablets will make reading available every where and every time. In other words, students will find themselves exposed to reading every time they open their tablets and can enjoy various reading options and materials in accordance with their own interests. Moreover, using tablets increases comprehension and analysis abilities and contributes to develop other skills such as listening, writing, and speaking. In addition, tablets makes it possible for students to record their voice while reading and thus recognize and correct their mistakes. This can ultimately build competent and efficient reading skills within contemporary and future generations (Ozbek & Girli, 2017).

Educational institutions worldwide struggle to integrate technological devices to help students develop their reading comprehension because tablets, for example, are more motivating than traditional books. However, not all the implications of using tablets are positive, there are negative effects and detrimental consequences of using this tool. One of the famous negative effects is the distraction that may cause students to switch to off-task activities such as playing games and scrolling social media apps. The solution to this problem is the application of more related-comprehension skills that can alleviate and downgrade

distraction during reading. Students who manage to master these skills will ultimately graduate while possessing better integration, comprehension, interference, monitoring, interference, and monitoring, in addition to a knowledge of narrative structures (Salmeron et al., 2021).

The effect of using tablets to read has not been studied in depth in contemporary studies (Connell et al., 2012). Tablets have become as essential part of our daily life, and people cannot imagine losing such devices from their life systems (Chen et al., 2014). Therefore, the existence of such technological devices makes a huge difference within the educational system. That is to say that using tablets will indicate different results (Hermena et al., 2017). Tablets have also affected teacher performance and enhanced the effectiveness of their teaching activities (Juarez, 2014). Teachers have also been using tablets to assess students' achievements and to test the validity of their techniques (Seifert & Paleczek, 2022). In other words, digital devices make learning and teaching more comprehensive and increases student' willingness to read and interact with the surrounding educational environment (Delgado & Salmerón, 2022).

Tablets increases the incomes and outcomes of the educational process. thus, students will achieve more rates of reading acquisition (Watkins et al., 2020). This indicates that students can use tablets to learn even when they are children, they will benefit more from their childhood time (Reich et al., 2016). Therefore, tablets can be consider as an effective solution for students who suffer from reading difficulties and will help them overcome most of these difficulties (Alqahtani, 2016).

Methodology

I will apply "tablet integrated method" in a the class while students are reading. I prepared a survey that records students' preferences and difficulties. The data will be collected both during students' reading from the traditional book and during their reading from the tablets. This method will highlight the differences between these two stages. The observation and grading marks throughout the experimental period will be compared to the grades of the student before initiating the tablet integrated practices in order to better track their progress and monitor their performance and be able to measure any effectiveness happening for tablet integration.

Another survey will be applied after they experience the 4 weeks experiment of reading on the tablet instead of their classical way of reading in order to check their feelings, and if they could overcome the challenges they voiced in the first survey. Also, this survey will help us better understand if there are still any obstacles with the tablet integrated practice that call for solutions or improvements. Finally, their opinions will be analyzed to support their academic result analysis to understand the effect happening through tablet integration.

I will need to utilize a number of tools in order to collect and analyze data. First, I will set up an interview with the students to get closer to the reasons for their struggle and if integrating technology represented in tablets will help them overcome their obstacles. The second tool I will utilize is a survey to check their learning styles and preferences when it comes to reading styles and reading tools and if reading electronically will be better from their perspectives and will facilitate their struggle.

An observation form will also be also embedded into my research context in order to follow up the students' progress and attitude and also to help us check the effectiveness we seek from integrating tablets into their reading classes. The final tool I will need is their

academic reports that will be analyzed and compared to their previous ones in order to make sure that a positive or no change happened and decide accordingly.

Our reading block begins with 20 minutes of whole group instruction. The lesson varies each day with instruction in reading comprehension, word study, vocabulary, writing, and contextual grammar. At the conclusion of whole group instruction, the students break up into four groups. Each group rotates around four reading stations with a different focus like vocabulary, comprehension ….etc. The average number of words was calculated in reading using traditional books and electronic books. In order to determine which strategy is more effective.

Results

The study recorded the number of words that students read from traditional books independently during the first stage. At the beginning of the second stage, students were given iPads to be used in their reading. As can be noticed from table 1, both the number of words students read of traditional and electronic books were recorded.

Table 1
The number of words by using traditional books and tablets.

