

STUDENTS' ATTITUDES TOWARDS THE IMPLEMENTATION OF ONLINE LITERACY PROGRAM IN PREPARATION FOR MINIMUM COMPETENCY ASSESSMENT

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ABSTRACT

This study aimed to investigate students' attitudes towards the implementation of the Online Literacy Program in the Junior High Public School (JHPS) 1, Central Java, as a program to promote School Literacy Movement and prepare the students to face the Minimum Competency Assessment, along with some challenges faced by the students as factors that might negatively impact their attitudes. To achieve the aforementioned aims, a mixed-method design was employed in this research. A questionnaire encompassing closed and open-ended questions was administered as the data gathering technique to provide triangulation and increase the validity and reliability of the research. Two main findings were drawn from this study. First, the participants showed positive attitudes towards the implementation of the Online Literacy Program, which is reflected in the two components of attitude, namely, affective and cognitive domains. In the affective domain, positive emotions such as enjoyment and comfort are more dominant than negative emotions such as boredom and anxiety. Furthermore, in the cognitive domain, positive attitudes could emerge because the participants were cognizant of the intellectual value, practical value, and linguistic value of the online literacy program that they had undertaken. Secondly, despite the positive results, some challenges, such as technical disruption and reading comprehension difficulty, were still present during the program implementation. Two main recommendations were suggested to help the teachers improve the future program, namely (1) exploring broader topics and (2) providing more visual aids.

Keywords: minimum competency assessment, online literacy, school literacy movement, students' attitudes.

INTRODUCTION

To thrive in this 21st-century technological and innovative era, individuals should possess some foundational literacy skills, which encompass "literacy, scientific literacy, cultural and civic numeracy, financial literacy, numeracy, and ICT literacy" (WEF, 2015, p.3). These skills serve as the building blocks that enable individuals to understand, process, and interpret information gathered from either digital or printed materials and utilize the information to approach complex challenges and solve everyday problems (Chew, 2013). According to

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the 2015 World Economic Forum, a nation's future development and success can be predicted by the citizens' literacy rate. Literate citizens are individuals who can apply core literacy skills to critically identify, analyze, process, and interpret information in a complex and novel way to solve real-life problems or tasks, meet 21st-century demands, and fully participate in the global community (UNESCO, 2004). All citizens are required to acquire literacy skills, which are beneficial not only for their own welfare but also for the nation's socio-economic success (Sawyer, 2006).

However, in the Indonesian context, some studies reported that the nation's literacy level is still considered low, which is represented by the 2011 PIRLS result, whereby Indonesia ranked 45 out of 48 countries (Hidayah, 2017). Furthermore, the 2015 PISA results showed that Indonesia ranked 64th of all 72 countries participating in the test (OECD, 2015). The PIRLS and PISA results mentioned above revealed that Indonesian students, on average, still have a considerably low level of basic literacy skills. According to Sailors and Shanklin (2010), students who have a low ability in reading literacy and numeracy are more likely to encounter academic obstacles during their academic life and possible economic inequity later in life. It is supported by Grabe (2009), who stated that "a person's future opportunities for success and prosperity will be more entwined with skilled literacy" (p. 6). Realizing how important literacy skill for the nation's future generation is, in 2014 Indonesian government launched a program called the National Literacy Movement followed by the School Literacy Movement and Home Literacy Movement formed by the Indonesian Ministry of Education and Culture in 2016 as follow up programs involving all educational stakeholders, teachers, parents, and community to foster reading culture, promote reading habit, and improve students' literacy skills (Kemendikbud, 2016). The rationale behind this is that to improve students' literacy skills, students should be surrounded by a literate ecosystem that nourishes reading habits and fosters positive attitudes towards reading inside and outside the school (Anandari & Iswandari, 2019; Pantiwati, Permana, Kusniarti, & Miharja, 2020)

