

What do Teachers and Pupils Say about Using e-Books in the Classrooms?

Abdul Mutalib Embong, Azelin Mohamed Noor, Mahfuzah Rafek, Haslinda Othman, and Puteri Zarina Megat Khalid

Abstract—This paper aims to gauge the use of e-books in primary schools in the state of Terengganu, Malaysia. Surveys were conducted among 73 teachers from 14 schools and 101 pupils from five primary schools. The findings revealed that both teachers and pupils showed positive feedback, perception and reception towards the use of e-books as text books. Based on the findings, the paper proposes a framework that enables the effective use of e-books as textbooks in the classroom among pupils and teachers .

Index Terms—E-Books, textbooks, classroom, pupils, teachers.

I. INTRODUCTION

Education is among the fastest expanding sector which is sensitive to changes in the economic and social structure of a nation. The employment of innovation and technology are considered fundamental and are driving elements in education. Learning institutions have progressively adopted e-books as a medium of teaching and learning. The proliferation of e-books has found its way into many classroom activities worldwide. In response to this development, educators, institutions, and organizations have been working on tactical plans to incorporate e-books in education.

Simultaneously, misconceptions and beliefs associated with teaching and learning online, accessible technological support for online education, the support and compensation required for high-quality instructors, and the demands of pupils pose challenges for education vision statements and planning documents. Misconception starts to loom since every other week, a different set of new e-learning technology, for instance, electronic books, simulations, text messaging, podcasting, wikis, blogs would emerge.

The multiplicative and dynamic driven technology confronts instructors and administrators at a time of continued budget economizing and rethinking. Contributing to this predicament, bored pupils are quitting online classes while asking for better and more interesting e-learning experiences [1]. Given the demand for e-learning, the variety of e-book technologies to incorporate into teaching, the budgetary issues, and the possibilities for advancement, educators debate that e-books learning environments are facing a “perfect e-storm,” a situation which links pedagogy, technology, and learner needs [2]. Taking into consideration

the substantial turbulence developed by the excellent storm encircling e-books, it is not surprising that views are mixed about the advantages of e-books in higher education. As highlighted in several issues of the Chronicle of Higher Education during the past decade, excitement and commitment for e-books are intermittently interrupted with a persistent perception of e-books gloom, dissatisfaction, bankruptcy and lawsuits, and a multitude of other contentions [3]. Essentially, the question lies in the direction of e-book learning where driving online education demands an awareness of the present state and the future path of online learning and teaching.

II. LITERATURE REVIEW

E-books in the classroom are part of a crucial long-term approach for many teachers. Besides being creative, teachers find the e-books a utilitarian medium to replace conventional text books. Several research reports have covered successful pedagogical techniques for e-books resources. Partlow and Gibbs, discovered from a Delphi research of professionals in instructional technology and constructivism that online programs developed from constructivist principles should be appropriate, interactive, project-based, and collaborative, while providing pupils with many options or control over their learning [4].

Keeton examined effective online e-books instructional practices based on a structure of effective teaching practices in face-to-face instruction in higher education. In this study, Keeton interviewed faculty in post-secondary institutions, who ranked the effectiveness of online instructional methods [5]. These faculty members gave higher rankings to online instructional techniques that had created an environment that supports and promotes inquiry, broadened the learner’s experience of the subject matter, and elicited active and significant expression by learners on their growing experience base [6].

In a study of pedagogical practices, Bonk found only 23-45 percent of online instructors surveyed actually used online activities related to crucial and innovative thinking, hands on performances, interactive labs, data evaluation, and scientific simulations, although 40 per cent of the participants mentioned those activities were highly vital in online learning environments [2]. In effect, a substantial gap divided preferred real online instructional practices. Technology has played and continues to play a huge role in the improvement and growth of online education. Accordingly, several universities have reported an increase in the use of online resources.

Manuscript received September 19, 2013; revised November 25, 2013.

Abdul Mutalib Embong is with the Universiti Teknologi Petronas, Tronoh Perak Malaysia (e-mail: mutalib_embong@petronas.com.my).