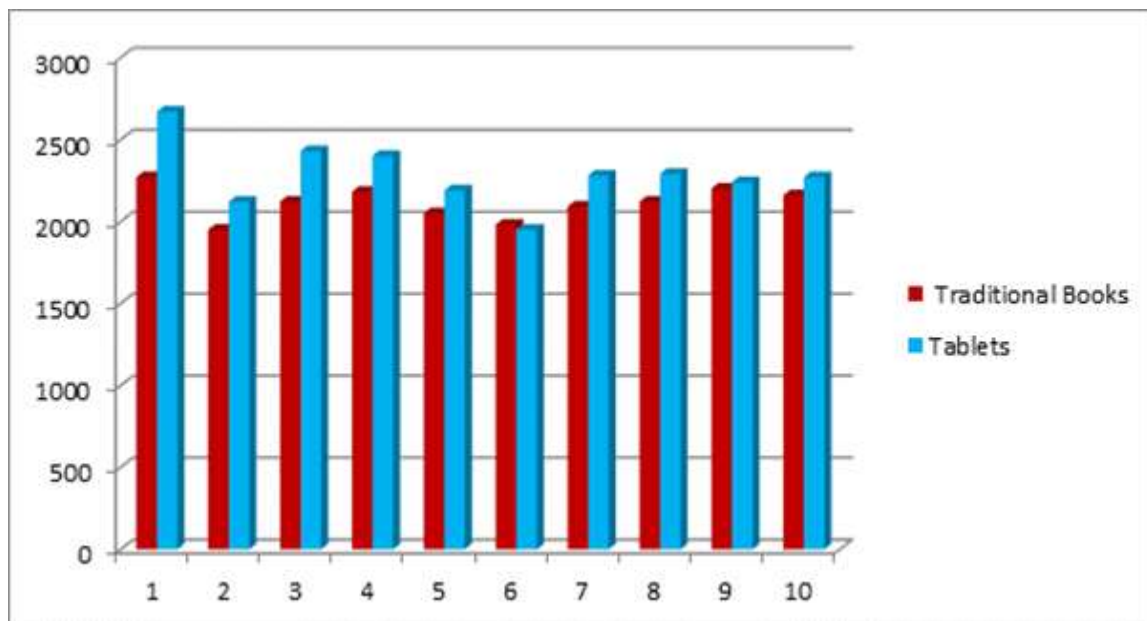| Student	Number of words by using traditional books	Number of words by using tablets
1	2270	2670
2	1950	2120
3	2120	2430
4	2180	2400
5	2050	2190
6	1980	1950
7	2090	2280
8	2120	2290
9	2200	2240
10	2160	2270

Figure 1: Average number of words read.

As illustrated in figure 1, the results show that students can read more correct words on tablets than traditional books. To illustrate, the number of the words that students read in tablets is 2248 while they only read 2112 in traditional books.

Results Significance

Ten students were followed up during the application of this study. They were monitored through two stages, the first was before introducing tablets and the second was after the integration of tablets.

Tablets, when used appropriately, motivated some students to read more than they did when only given the option of reading traditional books. It also allowed students to choose books that were at an appropriate reading level without having the concern that other classmates were judging their selection. Reading electronically is a more private way to read and minimizes these issues for students that struggle with difficult text.

Students' Survey Analyses
1. Was this activity more interesting for you?
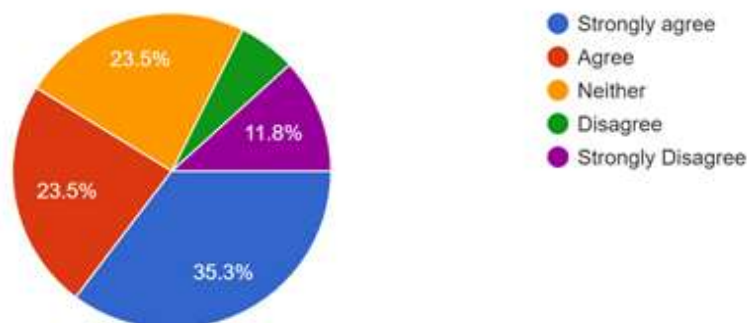
17 responses

Figure 2: the percentage of interest in the activity.

As shown in figure 2, when asked whether the activity was more interesting as compared to not using the tablet, views were mixed. Although most students agreed that the activity was more interesting at 35%, they were analogous at 23.5% in their feelings on it being interesting or it being the same either way. A small percentage of students strongly disagreed that the activity was more interesting with only 11.8% holding that opinion.

Do you often feel lazy or bored when you study for your classes?

