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Perception of Junior High School Students about the Use of E-books as Learning Sources

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ABSTRACT

This study aims to determine the perception of junior high school students about e-books as a learning source. This study used survey method involving 95 junior high school students. The questionnaire is used to find out the students' perceptions of e-books. The results show that although today's students have been familiar with many technologies, including handheld devices, however, evidently they do not fully involve technology for their learning activities. In fact, there are still many students who prefer to use conventional printed books rather than electronic books. This study also revealed several reasons for their preference, their reason can be a consideration for learning developers to design ebooks that match the characteristics, expectations, and needs of students.

Keywords: Perception; E-book; Learning Source.

INTRODUCTION

Students are currently categorized as a digital generation or digital natives. They are familiar with technology and internet from an early age. IGI Globaldefines the digital generation as a generation who grew with easy access to information technology and digital communications. Prensky(2001) defines that digital natives are a generation familiar with the internet, and integrate technology into life, whether to access information and interact with others, such as blogging, online games, music chatting/communicating downloads, and socializing via social media. They are accustomed to receiving information very quickly. They like to parallel and multi-task process. A digital generation has integrated technology and internet in everyday life. A preliminary study shows that 92.6% of junior high school students have access to using smartphones. They also use laptops (44.2%) and tablets (25.3%). They use these devices for chatting, playing games, watching videos, social networking, and googling. This proves that students are now part of digital natives.

Currently, there have been many learning products that students can access through handheld devices, such as educational games, ebooks, e-learning. Unfortunately, the preliminary study found that only 42.19% of students accessed learning products from their gadgets. They use more gadget for chatting (78.13%), access social media (70,31%), playing game and watching video (70,31%). This is of course very unfortunate because the existence of technology has not been able to contribute to support student learning activities.

One important element to support learning activities is availability of learning resources or teaching materials. Teaching material is the resources a teacher uses to deliver instruction. The teaching materials are the tools used by the learner or trainees to help them learn effectively. The purpose and importance of teaching-learning materials are: making learning interesting; facilitate learning; help to remember lesson material for a longer time; helping teachers to deliver their lessons successfully and easily; allows teachers to effectively disclose the concept of learning (Chanda, Phiri, & Nkosha, 2000). Hamdani, (2011)categorizes the types of teaching materials: 1) printed materials (LKS, handouts, books, modules, brochures, leaflets, wallcharts, etc.); 2) audio-visual teaching materials (film / video and VCD); 3) audio teaching material (cassette, radio, audio CD); 4) visual teaching materials (pictures, photos, models); 5) multimedia (interactive CD, computer-based learning, internet).

Prastowo(2013) describes the teaching materials function for teachers, among others: 1) saving teachers time in teaching; 2) change the teacher's role from a teacher to a facilitator; 3) improve the learning process to be more effective and interactive; 4) as a guide for teachers who will direct all activities in the learning process and is a substance of competence that should be taught to learners; 5) as a means of evaluating the achievement or mastery of learning outcomes. While the function of teaching materials for students, they are: 1) Students can learn without having a teacher; 2) Students can study anytime and anywhere; 3) Students can learn at their own pace; 4) Students may study in the order of their own choosing; 5) Helping students potential to become independent students; 6) As a guide for students who will direct all activities in the learning process and is a substance competence that should be studied or mastered.

Prastowo also divides the teaching materials function regarding learning strategies

used, namely the function in classical learning, individual learning. and group learning (Prastowo, 2013). Teaching materials in classical learning, serves as a major source of information, supervisors and control the learning process and as a materials support of the learning process held. Teaching materials in individual learning, acting as the main media in the learning process; as a tool used to compile and supervise the student process in obtaining information; and as a supporter of individual learning media. While learning materials in group learning, functions as an integrated material with group learning process by providing information about the background of the material, information about the role of the people involved in group learning, as well as instructions on the learning process of the group; as a supporting material of the main learning materials, and if designed well, it can increase students' learning motivation.

As mentioned by Hamdani above, the book is one kind of teaching materials. Until now, the book is the most widely used resource for learning. Now, book transformed from a printed book into electronic books (e-book). Oxford defines e-book as a digital version of a printed book which can be read on a computer or handheld device. E-books can convev information in an interesting and interactive way, as well as be containing exercise questions to check students' understanding once they read it (Smaldino, Lowther, & Russell, 2005).