In the past decade, numerous initiatives have sought to incorporate growing Internet technologies into the teaching and learning approach in higher education. Several researches have reported cases related to the use of websites to enhance student effort and representation. Some experts have publicized the plausibility of using wikis (a website that allows the collaborating editing of its content and structure by its users), student collaboration and podcasting is starting to garner interest from educators for its instructional use [7]. Although some discussions in the literature relate to efficient practices in the use of emerging technologies for education, scientific facts to support or oppose the effectiveness of such technologies, or, probably more essentially, guidance on how to use such resources successfully based on scientific evidence, is lacking.

III. BACKGROUND OF STUDY

In an attempt to make education free for all and to eliminate illiteracy, e-books are used in education in developed and developing countries. The use of e-books in education institutions is a relatively new phenomenon in Malaysia. Malaysia with an HDI of 0.796 [8] is the third country to implement e-books into its school system. E-books in the form of laptops were to be distributed to 25,000 standard five pupils in the state of Terengganu. In 2009, Terengganu became the first state to provide e-books to its primary schools in the whole of South East Asia. *Dewan Bahasa dan Pustaka* or The Institute of Language and Literature, was given the responsibility to develop the digital textbooks for this project. The Terengganu state government was adamant in fulfilling its objective to provide an environment conducive for learning and equipment in schools across the state.

The state government believed that it was vital to prepare its pupils to excel academically and face global challenges. These pupils will be taught not only all general year five subjects such as English, Bahasa Malaysia (Comprehension), Bahasa Malaysia (Writing), Mathematics, and Science but also Islamic Religious Knowledge or Islamic Studies. Costing approximately RM15 million, the e-books were distributed to 127 primary schools in Terengganu.

With the above in mind, this paper will discuss the usage of e-books in the classroom from the eyes of teachers and pupils based on its existence in Terengganu, Malaysia.

By examining these research questions, the next two quanta of studies can be further enhanced in developing an effective employment of e-books in the classroom:

- 1) To determine strategies for the implementation of e-books in the classrooms, and
- 2) To identify a framework as a guideline for teachers to refer to when using e-books in the class room.

It is hoped that this study will answer the following research questions:

- 1) How are the e-books being used in the classroom?
- 2) What are the pupils' perceptions of using e-books as the textbooks?
- 3) What are the receptions of teachers on the use of e-books?

IV. METHODOLOGY

In this study, a survey was conducted in two phases involving both teachers and pupils in the district of Kemaman, Terengganu, Malaysia.

The first phase involved primary school teachers who taught various subjects to year five and six from 14 schools. There were 63 females and 10 males with the total of 73 participants who were randomly chosen by their school administration. A majority of the participants had more than 10 years of teaching experience (72%) while 18% had between 5 to 10 years of teaching experience and the remaining had acquired less than 5 years. The questionnaire consists of 25 questions which particularly address the usage, emotions, lifespan and assistance towards using the e-books in the classroom. The rate of response was 100%.

The second phase of the survey was conducted in the same district. The population included primary five and six pupils. The research sample was considered convenient and was conducted in five schools. The pupils from the schools were randomly chosen by their teachers to answer a questionnaire which consists of 21 questions. The questions address usage, emotions, lifespan and assistance towards using e-books in the classroom. A total of 101 forms were distributed and the rate of response was 100%. Out of 101 participants, 45 were males and 56 were females. The majority were 11 (89.1%) while the rest (10.89%) were 12 years of age.

The data in this study were analyzed using the Statistical Package for Social Science (SPSS) software version 20.0.

V. RESULTS AND DISCUSSION

In phase one, a 5-point Likert scale was used to elicit opinions from the respondents. It ranged from 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly agree

A. What do Teachers Say?

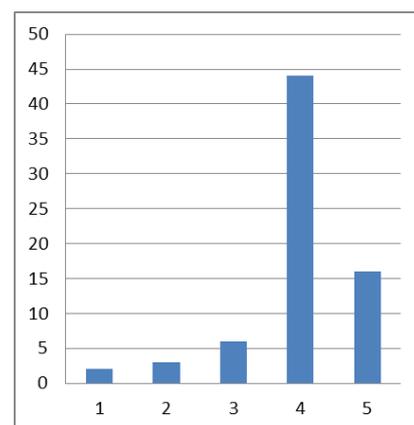


Fig. 1. The significance of e-books.

