

## Using Mobile Educational Apps to Foster Work and Play in Learning: A Systematic Review

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**Abstract**—The paper examined the use of mobile educational applications to foster work and play in learning. Three research questions were asked to guide the study. Fifty (50) articles pertaining to the use of mobile educational applications in classrooms were downloaded. Out of all these papers, thirty-five (35) relevant articles were selected for review after which twenty-five (25) were carefully read and searched so as to capture the required information for the analysis. The outcome of the review indicated that there are lots of mobile educational apps that can be used by educators to foster work and play in classroom teaching and learning thereby making the teaching and learning become mobile and attractive. This means that teachers make use of apps, internet and computers to teach in classroom, which makes teaching and learning more interactive, collaborative and replaces the conventional chalkboards. The study applied systematic literature methodology in order to achieve the goal of the research. The research outcome showed that some educators have not yet embraced the use of mobile educational apps for teaching and learning in classrooms especially in third world countries. It was recommended that teachers, curriculum planners, policy makers, administrators and caregivers should be provided with knowledge on the new trend of mobile learning and its importance to the education sector.

**Keywords**—Classroom, mobile educational applications, teaching and learning.

### 1 Introduction

The teachers' role is to encourage and awaken learners to work and play, to find words and ways to express their ideas and develop the intellectual capabilities, improve the cognitive processes of learners, thereby creating a learning environment

with the use of proper methodology and approaches in passing on knowledge (Dosunmu, 2011). Fredrick Froesel, a German teacher, was the first to recognize the use of play and work method in educating and teaching children in order to make teaching more concrete, real, attractive, interesting, practical and meaningful. Therefore, it is necessary that a good and resourceful teacher adopt different ways to foster work and play in the classroom in order to facilitate learning, teaching and retention of knowledge in both in and out-of-school scenarios. John Dewey, Piaget and Vygotsky all believed that children learn and develop through the incorporation of work and play in classroom setting. Throughout history, technology has played a vital role in enhancing educational realization and these has viewed over time in this way. Interestingly, Thomas Edison in 1913 projected that within 10 years, in schools, film would substitute books. Though Edison's forecast did not happen exactly as predicted, his perception has persisted in the minds of teachers, educators, instructors and policymakers (Blackwell, 2014). In view of these, mobile educational applications are growing quickly and faster making the whole world become mobile and bringing about new innovation (Blackwell, 2014). A clear example of such innovation is the use of mobile educational apps in classrooms which have fashioned the need for a novel form of learning termed mobile learning (or M-learning) (Mehdipour & Zerehkafi, 2013). Nowadays mobile phones are not only communication devices, but also portable and private pieces of technological equipment which can be used creatively in different areas (Mehdipour & Zerehkafi, 2013). Lots of work has being done in order to establish the benefits and usefulness of different applications and new apps were created to help in the area of fostering play and work in classroom setting. These new applications continue to proliferate and their access is made easier through the increased usage of mobile devices such as smart phones, tablet computers and the availability of Wi-Fi and cloud-based computing (Zhang & Liao, 2015). This paper is geared to review systematically various relevant journal articles, conference proceedings and literatures pertaining to the benefits of using mobile educational applications in order to help teachers and students learn better and support faster ways to make learning more experiential. Also, the paper looked at some of the challenges facing the use of mobile educational apps in classroom, having the third world countries in mind. With the result of this research, more researchers will delve into looking at challenges raised and how it can affect students' academic performance and look into possible solutions.

It is rather unfortunate that majority of the teachers are still applying the old method of teaching, that is, teacher-centered method and rote learning, which makes it difficult for children to learn and retain what is learned and according to the arguments of Paulo Freire, learning has not taken place rather the system of education is infected and suffering from narration sickness known as "Banking Concept" (Freire, 1993). In spite of rise in technology access, Gray, Thomas, and Lewis (2010) study assert that technology is grossly under-utilized in institutions irrespective of learners' grades, particularly in low income countries (third worlds). The National Education Association (2008) opined that the challenges in really integrating educational apps into the curriculum are faced by even schools with access to enabling devices. This could be due to teachers not familiarity with the usage of these