At the school level, *Gerakan Dahsyat Literasi* has been implemented in Junior High Public School (JHPS) 1 Muntilan since 2016 as a response to support the government's program of School Literacy Movement. However, due to the Covid-19 pandemic, in which all schools in Indonesia were closed down temporarily to prevent the transmission of Covid-19 at school, starting from 2020, *Gerakan Dahsyat Literasi* was changed into Literasi Online (Online Literacy, henceforth LION). This abrupt change from print-based reading mode into a digital text format may facilitate or impede students' participation and attitudes towards reading activity during the literacy program. Jang, Ryoo, and Smith (2021) argued that students' attitudes towards the medium of reading, either printed or digital, are considered paramount constructs that contribute to forming the overall reading attitudes. According to Petscher (2010), students' attitude toward reading is strongly related to achievement, especially during the 5-11 years of age. It is supported by Lockwood (2017) who stated that in almost all countries, students who enjoy reading and have positive attitudes towards reading are more likely to read more voluntarily, and that will significantly increase their proficiency. These two quotes represent the notion that students' attitudes toward reading are prominent in determining their reading performance.

According to Yamashita (2013), reading attitude can be defined as one's cognition or state of mind, as well as affective aspects that make one approach or avoid reading-related situations. Yamashita (2007) further formulated a framework of reading attitude that also encompassed affective, cognitive, and conative domains. The affective domain deals with feelings experienced by individuals during the reading process, such as comfort, anxiety, enjoyment, and boredom. Meanwhile, the cognitive element refers to those aspects of attitude related to thoughts, states of mind, and beliefs on the importance of reading. Cognitive elements involve some aspects, such as intellectual value, practical value, and linguistic value (Yamashita, 2007). Furthermore, the conative part is associated with those aspects of attitude which connect with behavioral components of attitudes attributed to past

experiences related to reading. He further explained that one's behavior is shaped by various factors, including past experiences, habits, and social demands.

Studies on students' attitudes towards the use of digital reading material in literacy practices have been extensively conducted worldwide. A study conducted by Weisberg (2011) revealed that American undergraduate students were reported to possess positive attitudes towards the use of digital reading materials in the classroom, as they perceived the new mode of reading as an opportunity to explore and utilize technology. Furthermore, Tveit and Mangen (2014) found that Norwegian high school students' preference for digital text affected their overall reading attitudes. The practicality and cost-benefit factors became the reasons why they preferred digital reading to printed ones. Another similar study conducted by Martin-Beltrán, Tigert, Peercy, and Silverman (2017) revealed the result that the use of digital text increased the engagement of avoidant students in reading. Furthermore, utilizing digital texts in literacy practices has been shown to benefit students in many ways, including increasing avoidant students in reading (Martin-Beltrán et al., 2017), facilitating readers with different learning styles and needs (Jang et al., 2021), creating hybrid literacy practices (Martin-Beltrán et al., 2017), reducing the cost of printed reading materials (Weisberg, 2011), influencing students' positive attitudes towards reading (Conradi et al., 2013), and allowing the students to gain new reading experiences by working with technology that is essential for them in this globalization era (Martin-Beltrán et al., 2017).

Despite a growing body of research on reading attitudes towards the use of digital reading in literacy practices, none of them investigated Junior High school students' attitudes toward the implementation of an online literacy program as part of the School Literacy Movement in the Indonesian context. Thus, investigating students' attitudes towards reading is considered essential since it will be beneficial for the teachers in providing a broader insight into students' attitudes towards reading and planning engaging literacy activities and instructions that work effectively for them (Conradi, Jang, Bryant, Craft, & McKenna, 2013). To partially fill the gap in previous research, this study aimed to investigate students' attitudes toward the implementation of the Online Literacy Program in JHPS 1 Muntilan as a program to promote the School Literacy Movement and prepare the students to face the Minimum Competency Assessment, along with some challenges faced by the students as factors that might negatively impact their attitudes. To achieve the aforementioned aim, the researchers formulated two research questions: (1) What attitudes did JHPS 1 Muntilan students have towards the implementation of the Online Literacy Program in preparation for the Minimum Competency Assessment? (2) What challenges did the students encounter during the implementation of the Online Literacy Program in JHPS 1 Muntilan?

RESEARCH METHOD

Research Design

To investigate students' attitudes toward the implementation of the Online Literacy Program in JHPS 1 Muntilan as a program to promote the School Literacy Movement and prepare the students to face the Minimum Competency Assessment, along with some challenges faced by the students as factors that might negatively impact their attitudes, the researchers employed a mixed methods design. A mixed-method design refers to a combination of a quantitative and qualitative approach to gather and analyze the data in order to have a richer and deeper understanding of the phenomenon being studied, and to answer the research problems (Ary, Jacobs, & Sorensen, 2010). A questionnaire encompassing closed and open-ended questions was administered as the data gathering technique to provide triangulation and increase the validity and reliability of the research.

