



The Illustrated Storybooks Advancement as the Literacy Movement for Preparing the Minimum Competency Assessment in Elementary School

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Abstract

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The National Assessment policy, well-known as *Asesmen Nasional* (AN), as the replacement for the National Examination, had been implemented. The Minimum Competency Assessment or *Asesmen Kompetensi Minimum* (AKM) is a part of AN, which examines the reading, numeracy literacies and the cultivation of good character for the students. During the COVID-19 pandemic, the implementation of AKM faces challenges for every educational system in improving the literacy rate among the students. Therefore, learning media is highly required which following the needs and the characteristics of students as well as the environmental condition so that it can be used for either online or offline learning. The research purpose is to develop a digital product of illustrated storybooks to prepare the students in facing the AKM. The research and development process is according to the ADDIE model, with a quasi-experimental trial design. The digital illustrated storybooks are designed based on the competency achievement of AKM, particularly the reading and numeracy literacies. The research result shows that the product of the illustrated storybooks demonstrates the criteria according to the needs, characteristics and environmental conditions. The digital illustrated storybooks are also considered suitable for the students, lead the students easily understand the content, attractive and effectively used in the learning process for the First Grade of elementary school students. Furthermore, the digital illustrated storybooks are proven to help the students in improving the reading and numeracy literacies in accordance with the achievements in the AKM.

Keywords:

Digital Illustrated Storybooks, Advancement, Literacy, Competency Assessment

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INTRODUCTION

In 2020, the government of Indonesia launched the new policy as stated in the Merdeka Learning policy or *Kebijakan Merdeka Belajar*. The Merdeka Learning policy reformed the learning assessment for students regarding the implementation of the National Examination converted into a program of Minimum Competency Assessment or *Asesmen Kompetensi Minimal* (AKM). The AKM is implemented in order to recognize the education quality during the learning process in each educational unit (Kemendikbud, 2020b). The policy of AKM is a challenge for every school to continually improve the school quality despite the COVID-19 pandemic. The Ministry of Education and Culture



expected that each educational unit possesses the platform to hone the reading and numeracy literacies and cultivate the character-building within the students. The attention provided by the government in improving the reading and numeracy literacies is the right step to go. This condition is caused by the lack of literacy rate shown by the students in Indonesia based on the PISA result assessment.

The Program for International Students Assessment (PISA) is an organization that intends to globally assess the students' proficiency in reading, arithmetic and natural science in contributing towards society (Wilkins, 2011). PISA has three aspects that are considered to obtain the information regarding the education quality especially in reading and numeracy literacy (Hawa & Putra, 2018). Reading literacy includes the ability to read, understand and reflect on it in a written form. Meanwhile, numeracy literacy covers reading, understanding, identifying and using the principle of mathematics in daily life. Furthermore, scientific literacy refers to the knowledge, the ability to identify and understand the facts as well as to decide about nature.