17 responses
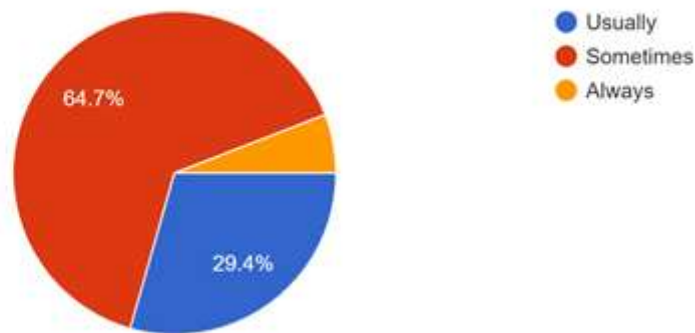
Figure 3: Feeling lazy or bored while studying.

As illustrated in figure 3, students overwhelmingly feel as though they are at times either bored or lazy during class with a noted percentage of 64.7%; whereas 29.4% say that they are usually bored or lazy. An even lesser percentage said that they always have feelings of boredom or laziness.

Do you share any information to your peers during the lesson?
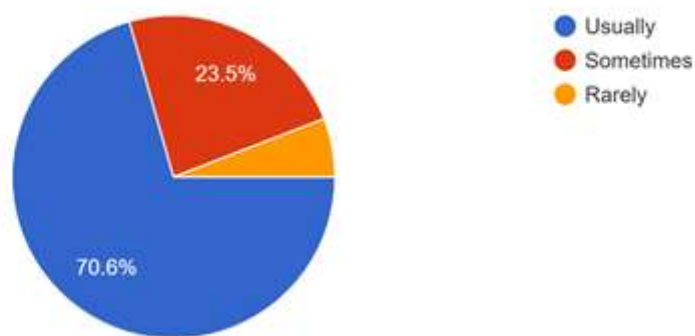
17 responses

Figure 4: Sharing information with peers.

As illustrated in figure 4, 70.6% of students questioned said that they share information with their classmates during a lesson. Still, 23.5% say that they sometimes do.

Do you have suggestions for your friends to be aware of when they study?
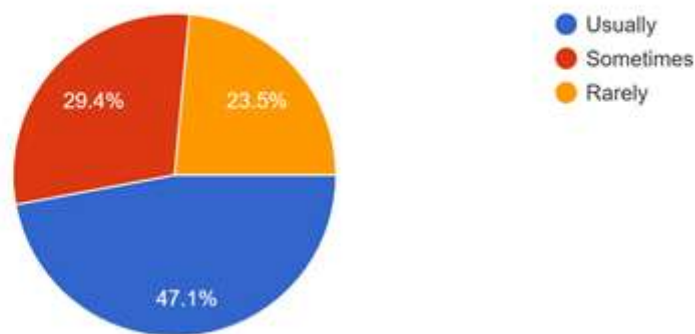
17 responses

Figure 5: Having suggestions for friends while studying.

As shown in figure 1.5, nearly half of students who were asked at 47.1% usually have suggestions for their friends to be aware of when they study. However, percentages were almost even between those who sometimes have questions at 29.4% and those who rarely have questions at 23.5%.

Do you feel the difference between regular study and using tablets during the lesson?
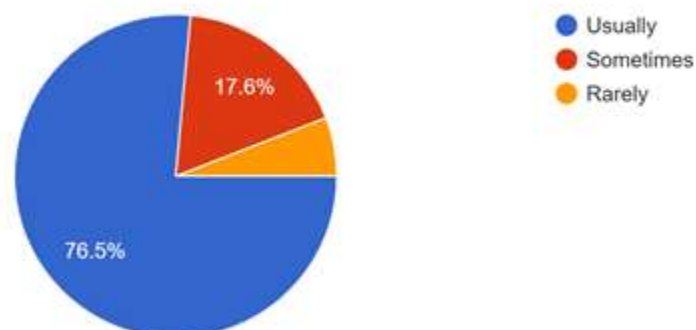
17 responses

Figure 6: feeling the difference between regular study and tablets.

As illustrated in figure 6, whopping 76.5% of students said that they usually feel a difference when using the tablet while studying whereas only 17.6% said that at times they notice a difference between studying with a tablet as opposed to not studying with one.