Research Setting and Participants

The research was conducted in Junior High Public School (JHPS) 1 Muntilan, Central Java, Indonesia in the even semester of 2021/2022. In this research, 339 students, consisting of 136 female and 203 male students,

were selected using a purposive sampling method (see Figure 1). According to Ary et al. (2010), purposive sampling is a non-probability sampling technique in which the researcher uses certain criteria or specific characteristics as personal judgments, which are in accordance with the research objectives, to choose the participants so that it is expected to be able to answer the research problems. The criteria for participant selection included seventh- and eighth-grade students who had participated in the Online Literacy Program for two semesters, as this program was implemented to help prepare students for the Minimum Competency Assessment.

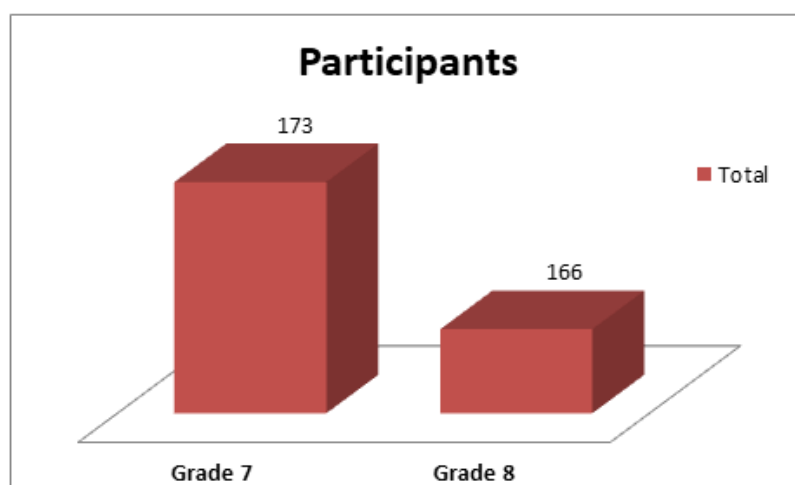


Figure 1. The Total Number of Participants

Research Instruments

To explore students' attitudes towards the implementation of the Online Literacy Program, the researchers developed a closed-ended questionnaire based on the theory of attitudes and reading attitudes (see Bartram, 2010; Yamashita, 2013). The questionnaire was in the form of a five-point Likert scale with five degrees of agreement ranging from "strongly disagree" to "strongly agree."

Table 1: Questionnaire Blueprint

Questionnaire	Domains	Aspects	Number of Items
Students' attitudes towards the implementation of the Online Literacy Program	Affective Domain	Enjoyment	1,2,3
		Anxiety	4,5,6
		Boredom	7,8
		Comfort	9,10,11
	Cognitive Domain	Intellectual Value	12,13,14
		Practical Value	15,16,17
		Linguistic Value	18,19,20

To ensure internal consistency and reliability of the questionnaire, the researchers calculated the Cronbach's Alpha coefficient utilizing SPSS 25. According to Dornyei and Taguchi (2010), a questionnaire is considered reliable if its Cronbach's Alpha coefficient is above .70. From the calculation, it was found that the

Cronbach's Alpha coefficient of the questionnaire was .808. Thus, it could be concluded that the items used in the questionnaire were reliable (See Table 2).

Table 2: Cronbach's Alpha Coefficient

	N of Items	Cronbach's Alpha
Students' attitudes towards the implementation of the Online Literacy Program	20	.808

Meanwhile, to investigate the challenges faced by the students during the implementation of the online literacy program, the researchers developed six open-ended questions from several theories based on previous related studies (see Chou, 2016; Manalu, 2019) which encompassed: (1) participants' preferences of reading mode, (2) the topics that were considered engaging for the participants, (3) the challenges encountered during the process, (4) the suggestions from participants to improve the future program

Data Analysis Techniques

Utilizing a mixed methods design, the researchers first analyzed the quantitative data gathered from the closed-ended questionnaire. The data gathered from the closed-ended questionnaire represented the overall picture of students' attitudes towards the implementation of the Online Literacy Program. Analyzed under descriptive statistics, the researchers calculated the mean and standard deviation of the variable to measure its central tendency. Central tendency is a way to "summarize and interpret the data in which the value can be used to represent the group as a whole." (Ary et al., 2010, p.108).

