ISSN: 2278-4012, Volume:9, Issue:3, July 2020

The Impact of Using the Mobile Application (iTooch language arts) on Improving English Writing Skills among 7th Grade Students in Jordan

Zeina Moh'd AlRahahleh (PhD student)

Dr. Nayel Alsharah (supervisor)

Jordan/Amman

Uniersity of Jordan/ Faculty of Education

Abstract

The present study examined the impact of using a specific mobile application (iTooch language arts) on improving English writing skills among 7th-grade students in Jordan. The quantitative method was adopted to collect the data through a pre-post writing skills test which was designed by the researcher and approved by 10 specialists. 42 students from 7th grade were divided into experimental and control groups then they responded to the test. The results showed significant differences in the mean scores of the students in favor of the experimental group. These differences indicate an improvement of the students' writing skills after using the mobile application. Therefore, it is recommended to use the application by students as self learning tool and by schools as supportive teaching tool. It is also suggested to do further studies on different mobile applications and other language skills to ensure the validity of using such applications in the teaching-learning process.

Keywords: Mobile applications, iTooch language arts, writing skills.

Introduction

"Technology is not the only way to enhance learning, but it is a very important part of the solution" (Pichai, 2017, para 1).

Researchers have been studying the role of technology tools for enhancing and mastering English language skills. One of the most usable technology devices is the mobile device. Studies have started recently to investigate this tool as an effective way to support education (Kyriakides, Meletiou-Mavrotheris, &Prodromou, 2016). English language, in particular, has a good share from these studies. Some results showed that mobile devices are meaningful in teaching English and students feel comfortable when they use their own devices to learn (Winterhalder, 2017). With the development of mobile devices, the industry of mobile applications has spread widely. Educational applications are the main target for some manufacturers (Scolari, Aguado, &Feijóo,

2012). Google play store offers a variety of educational applications. Millions of people install and review these useful applications. So, educators have started to study the effectiveness of these applications on enhancing language skills, as the term of blended learning is now the target of schools and universities (Purnawarman, Susilawati, &Sundayana, 2016). Research continues to prove that these applications change how language, both written and visual, is produced and handled. The applications affect the generation, manipulation, storage, retrieval and revision of texts as well as the products at the end (Snyder, 2003).

Statement of the problem

" If our schools continue to limit the literacy curriculum to reading and writing traditional, alphabetic, printed texts, then our children will be well prepared for 1950 but ill-prepared for 2050"(Baker, Pearson, &Rozendal, 2010, p. 2). It is recognized that most English language learners face many difficulties learning the language. They, therefore, are not keen to write or read English (Kuo, 2011). Teachers are struggling to make their students love English or even love the way they learn it. And so, universities still graduate students with poor English writing skills (Shamburg, Liu, & Monroe, 2017). English teachers in Jordan are very aware of this problem nowadays. The government also is trying to find suitable solutions to develop the tools and resources of the teaching-learning process (Al-Zaidiyeen, Mei, & Fook, 2010). But the great responsibility lies on the teachers and the learners themselves to find supportive ways and valid methods that could help solve this issue and enhance English writing skills as reading and writing skills are the key to obtain different kinds of knowledge (Winterhalder, 2017). Many results showed really a great improvement on both the attitudes toward learning the language and the enhancement of the language skills (Cheung &Slavin, 2013; Qalaja, 2015). The application iTooch 7th-grade language arts as a developed mobile application for educational purposes could be a supportive tool for both teachers and learners of English (edupad, n.d., para.1). This study, therefore, examines the impact of iTooch 7th-grade language arts on enhancing English Writing skills among seventh-grade students as it is used by millions with very good reviews (edupad, n.d., para.3).

The significance of the Study

The results of the current study may encourage teachers and learners to use mobile applications to enhance English Writing skills, motivate constant learning using the apps, regardless of time and place, for both learners and teachers, provide new tools for curriculum designers to improve English language writing skills and support learners through the use of mobile applications to acquire language skills.

Purpose and questions of the Study

The present study attempt to investigate the impact of using the app: iTooch language arts on enhancing English Writing skills among 7th grade students in Jordan through answering the

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

following question: Are there statistically significant differences in the mean scores of 7th-grade students' writing performance that could be ascribed to the method used (iTooch 7th-grade language arts vs. conventional method)?

Definitions of terms

Mobile application: an interface that connects the users with contents for knowing and tools for interacting. Different kinds of knowledge could be presented. Learners could do much more than reading the content because mobile applications provide users with tools to interact with it. These applications can be downloaded on mobile devices and used even if there is no internet connection (Scolari et al., 2012).