Student's Interview

Each interview was given 10 minutes to help students express their opinions. Students enjoyed various types of reading and assignments. Generally, teachers use the tablet reading 2-3 times a week across various curriculums. Students did not show any real preference for types of books/texts, but definitely enjoyed interactive assignments to go with the reading. Assignments that allowed the students to use/view audio/video components to go along with the reading helped them make connections they might have missed if just reading a book.

Students generally had a pleasant experience reading on and using tablets, according to survey results. Our current students are so accustomed to "screen time" that the traditional materials are the ones that feel unwelcome, in contrast to older generations who have ambivalent views about reading on a tablet vs. a print material. All of them feel comfortable using any type, style, brand, etc. of tablet in the classroom, even though some people prefer particular gadgets over others.

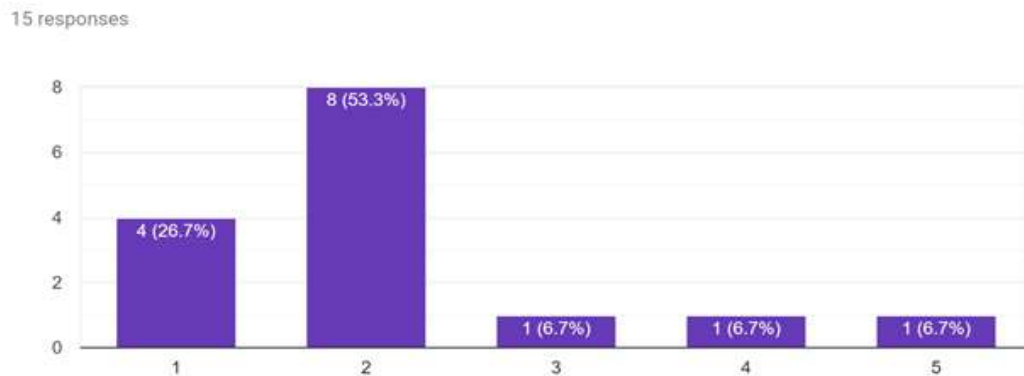**Teacher Observation Checklist Analyses**

15 responses

Figure 7: Student's understanding of the lesson's vocabulary.

As illustrated in figure 7, approximately one-third of the 15 students were observed that they read and understood the vocabulary presented on the tablet without any difficult. However, over half the students at 53.3% found minimal trouble while in the lesson. The remaining three categories that measured the understanding of students from variable struggle to not understanding at all found only one student in each grouping.
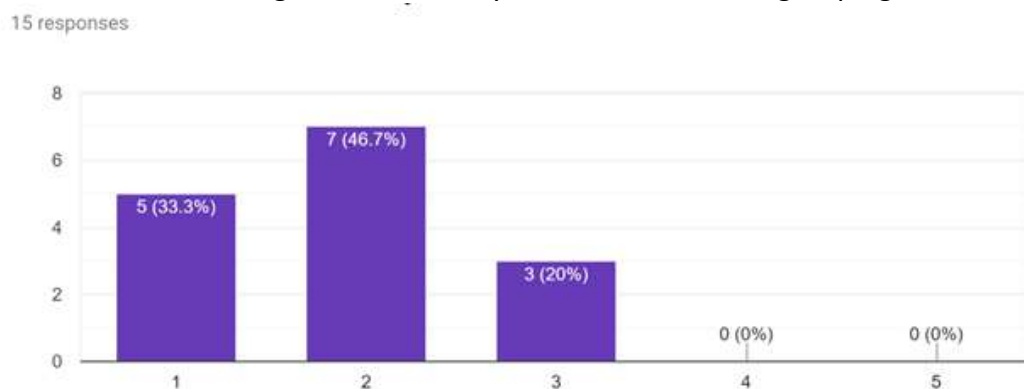
15 responses

Figure 8: student's ability to retell a story he has read.