In the digital age, using e-books has become a new trend. In Indonesia, the Ministry of Education and Culture has also published a digital textbook called Buku Sekolah Elektronik (BSE). Procurement BSE aims to improve motivation and interest in reading students and help procurement of books for free. The use of ebooks as a learning resource can support for conventional classroom learning, online learning, self-regulated learning.Kouis and & Konstantinou(2014) stated that Electronic books from simple versions in PDF format to audio, video, animation, simulation, begin to be adopted in conventional classroom teaching, distance education, online-learning or e-learning. Mobile devices have recently been used intensively in learning, this is because of mobile devices as one learning tool that thought to improve effectiveness the learning environment (Göksu & Atici, 2013). The use of iPads in the classroom attracts students and can better serve the content (Audi & Gouia-Zarrad, 2013)

An e-book has several advantages. Compared to conventional printed books, ebooks more durable because e-books will not be torn such a printed book. In terms of size, e-books have a more practical size, e-books can be used anytime and anywhere just by using a handheld device. For students, this practical e-book size will reduce the burden of carrying heavy books (Embong, Noor, Hashim, Ali, & Shaari, 2012). For teachers, e-books can improve teaching methods to improve student learning in the classroom (Embong, et. al., 2012). E-books can improve access to information quickly and easily in obtaining educational material(Yaya, 2015). An e-book can help students understand learning materials (Noor, Embong, & Ridhuan, 2012). Research also shows that e-books can increase students' interest and read time. Students at home spending time for reading electronic materials longer than print materials(Daniel & Woody, 2013). Rao (2003) noted that e-books are very easy to obtain and always available without waste time looking for books in bookstores and libraries. In addition, the e-book is more environmentally friendly, we do not need to cut trees to create an e-book. Replacement of textbooks with laptops does not affect student learning after one academic year(Bando, Gallego, Gertler, & Fonseca, 2017). This suggests that e-books can effectively replace printed books as learning sources.

Rockinson- Szapkiw, Courduff, Carter, & Bennett(2013) state that e-book is effectively used as a textbook for learning, the average scores of students who choose electronic textbooks for education are significantly higher in the affective and psychomotor aspects of

 Tabel 3.1 Frequency Students' Access E-book

students than those who prefer to use traditional textbooks. According to the characteristics of today's students where they have become the digital generation, and the various advantages of e-books described above, implementing e-books into a teaching and learning activity is a great potential for improving the effectiveness of learning. This study reveals the perception of junior high school students about the use of ebooks as learning sources.

METHOD

This study uses survey method. A questionnaire is used to collect information about students' perceptions of the use of e-books as teaching materials, which include; student access to e-books, student preferences and reasons for their preferences. The questionnaires were distributed to 95 junior high school students. The data were processed using percentage to be analyzed.

RESULTANDDISCUSSION

Result

Almost all students have access to a handheld device and connect with an internet connection everyday. They use handheld devices to access social media, communicate, playing games, entertainment, and educational purposes. So, does the student as a digital generation also access e-books for learning purposes? Seen in table 1, only 30.5% of students have accessed e-books in their handheld devices, while 69.5% claimed to have never accessed e-books from their handheld devices to learn.

Students access	F	%
Access e-book	29	30.5
Never access e-book	66	69.5
Total	95	100

When students were asked about preferences for conventional printed books and electronic books, most students prefer conventional printed books that were 54.7%;

40.0% of students prefer e-books and 5.3% did not make preferences between e-books and conventional print books (Table 3.2).

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Preference	F	%
E-book	38	40.0
Convetional Printed Books	52	54.7
No Preference	5	5.3
Total	95	100

Tabel 3.2 Students' Preferences of Conventional Printed books and E-books

The results obtained through data collected from student reasons for their preferences for electronic books and conventional printed books are presented in Tables 3.3 and 3.4 below.

Tabel 3.3 Students' Reasons for Their Preference of E-book

Why E-book?	F	%
Easier to find information	6	15.8
Interesting and exciting	7	18.4
Fun	9	23.7
Easy and Fast	4	10.5
Practical	11	28.9
Cheaper	1	2.6
Total	38	100

The results of the reason analysis of students prefer e-book is practical with a percentage of 28.9%; 23.7% said e-books are more fun; 18.4% revealed e-books more interesting and exciting; 15.8% of them reported

that e-books were easier at finding information; 10.4% stated e-book easy to use and fast; and 2.6% considered e-book is cheaper than conventional printed books.