Furthermore, the qualitative data gathered from the open-ended questionnaire were analyzed by employing a coding system to filter and categorize the data under some specific categories based on the theoretical framework (Creswell & Creswell, 2018). Lastly, the researchers connected and elaborated both quantitative and qualitative data to create holistic and comprehensive findings.

FINDINGS AND DISCUSSION

This section begins by discussing participants' attitudes towards the implementation of the online literacy program, followed by the challenges that they encountered during the process based on the data gathered through a questionnaire.

Students' attitudes toward the implementation of the Online Literacy Program

According to Yamashita (2007), reading attitude consists of three main domains, which encompass affective, cognitive, and conative. However, due to the limited time and pandemic situation, the researchers only focused on the affective and cognitive domains. The conative domain is associated with those aspects of attitude that connect with behavioral components of attitudes attributed to past experiences related to reading. In this sense, exploring the conative domain requires the researchers to conduct direct observations to observe participants' behavior during the reading process. Due to this reason, the conative domain was not included in this research.

Affective Domain

The affective domain deals with feelings experienced by individuals during the reading process, such as comfort, anxiety, enjoyment, and boredom (Yamashita, 2007). It deals with various emotions or feelings that might influence one's attitude by causing an individual to approach or avoid a reading situation. The greater affective involvement stimulates cognitive processes such as focused attention and facilitates comprehension of

what we are reading (Yamashita, 2015). The complex feelings and emotions associated with the attitude object, in this case, the online literacy program, could either make the students like the program by showing a positive affective reaction or dislike it by showing a negative affective reaction. Utilizing SPSS version 25, the researchers calculated the central tendency of the affective domain, which was represented by the mean score (38.14) and standard deviation (4.66). The summary of participants' affective domain gathered through the questionnaire is presented in Table 3.

Table 3: Summary of Participants' Affective Domain (N=339)

Aspects		Disagreement*		Neutral		Agreement**		Mean
			(%)		(%)		(%)	
Enjoyment		17	1.67	41	13.86	859	84.46	12.99
1	I enjoy reading digital texts offered in the Online Literacy Program rather than printed texts/books	14	82.35	89	63.12	236	27.47	
2	The features (pictures, animations, diagrams) of digital texts provided in the Online Literacy Program make them exciting to read	3	17.65	26	18.44	310	36.09	
3	Digital reading activity in the Online Literacy Program provides a positive reading experience for me	0	0.00	26	18.44	313	36.44	
Anxiety		371	36.48	230	22.62	416	40.90	
4	I feel anxious if I do not know most of the words that I read in the digital texts provided in the Online Literacy Program	46	12.40	108	46.96	185	44.47	9.10
5	I feel anxious if I am not sure whether I understand the digital text that I read during the Online Literacy Program	54	14.56	85	36.96	200	48.08	
6	Reading digital texts during the Online Literacy Program makes me feel confused and anxious	271	73.05	37	16.09	31	7.45	
Boredom		552	81.42	82	12.09	44	6.49	3.51
7	Joining the Online Literacy Program makes me feel bored	289	52.36	32	39.02	18	40.91	
8	The digital texts given during the Online Literacy Program are too difficult; thus, they make me feel bored	263	47.64	50	60.98	26	59.09	
Comfort		15	1.47	199	19.57	803	78.96	12.54
9	Reading digital texts given during the Online Literacy Program makes me feel relaxed	7	46.67	74	37.19	258	32.13	
10	I feel refreshed and enthusiastic whenever I read digital texts given during the Online Literacy Program	7	46.67	85	42.71	247	30.76	
11	The topics and content of the digital texts given during the Online Literacy Program make me feel comfortable in reading	1	6.67	40	20.10	298	37.11	

*Disagreement: Strongly Disagree to Disagree

**Agreement: Agree to Strongly Agree

Positive emotions experienced by the participants play an important role in shaping a good component of attitude, since that particular emotion may indicate whether or not the online literacy program was successfully implemented. From Table 3, it was apparent that enjoyment (Mean=12.99), was the most dominant emotion felt by the participants. This is further supported by the two participants who stated that:

