

DEVELOPMENT OF DIGITAL MEDIA AUTHENTIC ASSESSMENT IN LEARNING READING COMPREHENSION FOR ELEMENTARY SCHOOL

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Abstract

Nowadays, assessment is not only seen as an evaluation tool but also as a learning tool. With regard to reading instruction, efforts to improve students' reading skills and habits can be enhanced with the implementation of authentic assessment models. The purpose of this research is to produce a digital authentic assessment model that can be used in teaching reading comprehension in elementary schools. This educational design research study was conducted on fifth grade students in West Java. The data were collected by means of both test and non-test instruments. The generated data were analysed using qualitative and quantitative methods. Based on the results, it can be concluded that the digital an authentic assessment model developed in this study is a process-based model which has proven to be effective in improving students' reading comprehension skills and develop students' reading habits. Therefore, this digital an authentic assessment model can be used in reading comprehension instruction in primary schools as an alternative to improve reading skills.

Keywords: digital an authentic assessment, reading skills, reading habits

INTRODUCTION

One of the most important skills to master in order to develop multiliteracy is reading comprehension skills. Reading skills are closely related to the ability to absorb information from various sources, thus a person who possesses these skills will understand information correctly so that he/she can expand his/her knowledge. Concannon-Gibney and McCarthy (2012) stressed the importance of reading skills, remarking that students should be equipped with reading skills which enable them to solve problems, communicate, and think, preparing them for the 21st century.

Given the importance of reading skills, the teaching of Bahasa Indonesia in schools plays an important role in improving students' reading comprehension skills. Therefore, a radical paradigm shift is needed to improve reading comprehension instruction in schools. This effort should be made by teachers for it is one of their main roles to provide instruction which is in accordance with students' learning development, pedagogical concepts, learning materials, and students learning outcomes assessment (Darling-Hammond, et al., 2005). In line with this, Greenleaf, et al. (2010) argued that it is necessary to think about reading instruction strategies that integrate literacy development across subject matter domains. These efforts are not without reason considering the fact that research and surveys carried out by international institutions always place Indonesia in the lowest position in reading comprehension skills, even compared to other ASEAN countries.

However, efforts to improve reading comprehension skills that should be made by teachers has not been made optimally. This can be seen from the fact that teachers are still using the old patterns, which has proven to be unable to improve students' reading skills. Based on this problem, this study focuses on efforts to improve the quality of the process and outcomes of reading comprehension instruction by developing an authentic assessment model. This focus is in line what Wormeli (2006) stated, that in order to improve the quality of learning process, an authentic assessment model that can assess students' ability correctly/accurately and also can serve as a foundation of learning process development should be implemented. Corrigan, et al. (2013) added that an assessment which is closely related to (classroom) instruction is a fundamental issue in education; the development and implementation of curricula; learning process in class; and education research.

In general, reading skills are students' ability in comprehending the contents of a text. According to Nuttal (1996); Bergeron and Wolff (2002); Miller (2008); and Browne (2007), there are at least three basic indicators of reading skills, namely: (1) students can enjoy what they read, (2) Students can read silently with a flexible reading speed. (3) And students gain a good understanding of what they read. Reading habit, on the other hand, is students' practice when they are reading in terms of thinking process. Thus, the term 'reading habit' in this study refers to reading habits seen from the aspect of thinking process. These habits include the practice of reading with a purpose, reading by optimizing the interaction between readers and reading materials, organizing the contents of a text to comprehend the contents, interpreting the contents, and reading creatively. The originality of this study lies in this different aspect of reading habits.

In efforts to improve primary school students' reading skills and habits, assessments play an important role. This is in accordance with one of the objectives of assessments, which is for students to be able to gain self-control of their learning activities. An assessment model that has this kind of function is authentic assessment. Authentic assessment, in general, is an assessment which is developed to supplement conventional assessment models which are still being used today. Therefore, experts regard authentic assessment as an intensification of conventional assessments.

