



## Junior High School Students' Perspectives on Printed and Electronic Textbooks

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### **Abstract**

The study investigated junior high school students' perspectives on printed and electronic textbooks. Even though there are many studies conducted in this area, the studies focus on examining university or college students' perspectives (Abuloum et al., 2019; Adeyinka et al., 2018, Cumaoglu et al., 2013). Little research has been done to explore junior high school students' perspectives. Thus, further investigation is needed. This study is a cross-sectional survey using a questionnaire adapted from Abuloum (2019) with 276 students completed the questionnaire. The results showed that printed textbooks were still preferred by the majority (54.7%) of the students. The ease of highlighting and taking notes as well as ease of use were the major reasons for students who preferred printed textbooks. For students preferring e-textbooks, the main reasons were the ease of access and searching. It could be concluded that, despite of the pervasiveness of digital technologies, the students still preferred using printed textbooks for learning. However, findings also indicated that e-textbooks were gaining popularity in the field of education with almost half (46.3%) of the students choosing e-textbooks. Since there is a growing interest in e-textbooks, teachers can help familiarize students to e-textbooks by showing the students how to use them and what their advantages. E-textbook developers can also use the findings as the basis for designing more attractive and appropriate e-textbooks for junior high school students.

**Keywords:** *E-Textbooks; Junior High School Students; Printed Textbooks*

### **Introduction**

Research on students' perspectives about printed and electronic textbooks (e-textbooks) has received increasing attention in recent years due to changing directions in learning materials. The most obvious one is the increase in quantity and quality of learning materials delivered through technologies such as e-textbook. The common areas researched on this issue include the usage of printed and e-textbooks (Picardo, 2016; Simon & Gracia-Belmar, 2016; Walton, 2014) and the students preferences on the format of textbooks (Adeyinka et al., 2018; Cumaoglu et al., 2013, Khalid, 2014).

Textbooks are undoubtedly the most popular teaching materials (Littlejohn, 2011; Richards, 2014; Tomlinson, 2011). According to Tomlinson (2011), a textbook provides the core materials for a language-learning course. It aims to provide as much as possible in one book and is designed so that it could serve as the only book which the learners necessarily use during a course. They provide detailed

development of topics, comprehensive coverage of content, high-quality graphics and photos, selected data conveniently tabulated, many exercises and problems to solve, and sundry other features useful to students (Engbrecht, 2018). Textbooks have multiple components such as workbooks, an assessment package, DVDs and CD-ROMs, and additional resources for teachers and students. Hutchinson and Torres (1994) state that the textbook is an almost universal element of teaching. No teaching-learning situation, it seems, is complete until it has its relevant textbook. Moreover, scholars such as Cortazzi and Jin (1999), Cunningsworth (1995) and Hutchinson & Torres (1994) share the opinion that textbooks are necessary tools for language teaching and learning.

However, researchers have been somewhat split on their perspectives. Johnston et al. (2015) state that while print is at present the dominant format of textbooks, the rising condition is supporting a move toward e-textbooks. They also go on saying that e-textbooks are a strong competitor for print textbooks. Kouis and Konstantinou (2014) reveal that more than 62.5 percent of the participating students believed that e-textbooks would be the primary format for textbooks in the near future. Similarly, Hendricks et al. (2017) affirm that with the significant increase in the quality and availability of e-textbooks, future generations of students are expected to use them in all levels of education. According to Lee et al. (2013), e-textbooks will potentially replace existing paper-based textbooks in the school curriculum. Baker-Eveleth & Stone (2015) assert that the use of digital book format in education is a trend that will not disappear in the short term. Since this trend is heavily and constantly supported by the technological and publishing industries, e-books or e-textbooks are continuously being updated to improve their features and functionality for a pleasant student experience.

On the contrary, some researchers argue that many students still want a printed version over e-textbooks. Millar and Schrier (2015) mention that the primary reason that students want printed textbooks is that they simply prefer print to digital, and they also believe that printed textbooks are more convenient than electronic textbooks. There are several suggestions of why this may be the case. For example, a printed book is familiar and comfortable to use (Bouck et al., 2016). Traditional textbooks can also be used without the need of a special reading device or software. Others have suggested that printed textbooks are less distracting and easier to read (Millar & Schrier, 2015).