Tabel 3.4 Students' Reasons for Their Preference of Conventional Printed Book

Why Conventional Printed Book?	F	%
Keep the eyesight of the gadget screen	12	23.1
Easy to memorize	2	3.8
Easy to understand	9	17.3
More focused to learn	5	9.6
Easy to use	2	3.8
Interesting	4	7.7
Get used	3	5.8
Comfort	5	9.6
Complete	3	5.8
Save battery	2	3.8
Secure	1	1.9
Economical	4	7.7
Total	52	100

Majority of students (23.1%) prefer conventional printed books because they keep their eyesight of the gadget screen. According to them, using e-books will increase myopia. In addition, 3.8% stated that using conventional printed books will not drain the battery. Using conventional printed books also makes them better understand the content of the material (17.3%); easy to memorize material (3.8%); and more focused on learning (9.6%). They also assume that conventional printed books are easier to use (3.8%); interesting (7.7%); more complete (5.8%); secure (1.9%) and economical (7.7%). In addition to these reasons, 9.6% of them prefer to use conventional printed books for comfort reasons and 5.8% as they are used to using conventional printed books rather than e-books.

Discussion

Junior high school students' today called as a digital-generation actually has an interest in using e-books to learn. They consider e-books more fun and exciting for their learning activities. This result has similarities with the research of Dundar & Akcayir(2012)which states that Tablet PCs are a fun reading tool. Reading the text on a tablet PC is fun when compared to reading text in a printed book. In addition, high percentage obtained that students prefer e-book because it is practical, they also report that e-book gives ease and speed in finding information. Similarly, Gueval, Tarnow & Kumm (2015) who stated that searchability and portability are the advantages of e-books.

Although it is reported that e-books are more fun than conventional print books, the majority of students still prefer to use conventional printed books. They assumed that using e-books will make their eyes tired. This opinion is consistent with the results study of Gueval, Tarnow, & Kumm(2015) which state that includes barriers to using of e-books are eye strain and time to master e-books use. Similarly, research by Noor et al.(2012) although 75% of students liked e-books, only 43% choose to use e-books. Noor et al. (2012)stated that students are still in the early stages accustomed to using ebooks to learn. This is also seen in the results of the survey in this study, that only 30.5% of students who have accessed e-book on their handheld device.

Although students have used e-books and are satisfied using e-books, e-book users still prefer to use printed books to learn (Woody, Daniel, & Baker, 2010). According to Chao, Fuxman, & Elifoglu(2013), though e-books have many convenience features, e-books will not really exceed some of the advantages of printed books. Therefore, e-books may never replace the convenience using printed books. Woody et al., (2010) argue that e-books may not be as comfortable as a textbook experience for readers and that e-book design may need to be different from textbooks to make the user experience more constructive.

Preferably, before create an e-book needs to analyze students characteristics and students need. The result of requirement analysis and student characteristic analysis will become a consideration for e-book development. Thus, students will be able to feel the benefits and satisfaction of using an e-book.According to Joo, Park, & Shin (2017), the perception of usefulness in digital textbooks increases as expectations is met, therefore digital textbooks must be designed to provide useful content and helpful multimedia so that to meet the expectations of learners. Therefore, publishers and learning developers need to keep improving the legibility and design

of e-books in accordance with the characteristics of the user, as this important trend will not likely to disappear in the future.

CONCLUSION AND SUGGESTION

Students today are referred to as the generation of digital/digital natives. The digital generation has characteristics: fast and has a high interest in adopting technology. This is certainly a great potential for improving the effectiveness of classroom learning using technology. For example, using e-books for learning in both traditional classrooms, distance learning, and online learning. Some researchers have found that using e-books for learning has a good impact for students.

Although today's students have been familiar with many technologies, including handheld devices, however, the results show that they do not fully involve technology for their learning activities. In fact, there are still many students who prefer to use conventional printed books rather than electronic books. Some of the reasons why students prefer using printed books rather than electronic books can be a consideration for learning developers to design eaccording the characteristics, books to expectations, and needs of students.

REFERENCES

Audi, D., & Gouia-Zarrad, R. (2013). A New Dimension to Teaching Mathematics Using iPads. Procedia - Social and Behavioral Sciences, 103, 51–54. Elsevier B.V. Retrieved from http://linkinghub.elsevier.com/retrieve/pii/ S1877042813037518.