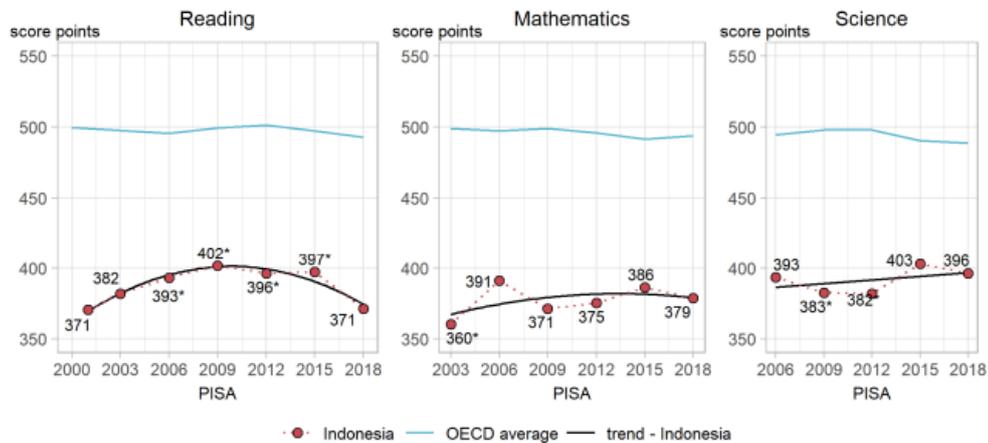


Figure 1. Indonesia's score in PISA 2018

The decline of literacy in Indonesia indicates that the literacy movement in Indonesia is strongly required to be improved. The importance of implementing reading literacy was also expressed by Rindermann & Baumeister (2015) which stated that it was crucial to consider the reading performance when interpreting the students achievement (including the science and math achievement). In line with the PISA assessment, the AKM implementation does not only stop at assessing for reading and writing skills but also the students are expected to afford to apply them in daily life. Reading literacy in AKM refers to the students' ability to understand, use, evaluate and implement the kinds of writings to remain productive in society (Kemendikbud, 2020a). Nevertheless, numeracy literacy in AKM is regarded as the capability to use mathematical concepts, procedures, facts and tools to solve mathematical problems in everyday life (Kemendikbud, 2020a). Moreover, the ideal literacy for students is defined as the ability that leads the students to be proficient in solving the surrounding problems as a form of knowledge reflection and insight in real conditions (Sinar, 2017; Arikan et al., 2016).

Schools as the educational units are expected to facilitate the students to develop the competencies which have been designed in the AKM. The availability of learning media is one of the efforts that can assist the students to improve the literacy rate as expected in AKM. The existence of learning media will ease the task of parents and teachers as facilitators in students learning rooms (Lilawati, 2020). Several things must be

considered in choosing the learning media, namely the students' needs primarily in implementing online learning and the students' characteristics, especially elementary schools.

The Development Cognitive Theory by Jean & Inhelder (2010) declared that children aged 7 to 11 years considered to the concrete operational stage. In line with Sinar (2017) that the education experts have a detailed definition regarding the literacy purpose especially as the first step to provide the reformation in the education world especially in the use of visual texts to accompany the verbal texts. The digital illustrated storybooks are the learning media that can accommodate the students in improving their literacy skills which obviously adjusted to the achievements in AKM. Furthermore, the digital illustrated storybooks are designed by presenting the aspects of reading and numeracy literacy that are in line with the achievement in AKM, particularly applying their knowledge in daily life. The research result of Huda et al., (2019) revealed that the digital illustrated storybooks presented the humanism value so that the life messages are explicitly exposed, it will lead the students easily to bring the value into the daily life. The existence the digital illustrated storybooks is expected to accommodate the students to hone their literacy skills as well, although via online learning. In accordance with Hidayati et al., (2020), said that the presence of learning media can solve the obstacles in building literacy from environmental factors. Furthermore, in line with Setiawan et al., (2019) who stated that creating the digital illustrated storybooks required to consider the needs of the utility, meant that the digital illustrated storybooks are flexible which adjusting the needs of the students. It will assist the teachers and parents in limiting the students' mobility out of the house.

The digital illustrated storybooks involve two senses, particularly hearing and sight, it accommodates the students to read, see and listen. The existence of learning media by engaging more than one sense and activities will make the students easily understand the learning lesson (Jauhari, 2018). The percentage achieved by students in using the digital illustrated storybooks is 50%. It is believed to have an impact on the ease of students in understanding and applying the learning result in daily life. The student achievement percentage is demonstrated in Edgar Dale's Cone of Experience pyramid.