As shown in figure 8, no student substantially struggled nor were totally unable to retell the story that they read on the tablet. Over a third of students observed had no problems retelling the story; however, close to half had some difficulties. Rounding out the students observed was 20% who had moderate issues on the tablet.
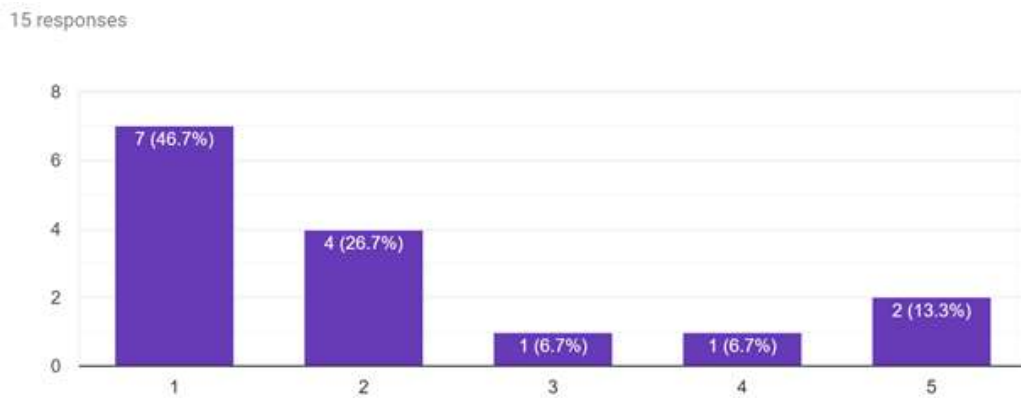
15 responses

Figure 9: Student's ability to identify parts of a book he has read.

As illustrated in figure 9, teachers found students ranged in their ability to identify various parts of the book they read on the tablet with most (46.7%) facing absolutely no obstacles. There was 26.7% who had minimal difficulties. Whereas a combined near third of students had modest to substantial difficulty identifying the beginning, middle and end of the book or weren't able to at all.
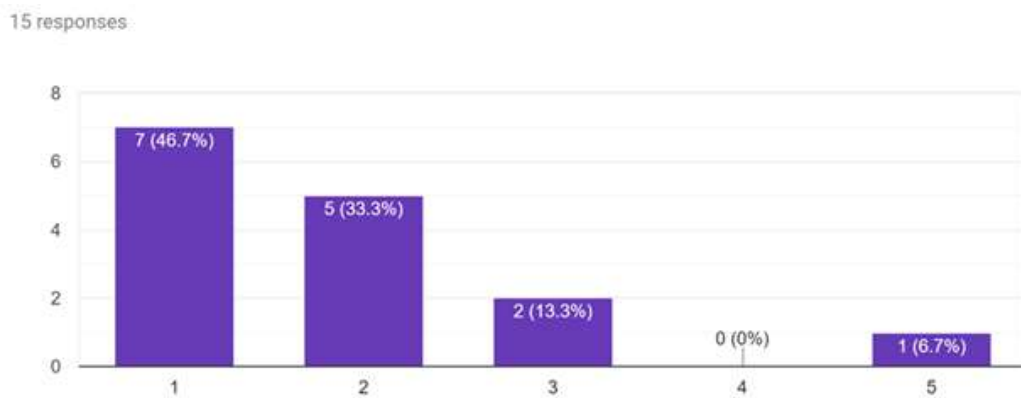
15 responses

Figure 10: Student's ability to identify characters.

As shown in figure 10, 46.7% of students could clearly identify characters within the stories they read on the tablet. Over a third of students at 33.3% had nominal trouble whereas 13.3% had an occasional issue. However, only one student could not identify characters utilizing the tablet.
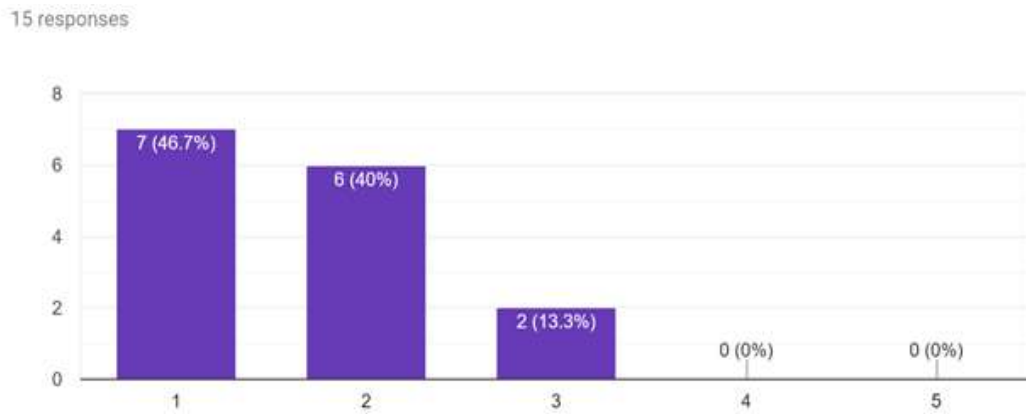
15 responses

Figure 11: Student's ability to identify the setting of the story.