Hart (Gulikers, Bastiaens & Kirschner, 2008) explained that authentic assessment is an assessment that involves students in authentic tasks, which are beneficial, important, and meaningful, that further can be thought of as performance assessment. Wormeli (2006) pointed out that authentic assessment refers to two aspects. First, authentic assessment is related to how students can apply their learning outcomes to their everyday lives. Second, authentic assessment is an assessment that can accurately pinpoint how students learn and what motivates them to learn. Based on this aspect, authentic assessment is an assessment carried out with an emphasis on the functions of assessment in social and educational dimensions. This kind of assessment is the assessment that serves as guidance on leaning process based on differentiated learning, so classroom instruction can have correctly-sequenced procedures that meet students' needs.

Efforts to implement assessment models to develop students' reading skills have been made by some researchers. One of the studies was conducted by Cheng and Warrant (2005). This study,

however, only focuses on one form of authentic assessment in reading instruction, assessment by fellow students in a form of peer assessment. Based on their study, Cheng and Warren (2005) noted that there are still some weaknesses in peer assessment and one of the weakest points is that students have rather negative attitudes towards their friends' language skills, but they do not assess the skills of their fellow students differently from other assessment criteria.

A study aimed at developing an authentic assessment in reading instruction, partially, was also carried out by Alderson and McIntyre (2006). This study was conducted mainly to develop a self-assessment model. Based on their study, Alderson and McIntyre (2006) concluded that most of the students felt the learning benefits through the use of the self-assessment model. However, on the other hand, the students also expressed dissatisfaction, there were some reasons why they reacted negatively towards themselves.

A more comprehensive study that developed an authentic assessment in reading instruction was conducted by Prestidge and Glaser (2000). The authentic assessment model that was developed include (1) an assessment in outcome dimensions comprising of comprehension assessment, writing assessment, reading technical skill assessment, and while-reading skill assessment; (2) a self-assessment by students consisting of group performance assessment, self-assessment, and reflective assessment; and (3) an assessment in outcome dimension in a form of students' integrated understanding. To conclude their study, Prestidge and Glaser (2000) stated that an authentic assessment gives teachers an opportunity to note subtle changes that cannot be proven by traditional assessment instruments. These tools also give teachers an opportunity to evaluate students individually because they work in groups to create an individual project.

O'malley, J.M. and Pierce, L.V. (2006) carried out a study on the development of an authentic assessment in reading instruction with an emphasis on the intensity of reading. The forms of assessment developed were (1) an assessment involving students, consisting of self-assessment and peer assessment and (2) an assessment through scoring rubrics, consisting of retelling rubrics, reading list, literary response, discussion group, reading notes, and reading portfolios. The development of this model has been able to improve students' reading skills.

Regarding authentic assessment in reading instruction, the findings of Stanford and Siders' (2001) study were used as guidance for this study, especially on developing an authentic assessment model in reading instruction. These findings were then combined with steps to developing an authentic assessment as outlined in Mueller (2012) so that the development of an authentic assessment in this study has its own distinguishing features compared to the two studies used as the guidance. Compared to the studies conducted by Klingner (2004); Cheng and Warren (2005); and Alderson and McIntyre (2006), this study has different aspects. Although the three studies also aim to develop an authentic model in reading instruction, they put more emphasis on student-centered assessment, while the assessment in this study is more process-oriented.

Based on the forms of authentic assessments that have been developed above, the authentic assessment models offered by O'malley and Pierce (2006) and Prestidge and Glaser (2000)

focus on the aspects of reading intensity and student-centred assessment. On the other hand, the assessment model developed by Nurgiyantoro and Pujiyati-Suyata (2009) puts emphasis on outcome assessment. Unlike the three forms offered by these previous studies, the authentic reading assessment in this study assesses reading process and reading outcomes.