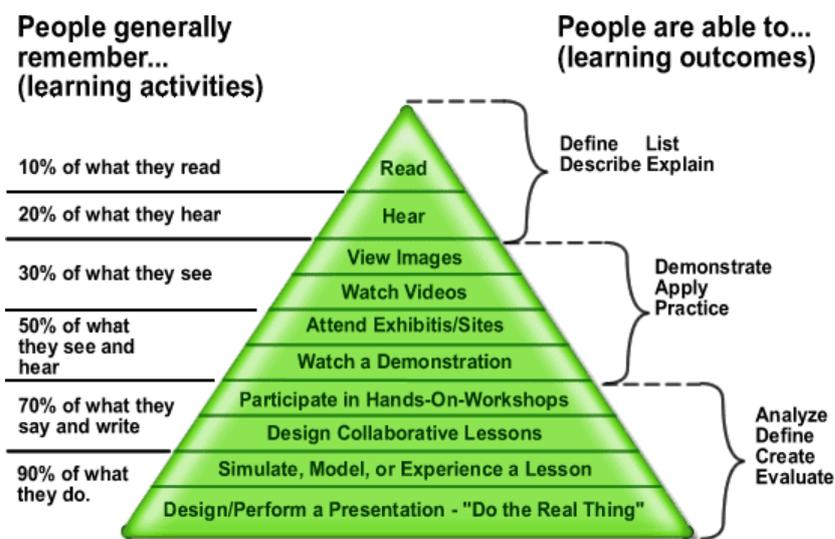


Figure 2. Edgar Dale's Cone of Experience pyramid

According to the observation and interview result, was discovered that the students in the First Grade at SD Negeri Blimbing 2 Kota Malang showed an excellent literacy rate. The information on the students' literacy might be seen from the learning guideline aspects and the students' understanding of the lesson. The understanding towards the reading content through the text presentation of literature and informational reading in the learning guideline demonstrated a good rate of reading literacy. The students of the First Grade at SD Negeri Blimbing 2 Kota Malang also showed outstanding results in numeracy literacy. It could be revealed by the students' capability in presenting the numeric in various ways presented in the learning guideline. However, this great result was not balanced by the existence of learning media which could help the students to get preparation in facing the AKM. Besides, the schools have not utilized the technology yet in the learning process.

According to the above analysis needs, therefore this research has a purpose to create an advancement product presented in the digital illustrated storybooks. The development of the digital illustrated storybooks is designed to help the students to hone their reading and numeracy literacy in online learning. The advanced digital illustrated storybooks are the audio-visual media, it has a purpose to ease the students in understanding, presenting and implementing the lesson into their daily life.

METHODS

This research belongs to the type of research and development method (R&D). Research development refers to a type of industry-based research to produce the advancement product in education as the ultimate goal (Gall et al., 2007). The outcome products are based on the needs and characteristics of students to optimally achieve the expected goals. The educational products producing from the research development are expected to become an effective, efficient and high quality (Yuberti, 2014). This research adopts the development-oriented ADDIE model which can be used as a guide in creating effective and dynamic activities as well as support the designed activities. The ADDIE model is implemented in five schemes, they are analyze, design, development, implementation and evaluate.

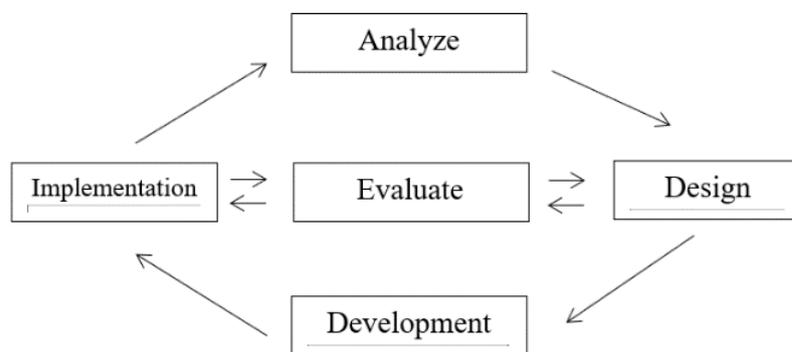


Figure 3. Stages of ADDIE Development Model (Dick and Carey)

This study also applied a quasi-experimental trial design at the implementation stage that involved the control and experimental classes selected randomly. The control group was carried out the learning process by using conventional media such as a

learning video via YouTube. Meanwhile, the experimental group was guided in the learning through the digital illustrated storybooks. The media of the digital illustrated storybooks was designed based on Thema 7 “Objects, Animals, and Plants Around Me”, Sub-theme 1 “Living and Non-Living Objects Around Us” the first lesson on the First Grade of elementary school.