Most of the teachers concurred that e-books were significant to the pupils. This is represented by the majority of the teachers: 44 teachers who agreed that e-books were significant while six teachers were neutral and another three disagreed with the statement. Only the remaining two did not give any response. Refer to Fig. 1.

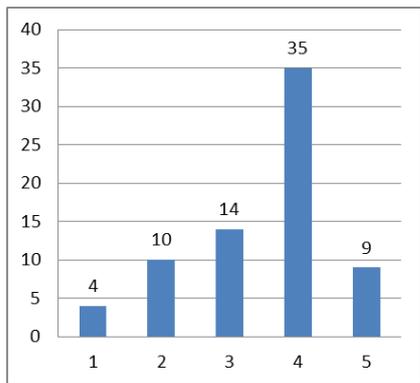


Fig. 2. E-books improve job performance.

A total of 44 teachers agreed that e-books showed improvement towards their job performance. On the other hand, 14 disagreed and another 14 were neutral with the statement. Refer to Fig. 2.

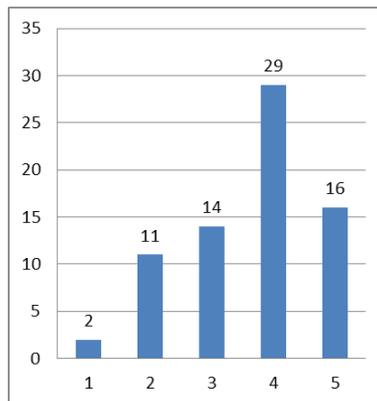


Fig. 5. E-books have replaced of paper text book.

Looking at Fig. 5, 45 teachers agreed that e-books had replaced the usage of paper text book in the learning process. Only 13 disagreed and 14 were neutral with the statement. This is expected since the e-book hardware device is not a novelty and most pupils are exposed to it.

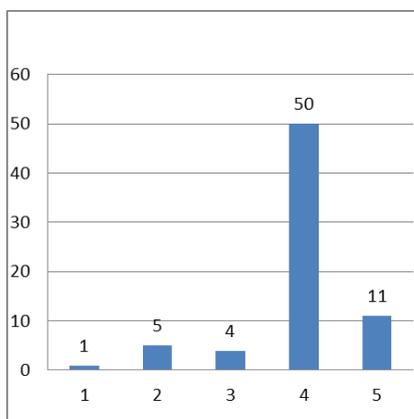


Fig. 3. E-books assist in the learning process.

Sixty one teachers agreed that e-books helped in the learning progress while only six of the teachers did not agree with the statement. A total of four were unsure.

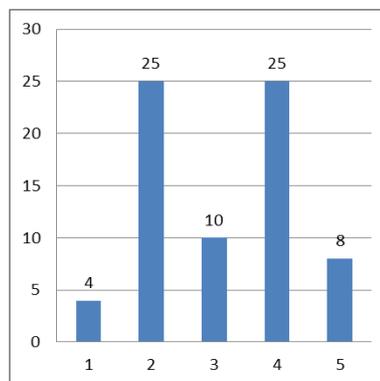


Fig. 6. E-books enhance pupils' focus in the learning process.

The graph above shows that most teachers agreed with the statement that e-books have affected pupils' attention positively during learning. While 33 agreed, 29 did not and 10 were neutral. The context involved a large number of pupils in a class, which can reach up to 50 pupils, and it was difficult for teachers to engage all the pupils.

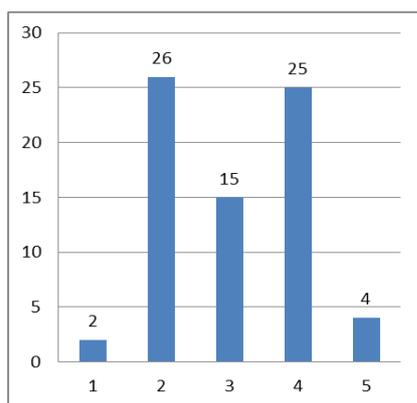


Fig. 4. E-books are fully used by pupils in the class.