"I prefer reading a digital text offered in the Online Literacy Program to reading a printed text because it is more practical, enjoyable, and flexible. I can access and read it anywhere as long as I have a good internet connection" (P. 129/OEQ)

"In this digital era, I prefer reading digital texts since the animations and the pictures provided along with the text make them more interesting and engaging to read" (P. 296/OEQ)

As can be seen, the participants in general enjoyed reading digital texts offered in the Online Literacy Program rather than reading conventional printed texts/books. The features (pictures, animations, diagrams) of digital texts provided in the Online Literacy Program also made the texts exciting to read. Furthermore, most of the participants agreed that the Online Literacy Program provided a positive reading experience for them. Further inquiry by analyzing participants' responses in the open-ended questionnaire also yielded a similar result, in which 319 participants out of 339 were considered as digital preferred readers as they preferred reading digital text to reading printed text or a book due to practicality and interface display reasons.

Positive emotion, such as enjoyment, is essential as it is interlinked with the amount of effort and time that the individuals invested in the reading process (Yamashita, 2007). The individuals who enjoy the reading process do not see the task as a burden; thus, they spend more time reading for pleasure. It is supported by a survey conducted by the Organization for Economic Co-operation and Development (OECD) in 2010. They compared the students' responses related to attitudes toward reading and the students' PISA scores (Kim, 2016). The result revealed that the enjoyment of reading experienced by the students and their positive attitudes towards reading make them devote more time and effort to read voluntarily in their leisure time. The result of the present study was in line with a previous related study that utilized digital texts in literacy practices has been shown to benefit students, particularly in influencing students' positive attitudes toward reading (Conradi et al., 2013) and allowing the students to gain new reading experiences by working with technology that is essential for them in this globalization era (Martin-Beltrán et al., 2017).

The second most dominant emotion that the participants had during the implementation of the online literacy program was comfort (Mean=12.54). Table 3 showed that reading digital texts given during the Online Literacy Program made them feel relaxed. They also felt refreshed and enthusiastic whenever they read digital texts given during the Online Literacy Program. Furthermore, the topics and content of the digital texts given during the Online Literacy Program made them feel comfortable in reading. Students' comfortable feeling in reading is essential because as the readers feel comfortable with the readings, comprehension is more likely to be attained (Martin-Beltrán et al., 2017). A similar result was also found from the open-ended questionnaire, one of the participants stated:

"So far, the digital texts that are given are neither too difficult nor too easy, so I can still understand them. The topics are also relevant and can be found on a daily basis, which made me feel comfortable reading those texts" (P.96/OEQ)

According to Yamashita (2004), readers will feel comfortable in reading if there is alignment between their reading proficiency and the text difficulty. In other words, when the readers are familiar with the topic and the reading material does not contain too much difficult vocabulary and specific or technical terms, comfort in reading can be gained. The result of the present study is in line with the study conducted by Manalu (2019) which

revealed that reading digital texts resulted in positive experiences, increased students' feelings of comfort, and reduced anxiety toward reading.

The last two emotions that emerged were anxiety (Mean=9.10) and boredom (Mean=3.51). From Table 3, it was obvious that the negative feelings (boredom and anxiety) were the least dominant feelings that the participants experienced during the online literacy program. It pinpointed that to some extent, the participants still encountered negative affective reactions, even though not very significant. Furthermore, from the present study, it was found that there were some conditions that made the participants feel anxious, such as when they did not know most of the words in the text and when reading took place in a test-oriented environment. Jang and Henretty (2019) argued that highly anxious readers may expend part of their mental energy thinking about things that are completely unrelated to the reading activity, such as the difficulty of the vocabulary in the text, how poorly they are doing, how their classmates are faring, or how much time they have to complete the reading. As a result, the reading process cannot take place automatically or efficiently. This is in line with the study conducted by Sellers (2000) which revealed that the students who gave negative affective reactions to reading were reported to have a low level of "absorption" and comprehension in reading.