As illustrated in figure 11, nearly half of students observed on whether they were able to identify the setting of the story they read in class on the tablet answered in the affirmative. 40% reported to have minimal issues with identify the setting while only 13.3% of students had moderate trouble. No student either had substantial nor absolute difficulties.
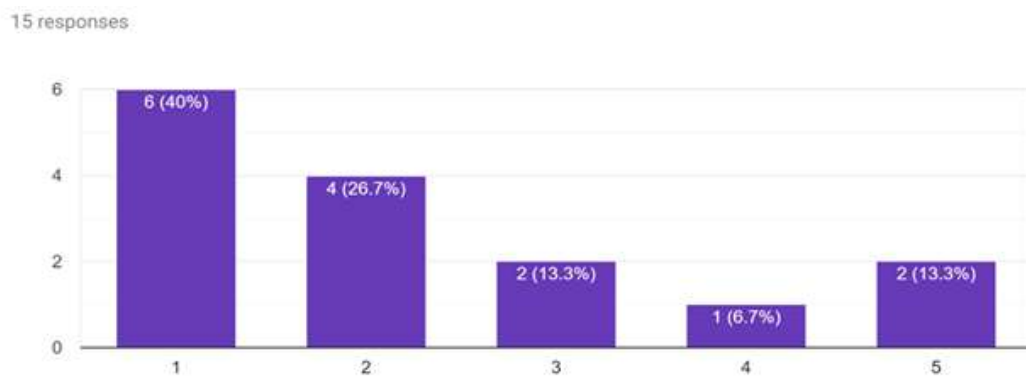
15 responses

Figure 12: Student's ability to use skimming.

As shown in figure 12, six out of the fifteen students observed, which accounted for 40%, were able to skim using the tablet to locate information. 26.7% found the task to minimally difficult. Two students apiece found skimming to be either moderately or totally difficult. Whereas only one student regarded it as considerably troublesome occasional obstacle.
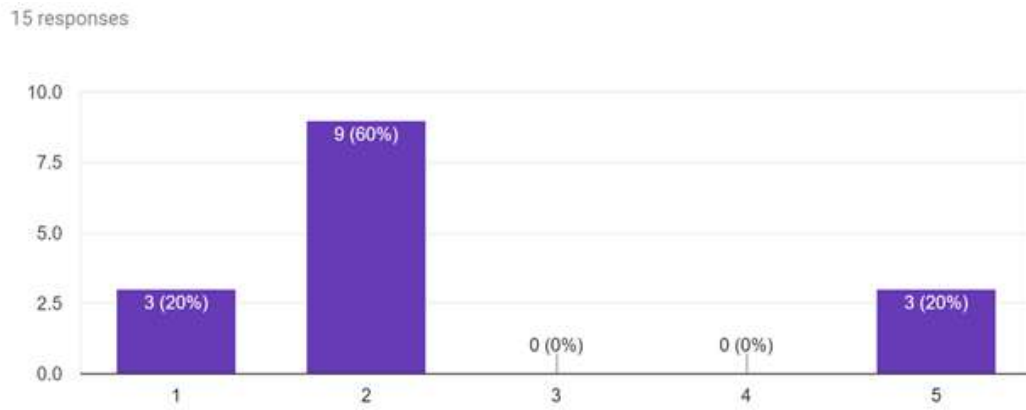
15 responses

Figure 13: Student's ability to summarize a passage.

As illustrated in figure 13, overwhelmingly, 60% of students had incidental hindrances in summarizing the passage while using the tablet. The remaining 40% were split evenly between the two extremes i.e., those who had absolutely no problems with the task and those who couldn't summarize the passage at all.
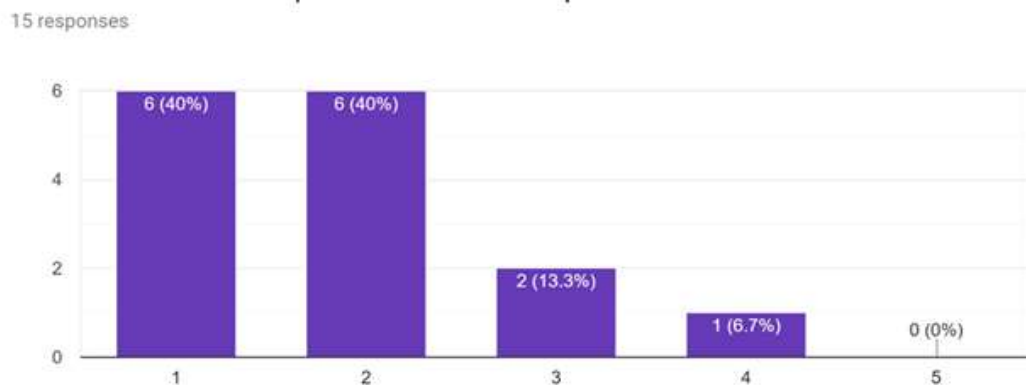
15 responses

Figure 14: Student's ability to sequence events or steps.