It can be seen that there is an ongoing debate related to which format of textbooks preferred by students. However, the study related to this topic usually investigated the perspectives of university or college students (Abuloum et al., 2019; Adeyinka et al., 2018, Cumaoglu et al., 2013). Little research had been conducted in exploring junior high school students' perspectives. Thus, this current study aims at examining junior high school students' perspectives on printed and e-textbooks.

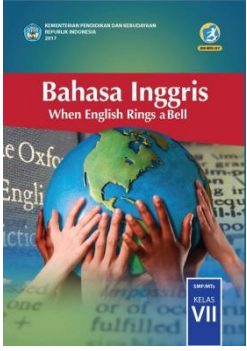
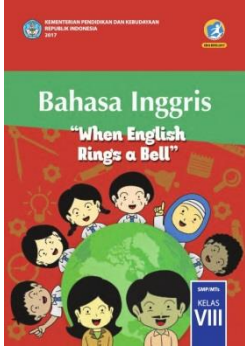
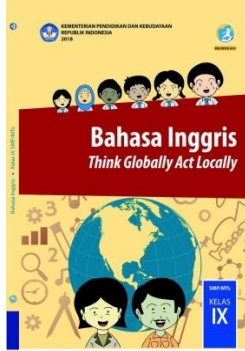
Based on the preliminary observation, some junior high schools in Magelang used two formats of textbooks for English learning: printed and electronic. The textbooks are developed by the Ministry of Education and Culture. Their perspectives are important because knowing students' perspectives on materials is useful for textbooks development and evaluation (Richards, 2014) and to provide insights into the needs and interests of particular groups of learners and decisions about how best to use the materials (Garton & Graves, 2014). To achieve the goal of the study, two research questions are developed: (1) What is students' preference for textbook format? and (2) What are the reasons for students' preference of textbook format?

## **Methods**

This study adopted a quantitative design using a cross-sectional survey in the form of a questionnaire. The survey is conducted in one of junior high schools in Magelang. In this school, the students used two formats of English textbooks: electronic and printed developed by The Ministry of Education and Culture. Each grade has a different textbook as shown in Table 1. The students could

borrow the printed textbooks from the school's library. Meanwhile, the electronic format could be freely downloaded from various websites on the internet.

Table 1. English textbooks for junior high school students.

Grade 7	Grade 8	Grade 9
		

The participants of this study consisted of 276 students (111 males and 165 females) in the academic year 2021-2022. Since the number of students in this school was relatively small, the researcher used total population sampling. It is a technique where the entire population that have the same set of characteristics are included in the research (Etikan et al., 2016). Table 2 describes demographics of the students.

Table 2. Demographics of the students.

Gender	Frequency	Percentage
Male	111	40.2
Female	165	59.8
Grade	Frequency	Percentage
7	89	32.2
8	95	34.4
9	92	33.3

The research survey questionnaire was adapted from Abuloum (2019). The questionnaire consisted of two sections. The first section aimed to obtain the data related to the demographics of the students. Since the questionnaire was distributed for junior high school students, the year of the study was modified into grade of the students. The second section investigated students' usage of and preference for printed and e-textbooks. The researcher only took items related to students' preference. This section used a 5-point Likert scale (1 means very weak reason, 2 means weak reason, 3 means moderate reason, 4 means strong reason and 5 very strong reason).

The first draft of the questionnaire was piloted. 25 students from grade 7 to 9 took part in this pilot testing. Based on the try out results of the instrument validity to the 12 items analyzed by using Statistical Package for Social Sciences (SPSS) software, all items were valid. Then, the internal consistency reliability estimate for the questionnaire was assessed with Cronbach Alpha. The alpha value was found to be (0.678) suggesting that the questionnaire was a reliable instrument for the purpose of the study.