Another study conducted by Conradi et al (2013) also yielded a similar result in which students' negative attitudes toward reading could significantly reduce their motivation and effort that they might put into reading, whereas positive attitudes could increase their motivation as they were more likely to sustain the reading process that would eventually lead to skill improvement. From the explanation above, we can say that students' attitudes toward the reading program and their attitudes toward reading, in particular, are important to determine their reading performance. Furthermore, the findings of the present study suggested that teachers should employ anxiety-reducing strategies through instructional practices in specific ways to reduce anxiety during the process of reading to help the anxiety-prone students.

Cognitive Domain

Reading is undoubtedly a cognitive process as it requires the readers to understand the written text by "cracking the code and analyzing, reasoning, thinking, imagining, and judging" (Baba & Affendi, 2020, p.110). The cognitive domain refers to those aspects of attitude related to thoughts, states of mind, and beliefs on the importance of reading. Cognitive elements involve some aspects, such as intellectual value, practical value, and linguistic value (Yamashita, 2007). Utilizing SPSS version 25, the researchers calculated the central tendency of the cognitive domain, which was represented by the mean score (41.09) and standard deviation (4.47). The summary of participants' cognitive domain gathered through the questionnaire is presented in Table 4 as follows:

Table 4. Summary of Participants' Cognitive Domain (N=339)

Aspects	Disagreement*		Neutral		Agreement**		Mean
	N	(%)	N	(%)	N	(%)	
Intellectual Value	5	0.49	5	6.39	947	93.12	
12 I can get various new information by reading digital texts given during the Online Literacy Program	0	0.00	17	26.15	322	34.00	
13 Reading digital texts provided in the Online Literacy Program improves my literacy skills		40.00	20	30.77	317	33.47	13.84
14 I can broaden my way of thinking by reading digital texts given during the Online Literacy Program		60.00	28	43.08	308	32.52	
Practical Value		0.88	66	6.49	942	92.63	

15	Joining the Online Literacy Program is beneficial for my future	33.33	19	28.79	317	33.65	13.68
16	The Online Literacy Program is useful to foster reading habits and culture	11.11	14	21.21	324	34.39	
17	Digital texts provided during the Online Literacy Program can help me to improve other skills, such as critical thinking which will be beneficial for future study	55.56	33	50.00	301	31.95	
Linguistic Value		0.39	73	7.18	940	92.43	
18	I can acquire a lot of new vocabulary after reading digital texts given during the Online Literacy Program	50.00	16	21.92	321	34.15	
19	My reading ability develops gradually after reading various digital texts provided in the Online Literacy Program	25.00	32	43.84	306	32.55	3.56
20	Reading digital texts provided in the Online Literacy Program improves my reading comprehension	25.00	25	34.25	313	33.30	

*Disagreement: Strongly Disagree to Disagree

**Agreement: Agree to Strongly Agree

From Table 4, it is shown that intellectual value (Mean=13.84) became the most dominant cognitive aspect acknowledged by the participants, followed by practical values (Mean=13.68) and linguistic value (Mean=13.56). Intellectual value deals with the intellectual benefits in terms of an increase in knowledge and a gain of new information that the participants attained from undertaking the online literacy program. Having a positive belief that joining an online literacy program gives essential intellectual benefits for the participants could increase their engagement in joining the program. Table 4 presents participants' acknowledgment that through reading digital texts given during the Online Literacy Program, they could get a lot of new information, broaden their way of thinking, and improve their literacy skills. Maio and Haddock (2010) asserted that possessing a broad mindset as a result of undertaking a literacy program is essential in gaining a positive cognitive component of attitude. It means that when the participants perceived the online literacy program as important and beneficial, they are more likely to invest more cognitive effort in reading.

The second most dominant cognitive aspect found in this study was practical value (Mean=13.68). Practical value refers to the participants' belief that the online literacy program was useful to facilitate them in improving other practical skills beneficial for their future study. From Table 4, it can be seen that the participants mostly agreed that joining the online literacy program was useful to foster reading habits and culture and improve other skills such as critical thinking, which will be beneficial for future study. In general, the participants perceived that joining the Online Literacy Program was beneficial for their future as they could learn other skills aside from reading skills. Bartram (2010) argued that having the perception of the utility or practical value of a literacy program is important as it acts as a source of motivation to achieve further, especially in terms of future study and career. This is supported by Yamashita (2015), who asserted that utility or practical value is paramount when looking at the attitudes of younger readers, as with this perception, they are more likely to develop positive attitudes in improving other related skills besides reading, as they can see the essentials it can bring to their lives at the moment.