Efforts to improve reading skills through the implementation of assessment models have been made by experts. However, only few researchers have implemented the digital an authentic assessment models which are intended to develop reading habits and skills at the same time. Therefore, this study is aimed at developing the digital authentic assessment model in reading comprehension instruction and at implementing the digital model in an attempt to improve primary school students' reading comprehension skills and develop their reading habits.

METHODS

The research method used in this study is the educational design research model (EDR). Design/development research as a viable strategy for socially responsible research in educational technology. One of the main advantages of design research is that it requires practitioners and researchers to collaborate in identifying real teaching and learning problems, creation of prototyping solutions based on existing design principles, and testing and refining prototype solutions and design principles until satisfactory results have been achieved by all parties (Reeves, 2006). Design research is not an activity that can be carried out by individual researchers independently of practice; its nature ensures that progress will be made with respect to, at a minimum, clarification of the problems faced by teachers and learners, and ideally, the creation and adoption of solutions along with the explanation of sound models and design principles.

In line with the description above, the research data was collected using an instrument in the form of a questionnaire. The data sources for this study were 5 assessment experts and 5 digital media experts whose function was to weigh the developed of the digital an authentic assessment model. The focus of the assessment aspects includes aspects of content feasibility, feedback components, habitual reading components, and understanding content and context of the text. The focus on media aspects includes media design techniques or the technical quality, media feasibility, and media quality in general. Likert scale is used for this measurement; 1 means very bad, 2 is bad, 3 is fair, 4 is good, and 5 is very good. The collected data was processed using descriptive statistical analysis techniques.

The study was conducted in Bandung Regency and recruited fifth grade primary school students in West Java, Indonesia during one academic year period. The primary school students were chosen according to the geographical characteristics of the schools. There were six primary schools chosen from three different geographical locations, namely urban, rural, and border areas. The choice of sampling scheme, based on geographical characteristics, was intended to obtain study results that can describe the overall effectiveness of the experimental model.

The instruments used in this study include, among others, process response, used to assess reading habits, product/outcome response, used to assess students' reading comprehension skills. The data were collected through tests. The generated data were analysed using quantitative method, by means of two-tailed test and Anova (Coladarci & Cobb, 2013).

FINDINGS

This study has succeeded in developing the digital an authentic assessment model in reading comprehension instruction. The assessment developed in this study is a combination of authentic tasks and reading activities performed by the students in order to develop good reading habits and improve comprehension. The assessment is tailored to meet every developmental need from pre-reading, while-reading, and post-reading stages. The outcomes of every activity performed by the students in each reading step are assessed so that the assessment which is developed accords with the concept of formative assessment.

The digital an authentic assessment model that has been developed is then validated by experts to determine its suitability and feasibility for use in learning. Based on this, the following are the results of the digital an authentic assessment model usability test which was developed based on assessment and digital media experts. The validation of the assessment experts was carried out by five lecturers who are experts in the field of assessment teaching Indonesian Language and Literature. Validation to assessment experts aims to get responses in the form of assessments and also suggestions regarding several aspects of the product being developed. The following are the results of an assessment or validation from a assessment expert (Table 1).

Table 1: Result of Assessment Expert

Number	Aspect	Score	Max. Score	Percentage
1	content feasibility (4 sub aspect)	92	100	92%
2	feedback components (4 sub aspect)	88	100	88%
3	habitual reading components (4 sub aspect)	83	100	83%
4	understanding content and context of the text (4 sub aspect)	84	100	84%
Average				86,75%

The feasibility of the content/material according to the assessment expert's view obtained a percentage score of 92% which was interpreted that the product developed was "Very Good" in terms of content/material. Based on the expert's point of view, the feedback component of digital media obtained a percentage score of 88% which was interpreted that the product developed was "Very Good". The habitual reading component. Base on reading habits got a score of 90% which means very good. Based on the aspect of understanding the content and context of the text, a score of 80% is obtained which also means very well. Based on the assessment of evaluation experts, the digital authentic assessment developed is considered very well which can be used in research.

