

Analysis of Prospective Mathematics Teachers' Reading Interest Through E-Book for Geometry Systems Course in New Normal Era

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ABSTRACT

In 2045, Indonesia will acquire a demographic bonus that will give rise to a golden generation, which needs to be supported by the adequate quality of education. One of the aspects that can support the competence of qualified graduates is through reading habits. Reading activities can promote students' thinking skills, sharpen their views, and broaden their horizons. This study aims to determine the extent to which the students of geometry system subject are interested in reading e-books in a new normal era. This study uses a descriptive qualitative approach in which the data were collected through questionnaires. The subjects of this study were selected based on a purposive sampling technique built upon the researcher's choice considering the focus aspects of the research. The results show that the interest in reading e-books for the second-semester students of the mathematics education study program in the geometry system course was classified in the high category (63%). Each indicator of interest in reading e-books falls under the high category, namely feelings of enjoyment in reading e-books (52%), students' need for e-books (73%), students' interest in e-books (59%), the students' eagerness to read e-books (66%) and 66% on the indicator of the students' enthusiasm to find e-book reading materials.

Keywords: *Reading Interest, E-Book .*

1. INTRODUCTION

Globalization that occurred in the 21st century has changed almost all aspects of life. Humans of this century are expected to understand the conditions of globalization and must be prepared to adapt to all existing changes, such as by mastering skills in the form of basic literacy, competence, and character quality. In 2045, Indonesia will acquire a demographic bonus that will give rise to a golden generation, which undoubtedly needs to be supported by the adequate quality of education [1]. Education is a universal activity in human life, which essentially is a life process in developing each individual to live and run their life and a conscious effort to shape them into independent adults who make better changes in knowledge, behavior, and attitude [2]. In producing quality graduates who are knowledgeable and skilled, and able to compete with other graduates, educators and students play an important role. Anggun argues that the quality of graduates lies not only in one component but all.

Components of education must be involved to achieve educational goals [1]. The purpose of education based on the Constitution of the Republic of Indonesia is to enrich the life of the nation and develop its citizens' full potential so that they become persons with human values who are faithful and pious to one and only God, who have a noble character, knowledge, and skills, strong and independent personality, and are democratic and responsible [3].

One of the factors that can promote high competence graduates is through reading habits. According to Tennan, at the most basic level, reading activities involve word recognition, from simple recognition of letters and how these letters form certain words, which means each term at the individual level and as part of the text. Reading activities are also necessary for everyday life to avoid missing some important information. It is an important thing that must be obtained and mastered in learning because, without the proper reading skill, someone will not achieve any success in his academic life [4]. Gambrell

et al. (2002) stated that the most important thing in reading activities is understanding the content of the text itself [5]. In addition, Quinn et al. 1 (2014) stated that improving reading comprehension depends on vocabulary knowledge. Researchers agree that reading activities can increase vocabulary knowledge, which is very useful for acquiring other learning skills, which makes improving reading skills paramount [6].

In Law Number 20 of 2003 concerning the National Education System article 4 paragraph 5, it is stated that "the principle of implementing education is to develop a culture of reading, writing, and arithmetic for all citizens." In addition, in Law Number 43 of 2007 concerning Libraries, article 48, paragraph 1 stated, "The encouragement of reading habit is carried out through families, education units and the community." Furthermore, in article 49, it is noted that "the government, local government, and the community encourage the growth of Community Reading Parks to support the habituation of reading." These statements show the importance of reading activities.

Despite the importance of reading skills to live in the 21st century, reality reveals something contradictory. According to the data from UNESCO, it was found that the percentage of Indonesian people with reading interest is only 0.001%, which means that only 1 person out of 1000 Indonesians is fond of reading [7]. This shows that the reading culture of Indonesian society is very low. The level of literacy or reading ability among students in Indonesia is proven to be very low. In addition, based on the Program for International Student Assessment (PISA) research, it was stated that the reading culture of Indonesian students in 2015 placed students in Indonesia in 66th position out of 72 participating countries with an average score of 397 [8].

Moreover, the Program for International Student Assessment (PISA) survey in 2018 again placed students in Indonesia in the lower ranks. It demonstrated a decline from 2015, in the 6th lowest position, namely the 74th position out of 79 countries with a mean score of 371 [9]. In addition, Yuri Belfali revealed that Indonesian students have good results in single texts but are very weak in multiple texts, and they can search for information, evaluate, and reflect on information, but are still weak in understanding the information [3]. Furthermore, the International Association for the Evaluation of Education (IEA) survey results show that Indonesia is a developing country with a low reading rate [10]. One of the causes is due to the fact that most Indonesian people do not make reading a habit, and they prefer to watch television and listen to the radio.