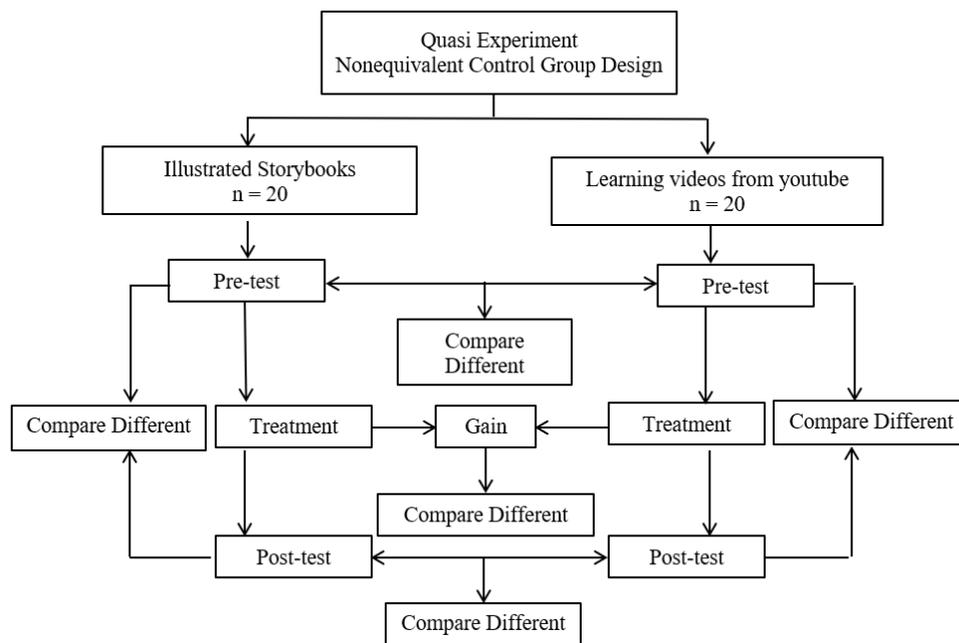


Figure 4. Quasi-Experimental Trial Framework

The data collection techniques were conducted by observation, interview, validation sheets, questionnaires, filling test, literacy and numeracy tests. The observations were carried out on February 22-23 2021 at SD Negeri Blimbing 2 Kota Malang. Furthermore, the observations had a purpose to recognize the media and activities learning as well as the infrastructure at schools. The interviews were conducted to determine the knowledge of teachers and students towards AKM, the students’ reading and numeracy literacy. Besides, the interviews were conducted by engaging among the First Grade teachers, the First Grade students whose high cognitive ability and also the First Grade students whose low cognitive ability at SD Negeri Blimbing 2 Kota Malang.

The validation sheet was used to consider the feasibility of the developed learning media and the attractiveness of the media. The measurement of the media attractiveness was gained from the result of the questionnaire. Meanwhile, the filling test intended to recognize the readability of the developed learning media. The pre-test and post-test questions were used to see the improvement of reading and numeracy literacy among the students. The whole questions have been tested and analyzed for their validity, reliability, level of difficulty and distinguishing the level.

RESULTS & DISCUSSION

Results

The outcome research was the data collected from the related sources. The result of the study were obtained through five stages in the ADDIE model. The results contained the characteristics, feasibility, readability, attractiveness and effectiveness of the digital illustrated storybooks in improving the reading and numeracy literacy towards the students.

Stage 1 : Analyze

The Digital Illustrated Storybooks Characteristics

The digital illustrated storybooks products were designed to adjust to the results of the needs analysis, the environmental condition and the characteristics of the students. The analyzing activity was conducted through the observation and interview at SD Negeri Blimbing 2 Kota Malang. The observation was focused to attain information regarding the needs during the learning process. It was done by observing the learning activities and the infrastructure in the learning process. The observation result can be seen in Table 1.

Table 1. The Observation Result at SD Negeri Blimbing Kota Malang

No	Aspects	Indicators
1	The existence of learning media in preparing the students to face the AKM particularly reading literacy	<ol style="list-style-type: none"> 1. The current learning media does not meet the AKM criteria in reading and numeracy literacy 2. There are no teaching products that can help the readiness student to face AKM
2	Learning activity	<ol style="list-style-type: none"> 1. The reading literacy activities are carried out to hone the reading and counting skills only (not yet to reasoning competency) 2. Every student is actively involved in the reading and numeracy literacy program in the learning process.

According to the observation result above, it can be concluded that the students of the First Grade at SD Negeri Blimbing 2 Kota Malang possess the need for learning media in supporting the literacy agenda primarily for facing the AKM. The analysis activities were further continued through the interview section to attain the information regarding the efforts in facing the AKM as well as the characteristics of the students. The interview results can be seen in Table 2.

Table 2. The Interview Results at SD Negeri Blimbing 2 Kota Malang

No	Aspects	Indicators
1	The efforts of preparing the students in facing the AKM particularly the reading and numeracy literacy	The schools do not provide reading books or texts based on the AKM achievement.
2	The capability of reading, counting and reasoning within the students	The students' capability in reading and counting shows excellent results either in introducing the vocabulary or numbers.

Stage 2: Design
Digitas Picture Storybook Design

According to the interview results, it can be concluded that the students of the First Grade at SD Negeri Blimbing 2 Kota Malang show an outstanding performance in reading and counting competencies. The students require concrete media which is in line with the AKM competency achievement. Therefore, the digital illustrated storybooks are designed to adjust the needs and characteristics of the students by reviewing the cognitive competencies among the students. Several displays of the digital illustrated storybooks can be seen in Figure 5.