According to the results, the usage of the e-books is moderate. Only 29 agreed that e-books were fully utilized in the classroom while 28 disagreed. Another 15 teachers felt neutral. This describes the extent e-books had helped teachers in the class. Teachers were skeptical on the added versatility of e-books since these devices can be used for computer games. Incidences where pupils were caught playing computer games in class were revealed.

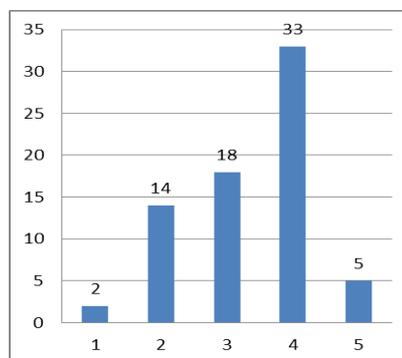


Fig. 7. E-books improve pupils' academic performance.

Fig. 7 shows 38 of the teachers agreed that e-books improved the pupils' academic performance. It could be implied that the use of e-books by teachers helped pupils fare better in their academic performance. A total of 16 teachers disagreed that e-books improved the pupils' performance while 18 were neutral towards the statement.

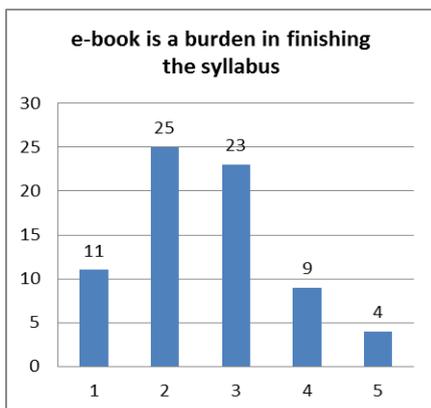


Fig. 8. E-books are a burden in finishing the syllabus.

Only 13 agreed that the e-books were a burden for them to finish the entire syllabus and almost half of the teachers disagreed with the statement. Meanwhile, 23 were neutral.

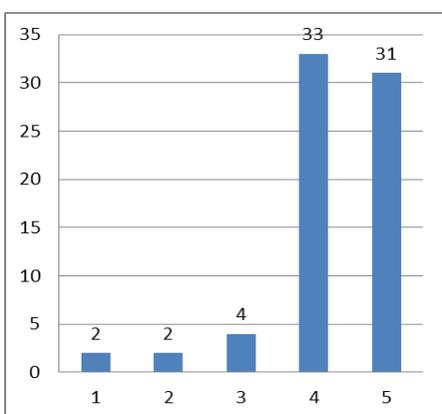


Fig. 9. E-books can be used by pupils.

A majority of 64 teachers admitted that e-books can be misused by the pupils while only six disagreed. Another four were not sure about it.

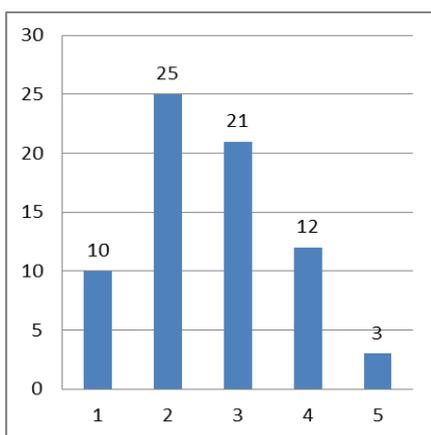


Fig. 10. E-books are a waste of money.

Fig. 10 shows 35 teachers disagreed with the statement that the e-books were a waste of money. They felt that the financial allocation should be retained. Only 15 of them agreed with the statement and 21 were neutral.

The statement that e-books were impractical for standard 5 and 6 pupils were disagreed by 48 teachers. Meanwhile, 15 of them agreed that e-books were impractical for the younger

pupils, while nine were neutral.