Writing skills: representing language through the use of a collection of signs or symbols in a textual form (Bazerman, 2009), Writing is often seen as the main tool for information transfer.

iTooch language arts: With more than 1,590 exercises, iTooch language arts is a new and fun way of practicing and learning Language Arts for 7th Graders. It is, by far, the largest collection of educational activities based on the US National Common Core Standards on the App Store. Used by more than 5,000,000 users, iTooch apps provide comprehensive learning solutions which help parents, teachers and students to identify and address learning needs in a fun and motivating way. (edupad, n.d., para.1-3)

Theoretical Rationale

Educational mobile applications:

Mobile phones are one of the technological developments that people recently demand, due to the high usability and the ability to download different useful applications on them. Even when offline, people can use these apps (Prasetyo, Ikhsan, & Sari, 2014). Accordingly, educational applications are now one of the top products among technology industry (Wilen-Daugenti, 2012).

Studies on educational mobile applications confirmed the importance of mobile learning in the education industry. Mobile learning is accepted as an effective tool to deliver lessons and acquire knowledge as its main strengths are anytime and anyplace or what so-called ubiquitous learning (Bidin&Ziden, 2013). Educational applications teach different subjects through practice, play, and learners' engagement. Augmented reality apps are also able to add a narrative to the learning process, through which learners must achieve goals by improving skills in the subject-matter (Kesim&Ozarslan, 2012).

English writing skills for 7th graders

Students with insufficient foundations of writing skills need instruction geared towards their level of skill and practice in amounts that produce high levels of writing skills. The

demands of writing skills change by the time because of the global, economic, social and cultural forces, therefore updated instructions for the development of writing skills must be offered to meet these demands plus the personal needs of the learners (Council, 2012).Writing skills are the main tools to explore the recent world changes, recognize the past and to draw the future. 7th graders should improve their writing skills by analyzing, suggesting reasons, pieces of evidence, and examples for their expressions (Abbott, Berninger, & Fayol, 2010). (Lipka,2010) suggested in his study our need to investigate the sources that improve these writing skills for learners of English. Others also recommended more researches about using mobile devices as a tool to solve the problem of writing skills (Hao, Lee, Chen, & Sim, 2019; Neumann, 2018).

Previous Studies

Educators and curriculum designers recognized the power of mobile devices as supportive learning tools for students and gave these devices a good share of their researches and studies (Bidin&Ziden, 2013). Qalaja(2015) presented in her thesis the influence of Edmodo a language art app on writing skills of 7th graders by an experimental study and the results after the treatment of the Edmodo changed positively of both the skills and the attitudes toward English writing. The researcher recommended to use the Edmodo in teaching English writing for better results in students' English writing skills and to let them use the writing product to develop their attitudes towards English. On the other hand, a published study about improving writing skills, along with student attitude toward writing, in a seventh-grade classroom byKardell(2013) indicated that the use of mobile educational applications improved students' writing skills in the areas of content, conventions, vocabulary, and organization. These apps also improved the attitude of the two special education students toward writing and encouraged them to do more writing works. Another research study evaluated the influence of a mobile application designed within the framework of cognitive apprenticeship, in order to support students struggling with learning English as a foreign language, The researchers Hao et al.(2019) collected the data through interviews, observation, surveys, and exams. The findings proved that the use of the application enhanced EFL learning. The application did not only provide a possible path for students who moved from individuals to learn cooperative learning, but it also enhanced their confidence in learning and led to a positive attitude toward EFL learning. Karchmer& Klein(2013) investigate in their study the different kinds of mobile applications that support writing skills and categorized them. Accordingly, they observe some practices among teachers and students. The results indicated positive reactions of the learners toward practicing writing through the apps. Additionally, the teachers of seventh grade were satisfied with the apps as a method to drill and practice in and outside the classrooms. The findings of the above review of literature varied between and positive and negative effects of mobile applications on the learning process depending on the grade level, the subject matter and the age of the learners. All of them suggested further investigations on different populations and applications. They are all not in Jordan. Therefore, this study is an attempt to enrich this field of study with an answer of whether a mobile application (iTooch language arts) could enhance 7th graders English writing skills in

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

Jordan or not, as the educational system in Jordan is moving toward new sciences and technology integrating.

Methodology

The quantitative approach was adopted in the current study which aims at examining the effect of using the mobile application: (iTooch language arts) as a self learning tool mentored by the teacher vs. the conventional method on improving English writing skills among 7thgrade students in Jordan. Participants were 42 students of seventh graders divided into two groups which were chosen randomly from a purposive sample in Alridwan private school in Amman (A national school). The experimental group consisted of 22 students and the control group consisted of 20 students. The experimental group used the application for 8 weeks, and the control group studied just in the conventional method, their English teacher was the mentor and the facilitator. A pre-post writing skills test including writing assignments that indicate students' achievement was prepared and refereed by 10 specialists, and then it was applied on the participants to record the results.