The last cognitive aspect that emerged from this study was linguistic value (Mean=13.56). Linguistic value refers to participants' belief that the online literacy program was useful in terms of improving their linguistically related knowledge and skills. The participants in this study agreed that joining the online literacy

program and reading the digital texts given during the program enabled them to gradually acquire a lot of new vocabulary and improve reading comprehension. This is supported by Yamashita (2015) who stated that as readers are exposed to a large number of reading materials, they are more likely to improve fluency and comprehension in reading gradually. However, this can only be gained if the reading materials are within their linguistic competence and are appealing to their pleasure.

The result of the present study was in alignment with Lockwood's (2017) research which revealed that the elementary students in one of the schools in the south of England were reported to have a positive attitude towards the reading program initiated by the school, as they gave positive affective responses. Furthermore, they valued what reading could do for them (intellectual, practical, and linguistic values) rather than the experience of reading itself. The motivation here was still connected with reading, though, and not focused on rewards unrelated to the activity, such as financial incentives or competitions. Furthermore, Yamashita (2004) who investigated the relationship between L1 and L2 reading attitudes found that if students have a positive attitude towards L1 reading, they are more likely to keep it in L2 reading. Those students have a higher potential to improve reading competence in L2 in the future because their positive reading attitude in L1 is likely to encourage them to obtain input from reading.

The Challenges Encountered by the Students

Based on the data gathered from the open-ended questionnaire, there were two main challenges encountered by the participants during the implementation of the Online Literacy Program. Those challenges are presented below:

Technical Disruption

From the open-ended questionnaire, 150 students mentioned unstable internet connection to be the main difficulty that they encountered during the implementation of the Online Literacy Program. Two of them mentioned:

"The main difficulty that I experienced was the unstable internet connection. It is annoying when I have finished answering the questions and it is time to submit my answers, but suddenly the connection is disconnected" (P277/OEQ)

"The internet connection in my area is not stable, so oftentimes it is difficult to log in and access the readings provided on the link" (P.284/OEQ)

Furthermore, other students also mentioned some other technical difficulties, such as incompatible devices, corrupted links, digital pages turning inadvertently, and electricity problems (blackout). According to Martin-Beltrán et al. (2017), the technical problems that occurred across digital reading activities may have impacted students' engagement with the text. Furthermore, technical problems encountered by the students can also distract their focus and may result in poor performance. The results of the current study were also in line with the study conducted by Manalu (2019) which revealed that internet connection and technical disruption from the computer and other devices used to access digital reading became the two most dominant problems encountered by the participants. Furthermore, the participants also reported that their reading motivation and comprehension decreased as a result of technical disruption during the digital reading activity. Another similar result was also found in the study conducted by Chou (2016) in which eye problems, unstable internet connection, and device compatibility issues became the main shortcomings found in utilizing digital reading text.

Reading Comprehension Difficulties

The second difficulty encountered by the students is reading comprehension. From the open-ended questionnaire, 25 students mentioned that they encountered difficulties which are related to reading comprehension. Some of them stated:

“Sometimes I find some unfamiliar and difficult vocabulary that makes it hard to understand the whole text” (P.241/OEQ)

“Some of the texts are too long with unfamiliar terms. As a result, it is hard for me to stay focused and comprehend the whole text” (P. 23/OEQ)

Chan and Unsworth (2011) argued that there are several factors that affect reading comprehension, including students’ interest in the reading topic, prior knowledge, and linguistic competence. Reading comprehension, like any learning, requires comprehensible input, and therefore, the text provided for the students in the literacy instruction should contain familiar vocabulary (Kim, Lee, & Zuilkowski, 2020). Furthermore, unlike the conventional literacy program in which the students were assisted by the teacher in the classroom, the online literacy program required the students to read digital texts alone at home. As a result, when they encountered difficulties in comprehending the text, they could not ask for the teacher’s assistance or other more knowledgeable peers. In this case, they should utilize all the resources possible, such as relying on the dictionary and looking up the relevant information on the internet.