From the results of the questionnaire, it can be concluded that as a whole, the respondents or teachers revealed a positive attitude towards the use of e-books in the classroom as compared to paper text books

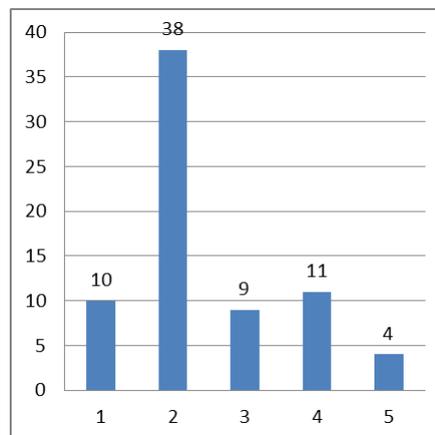


Fig. 11. E-books are impractical for young learners.

B. What do Pupils Say?

The penetration of e-books in the classroom is still in its infantile stage. Pupils within the age group of these respondents were born during the information technology surge which was already in full swing. It would not have taken them much effort to use the e-books. However, the results obtained could be interpreted as otherwise.

C. Perception

a) Only 16% of the pupils agreed that the e-books were used on a daily basis. The result does show an upturned finding from what is expected where the majority (65%) used the e-books sometimes while 19% of them rarely utilize it. The result therefore indicates that the Malaysian pupils are still in the early stages of getting used to using the e-books.

b) A small 6% of the pupils agreed that the e-books were used daily by their teacher. A majority of teachers (57%) used the e-books sometimes while 35% said their teacher used the e-books rarely. Two reasons could have attributed to this result. One is the slow start-up time and two, when system malfunctions. When this happens, pupils may find it difficult to follow lessons being taught in the classroom. Here, not only is it the duty of teachers but also the administrative staff to create avenues which would encourage pupils to use the e-books by overcoming the limitations faced. Considerations such as IT facilities management and teachers equipped with IT know-how should be the backbone of this migration from paper to screen [23].

c) When asked of their opinion on where the e-books could be used, 80% said that it can be used anywhere.

d) More than half the pupils used the e-books to study at home (55%).

e) About 75% said that they were able to follow the lessons taught in the classroom using the e-books.

f) The same percentage of 43% was received for agreeing and feeling unsure that the e-books helped them to understand the lesson.

g) Through the 66% response from those who agreed that

the e-books lightened the weight of their school bag, the Terengganu State Government has been successful to a certain extent in their mission to lighten the schoolbags of school children.

D. Reception

An encouraging 75% of the pupils liked using the e-books. Meanwhile 7% did not and 19% were unsure how they felt about using the e-books. This could be indicative that although the e-book may help pupils to keep track of what was taught in class, they may not necessarily understand. In this respect, teachers and curriculum designers would need to consolidate materials which would fully utilize the technology available to enhance the teaching and learning experience in the classroom as suggested by.

When asked if they wanted to use the e-books during school hours, only 41% were keen while 32% were not. This is further reflected in a question which asked of their preference between paper textbooks and e-books. Here, 43% preferred using the e-books and 34% preferred using paper textbooks.

A very high percentage did not consider the e-books boring (82%). The pupils used it for different purposes such as surfing the internet for information (82%), followed by listening to music (52%).

Only 8.9% had problems using the e-books while 66.3% had none. Partly, this is attributed to their IT literacy. Overall 66% of the pupils agreed that the e-books lightened the weight of their school bag.

A strong 81% were not bored using the e-books. When asked on their preference between e-books and textbooks, 43% were for the e-books. Between teachers and friends, friends (92%) are asked for help if they do not know how to use the e-books, while 83% asked for their teacher's help.

VI. STRATEGIES OF USING E-BOOKS IN THE CLASSROOMS

Drawing from the advantages and limitations of using e-books as textbooks, the following questions may give a rudiment concept for the teachers or school administrators upon implementing the use of this portable electronic device:-.

