THE EFFECTIVENESS OF USING E-BOOKS AS A MATHEMATICS LEARNING RESOURCE IN INCREASING HIGH SCHOOL STUDENTS' LEARNING MOTIVATION

Destiana Apriliyani[1], Isma Risqi Hanifah[2], Riyadlotul Janah[3], Hikmah Aulia[4], Undangsih Kartikasari[5], Santika Lya Diah Pramesti[6]

UIN K.H. Abdurrahman Wahid Pekalongan

Email: destiana.apriliyani@mhs.uin.gusdur.ac.id[1],
isma.risqi.hanifah@mhs.uingusdur.ac.id[2],
riyadlotul.janah@mhs.uingusdur.ac.id[3],
hikmah.aulia22060@mhs.uingusdur.ac.id[4],
undangsih.kartikasari@mhs.uingusdur.ac.id[5],
santikalyadiahpramesti@uingusdur.ac.id[6]

ABSTRAK

Sumber belajar siswa di sekolah pada umumnya menggunakan sumber belajar fisik yang berupa buku cetak seperti, LKPD, modul belajar, dan buku paket. Namun pada akhir tahun 2019 di Indonesia mengalami pandemi COVID-19, sehingga semua kegiatan seperti bekerja dan mencari ilmu dilakukan secara daring. Oleh sebab itu, mulai munculnya perkembangan dari sumber belajar berupa *e-book*. *E-book* merupakan salah satu sarana untuk seseorang dapat menemukan berbagai sumber referensi dalam bentuk elektronik tanpa harus mencari buku fisik. Penelitian ini bertujuan untuk meningkatkan motivasi pembelajaran matematika siswa sekolah menengah dengan menggunakan *e-book* sebagai sumber belajar siswa. Jenis penelitian ini menggunakan penelitian deskriptif melalui pendekatan kualitatif. Metode yang digunakan dalam penelitian ini diantaranya adalah metode observasi, dan *study literatur*. Objek yang diteliti merupakan siswa/siswi MAN Kota Tegal kelas XI. Dengan adanya e-book siswa dapat memanfaatkan teknologi dalam media pembelajaran serta membuat siswa lebih gampang saat belajar dan meningkatkan motivasi belajar siswa pada masa pandemi COVID-19. Permasalahan dalam penelitian ini adalah seberapa siap siswa MAN Kota Tegal Kelas XI dalam penggunaaan *e-book* saat pembelajaran.

Kata kunci : *sumber belajar, e-book, motivasi, pembelajaran matematika, digital*

ABSTRACT

Student learning resources in schools generally use physical learning resources in the form of printed books such as LKPD, learning modules, and package books. However, at the end of 2019 Indonesia experienced the COVID-19 pandemic, so all activities such as working and seeking knowledge were carried out online. Therefore, the emergence of learning resources in the form of e-books began to emerge. E-book is

one means for someone to find various reference sources in electronic form without having to look for physical books. This study aims to increase the motivation of mathematics learning of high school students by using e-books as a source of student learning. This type of research uses descriptive research through a qualitative approach. The methods used in this study include observation methods, and literature studies. The object studied was a student of MAN Kota Tegal class XI. With the e-book, students can take advantage of technology in learning media and make it easier for students to study and increase student motivation during the COVID-19 pandemic. The problem in this study is how ready MAN Kota Tegal Class XI students are in using e-books when learning.
Keywords*: learning resources, e-books, motivation, math learning, digital*

INTRODUCTION

In implementing education at school, the most important thing is the success of the learning process. Teachers and students are the main components in the learning process. In order for the learning process to be successful, teachers must guide students to develop their knowledge in accordance with the structure of the subjects they study. One way to overcome this situation is to use learning resources in the learning process.

Percival and Ellington (1998) argue that learning resources used in education and training are a system consisting of a set of materials or situations that are deliberately created and made to enable learners to learn individually. Learning resources include several elements, such as messages people, tools, techniques, and environments that support the learning process. Examples of learning resources include printed books, electronic media, internet and online media, and e-books.

According to Munif (2013: 151) and Suwarno (2011: 74), e-books are in the digital form of printed books which generally consist of a stack of bound paper containing text or text and or images, then electronic books contain digital information that can contain text, images, audio, video, which can be read on a computer, laptop, tablet, or smartphone.

An e-book is simply an electronic book or digital book. Electronic books are digital versions of books that generally consist of a collection of papers containing text or images. E-books as digital books make it easier for people, especially

students, who can read hundreds of pages of books in just one file and save the cost of buying books (Probowo & Heriyanto, 2013).

Translated with DeepL.com (free version) The use of e-books is an alternative to solving educational problems through the application of technology by utilizing learning resources that are designed, developed, and utilized in learning so as to stimulate the learning process in students independently (Ragawanto, 2013). This e-book is utilized by high school students in improving their individual learning, especially in learning mathematics.

(Hamzah and Muhislarini: 2014) state that mathematics learning is a process that is deliberately designed with the aim of creating an environmental atmosphere that allows a person to carry out mathematical learning activities. With the existence of mathematics learning, it will easily increase the learning motivation of secondary school students in teaching and learning activities.

Learning motivation is the overall psychic driving force within students that gives rise to forms of learning activities, ensures the continuity of learning activities and provides direction to these learning activities in order to achieve a goal (Winkel in Asrori, 2020, p.117).

Thus, the researcher took the title of the effectiveness of using ebooks as a mathematics learning resource in increasing the learning motivation of secondary students is to know how to use e-books, have an understanding of e-books, and be able to utilize e-books.