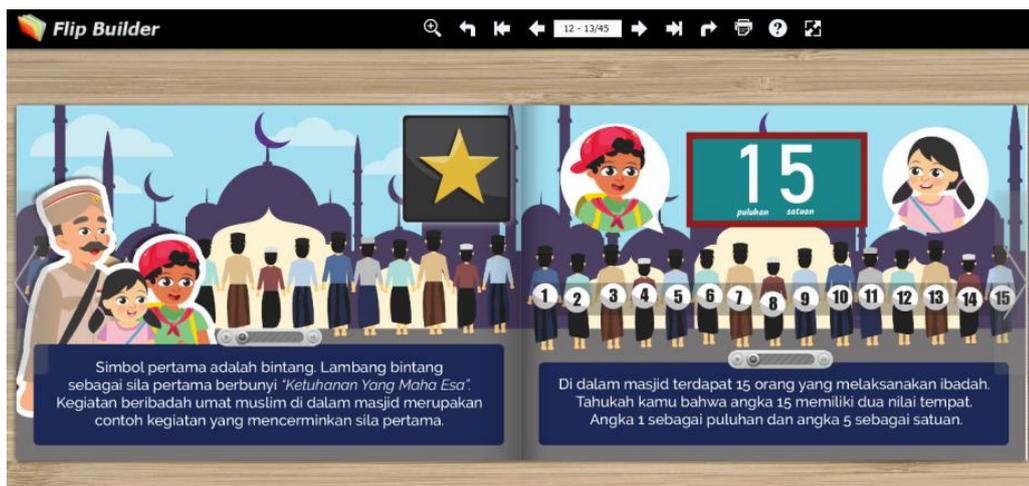


Figure 5. The Characteristics of Digital Illustrated Storybooks

The development product of digital illustrated storybooks have several characteristics such as 1) Presenting the stories by collaborating the reading and numeracy literacy, 2) Illustrating the visual in accordance with the development of the First and Third Grade of elementary school and 3) Providing the exercises as a form to prepare the students in facing the AKM.

Stage 3: Development
The Validity of the Digital Illustrated Storybooks

The validity test of the digital illustrated storybooks was conducted to obtain suitable products in the learning process. This test engaged the role of experts in providing the feedbacks such as further suggestions. The analysis of digital illustrated storybooks validity was held by involving the learning experts of the thematic, media and questions regarding AKM as well as two of the Second Grade teachers.

The result on the validation questionnaire are summarized based on the score criteria obtained, which can be seen in Table 3.

Table 3. Criteria for Validity Questionnaire for Digital Picture Storybook.

No	Achievement Level (%)	Qualification	Description
1	$84 < x \leq 100$	Very Valid	Very valid, no need to revise
2	$68 < x \leq 84$	Valid	Valid, but needs to be revised
3	$52 < x \leq 68$	Not Valid	Invalid, need revision
4	$36 < x \leq 52$	Invalid	Invalid, needs to be revised
5	$20 \leq x \leq 36$	Totally Invalid	Very invalid need revision

The Experts of Thematic Learning

The validity of the thematic learning experts was conducted by one of the lectures from the University of Negeri Semarang whose expertise in thematic learning. The validity was carried out by filling out the questionnaire regarding the thematic learning assessment from the digital illustrated storybooks. The aspect assessed out in thematic learning validity including the suitability of the content story between Core and Basic Competencies, the strength of the content story, the feedbacks, and the suitability among the students' characteristics.

Table 4. Grid of Thematic Learning Expert Validation Questionnaires

No	Aspects	Indicators
1	The content story between Core and Basic Competencies	Contents of the story according to KI and KD
2	The strength of the content story	Contents of stories based on reading literacy and numeracy literacy for students
3	The feedbacks	Student response
4	The suitability among the students' characteristics.	The content of the story is in accordance with the characteristics of the 1st grade elementary school students

Furthermore, the validation of thematic learning was held in two schemes to minimize the deficiency contained in the digital illustrated storybooks. The first scheme was obtained for 75% which is categorized as a valid outcome yet needs revision. After the revision finished, the next validation on the second scheme reached 84% which belonged to the very valid category and ended up without the revision.