- 1) The use of e-books in the classroom involved few parties: teachers, school administrators, and technology specialists. Is there any collaboration among them to ameliorate the content presentations of the syllabi with the e-book readers?
- 2) Technology is the most imperative prerequisite in introducing e-books in class. Thus, it is necessary to install specific software and hardware as a fundamental action in equipping the schools with the technology of e-books. This will surely ensure the effectiveness of e-books implementation as learning materials. So, are these technologies readily available? Do teachers have knowledge and skills about e-books?
- 3) How do schools provide instructions and manuals to pupils who are not IT savvy, are ESP pupils, or are with special needs? How can e-books support teachers in helping these groups of pupils?
- 4) Parents must be familiar with e-book applications once it

replaces the traditional textbooks. How can they help their children to learn using e-books both at school and at home?

- 5) E-books may not have a long shelf life if not regularly and properly maintained. Is the maintenance of e-books properly planned and implemented? If they are, who is responsible for it? Will the service be readily available?

VII. A FRAMEWORK FOR USING E-BOOKS AS TEXTBOOKS

With the wide range of benefits they bring to teaching and learning, the e-books have presented the ability to provide teachers with a teaching tool that can assist them to effectively conduct teaching and learning sessions in the classroom. Nevertheless, this paper also acknowledges that e-books can never replace the fundamental function of teachers irrespective of the extent of technological advancements. The task of teaching elementary-age pupils for example, is complicated and complex. It still requires the teacher to possess deep knowledge of the children's mental capacities as well as their emotional requirements during the process of adapting to the surrounding. Furthermore, the effectiveness of the child's education depends on the types of feedback, direction and encouragement that can only be provided by teachers who possess the knowledge and exude passion and enthusiasm.

The use of e-books as text books is definitely best suited in today's modern learning environment. The education system has entered a new paradigm to keep pace with the emerging green environment trend. To provide a framework which can be utilized when using e-books as textbooks in the classroom, the researchers have adopted the framework of Using Technology within K-6 Programme in the National Reading Panel Report 2000 [10]. The framework consists of five general capabilities as shown below.

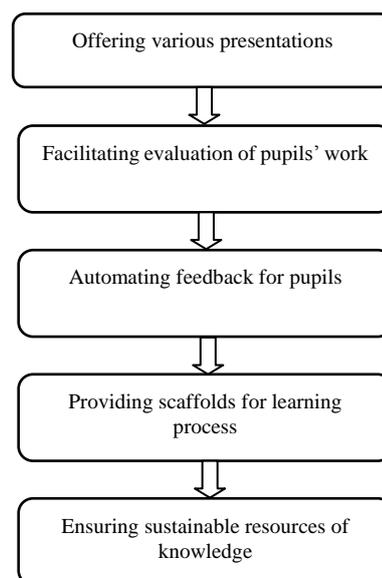


Fig. 12. Framework for using e-books as textbooks

A. Offering Various Presentations of Information and Activities

The extensive functions of e-books include any type of

auditory or visual materials – including speech, text, music, animations, photographs, or videos – alone or in different combinations. Apart from that, e-books can link and combine different types of representations such as pictures with sounds, oral readings with written text, videos with subtitles, or any other combinations that could reinforce teaching and learning. They can also provide enormous flexibility, allowing pupils to set the rate of speech, decide whether written text should also be read aloud, choose the language presented in text and speech, or decide whether to repeat the presentation.

B. Facilitating the Evaluations of Pupils' Work

The capability of presenting information and activities in various formats also means that e-books can accept a variety of inputs from pupils, ranging from mouse clicks to written text as well as to spoken words. It also consists of programmes that permit pupils to check and mark their works, thus indirectly nurturing them to become independent learners in the near future. Since good e-books are highly capable of recording and organizing information, as well as reporting that information in multiple formats, this function can be used to inform teachers' instructional decisions and to make documenting pupils' progress much more efficient.

C. Automating Some Feedbacks for Pupils

Since e-books ease evaluation, they should also be interactive as well as able to portray user-friendly interface to ensure effective instruction. For example, when pupils respond to questions or read aloud, they need: feedback to know whether they are correct, instruction to help them learn more, and opportunities to engage in additional work at appropriate levels to further their learning. When tasks require simple inputs, such as selecting from presented options or typing a word, e-books can be programmed to immediately evaluate each response and provide appropriate feedback with the addition of thorough explanation and description on particular answer. Most importantly, aside from presenting a personal or individual progress report, e-books can be programmed to adjust the tasks presented based on feedbacks from previous performances.