Based on several research results that have been conducted on students in Indonesia regarding students' reading habits, it is stated that although they have been reading since childhood, it is revealed that it does not make them have good reading habits [11]. They realize that reading books is beneficial, but it does not motivate them to build a good reading activity. In line with this research, from the research that has been done related to students' reading habits, including 41 high school students during the holidays, there are 50% of students who only read occasionally, 12% of students who only read once a week, 9% students who only read once a month and as much as 25% of students who do not read books at all despite the books being available [12]. Even though the students agreed that reading was very important, they had little interest in reading.

Reading is something that must be mastered by everyone, especially by students [13]. This is because, through reading activities, one can learn the development of science. In addition, through reading activities, one can find out what was previously unknown and can increase one's knowledge in everything. Low interest in reading will affect the level of knowledge and insight of students. This is supported by the statement of Utami et al. that students who have a high reading intensity will have a broad level of knowledge and insight. This is because, by reading, students will get additional information; the more they read, the more information will be absorbed [14].

The development of science and technology requires people to have good reading habits. The development of reading skills is more important because it is a basic understanding in preparing knowledge to face the future [3]. Reading habits need to be developed from an early age, starting from home, elementary school, junior high school, and high school until college. The habit of reading is very necessary to be able to master science and technology.

In the 21st century, it has been proven that it is inversely proportional to the declining interest in reading with the rapid advancement of technology and information technology. The reason behind this is the increasingly sophisticated audio-visual equipment that makes people, especially students, prefer to indulge their eyes and ears compared to fostering enthusiasm for reading habits [14]. Furthermore, the influence of the environment, parents, friends, school curriculum, and teachers are other factors that can support or oppose the development of good reading habits [15]. This can be seen from the evidence showing how parents make children like reading [16].

The digital era has changed the reading habits of Indonesian people [17]. It has become an inseparable

part of the world of education [18]. Digital technology here includes a variety of computer hardware and software, such as cellular phones, web tools, application software, communication, and storage services [19]. Since the pandemic began until the new normal era, more people stayed at home and used gadgets more as work tools and learning tools. Therefore, gadgets should be an alternative for students to get reading tools easily. One effort that can be used to help overcome the problems of the students in having a source of learning in the era of new normal is by utilizing a teaching material in the form of an electronic book (e-book) that can later be used by students both for in-school and self-regulated learning [20].

A digital book, widely known as an e-book, consists of text, images, and sound and is published in digital form that can be read on computers or other electronic devices such as Android or tablets [21]. According to Subiyantoro, E-books or electronic books evolve printed books that we commonly read every day [22]. E-book replaces the role of Open eBook as an open book format. E-book consists of multimedia files, html5, css, xhtml, xml in one file package [23]. Therefore, this learning media can attract students' attention and thinking ability. This is in accordance with Letchumanan's opinion that e-books are always attractive to many readers because of their mobile nature and dynamic features.

The government's policy that encourages every level of education to carry out online learning activities, which continue to be extended until the new normal period, has resulted in the number of gadgets in Indonesia growing significantly. This should be a momentum for the students to take advantage of and build better reading habits with e-books. One of the policies in this new normal era is turning lectures usually carried out face-to-face in class into an online learning system by utilizing advancements in technology and informatics, namely with the assistance of electronic devices and internet connections in learning. Since students in this course are trained to sharpen the power of logic by doing deductive reasoning to understand and derive applicable theorems, the existence of e-books in learning will unquestionably be a great help to increase students' insight and richer knowledge through other sources even though the learning is carried out from home.

Based on the explanation above, the researchers are interested in researching with the title "Analysis of Prospective Mathematics Teachers' Reading Interest through E-Book for Geometry System Course in New Normal Era." This study aims to determine the extent to which the habit of reading e-books for prospective

mathematics teacher students in the new normal era in the geometry system course.

2. METHOD

2.1. Design And Approach

This research is descriptive research with a qualitative approach. This study aims to determine the extent of interest in reading e-books for students in geometry system courses during the new normal era. Qualitative research is a form of social action that emphasizes how people interpret and understand their experiences to understand the social reality of individuals [24]. Meanwhile, descriptive research is related to the relationship between variables, hypothesis testing, and the development of generalizations, principles, or theories with universal validity [25]. The variable studied in this study is the students' interest in reading e-books for geometry system courses during the new normal era.

2.2. Subject

The research subjects were selected using a purposive sampling technique which involves the second semester students of mathematics education study program at the Mathla'ul Anwar University Banten in the geometry system course, consisting of 14 people who had carried out learning activities in the online geometry system course for the academic year of 2020-2021. This technique allows the researchers to select the subject by considering who and what aspects to focus on during certain situations throughout the research process.