DISCUSSION

This research started with the planning stage. In other words, at the stage of making it through 4 stages. this researcher prepares e-books for students to use. According to Taqwa (2019) the way to make an e-book is to change the appearance of the book from conventional (traditional) to digital. The application that can be used in making e-books is the Flip pdf Corporate application. In the process The first stage is the stage of making material from Ms Word / PT. The second stage is the stage of converting material from Ms Word / PT into pdf. The third stage is the stage of using the application, and the last stage is the stage of publishing the material into an e-book.

The first day's activity was socialization which was carried out with a total of 40 students divided into 5 teams, which consisted of 5 students. The essence of this discussion is to convey 1) the meaning of e-books that will be discussed, 2) the reasons for using the e-book, 3) the website address that can be used to download e-books, 4) how to get e-books, 5) examples of e-books.

This activity began with a presentation in the form of an interactive lecture, followed by brainstorming and sharing. At the beginning of this activity, it was known that some grade XI students did not fully know about e-books, only knowing that learning resources came from teacher explanations and printed books. Students were enthusiastic about participating in the activity because e-books were new to them. Students asked several questions related to the use of e-books, including: 1) Are e-books available for all subjects? 2) Where is the website address to download e-books?

There was active interaction between the participants and the research team when students asked the questions above. The results of the first activity showed that 38 students understood the e-book with an understanding rate of 95%. This shows that students' understanding of e-books has increased compared to only 10% previously.

The second day of activities was carried out with 37 students because 3 other students were sick. This second activity is designed to download e-books that can later be used as independent learning resources. In addition, there were three students whose cell phone storage was full so that the students could not save the e-book on their cell phones. Therefore, the research team asked students to delete some unimportant files, game accounts, or photos in their cell phone gallery. The goal was to facilitate the mentoring activities and the use of e-books. As a result of the second activity, 34 students downloaded the e-book and saved it on their cellphones so that students can use the e-book as a learning resource at any time both at school and at home. Students admitted that it was the first time they had books in soft file format so they no longer needed to carry around thick printed textbooks. However, books from well-known publishers cannot be downloaded.

The next activity is monitoring and evaluation which is carried out to make conclusions at the end of the activities that have been carried out previously. A total

of 37 students representing the class were first assessed whether students used ebooks as learning resources. After that, 10 students per class representative were asked to convey the results of activities related to the use of ebooks to all their friends in the class. The results of the three activities carried out with the 11th grade students of MAN Kota Tegal showed an understanding of e-books. The increase was reflected in the percentage of understanding before the observation activity and after the observation activity was completed.

The increase can be seen from students who before the activity did not like learning math but after this activity, students are more motivated to learn math because it is easier to access e-books on cellphones than to open printed textbooks. Especially in today's digital era, students are more interested in opening or reading books through electronic media, especially cellphones. So that it can increase students' motivation to learn mathematics and until now students have not had a negative impact while accessing e-books. In addition, it cannot be denied that students use printed books as the main source of knowledge.

The benefits of e-books for math learning are: (i) students can easily access various math learning resources online. (ii) it allows students to gain broader and more up-to-date knowledge; (iii) it is a more efficient learning medium to search for the materials needed.

E-books offer more benefits and functions, better portability, and a much more cost-effective approach. In addition, the world is moving towards a digital world that will have more digitized versions. The emergence of several self-publishing platforms has helped many independent authors. In the world of education, e-books give students easy access to education wherever the student is also offer an optimized learning process that suits every student's needs.

CONCLUSION

Based on the results and discussion above, it can be concluded that some students do not know what an e-book is. After conducting observation activities they are ready to use it as a learning resource, especially for math lessons, because of better portability, and a much more cost-effective approach. In the world of education, e-books give students easy access to education wherever students are.

REFERENCES

Azrai, E.P, & Refirman. (2013). Efektifitas Penerapan e- book sebagai Sumber Belajar Mandiri dalam Pembelajaran Biologi, Prosiding Semirata FMIPA Universitas Lampung, 243-250.

Hasbiyati, H. & Khusnah, L. (2017). Penerapan Media E-Book Berekstensi Epub untuk Meningkatkan Minat dan Hasil Belajar Siswa SMP pada Mata Pelajaran IPA. Jurnal Pena Sains, 4 (1), 16-21

Koriaty, S. & Manggala, E. (2016). Penerapan Media E-Book Terhadap Minat Belajar Siswa Di Kelas X Jurusan TKJ SMK Negeri 4 Pontianak. Jurnal Pendidikan Informatika dan Sains, 5(2), 237 – 246.

Lukman , Bachtiar.2014. PERSEPSI MAHASISWA TERHADAP PENGGUNAAN E-BOOK & E-LIBRARY (STUDI KASUS PADA SCIENCE DIRECT) . Jurnal Fakultas Ilmu Komputer, Universitas Darwan Ali Vol 2 No 12014.

Munif, A (2013). E.Book dan Buku Teks. Jakarta, Pustaka Setia.

Prabowo, A. & Heriyanto. (2013). Analisis Pemanfaatan Buku Elektronik (E-Book) oleh Pemustaka di Perpustakaan SMA Negeri 1 Semarang. Jurnal Ilmu Perpustakaan. 2 (2), 1-9.

Ramli Abdullah.2012."PEMBELAJARAN BERBASIS PEMANFAATAN SUMBER BELAJAR". Jurnal Ilmiah DIDAKTIKA Februari 2012 VOL. XII NO. 2, 216-231

Rosida, Noor Fadiawati, Tri Jalmo.2016."Efektivitas Penggunaan Bahan Ajar E-Book Interaktif Dalam Menumbuhkan Keterampilan Berpikir Kritis Siswa". Jurnal IPA FKIP Unila Vol 2 No 3 2016.

Sanjaya, W. (2008). Perencanaan dan Desain Sistem Pembelajaran. Jakarta, Kencana