Recommendations for Future Program Improvement

Further inquiry through an open-ended questionnaire explored some recommendations given by the participants to improve the future literacy program, some of which are mentioned below:

Exploring Broader Topics

The choices of reading topics and materials hugely impact students’ engagement and motivation in reading digital text during the literacy program. From the open-ended questionnaire, the participants reported that the reading topics that were given during the online literacy program were already engaging and interesting. However, the participants expected that more reading topics could be explored. Two of them stated:

“So far, the reading topics given during the LION program are interesting, but I hope that future readings can cover broader topics such as psychology, development of technology, entrepreneurship, Indonesian literature, and world history” (P.28/OEQ)

“I hope that more interesting topics can be given so that I can get more motivated in reading the texts. The topics about health, entertainment, sports, world literature, and science are engaging for me” (P.29/OEQ)

Martin-Beltrán et al., (2017) argued that reading interest is elicited when a specific topic or theme is in line with readers’ personal interests. It happens because readers tend to instantaneously recognize interesting information and spontaneously allocate attention as they process it. It is supported by the study conducted by Hidi (2001) which revealed that students who rated a topic as interesting were more likely to report feeling interested as they read on and to persist in reading. Thus, providing various readings with broader topics for the online literacy program is deemed essential to improve students’ reading interest and engagement.

Providing More Visual Aids

The second recommendation to improve the LION program is to provide more visual aids, such as pictures, illustrations, diagrams, infographics, animations, and videos, which are relevant to the readings. One of the influential rationales behind using visual aids and text together is Paivio’s (1991) dual-coding theory. According to Paivio’s (1991) theory, mental representations consist of two distinct knowledge systems: (a)

Nonverbal systems, which are related to the holistic processing of data, and (b) Verbal systems, which are related to abstract and sequential processing of data. When the reading text and the relevant visual aids are presented together, verbal and nonverbal data are processed in different cognitive systems. However, they are interconnected and integrated, and lead to better retention of data and enhanced comprehension. Furthermore, visual aids also served as background information for the readers by activating an organizational schema for the text as a whole (Noroozi & Mehrdad, 2016). Two of the participants argued:

“I hope the texts can contain more pictures, animations, or short videos that are related to the topic of the reading” (P.38/OEQ)

“I actually prefer watching videos to reading the long texts because I tend to get bored and distracted easily when reading, so I hope that more videos can be added along with the texts” (P. 54/OEQ)

Another benefit of providing visual aids in the online literacy program is improving students' interest in reading. Kate and Annie (2011) stated that readers feel more engaged with the text through both visual aids and audio-visual aids, as these add interest to a presentation by creating excitement and authentic communication between the readers and the text. Visual aids facilitate readers with different learning styles and needs, as they can use more than one sense at the same time (Jang et al., 2021). This is supported by Jang and Henretty (2019) who argued that incorporating a variety of visual aids into the reading curriculum may encourage reluctant readers to develop overall positive attitudes toward reading and also foster a greater interest.

CONCLUSION

The present study attempted to investigate students' attitudes toward the implementation of the Online Literacy Program in JHPS 1 Muntilan as a program to promote the School Literacy Movement and prepare the students to face the Minimum Competency Assessment, along with some challenges faced by the students as factors that might negatively impact their attitudes. Two main conclusions could be drawn from this study. First, the participants showed positive attitudes towards the implementation of the Online Literacy Program, which is reflected in the two components of attitude, namely, affective and cognitive domains. In the affective domain, positive emotions such as enjoyment and comfort are more dominant than negative emotions such as boredom and anxiety. Furthermore, in the cognitive domain, positive attitudes could emerge because the participants were cognizant of the intellectual value, practical value, and linguistic value of the online literacy program that they had undertaken. Secondly, despite the positive results, some challenges, such as technical disruption and reading comprehension difficulty, were still present during the program implementation. In addition, two main recommendations were suggested to help the teachers improve the future literacy program, namely (1) exploring broader topics and (2) providing more visual aids.

Some implications can be drawn from this study. First, it contributes to guiding teachers in helping their students grow as independent readers who enjoy multiple readings by utilizing an online platform. Secondly, it sheds light on the importance of actively engaging the students in literacy practices in the digital context for different purposes. Undoubtedly, some limitations are unavoidable in this study as it relied only on students' self-report questionnaires. Thus, future researchers are encouraged to take into account students' minimum competency assessment scores to see whether or not the online literacy program can significantly improve students' literacy skills.

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