2.3. Data Collection

The data in this study are students; responses regarding their interest in reading e-books for the geometry system course. The Data were collected through survey techniques. The instrument used is a closed questionnaire according to the indicators of students' interest in reading and filled in online through a google form.

3. RESULTS AND DISCUSSION

Reading is a language skill obtained through text understanding which aims to obtain information, increase knowledge, entertainment, and self-development [17]. Therefore, reading activities aim to stimulate the reader's mind to achieve certain goals that can be achieved from the reading sources. The

data collection was carried out through questionnaires using google forms on June 13, 2021, which were distributed to second semester students of the mathematics education study program in the geometry system course through this link: <https://forms.gle/ikT55VniegGAHwX38>. The questionnaire consists of positive and negative statements containing 4 statements relating to feelings of enjoyment in reading *e-books*, 4 statements relating to the need for *e-books*, 4 statements about students' interest in *e-books*, 4 statements about the students' eagerness to read e-books, and 4 statements about the students' willingness to find e-book reading materials which were measured in the geometry system course. Based on the results of students' responses, it can be seen in the table below that the data were obtained from the average score of the number of students who responded to certain categories on each indicator.

Table 1. Questionnaire Results in Attitude Scale Category

Mean Score	Category
2,67	Positive

Based on Table 1 above, it can be seen that the average score of students' responses regarding interest in reading e-books on the subject of geometry system is equal to 2.67. Therefore, where $2.67 > 2.50$, it can be concluded that the student's response regarding interest in reading e-books is in a positive category. The attitude scale category on the questionnaire is in a positive category if $x > 2,50$, is in a neutral category if $x = 2,50$ and is in the negative category if $x < 2,50$ [26]. The following is the description of data obtained regarding prospective mathematics teachers' interest in reading e-books in the geometry system course based on each indicator.

3.1. Feeling of Enjoyment in Reading E-Books

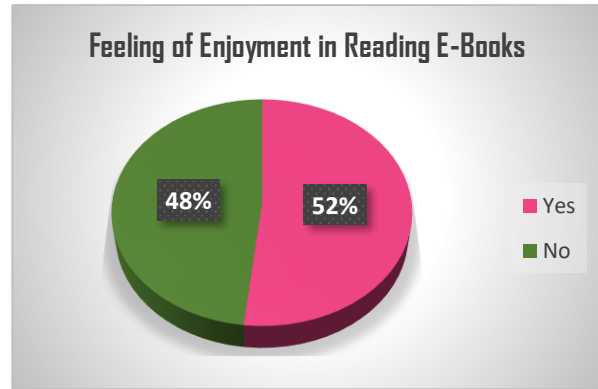


Figure 1 Percentage of Students' Responses to the First Indicator

The indicator of enjoyment in reading e-books consists of 4 statements that express students' enthusiasm for reading e-books in the geometry system course. Based on the results of a survey on students, it was found that as many as 52% of students enjoy reading e-books, especially for learning context in this new normal era. These results indicate that students' feelings of enjoyment in reading e-books are classified in the high category.

3.2. The Need for E-Books

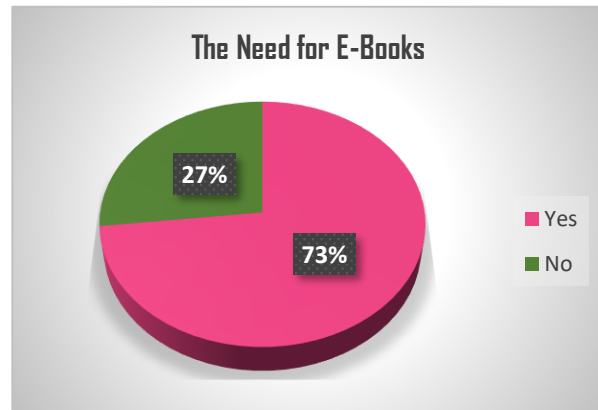


Figure 2 Percentage of Students' Responses to the Second Indicator

The second indicator, namely the students' need for an e-book, consists of eight statements that include students' awareness of the importance of reading e-books. Based on the survey results about students' demand for e-books in the geometry system course, 73% of students declared that they need to read e-books. This result indicates that students' need for e-books is classified in the high category.