devices (e.g., mobile apps or not non access to them). If teachers were to be familiar with the use of mobile educational apps in classrooms, more topics can be covered, students can participate actively, assignment can be easily submitted and checked by the teacher, students' horizon can be widened and they can become more creative. This paper will research into the benefits of using mobile educational apps to foster work and play in classroom and help teachers, policy makers and educationist become more aware. The main objective of the study is to find out the use of mobile educational applications to foster work and play in classroom. Other specific objectives are: i) To ascertain how mobile educational applications foster work and play in classroom; ii) To find out the effects of mobile educational applications on teaching and learning outcomes when used for work and play in classroom; and iii) To find out challenges confronting the usage of mobile educational apps in classroom. The research questions are as follows: i) How do mobile educational applications foster work and play in classroom?; ii) What are the effects of mobile educational applications on teaching and learning outcomes when used for work and play in classroom?; and iii) What are the challenges confronting the usage of mobile educational apps in classroom? The paper is organized thus: section one which is introduction covered background of the study, research objectives, research questions and the organization of the paper. Section two dealt with review of related literature. Section three presented the methodology (procedure) used in carrying out the research. Section four dealt with data analysis, results and discussion. Finally, section five dealt with conclusion, summary recommendations, limitation of the study and future work.

## **2 Review of Related Literature**

Recently, many researchers have focused on mobile learning and its environment (Blackwell, 2014), compared to the former mode of teaching and learning that involves more of rote learning and teacher-centeredness. John Dewey in his educational theory expressed that one of the task of a teacher is to perform a complete rework, a complete organization, a true revolution of the old school from bookish school into a social school, a life that involves learning through what you can see and touch around you (Spaseva, 2016). Jean Piaget and Lev Semionovich Vygotsky were both enormously significant contributors to the cognitive development of children saying that the way children learn and mentally grow plays a central role in their learning processes and abilities (Brandi, 2011). By understanding the progression of cognitive development teachers enable themselves to better cater for the unique needs of each child by engaging them in both work (Hussein et al., 2019, Hussain et al., 2019; Hussain & Mkpojiogu, 2017; Hussain et al., 2017; Hussain et al., 2016) and play (Brandi, 2011). Games and different plays can be used to teach and introduce different concept, as children are having fun so also are they learning and the concept becomes clearer and concrete (Malone & Lepper, 1987). Music, animation and multimedia tools when used effectively can facilitate fun, game and play in classroom learning, making teaching more effective, efficient, interesting and pleasurable

(Malone & Lepper, 1987). Also, Quinn (1994) advocates and stresses the integration of fun (e.g., games) into the design of instructions and learning so as to profit and enhance learning. This integration will motivate interactivity and sociability in learning. Mobile Apps popularity in education field has contributed to this new learning style, use of smart phones, tablets and other mobile educational apps helps to foster work and play in classroom (Zhang & Liao, 2015; Hussain et al., 2020c). According to Lepper and Cordova (1992) learning that involves fun or that incorporates play seems to be more successful, effective, and efficient in fostering work and play in classroom. Play and work can be facilitated by several ways with the use of interactive educational technologies. For instance, Ofcom (2017) observed that 10% of children within the ages 3-4 play online games, which demonstrates that online gaming can be attractive in learning (Plowman et al., 2012). Interactive educational artifacts are stimulants for imaginative and immersive play (Marsh, 2014; Mkpojiogu et al., 2020c; 2020d). They encourage autonomous and self-learning drive.

Obviously, younger learners enjoy and appreciate playing with digital toys with educational contents. Playing with learning applications opens the door and provides the basis for the development of learners' reasoning faculties and improved daily their critical, cognitive, social, behavioral and affective skills and knowledge (UNICEF, 2018). By the medium of play, young learners absorb the quality of connecting with other learners in a social setting and imbibe self-advocacy skills. They also learn to share, relate, negotiate, tolerate with others and resolve conflicts (UNICEF, 2018). In addition, they learn leadership and group skills through the avenue of play. Besides, play as a natural tool enable young people to learn coping and resilience skills. Through it they learn how to deal with challenging social issues and to navigate relationships and surmount their fears (UNICEF, 2018). In line with this, Malone and Lepper (1987) studied those elements that support fun and education in games. A number of multi-media effects facilitate this: audio, dynamic icons, videos, expressive elements, music, and other interactive capacities enable the evocation of sensory adventure and curiosity in learners in their use of interactive mobile platforms (Liu, Toprac, & Yuen, 2009). There are several apps designed for education and learning (Demuynck & Laureys, 2002). Surfing e-stores (e.g., Google Play Store for Android Apps) shows a diversity of learning applications for on several subjects. The integration of communication and information technologies, into educational processes have uncovered some essential ways to develop learner's cognition and episteme. The usage of innovative learning technologies galvanizes and fascinates the interest of learners in learning. Hence, the integration of these technologies in and out of the classroom is advocated in prior studies (Ferreira, Moreira, Pereira & Duro, 2015). Interestingly, Kenney (2011) states that the ubiquitous presence of technology in the daily lives of learners makes classroom learning without it totally uninteresting. In addition, teacher/student bonds and relations is also promoted with the use of these technologies especially as the teachers get closely involved with the students. Also, these technologies promote their social learning as they support interaction among learners. This enables collaborative learning and makes learning more active (Ciampa, 2014; Hussain et al., 2020a; 2020b). Independence and sociality stimulated