The validation of the media experts was carried out by five multimedia experts. Validation to media experts aims to get responses in the form of assessments and suggestions about the products developed. The following are the results of the assessment or validation from media experts (Table 2).

Table 2: Result of Digital Media Expert

Number	Aspect	Score	Max. Score	Percentage
1	media design techniques / the technical quality (5 sub aspect)	100	125	80%
2	media feasibility (4 sub aspect)	90	100	90%
3	media quality in general (2 sub aspect)	44	50	88%
Average				86%

The technical quality and design of the MR technology application obtained a percentage rating of 80% which indicates that the quality of the media is in the “Very Good” category. Base on media feasibility the percentage obtained is 90% and it can be interpreted that the book is in the “Very Good” category. Media quality assessment indicators include: (1) the use of media, and (2) the usefulness of the media in facilitating students to be active in learning. Media quality got a percentage score of 100%, which means the media quality is “Very Good”. In addition to assessing there are several notes put forward by digital media experts. The advice given is regarding the need to test applications on various smartphone so that users know the level of compatibility of the applications made. This is because this application that is installed on a smartphone that has low specifications cannot run properly. On the other hand, based on the overall assessment from the digital media expert’s point of view above, it can be concluded that this digital an authentic assessment is already feasible to use with notes.

After succeeding in developing the authentic assessment model in reading comprehension instruction, the model is then implemented in the reading comprehension instruction. The implementation goes through three phases, namely limited testing phase, expanded testing phase, and validation testing phase. The results of the limited test/experiment which was conducted three times show that there is an improvement in the students’ reading habits. In addition, it is proven that in all three experiments the students show significant improvement in reading comprehension. The results of the statistical tests on the limited test are presented below (table 3 and 4).

Table 3: The Results of Anova on Reading Habits in the Limited Experiment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2375.625	2	1187.813	20.943	.000
Within Groups	3232.813	57	56.716		
Total	5608.438	59			

Table 4: The Results of Anova on Reading Comprehension Skills in the Limited Experiment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1765.83	2	882.917	17.666	.000
Within Groups	2848.75	57	49.978		
Total	4614.58	59			

The results of the Anova, presented in both tables, indicate $F=17,666$ with a significance level of 0,00 which is less than the critical value (α) set in this study, 0,05. Based on these results, it is known that the implementation of the authentic assessment model in reading instruction in the limited test has significantly contributed to improvement in the students' reading habits and skills in reading comprehension.

Based on the extensive experiment which was conducted in two schools, the authentic assessment model developed in this study has proven to be effective in developing the students' reading habits because significant improvement is shown in the students' reading habits. Furthermore, the students' reading skills also improve significantly. The results of the Anova on the extensive test are presented in table 5 and 6 below.

Table 5: The Results of Anova on Reading Habits in the Extensive Experiment

First School					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3477.493	2	1738.746	20.292	.000
Within Groups	6940.569	81	85.686		
Total	10418.062	83			
Second School					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4713.542	2	2356.771	26.244	.000
Within Groups	8082.157	90	89.802		
Total	12795.699	92			

Table 6: The Results of Anova on Reading Comprehension Skills in the Extensive Experiment

First School					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2680.357	2	1340.179	21.071	.000
Within Groups	5151.786	81	63.602		
Total	7832.143	83			
Second School					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3503.763	2	751.882	23.762	.000
Within Groups	6635.484	90	73.728		
Total	10139.247	92			

The results of the Anova from both tables indicate a significance level of 0,05. This indicates that the implementation of the authentic assessment model in reading instruction in the extensive experiment has contributed to a significant improvement in the students' reading habits and skills in both schools.