Research design

This is a quasi-experimental study that concerned about determining the impact of the independent variable which is a mobile device application (iTooch language arts) on the dependent variable which is English writing skills for 7th grade students in Jordan. (EG= experimental group/ CG= control group/ X= instructional program /O1: writing skills pre-test/ O2: writing skills post test)

Ex G O1 X O2

CG O1 ----- O2

Results

Quantitative data was collected from students by performing a writing skills pre - post-test. Control group and experimental group both applied a pre-test to determine their level in writing skills before the treatment. After that, a post-test was applied for the two groups to figure out if there is any difference (Dugard&Todman, 1995). The collected data was analyzed by SPSS (Statistical Package for Social Sciences program) to figure out the result of this study. ANCOVA Independent Sample was used to measure the effect size. The means and standard deviations of the pre-test and the post-test of the members of the experimental and control groups for the writing performance test were extracted. Table (1) shows the results .

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

Table (1)

Means and standard deviations of the pre-test and the post-test of the members of the control and experimental groups for the writing performance test:

Group	N.	Pre-test		Post-test	
		Mean	Std. Deviation	Mean	Std. Deviation
Exp.	19	3.27	1.34	4.44	1.13
Con.	19	3.33	0.92	3.37	1.29
Total	36	3.30	1.14	3.92	1.31

The table (1) shows that there are differences between the means of the scores of the experimental and control groups in the post test of the writing performance test in favor of the experimental group. The mean score of the post-test of the members of the experimental group in the writing skills test was (4.44). However, the mean of the scores of the control group of the post test for the writing skills test was (3.37). To determine whether the differences are statistically significant, the "ANCOVA" test was used. Table (2) shows the results.

Table (2)

Results of "ANCOVA" Test for determining the differences between the two groups for the writing skills test:

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	11.534	1	11.534	13.598	.001	.286
Pre-test	22.253	1	22.253	26.235	.000	.436
Error	28.839	34	.848			
Total	61.794	36				

The table (2) shows statistically significant differences at sig. ($\alpha \leq 0.05$) between the means of the experimental and control groups in the writing skills test. F was (13,598) and the differences were in favor of the experimental group, where the mean for the experimental group's writing skills test was (4.44). This indicates that there is effectiveness in teaching through iTooch for the

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

writing skills in favor of the experimental group. The size effect of the independent variable on the dependent variable was (0.286).

Table (3)

Modified means and standard errors for the experimental and control groups for the writing skills test:

Group	Mean	Std. Error
Exp.	4.464	.211
Con.	3.347	.217

Analysis of test dimensions

To answer this question, the means and standard deviations of the dimensions of the writing skills test among the members of the two groups on both the pre-test and the post-test were extracted. Table (4) shows the results.

Table (4)

Means and standard deviations of the dimensions of the writing skills test among the members of the control and experimental groups on the pre-test and the post-test:

Domain	Test	Exp.		Con.	
		Mean	Std. Deviation	Mean	Std. Deviation
Punctuation	Pre	1.5263	1.23854	.9861	1.05535
	Post	3.4737	1.03042	1.9444	1.03453
Spelling	Pre	2.3947	1.45133	2.2500	.88700
	Post	3.7500	1.20474	2.9444	1.70759
Linking words	Pre	3.6842	1.37649	3.8333	.92355
	Post	3.9474	1.12909	3.7500	1.45774
Ideas	Pre	5.4737	2.60061	6.2500	2.28325
	Post	6.6053	2.51429	4.8333	3.20386

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

The table (4) shows that there are differences between the means of the experimental and control groups in the dimensions of the writing skills test in favor of the post-test where the experimental group obtained higher means in the post-test.

Discussion

After collecting data and analyzing it, we discussed here the interpretation and the reasons that led to those results.

Results related to the question: Are there statistically significant differences in the mean scores of 7th-grade students' writing performance that could be ascribed to the method used (iTooch 7th-grade language arts vs. conventional method)?

The test results showed that the use of the mobile application (iTooch language arts) was effective in developing English writing skills for seventh grade students in Jordan. This result could be ascribed to the fact that the application has contributed to the development of English writing skills through displaying all writing techniques, as it has explained these techniques and support them with illustrative examples and pictures when necessary. Each of these techniques ended with a fun evaluation in the form of competition and the application also promotes and encourages the student by accumulating points. Then motivate them to try again when wrong.