through learning apps awakens the instinct of independence and the social trait in learners which very natural.

There are a number of applications that support work and play in learning. These apps enable interactive, and immersive learning engagement and experience for learners outside the four walls of the formal classroom. The apps motivate and foster virtual self-directed and independent learning. Some of the applications in this category are: NOVA Elements, Bobo Explores Light, Project Noah, Brain POP Featured Movie, and Proloquo2Go, etc. These apps support customized and personalized authentic learning activities and foster collaborative learning among learners (Apple Inc., 2013; Mkpojiogu et al., 2020a; 2020b). The personalized quality of these apps spur individuation in learners.

## **2.1 Benefits of Using Mobile Educational Apps in Classrooms**

**Collaborative Teaching:** Teachers can use a cell phone alone or with some special apps to make a video or voice call with an expert in order to achieve certain objectives in the classroom, prepare their lessons before teaching, record lesson through screencast-o-matic or camtasia and send to students to watch and the students can use it also in a group work. Assessment can be delivered via phone and learners can also engage socially using educational apps, sharing knowledge in a mutually beneficial, collaborative digital environment. Also, educators can use ‘gamification’ which makes lessons more engaging by using gaming principles in design alongside with mobile devices (Niall, 2016).

**Learning Experiences:** Mobile apps have the ability to transform the educational experience of students by given them opportunity to explore, do their homework and classwork. Mobile apps also allow teachers to enjoy greater convenience in the classroom by helping them stay organized, prepare their lesson, manage the classroom and teach efficiently (Lee, 2017).

**Novel Learning Methods:** The ushering in of educational apps has given rise to the introducing of novel methods of learning which is more students centered. These mobile apps include fun supporting games that indulge and stimulate students into a healthy cognitive process. It spurs adventure, curiosity and new discoveries and also help learners to understand and perceive things from different viewpoints (Roy, 2017).

**Improved Educator /Parent Communications:** Applications for educator/parent communication apps support the development of educator/parent bonding even outside the school environments (Roy, 2017). These relations enable educators to respond to the inquiries from parents about the progress of their wards. In addition, this facilitates the upholding of a transparent culture in the educational segment. Also, parents and teachers can now work collaboratively to help improve the child’s academic performance and preparation for their future career. Schools do not need to wait for Parent-Teachers Association meetings to deliberate and decide on urgent issues, rather they communicate easily on the apps which cut cost, which are more reliable and time saving (Roy, 2017)

**Online Study and E-Books:** Because of the attractiveness and independence in online studies, learners usually are fond of it (Roy, 2017). The innovative library applications and electronic books together with e-readers are fascinating to online learners. The ease of use of the apps enable learners to obtain suitable learning materials with the use of their mobiles anytime and anywhere. These apps facilitate learners' immersive participation in learning. It helps student discover lots of information on their own while supporting them in doing assignment and projects independently (Roy, 2017).

## **2.2 Challenges Facing the Use of Mobile Educational Apps in developing countries**

**Irregularities in power supply:** Many developing countries could not still boast of regular power supply and people use more electricity generating set than they use electricity from the main power grid which makes it difficult for both teachers and students to use educational apps comfortably in classroom teaching and learning. Mobile gadgets need electricity, need to be charged and ready for use but if you lack what to use in charging your gadgets, how do you use them. This can pose difficulty for institutions to embark on using mobile educational apps in classroom for the fostering of play and work (Niall, 2016).