As illustrated in figure 14, 80% of the 15 students on whether they were able to sequence events were evenly split between those who either had no trouble or nominal difficulty with the task. The remaining 20% found two students who faced occasional issues and only one who found the task extremely daunting.
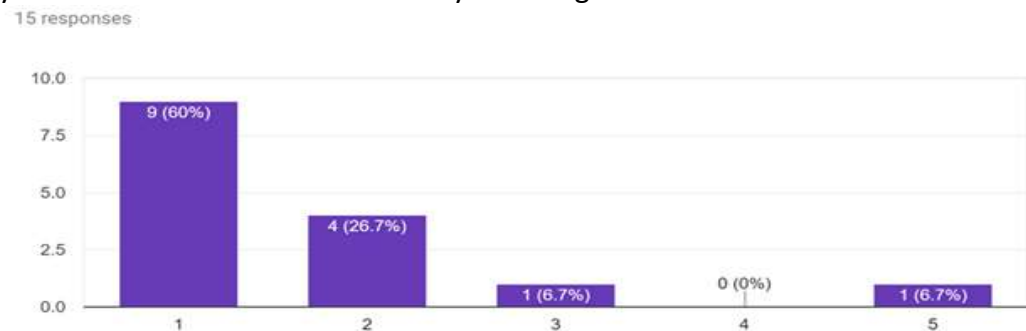
15 responses

Figure 15: Student's ability to identify the main idea of a passage.

As shown in figure 15, 60% of students were able to identify the main idea of the passage while using the tablet. Almost a third found identifying it modestly challenging. One student each found the task either moderately difficult or entirely troublesome.

Conclusion

The research question, "How effective are tablets in boosting reading?" was answered by the study. After analyzing the data, it was found that there was a strong development; all of the students in the 7th grade revealed that tablets were a useful instrument for boosting English reading skill. The study concludes that:

- All students with a learning difficulty or disability should have access to technological means to help them improve their skills.
- School administrators should support teachers to conduct more studies on their students and encourage them to integrate technology.

References

Alqahtani, S. (2016). *THE EFFECT OF USING A TABLET AND A META-COGNITIVE STRATEGY TO IMPROVE READING COMPREHENSION SKILLS FOR STUDENTS WITH SLD*. The University of Iowa.

Alsharif, A. H., Salleh, N. Z. M., & Baharun, R. (2021b). Neuromarketing: Marketing research in the new millennium. Neuroscience Research Notes, 4(3), 27-35.

Alsharif, A. H., Salleh, N. Z. M., & Baharun, R. (2021c). Neuromarketing: The popularity of the brain-imaging and physiological tools. Neuroscience Research Notes, 3(5), 13-22.

Baroudi, S., & Eppard, J. (2019). A Case Study on Improving Reading Fluency at a University in the UAE. *International Journal of Instruction*, *13*(1).

Alsharif, A. H., Salleh, N. Z. M., Baharun, R., & Alharthi, R. H. E. (2021e). Neuromarketing research in the last five years: a bibliometric analysis. Cogent Business & Management, 8(1), 1978620.

Chen, G., Cheng, W., Chang, T.-W., Zheng, X., Huang, R., Chen, G., Cheng, Á. W., Zheng, Á. X., Huang, Á. R., & Chang, T.-W. (2014). A comparison of reading comprehension across paper, computer screens, and tablets: Does tablet familiarity matter? *Journal of Computers in Education 2014 1:2*, *1*(2), 213–225. https://doi.org/10.1007/S40692-014-0012-Z

Alsharif, A. H., Salleh, N. Z. M., Baharun, R., Alsharif, Y. H., & Abuhassna, H. (2021g). A bibliometric analysis of neuromarketing: Current status, development, and future directions. International Journal of Academic Research in Accounting Finance and Management Sciences, 11(3), 670-689.