Based on the results of the validation experiment carried out in three experimental classrooms, it is known that the implementation of the authentic assessment model has proven to be effective in developing the students' reading habits and skills. On the other hand, it is also known that the conventional assessment model has also contributed to improvement in the students' reading habits and skills. In order to prove the effectiveness, A T-test was carried out and the results are as follows:

Table 7: The Results of the T-Test on Reading Habits and Skills between the Experimental Class and Control Class

Reading Habits			
		Equal variances assumed	Equal variances not assumed
t-test for Equality of Means	T	5.802	5.814
	Df	198	197.106
	Sig. (2-tailed)	.000	.000
	Mean Difference	8.18452	8.18452
	Std. Error Difference	1.41071	1.40766
Reading Skills			
		Equal variances assumed	Equal variances not assumed
t-test for Equality of Means	T	5.144	5.140
	Df	198	196.730
	Sig. (2-tailed)	.000	.000
	Mean Difference	6.64966	6.64966
	Std. Error Difference	1.29277	1.29382

Based on the data presented in Table 7 above, the authentic assessment model which is developed is considered to have a higher level of effectiveness in the development of reading habits and skills compared to those commonly used in schools (conventional models). This proves that an authentic assessment model is effective in developing primary school students' reading habits and skills. The results of the validation experiment also indicate that compared to the authentic assessment model implemented in the experimental school that has indicated a significant difference in both reading habits and skills in every meeting, the model used in the control school only shows a significant difference in reading habits after three meetings. This confirms that authentic assessment model is an effective way to improve primary school students' reading skills and develop their reading habits.

DISCUSSION

The Digital an Authentic Assessment Model in Reading Comprehension Instruction

Based on the results of the study, it is known that the implementation of the digital an authentic assessment model has significantly developed the primary school students' reading habits and

improved their reading comprehension skills. The reading habits emphasized in this study is the reading habits in mental and cognitive dimensions. The reading skills improved by the implementation of the authentic assessment model include students' ability to understand the contents of texts by means of various multimodal comprehension representation media

The success of the digital an authentic assessment in developing the students' reading habits and comprehension skills is in accordance with the fact that digital an authentic assessment is made up of a set of authentic activities that students should perform throughout their learning process. These activities are activities which are based on certain reading strategies. Therefore, through the use of digital an authentic assessment, the students will unconsciously develop habits of applying appropriate strategies to their reading. This will lead to the development of flexible reading habits that is varied reading habits according to the reading purpose. Therefore, it seems reasonable that the digital an authentic assessment model in the end will be able to develop a good reading habit among the students. These results complement what Alderson and McIntyre (2006) have found in their study that most students felt the learning benefits through the use of self-assessment.

Based on the final form of the model, the digital an authentic assessment model developed in this study has some differences from the authentic assessment models that have been developed in previous studies. There are at least four major differences between the model developed in this study and the models that have been developed so far. First, the digital an authentic assessment model developed in this study is tailored according to the methods or reading comprehension instruction being used. With the use of this appropriate model, the instruction becomes more conducive and can directly improve the students' competency. In line with this, Joyce, et al (2009) argued that the use of learning models is believed to be able to help achieve learning goals.

Second, the digital an authentic assessment model developed in this study focuses on process assessment, thus this model is designed based on the students' real activities. With these clear stages of activities, teachers can identify difficulties experienced by students in their learning because authentic assessment model can have formative functions during the learning process. In line with this, Popham (2011) stated that formative assessment is an assessment done during the learning process based on the outcomes of students' real activities throughout the learning process so that this assessment will be able to give feedback on the students' progress.

Third, the digital an authentic assessment model developed in this study does not only provide general activities in learning but also a number of activities oriented towards the development of good reading habits among the students. The reading habits in this study are not physical/visual reading habits but they are more cognitive. The reading habits here refer to the students' habits of developing knowledge based on the materials they read, which include grasping ideas thoroughly, processing ideas accurately and cooperatively, as well as habits of expressing ideas creatively and responsibly. Based on this fact, the digital an authentic assessment model developed in this study is not only a physical/visual model, but more of a mental/cognitive model.