The Experts of Instructional Media

The validity of learning media was conducted by one of the lectures from the University of Negeri Semarang whose expertise in learning media. Moreover, the validity has been obtained the result by filling out the assessment questionnaire regarding the feasibility of the developed learning media. The aspects assessed in validating learning media including the suitability with the 2013 curriculum, the suitability of visual translators, meeting the didactic, construction and technical requirements.

Table 5. Grid of Thematic Learning Expert Validation Questionnaire

No	Aspects	Indicators
1	The suitability with the 2013 curriculum	KI and KD are used as a reference for product development in accordance with the 2013 curriculum
2	The suitability of visual translators	The role of the image in the product is in accordance with the content of the story text
3	Meeting the didactic	Universal (can be used for students with average and high cognitive abilities)
4	Meeting the construction	Use of vocabulary, sentence structure and use of language
5	Meeting the requirements	Use of images, letters and appearance

The learning media validation was conducted in two schemes to minimize the deficiency contained in the digital illustrated storybooks. The first stage obtained 75% which is regarded as a valid category yet remains to revision. After the revision was

accomplished, the second phase of validation received 96% which included a very valid category and was not required to revise.

The Expert of AKM Questions

The validity of the AKM questions experts was conducted by one of the lectures from the University of Negeri Semarang whose expertise in AKM questions. The validity was carried out by filling out the questionnaire regarding the evaluation learning activity from the digital illustrated storybooks. The aspect assessed out in AKM questions validity including the completeness of the questions instruments, meeting the criteria of AKM questions and having the various types of difficulty levels (understanding, reasoning and implementing).

Table 6. Grid of Expert Validation Questionnaires for AKM

No	Aspects	Indicators
1	Including the completeness of the questions instruments	Completeness of the questions in the form of questions, lattice questions, answer keys, scoring guidelines, and in accordance with the achievement competencies in the AKM
2	Meeting the criteria of AKM questions	The questions have characteristics according to the tests in the AKM, both reading literacy and numeracy literacy
3	Having the various types of difficulty levels	The questions cover 3 stages of student knowledge, namely understanding, reasoning and application

Furthermore, the validation of AKM questions was held in two schemes to minimize the deficiency contained in the digital illustrated storybooks. The first scheme obtained for 70% which is categorized as a valid outcome yet needs revision. After the revision finished, the next validation on the second scheme reached 86% which belonged to the very valid category and ended up without the revision.

The First Grade of Elementary School Teachers

The validation was also conducted by the First Grade of elementary school teachers to examine the feasibility of the developed product in the learning process for the First Grade of elementary school students. The validation was carried out by filling out a questionnaire to assess the feasibility of the digital illustrated storybooks. in thematic learning validity including the suitability of the content story between Core and Basic Competencies, the strength of the content story, the feedbacks, and the suitability of learning media for the students of the First Grade. The assessment scored by the first teacher was 91% and 89% by the second teacher. Both results were categorized as the very valid level so that the revision was not required.

Stage 4: Implementation

At the implementation stage, the activity was carried out by applying digital picture storybook products in learning to class 1 students at SD Negeri Blimbing 2, Malang City. The research subjects involved 2 parallel classes that acted as the control class and the experimental class. The test results provide data in the form of product development quality such as, readability and attractiveness.

The Readability of the Digital Illustrated Storybooks

The readability test of the digital illustrated storybooks was presented in the 5 questions of the filling test, each question scores 20 points respectively. The readability test was conducted by engaging 13 students of the First Grade from SDN Sumberboto 04 Blitar. The readability test of the digital illustrated storybooks result can be seen in Table 7.

Table 7. The Result of the Readability Test

No.	Name	Correct question	Score	Predicate
1	F	3	60	Average
2	N	3	80	Advanced
3	H	4	80	Advanced
4	U	3	60	Average
5	Z	2	40	Average
6	A	5	100	Advanced
7	D	3	60	Average
8	N	4	80	Advanced
9	K	3	60	Average
10	A	3	80	Advanced
11	A	4	80	Advanced
12	C	2	80	Advanced
13	R	3	60	Average

The points achieved by the students in the filling test are classified as average and advanced categories with the final average of 70 included in the advanced predicate. It shows that the illustrated storybooks can be absorbed by the students and lead them easily to receive the information.

The Attractiveness of the Digital Illustrated Storybooks

The test of the digital illustrated storybooks attractiveness was conducted by involving three subjects, they are a teacher, 13 parents and 13 students of the First Grade from SD Negeri Blimbing 2 Kota Malang. The assessment of attractiveness was held by distributing the questionnaire after accomplishing the learning process of the digital illustrated storybooks. The questionnaire for the teacher and parents were sent in google. The teacher response test questionnaire grid can be seen in Table 8.