Connell, C., Bayliss, L., & Farmer, W. (2012). Effects of eBook Readers and Tablet Computers on Reading Comprehension. *International Journal of Instructional Media*, *39*(2).

Alsharif, A. H., Salleh, N. Z. M., Baharun, R., Abuhassna, H., & Alsharif, Y. H. (2022). Neuromarketing in Malaysia: Challenges, limitations, and solutions. International Conference on Decision Aid Sciences and Applications (DASA), 2022, Chiangrai, Thailand. 740-745. DOI:https://doi.org/10.1/dasa54658.2022.9765010

Delgado, P., & Salmerón, L. (2022). Cognitive Effort in Text Processing and Reading Comprehension in Print and on Tablet: An Eye-Tracking Study. *https://Doi.Org/10.1080/0163853X.2022.2030157*, *59*(4), 237–274. https://doi.org/10.1080/0163853X.2022.2030157

Alsharif, A. H., Salleh, N. Z. M., Baharun, R., Abuhassna, H., & Hashem, A. R. E. (2022). A global

research trends of neuromarketing: 2015-2020. Revista de Comunicación, 21(1), 15-32.

Hermena, E. W., Sheen, M., AlJassmi, M., AlFalasi, K., AlMatroushi, M., & Jordan, T. R. (2017). Reading rate and comprehension for text presented on tablet and paper: Evidence from Arabic. *Frontiers in Psychology*, *8*(FEB), 257. https://doi.org/10.3389/FPSYG.2017.00257/BIBTEX

Juarez, L. M. (2014). *Transforming literacy instruction: Exploring pre-service teachers' integration of tablet technology in reading, comprehension, and writing - ProQuest* [Texas A&M University]. https://www.proquest.com/openview/0e216a1bb9f64febb16274aaf1555fe9/1?pq-origsite=gscholar&cbl=18750

Ozbek, A., & Girli, A. (2017). The Effectiveness of a Tablet Computer-aided Intervention Program for Improving Reading Fluency. *Universal Journal of Educational Research*, *5*(5).

Potier Watkins, C., Caporal, J., Merville, C., Kouider, S., & Dehaene, S. (2020). Accelerating reading acquisition and boosting comprehension with a cognitive science-based tablet training. *Journal of Computers in Education*, *7*(2), 183–212. https://doi.org/10.1007/S40692-019-00152-6/TABLES/3

Reich, S. M., Yau, J. C., & Warschauer, M. (2016). Tablet-based ebooks for young children: What does the research say? *Journal of Developmental and Behavioral Pediatrics*, *37*(7), 585–591. https://doi.org/10.1097/DBP.0000000000000335

Seifert, S., & Paleczek, L. (2022). Comparing tablet and print mode of a german reading comprehension test in grade 3: Influence of test order, gender and language. *International Journal of Educational Research*, *113*, 101948. https://doi.org/10.1016/J.IJER.2022.101948

Appendix "1"
Student's interview
1.   How does reading on the tablet compared to reading a book or a textbook?
2.   How would you compare your self-motivation in class during a regular lesson to your time spent using the tablet?
3.   Would you want your teachers to use the tablet more regularly in the classroom? Why or why not?
4. What would you like to use the tablet in the classroom? On your own?
5. How do you find using a tablet in class? Which is more beneficial to you?
6. Did you have problems with the use of the tablet PC?

Appendix "2"
      Questionnaire
1.   Was this activity more interesting for you?
"Strongly agree - agree – disagree – strongly disagree "

2.   Do you often feel lazy or bored when study for your classes?
"Usually – sometimes – rarely "
3.   Do you share any information with your peers during the lesson?
"Usually – sometimes – rarely "
4.   Do you have suggestions for your friends to be aware of when they study?
"Usually – sometimes – rarely "

5. Do you feel the difference between regular study and using tablets during the lesson?
"Usually – sometimes – rarely "

Appendix "3"
Observation Date(s):
Observer's Name:
Reading Comprehension Observational Checklist

	Excellent	Very good	Good
The student reads and understands the lesson vocabulary			
The student is able to retell a story he has read.			
The student is able to identify the beginning, middle, and end of a book he has read.			
The student is able to identify characters in general reading text.			
The student is able to identify the setting of the story.			
The student can recall specific facts from the reading text.			
The student is able to use skimming to locate information.			
The student is able to summarize a passage that he has read.			
The student is able to sequence events or steps.			
The student can identify the main idea of a passage.			