D. Providing Scaffolds for Learning Process

Besides interactive instructions, it is vital for e-books to provide flexible supports for pupils' learning process especially in building vocabulary. Most e-books programs provide the ability to highlight text sections, and take notes and some even add the ability to create drawings within the book. All of these features can increase a pupil's comprehension of and attention to a given work. Some e-book programs have interactive dictionaries, providing just-in-time learning, that allow users to select any word within the e-books and get a definition instantly, have the definition read aloud, or request an instant translation to another language. This too serves as an attraction for a new modern definition of learning compared to the mundane traditional chalk and talk method by teachers in the past.

E. Ensuring Sustainable Resources of Knowledge

Providing scaffolds for the learning process should also be supported by fostering sustained development of knowledge

and learnt society. E-books can contribute to this continuous effort through maximizing the availability of knowledge while reducing the numbers of trees cut down to produce printed books. Every year about 200,000 tons of paper is produced from 4 million trees for the publication of textbooks. This accounts for approximately 20 per cent of the total paper used in the book publishing sector.

According to the latest figures from the Ministry of Education, Malaysia, the current number of enrolment in Malaysian public schools is approximately 5.2 million [11]. This number accounts for 2.9 million primary school pupils and 2.3 million secondary school pupils. Each primary school pupil generally has about 10 textbooks per year and each textbook has about 50 to 80 pages. The shift to using e-books as textbooks would not only reduce the usage of approximately 1 billion sheets of paper which translates into 120,000 trees being saved every year but also ensure sustainable resources of knowledge [12].

VIII. RECOMMENDATIONS

From this investigation, it may seem that both pupils and teachers would need more time to fully explore and take full advantage of using e-books in the classroom. As mentioned earlier, in classroom administration, the e-books ease class management and monitoring individual pupils' activities and performance.

Pupils' development can be closely and conveniently monitored, documented, categorized and accessed [13]. It is suggested that an IT support staff is required in each school to monitor all the e-books and to ensure the e-books function optimally. Similar to our desktop or laptop which requires periodical servicing; these e-books need an in-house technician since the users are new, are children and are in a large number.

This investigation provided the general perceived opinion on the usage of the e-book in a primary school. Pupils will utilize the e-books if their teachers and the school provide a suitable e-book environment. Further research is suggested to determine on the perception of the teachers on the use of e-books in the classroom.

The emergence of e-books as textbooks among the school children requires all parties (i.e. teachers, technologist, parents and even policy makers) to deliberate on adopting and adapting themselves to the use of e-books. While e-books will not replace print books in the near future, it will definitely be used to complement print books. In classrooms, teachers and pupils will start to value the convenience and accessibility of e-books. Technologists can expand e-books usage among a large number of school children by creating awareness on e-books usability. Parents will be exposed to the latest development in education technology. Indeed, the introduction of e-books in education could be a jump-start in promoting highly e-literate society. The suggested framework above may also need to suit a country's policy. The development and publishing process of text books into e-books may be different from one country to another. In Malaysia, this process is subjected to policies made by the Ministry of Education which possess the full copyright of publications.

IX. CONCLUSION

In some countries, e-books have long been used in the process of teaching and learning in schools and in the tertiary institutions. It is considered as undesirable or unacceptable for pupils to depend solely on traditional textbooks in certain contexts since the e-books contribution to the success rate of new knowledge comprehension is too apparent. In other words, the use of e-books, although does require certain prerequisites, is definitely best suited in today's modern learning environment. For the pupils who have internalized such learning method, they are expected to face little or no obstacles to blend in the fast pace of the dynamic technological oriented society. Thus, understanding of its application and functions from both the teachers' and pupils' angles should unquestionably be encouraged.

Nevertheless, the proclaimed goal of e-books implementation in all classrooms learning demands reconsideration before it can be fully executed. Although the idea is not virtually impossible, more considerations such as cost, expertise, pupils' and teachers' readiness, infrastructure and most importantly clear cut instructions and guidelines need to be fully and properly drafted. Along with the continuous efforts to merge pupils' needs with the application of technology in education, it is hoped that e-books could serve as an advent not only to creating a pupil-centered and comfortable classroom environment, but also to further facilitating their life-long learning processes.