- Bando, R., Gallego, F., Gertler, P., & Fonseca, D.
 R. (2017). Books or laptops? The effect of shifting from printed to digital delivery of educational content on learning. *Economics of Education Review*, *61*, 162–173. Elsevier Ltd. Retrieved from http://dx.doi.org/10.1016/j.econedurev.201 7.07.005.
- Chao, C., Fuxman, L., & Elifoglu, I. H. (2013). Electronic Books Impact Global Environment—An Empirical Study Focus Perspectives. User Journal on of Management and Strategy, 4(2), 52–60. Retrieved from http://www.sciedu.ca/journal/index.php/jm s/article/view/2752
- Daniel, D. B., & Woody, W. D. (2013). Etextbooks at what cost? Performance and use of electronic v. print texts. *Computers and Education*, *62*, 18–23. Elsevier Ltd. Retrieved from http://dx.doi.org/10.1016/j.compedu.2012. 10.016.
- Dundar, H., & Akcayir, M. (2012). Tablet vs. paper: The effect on learners' reading performance. *International Electronic Journal of Elementary Education*, 4(3), 441–450.
- Embong, A. M., Noor, A. M., Hashim, H. M., Ali, R. M., & Shaari, Z. H. 2012. E-Books as textbooks in the classroom. *Procedia -Social and Behavioral Sciences*, 47, 1802-1809. Retrived from http://dx.doi.org/10.1016/j.sbspro.2012.06. 903.
- Göksu, İ., & Atici, B. (2013). Need for Mobile Learning: Technologies and Opportunities. *Procedia - Social and Behavioral Sciences*, 103, 685–694. Retrieved from http://linkinghub.elsevier.com/retrieve/pii/ S1877042813038330
- Gueval, J., Tarnow, K., & Kumm, S. (2015). Implementing e-books: Faculty and student experiences. *Teaching and Learning in Nursing*, *10*(4), 181–185. Organization for

Associate Degree Nursing. Retrieved from http://dx.doi.org/10.1016/j.teln.2015.06.00 3

- Hamdani. (2011). *Strategi Belajar Mengajar*. Bandung: CV Pustaka Setia.
- IGI Global. (n.d.). What is digital generation. Retrieved January 12, 2018, from https://www.igiglobal.com/dictionary/digitalgeneration/7631.
- Joo, Y. J., Park, S., & Shin, E. K. (2017). Students' expectation, satisfaction, and continuance intention to use. *Computers in Human Behavior*, 69, 83-90.Retrived from http://dx.doi.org/10.1016/j.chb.2016.12.02 5
- Kouis, D., & Konstantinou, N. (2014). Electronic textbooks advantages and challenges for the Hellenic higher education and publishing community. *Library Review*, 63(6/7), 531–543. Retrieved from http://www.emeraldinsight.com/doi/10.110 8/LR-06-2014-0074.
- Noor, A. M., Embong, A. M., & Ridhuan, M. R. T. L. A. (2012). E-Books in Malaysian Primary Schools : The Terengganu Chapter. *Ieee*, 6(6), 298–301.
- Oxford. (n.d.). Definition of e-book. Retrieved January 12, 2018, from https://en.oxforddictionaries.com/definitio n/e-book.
- Prastowo Andi. (2013). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta: Diva Press.
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1– 6. Retrieved from http://www.emeraldinsight.com/doi/10.110 8/10748120110424816.
- Rockinson- Szapkiw, A. J., Courduff, J., Carter, K., & Bennett, D. (2013). Electronic versus traditional print textbooks: A comparison study on the influence of university students' learning. *Computers and Education*, 63, 259–266. Elsevier Ltd.

Retrieved from http://dx.doi.org/10.1016/j.compedu.2012. 11.022.

- Rao, S. S. (2003). Electronic books: a review and evaluation. *Library Hi Tech*, 21(1), 85–93. Retrieved from http://www.emeraldinsight.com/doi/10.110 8/07378830310467427.
- Smaldino, Lowther, & R. (2005). *Instructional Technology & Media for Learning*. Upper Saddle River, New Jersey: Pearson.
- Woody, W. D., Daniel, D. B., & Baker, C. A. (2010). E-books or textbooks: Students prefer textbooks. *Computers and Education*, 55(3), 945–948. Elsevier Ltd. Retrieved from http://dx.doi.org/10.1016/j.compedu.2010. 04.005.
- Yaya, J. A. (2015). Prospects and Challenges of E-Books in School Media Services in Nigeria: The Way Forward About E-Books, 1(3), 92–98.