The quantitative data gathered for this research was from a self-administered survey questionnaire. The researcher distributed the questionnaires from March 28<sup>th</sup>, 2021 to March 31<sup>st</sup>, 2021 in

nine different classes. Out of 300 questionnaires distributed, 276 were completed with a response rate of 92%. Descriptive statistical procedures were applied by using SPSS software to analyze the obtained data. Means and frequencies were calculated to help provide answers for the research questions.

## Results and Discussion

As previously mentioned, this study was conducted to explore junior high school students' perspectives on printed and e-textbooks. Two research questions were formulated to guide the study. Findings are presented according to these research questions. In general, students reported that they preferred printed textbooks more than e-textbooks.

### 1. Students' Preference for Textbook Formats

The first research question was designed to discover students' preference for textbook format. The results are presented in Table 3. The data from the table are also displayed in a pie graph in Fig. 1.

Table 3. Students' preference for textbook format

	Frequency	Percent
I prefer printed textbooks over e-textbooks	151	55
I prefer e-textbooks over printed textbooks	125	45
Total	276	100

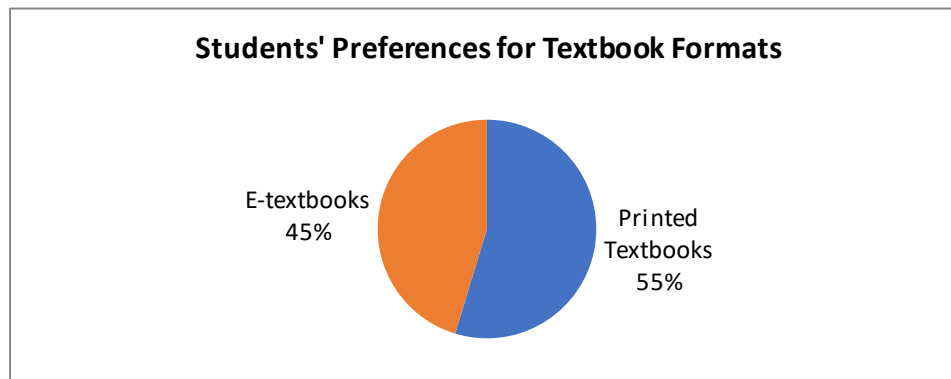


Figure 1. Students' preference for textbook format

The finding illustrated that printed textbooks were more preferred by the students. This finding was in line with Mizrachi's et al. (2018). In this study, they surveyed student preferences about using printed and e-books. The results from this survey demonstrated that the vast majority of university students worldwide preferred to read their academic materials in printed format. The participants believed that they learned and focus more effectively on material presented in printed format.

In addition, the finding of this current study was also in tune with the study conducted by Kazanci (2015). This longitudinal study explored the preferences of students for reading from a printed text or from a digital screen. Based on the findings, most of the students still preferred traditional printed paper to digital screens for their reading activities and this preference had not changed in six years of the study.

However, the results displayed on Fig. 1 also showed that e-textbooks were gaining popularity in the field of education with almost half (45.3%) of the students choosing e-textbooks. The result was consistent with several studies that showed positive results of students' preference and attitude towards e-textbooks (Al-Qatawneh, 2019; Wiese & Plessis, 2017). Moreover, another study conducted by Bouck, et

al. (2016) also indicated that the popularity of electronic textbook would be likely to expand as students became more aware of its educational benefits. This, of course, emphasized the importance of raising awareness of the use and development electronic English textbooks in the future.

## 2. Reasons for Textbook Format Preference

The second research question aimed to collect the data related to the reasons for students' preference of textbook format. Students were given items on a 5-point Likert-like scale (1 means 'very weak reason', 2 means 'weak reason', 3 means 'moderate reason', 4 means "strong reason", and 5 means 'very strong reason'). Table 4 displayed students' reasons for preferring printed textbooks over e-textbooks in a descending order. Students who could respond to this list were ones who chose printed textbooks over e-textbooks as their preference for textbook format as shown earlier in Table 3.