Table 8. Grid of Teacher Response Test Questionnaire

No	Aspects	Indicators
1	Interesting story content	Learning media is considered interesting according to stories that are relevant to elementary school age children
2	The attractiveness of the storybook display	Learning media is considered attractive according to the structure/form and appearance of digital picture story books

The grid of student response test questionnaires can be seen in Table 9.

Table 9. Grid of Student Response Test Questionnaires

No	Aspects	Indicators
1	Student interest in the product	Enthusiasm in using products in the learning process

The result of the digital illustrated storybooks attractiveness assessment by the First Grade teachers of SDN Blimbing 2 obtained 100% for a very attractive category. The questionnaire by parents showed 72% for attractive and very attractive levels. Meanwhile, the students questionnaire reached 70% up to 100% with the category of attractive and very attractive. The score criteria on the student and teacher test questionnaires can be seen in Table 10.

Table 10. Criteria for Response Test Questionnaire

No	Achievement Level (%)	Qualification	Description
1	$84 < x \leq 100$	Very Valid	Very valid, no need to revise
2	$68 < x \leq 84$	Valid	Valid, but needs to be revised
3	$52 < x \leq 68$	Not Valid	Invalid, need revision
4	$36 < x \leq 52$	Invalid	Invalid, needs to be revised
5	$20 \leq x \leq 36$	Totally Invalid	Very invalid need revision

Stage 5: Evaluation

The Effectiveness of the Digital Illustrated Storybooks

The examination of the digital illustrated storybooks effectiveness was conducted by giving the pre and post-test questions to respectively 13 students in the control and experimental class. The questions pre and post-test were presented in 5 questions according to AKM standards such as multiple-choice, matching set, filling the blanks and essay. Besides, the examination of the digital illustrated storybooks effectiveness through pre and post-test was carried out by the normalized tests of gain, homogeneity and hypothesis as well.

The Normalized Gain Test (N-Gain)

The test of the normalized gain (N-Gain) was reached to recognize the increasing result upon the cognitive learning of the students after the observation. The increasing rate was measured from the pre and post-test scores of the students. The improvement of reading literacy rate in the experimental class was showed in N-Gain scored of 0.65 which belonged to an average level. Meanwhile, the improvement of numeracy literacy rate in the experimental class was showed in N-Gain scored for 0.60 which belonged to the average level as well.

The improvement of numeracy literacy rate in the experimental class was demonstrated in N-Gain scored for 0.40 which belonged to an average level. Meanwhile, the improvement of numeracy literacy rate in the experimental class was demonstrated in N-Gain scored for 0.23 which belonged to a low level. To show the significant results in distinguishing between the reading and numeracy literary development at the experimental and control class, therefore, a statistical test was also conducted through an independent t-test.

The Test of Normality

The normality test was used to see the condition of data whether properly distributed or not. If the N-Gain of experimental and control class was examined at the same time, then the result of normality test showed by Shapiro-Wilk. The outcome of homogeneity test by using the SPSS application. Furthermore, the result of N-Gain for Experimental Class was obtained at Sig. 0,614 > 0,05 which regarded as normal distributed. On other hand, the Control Class N-Gain reached Sig. 0,053 > 0,05 which defined as normal distributed as well.

The Test of Homogeneity

To examine the homogeneity of variance, it is crucial to do the statistic test or variance test toward distributing scores of the related groups. The test homogeneity result by using the SPSS application. Moreover, the N-Gain value of control class and experimental on reading literacy reached for Sig. Levene Statistic 0,219 > 0,05, so it can be concluded that the variance data of the N-Gain value from the control class and experimental on reading literacy is homogenous. Meanwhile, the N-Gain control class and experimental on numeracy literacy reached for Sig. Levene Statistic 0,811 > 0,05, so it can be concluded that the variance data of the N-Gain value from the control class and experimental on numeracy literacy is homogenous as well. According to the result of the normality and homogeneity tests, the statistics used are the parametric statistics, yet to determine the various average rate is used the t-independent.

The Test of Hypothesis

The hypothesis assessment aimed to recognize upon the population samples shows the significant similarity or differences from each other. Based on the rest of the normality and homogeneity tests, the statistics used are parametric. The test of average distinguish is used the t-paired sample test. This technic purposed to determine the differences in the reading and numeracy literacy between the observed experimental class and unobserved the control class. The improving trend on reading literacy could be calculated by t-count for 2.531 while the numeracy literacy counted for 2.508.