Fourth, the digital an authentic assessment developed here is equipped with process worksheets that guide students to work towards the objective of the model being developed. Based on this condition, although teachers do not have a sound understanding of the reading instruction model, teachers and students will unconsciously incorporate authentic learning activities into the right learning model. The use of process worksheets can directly improve reading skills or gradually, in line with the principles of sequential learning outlined by Axfor, Hardes, & Wise (2009), which through sequential learning, students will gain more complex skills, strategies, and knowledge.

The digital an authentic assessment in reading instruction which was successfully developed is also aimed at helping the students to gain a deep understanding of what they read. This is in line with the form of authentic assessment that also puts an emphasis on cognitive, which can enhance knowledge acquisition. Further, it is believed that information and knowledge that the students gain can stick longer because they are obtained through authentic activities performed by the students which are incorporated in various multimodal representation media.

The Contribution of the Digital an Authentic Assessment Model to the Development of Reading Habits

The implementation of the digital an authentic assessment model in this study has proven to be effective in improving the students' habits during the reading process. These habits are mental habits that is the habits of processing information thoroughly and appropriately in every reading stage. Therefore, the reading habits developed through this study include the habits in pre-reading stage, while-reading stage, and post-reading stage.

The first reading habits developed in this study are those in the pre-reading stage. In this stage, the habits help students to read with a purpose. This means that students set a purpose for their reading prior to their reading activities. Reading with a purpose has proven to be able to improve students' reading skills, thus compared to purposeless reading, reading with a purpose can contribute to students' success at reading. Ahuja and Ahuja (2007) argued that a reading purpose plays a very important role in reading success. Furthermore, Iyer (2007) argued that one of the biggest mistakes made by readers is reading without setting a clear purpose.

The second reading habits developed through the implementation of the digital an authentic assessment model is those in the while-reading stage. These habits are related to the students' cognitive habits during reading activities. Thus, the digital an authentic assessment provides activities that require the students to think in order to comprehend what they read. Based on this more complex reading process, this study supplements the authentic assessment instruments developed by Prestidge and Glaser (2000). This study has succeeded in developing the students' reading habits by accustoming the students to performing various activities when they are reading. It is these activities which are expected to be the basic model for the students to enhance their understanding of discourse and retain the knowledge in their long-term memory. The digital an authentic assessment developed in this study also gives the students an opportunity to choose the strategies deemed appropriate to understand what they read. Through these strategies, the students are expected to be able to think independently of the strategies

which are suitable for them in an effort to build a good understanding. In line with this, Alderson and McIntyre (2006) concluded that authentic assessment can stimulate students to independently find the learning activities deemed necessary for the development of their learning skills.

The third reading habits developed in this study are related to the post-reading stage. The habits being developed in schools so far are the habits that focus only on comprehension assessment by answering questions. Through this study, students are taught to demonstrate their understanding more creatively and independently. Unlike the studies conducted by Murray, et al. (2011); Alonzo, et al. (2009); Smagorinsky (2009); and Provost, et al. (2009) that aimed to develop assessment instruments in measuring reading skills, this study put emphasis on creative and independent ways to demonstrate understanding. The digital media used by the students to demonstrate their understanding are multimodal, like poems, comics, posters, and other media. Through these media, students are not only able to enhance their understanding of the reading contents, but they are also able to produce creative works, which in turn will boost their creativity.

The results of the extensive test and validation experiment show that the development of good reading habits can be directed to both high ability students and low ability students. The difference is that with high ability students, the instillation of habits will be more difficult because high ability students tend to think that with few efforts, they can comprehend what they read. With low ability students, the instillation tends to be easier since low ability students may think that by developing good reading habits, they can improve their reading comprehension. The role of teachers is needed to remind the students about the importance of developing good reading habits for their learning achievement, so that the students can accept the concepts of the authentic assessment.