Table 4. Students' Reasons for Preferring Printed Textbooks over E-textbooks in a Descending Order (n= 151)

Rank	Reason	Mean	Std. Dev.
1.	Ease of highlighting and taking notes	4.225	0.810
2.	Ease of use	4.106	0.842
3.	Readability	4.053	0.855
4.	Effectiveness in memorizing information	3.821	0.857
5.	Ease of searching	3.695	0.894
6.	Portability	3.325	0.861

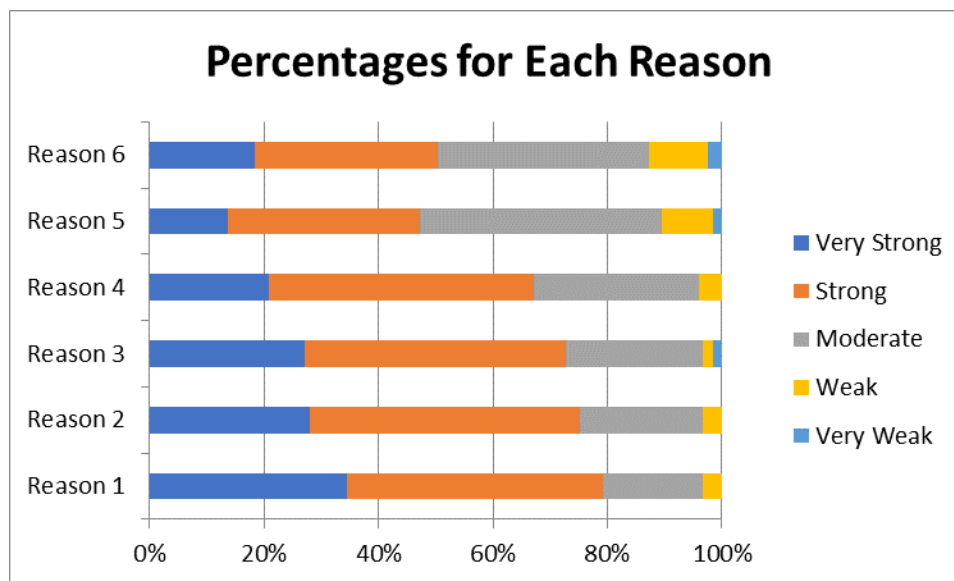


Figure 2. The percentages of reason for preferring printed textbooks.

From the responses, it was evident that the students preferred printed textbook for its availability for highlighting as well as taking notes which was in alignment with the findings of Alfiras and Bojiah (2020). In their study, there were two major reasons for students choosing printed textbooks: its portability and availability for highlighting and taking notes. Then, another study also reported that for the students printed texts afforded easy highlighting, note taking, bookmarking and saving (Abram, 2010). Furthermore, according to Millar and Schrier (2015), printed textbooks were preferred by students as they could look back at their notes and highlighted sections of the book. To support those arguments, the

findings of Johnston & Ferguson (2020) indicated that when using e-textbooks, students rarely used highlighting features. They also kept taking notes on papers rather than in the digital texts.

The second reason for choosing printed textbooks was ease of use. The finding was consistent with Khalid (2014) reporting that the majority of the students preferred printed format of the book with ease of use became one of the top reasons for their preference. One of the reasons of why ease of became a major reason was because printed textbooks were simply familiar and comfortable to use and could be read without the availability of digital reading devices, software or internet (Engbrecht, 2018).

Table 5 displayed students' reasons for preferring e-textbooks over printed textbooks in a descending order. Students who could respond to this list were ones who chose e-textbooks as previously shown in Table 3.

Table 5. Students' Reasons for Preferring E-textbooks over Printed Textbooks in a Descending Order (n=125)

Rank	Reason	Mean	Std. Dev.
1.	Ease of access	4.104	0.801
2.	Ease of searching	4.000	0.793
3.	Ease of navigation	3.952	0.851
4.	Ease of archive	3.840	0.797
5.	Cost saving (compared to printed textbooks)	3.488	0.896
6.	Currency of information	3.536	0.988