The sig value showed (2-tailed) $0.018 < 0.05$ refers to H_0 is rejected, it means that there is a difference in improving the reading literacy between the experimental and control class. Meanwhile, the sig value showed (2-tailed) $0.019 < 0.05$ refers to H_0 is rejected, it means that there is a difference in improving the reading literacy between the experimental and control class. The increasing rate of reading and numeracy literacy shows that the experimental class is larger than the control class. It is shown based on the result of N-Gain reading literacy at the experimental class for 0.65, on the other hand at the control class showed 0.40 for the reading literacy. Furthermore, the calculation of N-Gain numeracy literacy counted for 0.60, while 0.23 showed in the control class.

DISCUSSION

The existence of learning media in preparing the AKM at elementary schools has been demonstrated in the form of the digital illustrated storybooks which have been examined following the development research criteria. This advanced product covers the whole crucial features in one system such as the input, the process and the output. The input stage is started with the needs analysis, environmental and the students' characteristics as the first step design of the digital illustrated storybooks. The process is conducted through the designation, feasibility, readability, attractiveness and effectiveness tests towards the digital illustrated storybooks. The research output created the digital illustrated storybooks which effectively increase the reading and numeracy

literacy students in preparing the AKM at elementary schools particularly for the First Grade students.

By the end of the research, hopefully, this study can provide the solution to the schools' unreadiness to improve the students' literacy rate especially in facing AKM. Several specific elements are developed in the digital illustrated storybooks including the evaluation questions based on the AKM test. The existence of audio-visual in the digital illustrated storybooks increases the imagination, leads the students easily to pronounce sentences and presents symbols or numbers.

The digital illustrated storybooks present the features of audio and visual as one of the advantageous points amid the learning media development (Ayuniar & Patria, 2021). It will be one of the characteristics of the digital illustrated storybooks owned. The role of audiovisual will be as the media for the students to easily understand the content story so that the literacy rate will positively improve among the students. The research result of Ayumi et al., (2021) said that the improving literacy trends within the students occurred when the existence of audiovisual learning media also exists.

There has not been discovered yet for research about the development of the digital illustrated storybooks which also presents the reading and numeracy literacy based on the achievement of the AKM competency. The previous research presented about reading literacy only (Lubis & Dasopang, 2020; Rizal Azdka & Giari Murwandani, 2019; Herlina et al., 2019). Therefore, this research will be a worthy reference to the related study in preparing the AKM for elementary school students.

The product of the digital illustrated storybooks development will accommodate the students to increase two abilities at once namely on reading and numeracy literacy. It happens due to the focus from addressing the plan of the digital illustrated storybooks in preparing the students to face the AKM so that the achievement of the AKM competency becomes the most concerning part. The policy aim of the Minimum Competency Assessment is designed for specific goals such as 1) Increasing the ability of language thought through reading literacy, 2) Enhancing the mathematics thought through numeracy literacy and 3) Improving the character-building cultivation through the surveys (Ismail & Zakiah, 2021). The product of digital illustrated storybooks development is one of the preparation tools to cope with the globalization era that marked by the policy reformation to create a better civilization. The Minimum Competency Assessment is also considered in line with the world development, it can be seen through the aspects of primary (character survey) and the instrumental (reading and numeracy literacy) implemented towards the guideline for the whole students in Indonesia (Sari & Rosa, 2021).

CONCLUSION

This research has successfully developed the product of learning media through the digital illustrated storybooks to prepare the AKM at elementary schools. The digital illustrated storybooks are created according to the achievements of the AKM competency. The existence of this digital picture story book can be used as a learning media to improve students' reading literacy and numeracy skills so that they are ready to face AKM. They are also regarded as the suitability of learning media by the experts and positively provide the access to the students in understanding the lesson. Besides, the digital illustrated storybooks are also very attractive to use in the learning process and lead to improving the reading and numeracy literacy skills for the First Grade students of elementary schools.

This research only develops digital picture storybook products that can only be accessed using electronic goods. So the research is only conducted in schools that have technology-based infrastructure. In addition, this research only involves students who are in the first grade elementary school education level who are accustomed to carrying out the learning process by involving technology.

CONFLICT OF INTEREST

The authors report that no conflict of interest potential occurred during the research.

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