Whereas, the application worked on teaching students the vocabulary as a first step and provided students with an opportunity to collect the largest possible number of vocabulary elements necessary for writing the paragraph, in addition to training students to use the necessary punctuation marks. As for the teaching of sentences, the application has facilitated the process of training students on how to form paragraphs, which led to students' progress in writing in the post-test. This result may be attributed to the fact that the use of the mobile application made students active and motivated them to write. This positive result towards using mobile applications in learning English writing skills matches with the results of a study by (Kawazbeh 2015), which emphasized the importance of audio-visual means in developing writing skills. And the result of the study of Al-Jaboul (2018), which showed the effect of a cloud-based teaching program on developing writing skills in the English language.

Conclusion, recommendation and suggestion

Mobile phone applications continue to prove their effectiveness as self-learning tools for students or as teaching aids in support of teachers as shown in this study and in previous studies that have been mentioned here and many other studies. So it is recommended to use the mobile app as learning and teaching tool. It is also suggested to do more studies about the impact of other mobile applications on other language skills and in different environments to ascertain these results and prove them.

Bibligraphy

Abbott, R. D., Berninger, V. W., & Fayol, M. (2010). Longitudinal relationships of levels of language in writing and between writing and reading in grades 1 to 7. *Journal of educational psychology, 102*(2), 281 .

Al-Otaibi, H. M., AlAmer, R. A., & Al-Khalifa, H. S. (2016). The next generation of language labs: Can mobiles help? A case study. *Computers in Human Behavior, 59*, 342-349. doi: https://doi.org/10.1016/j.chb.2016.02.028

Al-Zaidiyeen, N. J., Mei, L. L., & Fook, F. S. (2010). Teachers' Attitudes andLevels of Technology Use in Classrooms: The Case of Jordan Schools. *International education studies, 3*(2), 211-218 .

Anderson, C., & Kieran, L. (2016). *Technology and Language Arts: A good recipe for one adolescent girl!*Study presented at the Society for Information Technology & Teacher Education International Conference.

August, D., McCardle, P., & Shanahan, T. (2014). Developing literacy in English language learners: Findings from a review of the experimental research. *School Psychology Review, 43*(4 .498-490 ,(

Baker, E., Pearson, P. D., & Rozendal, M. S. (2010). Theoretical perspectives and literacy studies: An exploration of roles and insights. *The new literacies: Multiple perspectives on research and practice* .

Bakhsh, S. S. H., & Al Hebaishi, S. a .M. (2015). *Mobile learning adoption by language instructors in Taibah University*. Taibah University .

Bidin, S., & Ziden, A. A. (2013). Adoption and application of mobile learning in the education industry. *Procedia-Social and Behavioral Sciences, 90* .729-720 ,

Bitter, G., & Corral, A. (2014). The pedagogical potential of augmented reality apps. *Journal of Engineering Science Invention ISSN (Online), 2319*, 13-17 .

Cheung, A. C., & Slavin, R. E. (2013). Effects of educational technology applications onreading outcomes for struggling readers: A best-evidence synthesis. *Reading Research Quarterly, 48*(3), 277-299 .

Council, N. R. (2012). *Improving adult literacy instruction: Options for practice and research*: National Academies Press.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research, 209*, 240 .

D'Agostino, J. V., Rodgers, E., Harmey, S., & Brownfield, K. (2016). Introducing aniPad app into literacy instruction for struggling readers: Teacher perceptions and student outcomes. *Journal of Early Childhood Literacy, 16*(4), 522-548 .

Daley, E. (2003). Expanding the concept of literacy. *Educause Review, 38*(2), 32-32 .

Dugard, P., & Todman, J. (1995). Analysis of pre-test-post-test control group designs in educational research. *Educational Psychology, 15*(2), 181-198 .

Hao, Y., Lee, K. S., Chen, S.-T., & Sim, S. C. (2019). An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. *Computers in Human Behavior, 95*, 208-216. doi: https://doi.org/10.1016/j.chb.2018.10.013

Karchmer-Klein, R. (2013). Best practices in using technology to support writing. *Best practices in writing instruction*, 309-333 .

Kardell, S. (2013). *Improving Writing Skills, Along With Student Attitude Toward Writing, in a Seventh Grade Classroom Through the Use of Specific iPad" Apps"*. Caldwell College .

Kesim, M., & Ozarslan, Y. (2012). Augmented reality in education: current technologies and the potential for education. *Procedia-Social and Behavioral Sciences, 47*, 297-302 .