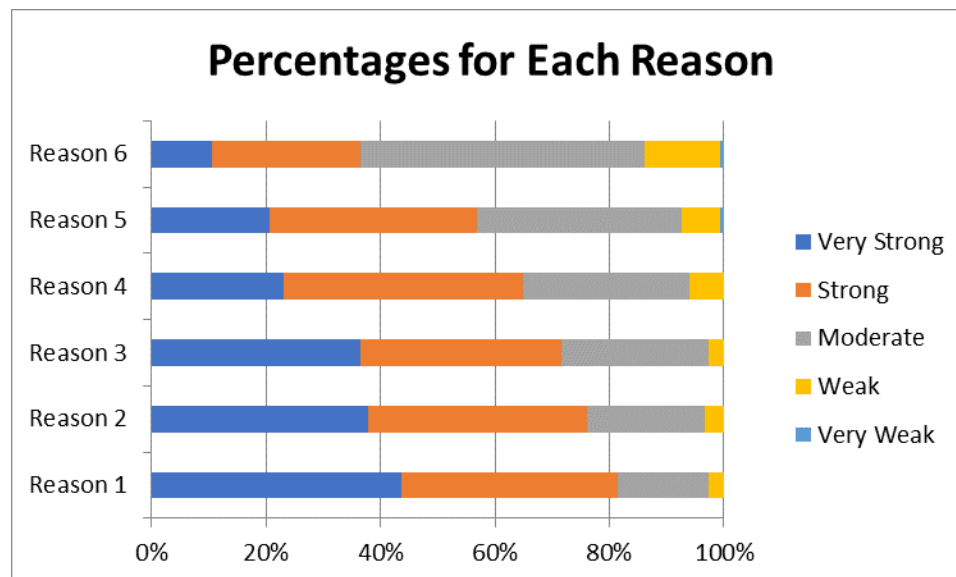


Figure 3. The percentages of reason for preferring e-textbooks.

The finding was congruent with study carried out by Abuloum et al. (2019) which found the reasons students' preference of e-textbooks over printed textbooks was ease of access. The reason for the preference was also in tune with the findings of research studies of Fister & Gilbert (2015). There are three major reasons given by the students for choosing e-books such as ease of access, portability and easier to use than physical books. The finding was also consistent with the study of Cumaoglu et al. (2013) which revealed the fact that students deemed easy access of e-books as its biggest advantage. This might be because the students now have mobile phones and internet was available to them (Hendricks et al., 2017)

The second highest reason was ease of searching. The finding was in tune with study of Casselden and Pears (2013). Keyword searching within e-books was mentioned frequently when respondents provided qualitative discussion of their approach to reading an e-book, suggesting that this was something particular to e-books. Another study (Woody, et al., 2010) reported that students read electronic text was searching for key terms rather than reading line by line. The result also corroborated the finding of Mulholland and Bates (2014) indicating that e-books were preferred for searches and information retrieval.

## **Conclusion**

The main purpose of the study is to investigate the junior high school students' perspectives on printed and e-textbooks. Regarding research question 1, most of the students still prefer printed textbooks than e-textbooks. The answers to research question 2 are differed based on the students' choice on question 1. There are two major reasons for choosing printed textbooks. Those are ease of highlighting and taking notes as well as ease of use. For students' preference on e-textbooks, ease of access and ease of searching become the major reasons. From the findings, it could be seen that students still preferred using printed textbooks despite of the pervasiveness of digital technologies in this era. However, from the findings we could also see that e-textbooks were gaining popularity in the field of education with almost half of the participants preferred to use e-textbooks.

There are several suggestions based on the results of this study. For junior high school teachers, since there is a growing interest of e-textbooks, teachers can show students how to use them and what their advantages because students. This can help teachers familiarize e-textbooks for students who do not prefer them. Then, teachers should not limit materials on one type to another. Printed and electronic textbooks should co-exist due to the different preferences of the students and different benefits of each format. For e-textbook developers, students' reasons for choosing e-textbooks can be a valuable information for them, so that they can consistently provide what the students desire from e-textbooks. Then, by understanding the lowest reasons from students choosing e-textbooks, they can enhance the quality of their e-textbooks.

Nevertheless, the present study has some limitations. This study only explored junior high school students' perspectives on printed and e-textbooks. Thus, future studies can investigate the perspectives on different learners from other levels of education such as elementary or senior high school students. Furthermore, this study only captures the students' perspectives only in a specific time. Therefore, a longitudinal study is needed.

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