**Availability of funds to purchase the required gadgets for school use:** Some of the developing countries are not buoyant enough to purchase mobile devices and put them at the disposal of all students (Zhang & Liao, 2015). For example, sometimes policies are made, funds are released to carry out the project but due to misappropriation of funds, projects die a natural death after few years of kicking off. Some individuals at the realm of affairs do not still believe in the provision of common amenities to reach every corner of the country in order for the poor masses to benefit from education schemes. However, these few in the helm of affairs rather divert the funds for something else other than improving the educational sector by including in the curriculum the use of mobile educational apps to foster work and play in all schools (Oladiji, 2018).

**Paucity of teachers who knows how to use these apps effectively:** The curriculum design for teacher training, lack courses on how teachers can use mobile educational apps to enhance teaching and learning in classroom (Fatunde, 2018). Lots of courses are taught in theory but the practical aspects are not being followed up. Most of the third world countries suffered the same faith, lacking technical knowledge and how to use apps in classroom (AAI, 2015)

**Connectivity, maintenance and technical support:** Another problem facing third world country is problem of connectivity and technicians who know much about the connections and how to install the devices (Mehdipour & Zerehkafi, 2013). This makes connection to internet server's difficult, maintenance challenging and technical support inadequate. For example, in some remote villages, network services are still fluctuating and unstable. Some school does not have access to internet facility and finds it difficult to talk about buying or using educational devices (Agbakwuru, 2017).

Negative social attitudes towards the use of mobile phones: Some people still believe in the traditional ways of teaching and hold on to it as the best. This group of people see mobile phones as disruptive devices that students use primarily to play games, chat with friends and potentially engage in inappropriate behaviors such as cheating, flirting, watching pornographic films, indulging in crimes, joining cult groups and cyber-bullying to mention but few. This makes it difficult for school to embrace the use of mobile educational apps to help foster work and play in schools (Agbakwuru, 2017).

### 3 Methodology

In order to explore the use of mobile educational apps to foster work and play in classroom teaching and learning, this paper employed a systematic literature review method in searching for appropriate conference proceedings, journal articles, and other related and relevant literatures. The activities involved in the systematic review exercise included: 1) first stage: the review planning, while 2) second stage: the conducting of the review, and then, 3) the final stage: the result presentation.

**Review Planning:** The goal of this stage is to collect vital and relevant information that are connected to how mobile educational apps can be used to foster work and play in learning. With respect to this, primary search involves the search and selection strategy. This primary search was done utilizing high impact journal articles and conference proceedings from online databases in the area of the use of mobile educational apps in fostering work and play in the classroom. In this study, search was done by employing the search strings: “Using mobile educational apps to foster work and play in the classroom”. The review covered studies ranging from year 2000 to 2018. This ensured currency of information connected to mobile educational apps that can be used to foster work and play in classroom. Literatures, articles and conferences on mobile educational apps to foster work and play in classroom were limited. In Table 1 below the selected journal articles, and conferences proceedings are described.

**Table 1.** Selected Journals, articles and Conference Proceedings

Selected Journals	Selected Conference proceedings
Journal of Education Research	Proceedings of the 5 <sup>th</sup> International Conference on Text, Speech and Dialogue, Czech Republic
Journal of Research on Technology in Education	Proceedings of ICERI conference. Seville, Spain
The Turkish Online Journal of educational Technology	Use of mobile apps for teaching and research
International Journal of Computational Engineering Research	45 <sup>th</sup> Hawaii International Conference on System Sciences
British Journal of Educational Technology	
Journal of Computer Assisted Learning	
Contemporary Educational Technology	
Journal of Education and Practice	

**Table 2.** Number of articles/papers per journal/conference proceedings

Journal, Conference Proceeding	No. of Papers
JER	3
JRTIE	1
TOJET	2
BJET	2
IJCER	3
JCAL	1
CET	2
JEP	1
ICTSD	2
ICERI	3
UMATR	2
EEASAE	1
HICSS	2
TOTAL	25

The articles chosen for this review anchored purposely on the use of mobile educational apps to foster work and play in classroom, its benefits and challenges facing the use of mobile educational apps. The following keywords were used in the review: mobile apps, educational apps, benefits, classroom learning, education, use of mobile apps. Also, all relevant articles were prudently chosen to extract the needed data for the review (see Table 2). The number of articles/papers chosen per conference proceedings or journal with a range of 1 to 3 are shown in Table 2.