In its application, the digital an authentic assessment developed in this study is not always easy to implement effectively to all students. Thus, teachers as the implementer of teaching methods, are expected to explain to students the importance of the activities that they should perform during the reading class. Then, teachers should also put more emphasis on the activities that the students should master in order to perform optimally. In accordance to this fact, the development of the digital an authentic assessment in the future should be planned collaboratively by researchers, teachers, and students. Furthermore, good reading habits do not develop instantly but they should be practiced repeatedly and continuously. Therefore, the reading habits developed through the implementation of the digital an authentic assessment model in this study cannot be learned in one session, but it will take at least three sessions to develop the habits.

The Contribution of the Digital an Authentic Assessment Model to the Development of Reading Skills

The Digital an authentic assessment developed in this study is also proven to have significantly improved the students' reading comprehension skills. The fact that improvement is evident in every school indicates that the authentic assessment model does not only work with high ability

students but also with low ability students. The digital an authentic assessment model developed in this study is equipped with thinking activities. Thus, students are habituated to processing discourse with an appropriate strategy. With the strategy they use, the students can read thoroughly and contextually so that they have better understanding of what they read. Different from the study conducted by Greenleaf, et.al (2010) that developed a reading apprenticeship model that relies on stimuli in order to develop students' reading comprehension skills, this study relies on the authentic activities performed by the students when they are reading and on students' creativity in demonstrating their understanding through multimodal representation media.

Reading instruction through optimal implementation of the digital an authentic assessment involves designing reading instruction model on the basis of students' activities. In line with this, LaLopa (2005) stated that the development of authentic assessment gives students an opportunity to gain deeper understanding. Therefore, it seems reasonable that the digital an authentic assessment model in reading instruction developed in this study is able to develop students' reading skills. Based on this fact, this study complements what Bryant, et al. (2009) found, that direct interaction between students and texts in pre-reading stage, while-reading stage, and post-reading stage will develop student's knowledge of what they read.

Improvement in the students' reading skills also results from the use of the process worksheets in the reading instruction. The use of these process worksheets can involve the students to understand texts in every level of understanding. The use of the process worksheets to develop different complexities of reading comprehension is different from the findings of the study conducted by Alonzo, et al. (2009) that puts more emphasis on summative assessment model on the basis of different levels of comprehension, which consist of literal, inferential comprehension, and evaluative comprehension.

Based on the discussion, it can be concluded that the digital an authentic assessment developed in this study has also proven to improve the quality of reading instruction in schools. This is because developing the digital an authentic assessment is the same as developing creative, innovative, and productive instruction. Through the implementation of the digital an authentic assessment, the teachers admit that the reading instruction becomes more interesting and creative, thus the students feel challenged to be able to read better. This supports the assumption that assessment can be used to guide learning process and also to develop students' academic skills.

CONCLUSION

The digital an authentic assessment developed in this study is the model based on reading process. The model developed is formative that is it is developed for every reading stage from pre-reading stage, while-reading stage, to post-reading stage. In the pre-reading stage, the assessment was aimed at guiding and assessing purposive reading. In the while-reading stage, the assessment was intended for the students to do mental activities in comprehending the reading contents. In the post-reading stage, the assessment was intended to guide students to represent their understanding in various multimodal media and to assess the comprehension

gained during the reading process. Based on the results of the study, it is known that the digital an authentic assessment model is proven to have significantly contributed to the students' positive reading habits during their reading. The reading habits here refer to the students' habits of developing their knowledge based on the reading materials they read, comprising the habit of grasping ideas carefully, processing ideas accurately and cooperatively, and the habits of expressing ideas creatively and responsibly. The improvement is evident in all schools, meaning that the digital an authentic assessment model does not only work with skilled students but also with less skilled students. Considering this fact, an authentic assessment model is crucial to improving students' reading habits while reading. The digital an authentic assessment is also proven to have enhanced the students' understanding of what they read. This understanding is represented through various multimodal media. The use of the multimodal media is not only able to be used as a medium to represent understanding but also to develop the students' creativity. With regard to the scope of this study, the improvement is evident in all schools. Therefore, the digital an authentic assessment model developed in this study can be used in all schools in order to develop primary school students' reading competency.

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