ACKNOWLEDGEMENT

The authors would like to thank the staff and management of Universiti Teknologi PETRONAS, Malaysia, for their continuous support and encouragement. Also, a heartfelt appreciation goes to the teachers, pupils, and school administrators who took part in this study and to The Most Honorable Dato' Seri Ahmad Bin Said, the Chief Minister of Terengganu, Malaysia.

REFERENCES

- [1] C. J. Bonk, "The perfect e-storm: emerging technologies, enhanced pedagogy, enormous learner demand, and erased budgets," *London: The Observatory on Borderless Higher Education*, 2004.
- [2] K.-J. Kim, C. J. Bonk, and T. Zeng, "Surveying the future of workplace e-learning: the rise of blending, interactivity, and authentic learning," *E-Learn Magazine*, June 2005.
- [3] R. Detweiler, "At last, we can replace the lecture," *Chronicle of Higher Education*, 2004.
- [4] K. M. Partlow and W. J. Gibbs, "Indicators of constructivist principles in internet-based courses," *Journal of Computing in Higher Education*, vol. 14, no. 2, pp. 68-97, 2003.
- [5] M. T. Keeton, "Best online instructional practices: report of phase i of an on-going study," *Journal of Asynchronous Learning Networks*, vol. 8, no. 2, pp. 75-100, 2004.
- [6] C. J. Bonk, *Online Teaching in an Online World*, Bloomington, Ind.: Course Share, 2001.

- [7] S. Sloan, "Podcasting in education," paper presented at the EDUCAUSE Western Regional Conference, San Francisco, California, 2005.
- [8] United Nation Development Programme (UNDP). (20 August 2103). Human Development Report. [Online]. Available: <http://www.hdr.undp.org/en/>
- [9] A. A. Mutalib, M. N. Azelin, M. H. Hezlina, M. A. Razol, and H. S. Zullina, "E-books as Textbook in classrooms," in *Proc. the International Conference of Education Research*, Cyprus, 2012.
- [10] J. W. Cunningham, "The national reading panel report," *Reading Research Quarterly*, vol. 36, no. 3, pp. 326-335, 2001.
- [11] *Ministry of Education, Malaysia- The Handbook*, 2011.
- [12] Conserv a Tree. (2011). [Online]. Available: <http://www.conservatree.org/learn/EnviroIssues/TreeStats.shtml>
- [13] A. A. Mutalib, A. Alwi, and S. N. S. Salam, "The acceptance of e-book readers among Malaysian Children," in *Proc. ICOCI2006: International Conference on Computing and Informatics*, 2011.



Abdul Mutalib Embong is a lecturer at Universiti Teknologi Petronas. He is teaching Technical Writing. Currently, he is doing his Ph.D. in British Discourse Analysis at the same university, focusing on colonial newspapers.



Azelin Mohamed Noor is currently a lecturer at Universiti Teknologi Petronas. She is teaching Professional Communication Skills. She obtained a degree in Mass Communication and Master's Degree in TESL from Universiti Teknologi Mara, Malaysia. Her areas of interest include education and technology, adult learners, and outdoor education.



Haslinda Othman is currently a tutor at Universiti Teknologi Petronas. She graduated from Universiti Putra Malaysia in Bachelor of Arts (English) and obtained her Master in TESL from Universiti Pendidikan Sultan Idris. Her research areas are syntax and morphology.



Mahfuzah Rafek is a lecturer at Universiti Teknologi Mara Seri Iskandar, Perak. She graduated from Universiti Teknologi Malaysia (UTM) with Bachelor of Science With Education (TESL) and Master of Education (TESL). Her area of interest is educational psychology and second language acquisition.



Puteri Zarina Megat Khalid is a lecturer at UNIKL MIMET. She obtained her PhD from Belfast Queens' University and her Master's degree in TESL from Universiti Perguruan Sultan Idris, and B.Ed. (TESL) from Universiti Putra Malaysia. Her research interests include Scottish discourse and maritime studies.