**Review Conducting:** this stage explains the way the review was conducted. In this stage, the search string, and the abstract of each downloaded article were carefully read assess their relatedness and relevance to the review study. Fifty studies were downloaded from conference proceedings and journals. Nevertheless, the papers chosen for further reading were the ones that has important contributions, so, just 35 papers were considered, out of which only 25 papers were eventually selected, carefully read, and examined for appropriate details that relate to the purpose of the review. Appropriate information (associated to using mobile educational apps to foster work and play in classroom, its benefits and challenges, were mined, and collated. It was based on this that the analysis shown in the results' section was done. Table 2 indicates the number of articles/papers chosen per and conference proceeding and journal. The chosen journals and conference proceedings, out of which the articles/papers were extracted are reputable. The complete list of chosen articles/papers are indicated in Table 3. These chosen articles/papers were from year: 2000 to 2018. The chosen articles offered a good representation of the studies within the period on the use, benefits and challenges of mobile educational apps.

**Table 3.** List of chosen articles/papers

Article ID	Authors	Year
MEA 1	Ally, M. et al.	2014
MEA 2	Blackwell, C.	2014
MEA 3	Courtney, B.	2014
MEA 4	Dornyei, Z.	2000
MEA 5	Demuyneck, K. et al.	2002
MEA 6	Ertmer, P. A. et al.	2010
MEA 7	Ertmer, P. A. et al.	2012
MEA 8	Ferreira, M. J. et al.	2015
MEA 9	Gray, L. et al.	2010
MEA 10	Henderson, S. et al.	2012
MEA 11	Hinze, A. et al.	2017
MEA 12	Kenney, L.	2011
MEA 13	Lopuch, M.	2013
MEA 14	Maha, A. et al.	2015
MEA 15	Mehdipour, Y. et al.	2013
MEA 16	Niall, M.	2016
MEA 17	Pachler, N. et al.	2011
MEA 18	Ross, S. M. et al.	2010
MEA 19	Shrivastava, M. et al.	2014
MEA 20	Shuler, C.	2009
MEA 21	Singh, M.	2010
MEA 22	West, D. M.	2013
MEA 23	Watlington, D.	2011
MEA 24	Wong, C.Y. et al	2010
MEA 25	Zhang, J. et al.	2015

Several online databases were utilized to facilitate this study. They are: Academia, Google Scholar, and ResearchGate. In these 3 online databases, a sum of fifty (50) articles/papers were discovered out of which twenty-five (25) were eventually chosen for the study. The different online database accessed and the total sum of papers discovered and chosen are shown in Table 4.

**Table 4.** Online databases and Chosen papers

Online Databases	Papers Found	Papers Chosen
Google Scholar	25	16
Research Gate	15	6
Academia.Edu	10	3
Total	50	25

**Inclusive and Exclusive Criteria:** to establish the delimitation of this study, some exclusion conditions were used to eliminate the aspects that are not within the scope of the study. In like manner, some inclusive criteria were set scope the study. 1) Exclusive criteria: the following were eliminated from the search and review: the design of mobile communications, tools for mobile communications, and online learning environment enhancement and motivation frameworks. These were omitted from the research because they and were out of the scope the review. 2) Inclusive Criteria: The following conditions were included in the search and review: all aspects of mobile educational apps in fostering work and play in classroom together with some mobile apps used to foster work and play in classroom, benefits of using mobile educational apps in classroom and the challenges confronting the usage of mobile educational apps.

#### 4 Results

The review results on the use of mobile educational apps to foster work and play in learning, the benefits of using such apps and the challenges facing its use are presented in this section. The percentages of research papers in the area of mobile educational apps used to foster learning in a work and play scenario, the benefits of using such apps and the challenges facing the use of the apps are indicated below.

**Table 5.** Mobile apps use to foster work and play in classroom

Mobile apps use to foster work/play in classroom	Frequencies of studies	Percentage
Nova Elements	3	12%
Bobo Explores Light	2	8%
Project Noah	3	12%
Brain POP Featured Movie	4	16%
Proloquo2Go	3	12%

Table 5 shows the findings gotten from the chosen and reviewed articles. This findings indicate that the review elicited a number of mobile applications used in classroom with regards to the Nova elements app (12%), Bobo explore light app (8%), Project Noah app (12%), Brain POP featured movie app (16%), and Proloquo2Go (12%).