3.3. Interest in E-Books

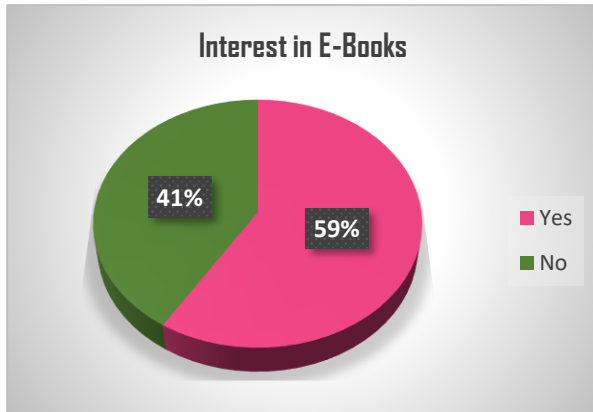


Figure 3 The Percentage of Students’ Responses to the Third Indicator

The third indicator is students' interest in e-books for geometry system courses which consists of 2 statements that express students' interest in reading e-books as reading material. The response result to this indicator was 59% which indicates that the prospective mathematic teachers' interest in e-books is classified in the high category.

3.4. The Students’ Eagerness in Reading E-Books

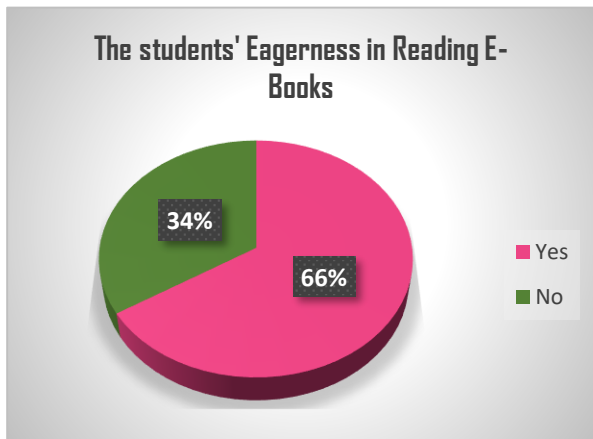


Figure 4 The Percentage of Students’ Responses to the Fourth Indicator

This fourth indicator is about the students' eagerness to read e-books, consisting of four statements that reveal how students spend their time reading e-books on the geometry system. Based on the students' answers on this fourth indicator, the result was 66%. This result indicates that students' eagerness to read e-books is classified in the high category.

3.5. E-Book Students’ Enthusiasm in Finding E-Book Reading Materials

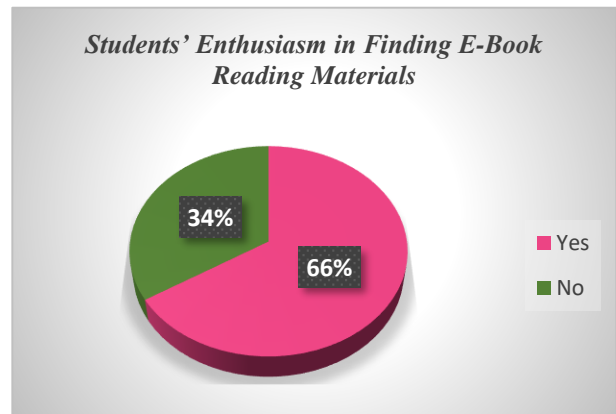


Figure 5 The Percentage of Students’ Responses to the Fifth Indicator

The fifth indicator is about how enthusiastic students are in finding e-book reading materials, consisting of 2 statements to choose the appropriate e-book to read and the other two statements on the student's enthusiasm for finding e-book reading sources. The survey result to this indicator was 66%. This means that the students' enthusiasm in finding e-book reading materials is classified in the high category.

Cumulatively, the percentage of students' interest in reading e-books for geometry system subjects is 63% for good reading interest, while the percentage of poor reading interest is 37%. This shows that the mathematics students have a good attitude toward learning activities in this new normal era, as demonstrated by the percentage of the positive response, which is classified as a high category at 63%.

4. CONCLUSION

Based on the data analysis and discussion results in this study, it can be concluded that the percentage of interest in reading e-books for prospective mathematics teachers in geometry system courses in the new normal era is 63%. Therefore, it proves that the student's interest in reading e-books is good. The percentage on the indicator of a feeling of enjoyment in reading e-books is 52 %, the percentage on the indicator of students' needs for e-books is 73%, the percentage on the indicator of students' interest in e-books is 59%, the percentage on the indicator of the students' eagerness in reading e-books is 66%, and the percentage on the indicator of the students' enthusiasm in finding e-book reading materials also reached 66%. Accordingly, it can be concluded that each indicator of

prospective mathematics teachers' interest in reading e-books in the new normal era is satisfactory.

AUTHORS' CONTRIBUTIONS

This research has contributed to the field of study and practice for online learning. The results reveal the impact of reading interest levels on the continuity of online learning and their effect on students' aptitude. This study has demonstrated the students' interest in reading e-books as a reference for improving lecturer performance in relation to the continuous implementation of online learning.

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