Kuo, Y.-H. (2011). Language challenges faced by international graduate students in the United States. *Journal of International Students* .(2)1 ,

Kyriakides, A. O., Meletiou-Mavrotheris, M., & Prodromou, T. (2016). Mobile technologies in the service of students' learning of mathematics: the example of game application ALEX in the context of a primary school in Cyprus. *Mathematics EducationResearch Journal, 28*(1), 53-78 .

Lee, C., Yeung, A. S., & Cheung, K. W. (2019). Learner perceptions versus technology usage: A study of adolescent English learners in Hong Kong secondary schools. *Computers & Education, 133*, 13-26. doi: https://doi.org/10/1016.j.compedu.2019.01.005

Lindeblad, E., Nilsson, S., Gustafson, S., & Svensson, I. (2017). Assistive technology as reading interventions for children with reading impairments with a one-year follow-up. *Disability and Rehabilitation: Assistive Technology* .724-713 ,(7)12 ,

Lipka, O. (2010). *Reading comprehension skills of grade 7 students who are learning English as a second language.* University of British Columbia .

Lowther, D., Ross, S. M., & Strahl, J. D. (2006). The influence of technology on instructional practices. *The International Journal of Knowledge, Culture & Change Management, 6*, 15 .

Luppicini, R. (2012). *Handbook of Research on Technoself: Identity in a Technological Society: Identity in a Technological Society*: IGI Global.

Mosley, V. V. W .(2012) .*Technology adoption in K-12 education: A qualitative study using TAM3 to explore why technology is underutilized.* Capella University. Retrieved from https://www.learntechlib.org/p/119202

Mouza, C., & Barrett-Greenly, T. (2015). Bridging the app gap: An examination of a professional development initiative on mobile learning in urban schools. *Computers & Education, 88*, 1-14 .

Neumann, M. M. (2018). Using tablets and apps to enhance emergent writing skills in young children. *Early Childhood Research Quarterly, 42*, 239-246 .

Papadakis, S., Kalogiannakis, M., & Zaranis, N. (2018). Educational apps from the Android Google Play for Greek preschoolers: A systematic review. *Computers & Education, 116*, 139-160. doi: https://doi.org/10.1016/j.compedu.2017.09.007

Park, Y. (2011). A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies into four types. *The International Review of Research in Open and Distributed Learning, 12*(2), 78-102 .

Pichai, S. (2017 .(Google CEO Sundar Pichai. *edu.google.com* .

Prasetyo, Y. D., Ikhsan, J., & Sari, R. L. P. (2014). The Development of Android-Based Mobile Learning Media as Chemistry Learning for Senior High School on Acid Base, Buffer, Solution, and Salt Hydrolysis. *Journal Education of Mathematic and Science, 15*, 18 .

Purnawarman, P., Susilawati, S., & Sundayana, W. (2016). The use of Edmodo in teaching writing in a blended learning setting. *Indonesian Journal of Applied Linguistics, 5*(2), 242-252 .

Qalaja, M. W. M. (20 .(15The effectiveness of using Edmodo on developing seventh graders' writing skills and their attitude towards writing in Gaza Governorate. *Islamic university of Gaza* .

Scolari, C. A., Aguado, J. M., & Feijóo, C. (2012). Mobile Media: Towards a definition and taxonomy of contents and applications. *International Journal of Interactive Mobile Technologies, 6*(2 .(

Shamburg, C., Liu, T. J., & Monroe, C. (2017). 14 - Ten-story building: App development for ESL. In S. Pixy Ferris & H. Wilder (Eds.), *Unpluggingthe Classroom* (pp. 177-186): Chandos Publishing.

Snow, C. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*: Rand Corporation.

Snyder, I. (2003). *Page to screen: Taking literacy into the electronic era*: Routledge.

Stevenson, M., Hedberg, J., Highfield, K., & Diao, M. (2015). Visualizing solutions: Apps as cognitive stepping-stones in the learning process. *Electronic Journal of e-Learning, 13*(5), 366-379 .

Wilen-Daugenti, T. (2012). *Society 3.0: How Technology Is ReshapingEducation, Work and Society*: ERIC.

Winterhalder, J. E. (2017). Teachers' Perceptions and Experiences in Implementing Mobile Devices Into Their Teaching .

Woodcock, B., Middleton, A., & Nortcliffe, A. (2012). Considering the Smartphone Learner: developinginnovation to investigate the opportunities for students and their interest. *Student Engagement and Experience Journal, 1*(1 .(

ISSN: 2278-4012, Volume:9, Issue:3, July 2020

Bazerman, C. (2009). *Handbook of research on writing: History, society, school, individual, text*: Routledge.