**Table 6.** Benefits of using mobile educational apps in classroom

Benefits	Frequencies	Percentage
Collaborative Teaching	5	20%
Learning Experience	5	20%
New Learning Method	5	20%
Enhanced parent/ Teacher Communication	5	20%
E-Books and Online Study	5	20%

Table 6 reveals the benefits of mobile educational apps in fostering work and play in classroom, showing collaborative teaching 20%, learning experience 20%, new learning method 20%, enhanced parent/teacher communication 20% and E-Book/online study 20%.

**Table 7.** Challenges facing the use of mobile educational apps

Challenges	Frequencies of studies	Percentage
Irregularities in power supply	3	12%
Availability of funds	3	12%
Paucity of Teachers	2	8%
Connectivity/maintenance/technical support	1	4%
Negative social attitudes	1	4%

In Table 7 above, the reviewed articles revealed some of the challenges facing the use of mobile educational apps in classroom like, irregularities in power supply 12%, availability of funds 12%, paucity of teachers 8%, connectivity/maintenance/technical support 4% and negative social attitudes 4%.

## 5 Discussion of Findings

The results show that much has to be done in incorporating the use of mobile educational apps in fostering work and play in learning in most part of developing world. This also affects the area of challenges facing the use of mobile educational apps as regards to third world countries. Niall (2016) assert that the lowering in the cost of mobile devices along with the blossoming in the development of educational apps implies that several learners in emerging economies can now also access good media on education for out-of-classroom learning. The rise in mobile access particularly in third world countries will enable school administrators, policy makers, teachers and educationist take learning to students’ who commute daily to school and homes. This improved access will make ‘learning on the go’ a suitable way to get a wider spectrum of learners who desire and possess the ability to learn but however, are restrained because of inability to undergo the traditional learning via the formal classroom education (Niall, 2016). The outcome of this review underscores and supports the work of Froebel, Montessori and Vygotsky (early childhood education proponents who advocated that children should be taught through play) as cited in Onukaogu et al. (2010).

## 6 Conclusion

Obviously, there are quite a number of literatures, journal articles and conference proceedings concerning mobile educational apps. This paper was aimed at reviewing literature sources on mobile educational apps in fostering work and play in learning. A systematic review of literature was utilized to achieve the study’s objectives.

Appropriate articles on the use of mobile educational apps to foster work and play in classroom were chosen using systematic literature review procedure. Of the fifty (50) articles downloaded, twenty-five (25) relevant ones used for the review. To obtain answers for the study's research questions, the chosen papers were pertinently read to obtain the required outcomes. The outcomes of the review reveals the following: there are different mobile educational apps designed to foster work and play in classroom teaching and learning. Hence, the results got from this study showed that mobile educational apps are used in classrooms and it has a lot of benefits. In addition to this, the research identified some issues confronting the usage of mobile educational apps in classroom especially in third world countries. The results from this paper provide additional knowledge for educators, curriculum planners, policy makers, teachers and students on the present state of practice and research on the use of mobile educational applications in fostering work and play in learning.

Sequel to the study's outcome, it is recommended that teachers, curriculum planners, policy makers, administrators and caregivers should be provided with knowledge on the new trend of mobile learning and its importance to education sector so as to square up and mitigate the issues faced by the use of mobile educational apps in third world countries and have more effective and efficient teaching. The paper though tries to look at mobile educational apps in fostering work and play in classroom, did not explore more on the existing mobile educational apps and research into how they can be used at all level to foster work and play in order to improve on learning and teaching in classroom setting. Further still, the fewness of the download also limited the results of the study. Further studies should be done looking at challenges raised and how it can affect students' academic performance and look into possible solutions especially focusing on incorporating the use of mobile educational apps to foster work and play in education system curriculum and teacher training curriculum in order to meet up with the demands of education in this century. It is necessary that more research on the use of mobile educational apps in third world country schools be carried out more regularly to elicit and fill further existing gaps and solve more related research problems. In comparison to advanced countries, the condition is very serious. Therefore, more efforts still need to be made to put things in place in third world schools. Future works will ensure that more downloads are made to enhance on the findings of the study.

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