

Conference Paper

Development of Portable E-comic-Based Indonesian Language Teaching Materials for 7th Grade Students

T. Nurhayatin, Marlia, and D. F. Fauziyyah

Lecturer at Indonesian Language and Literature Education Program, Faculty of Teacher Training and Education, Pasundan University, Jalan Tamansari No. 6-8, Bandung 40116, Indonesia

Abstract

The specific targets pursued by this research are e-comics teaching materials that can be learned anywhere and anytime. The researchers designed e-comics portable-based Indonesian teaching materials for 7th-grade students by considering the aspects of relevance, consistency, adequacy, and attractiveness. Material standards take into consideration the type of material, scope, breadth, depth, the order of presentation, and treatment students must master. Based on the results of the research conducted, the teaching materials meet the criteria of relevance, consistency, adequacy, and attractiveness. Similarly, the level of understanding is very high, based on the aspects of attractiveness and pleasure, and students said they were very interested and happy.

Keywords: 7th grade students, portable e-comics, teaching material

Corresponding Author:

T. Nurhayatin

titin_nurhayatin@unpas.ac.id

Received: 6 April 2018

Accepted: 3 May 2018

Published: 26 July 2018

Publishing services provided by
Knowledge E

© T. Nurhayatin et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ISLLE 2017 Conference Committee.

1. Introduction

Learning resources are the intermediaries used in teaching and learning activities between teachers and students. Many learning resources can be used by students. They can also use rapid advancement of information and communication technology as a source of learning. In line with that, the government introduced the School Literacy Movement to improve the reading culture among learners. Correspondingly, the rapid development of information and communication technology must be used to develop the reading culture. In reality, almost all students have gadgets. They read a lot of gadgets. Therefore, the presence of gadgets should be used to improve the reading culture, rather than being a barrier, and gadgets can be used as a source of learning. Thus, a strategy is needed to develop teaching materials that can be learned through gadgets.

OPEN ACCESS

The problem in this study is how the design, implementation, and impact of portable e-comics can be used to improve the understanding, interest, and pleasure of junior high school students in learning Indonesian language teaching material. This study aims to design portable e-comics as an alternative selection of Indonesian language teaching materials for 7th-grade junior high school students.

This research is very important because gadgets have begun to dominate the hearts of students, so they can be used as media companions and supporting textbooks. This is expected to help in developing a reading culture and improving students' understanding of teaching materials. Therefore, the applications contained in portable e-comics gadgets are expected to be an alternative to problem-solving in improving the reading culture and the quality of students' understanding of teaching material.

2. Methods

According to Harmer, "[t]eaching aids are valuable instructional tools that can help make learning more effective and interesting" [1]. Harmer says that a range of objects, pictures, and other things can be used as instructional media to present and manipulate language and to involve students in the activities [1].

Tomlinson also states that "[t]eachers should be aware that materials development is based on principled applications of theories of language acquisition and development, principles of teaching, teachers' current knowledge of how the target language is actually used, and the results of systematic observation and evaluation of materials in use" [2].

Shin states that "[y]oung learners like to have fun, have a lot of energy, and like to learn using their five senses [3]. Based on that characteristic, it can be concluded that learners need materials which consist of interesting and colorful pictures, songs, and stories...."

Briggs defines media as "physical means which are used to send messages to the students and stimulate them to learn" [4].

Heinich also states that "[m]edia can be used to present information that is needed to deliver the message to the students" [5].

Bertram et al. state that "[p]opular *electronic* media provide teachers with an excellent resource for improving language skills, such as listening and speaking" [6]

"The most common use of media in an instructional situation is for supplemental support of the instructor in the classroom to enhance learning" [7].

“The instructional use of media programs is designed intentionally to make the teaching-learning environment more interesting and effective” [8].

According to Rohani, “[c]omic media is a media that has a simple, clear, easy to understand, and more personal nature so that it is informative and educative [9]. Based on the definition of comics presented, it indicates that comics are an informative and educative media. Therefore, this study develops comics as a medium of learning.”

Many types of comics can be developed. According to Nurgiyantoro, based on their appearance, comics can be divided into educational comics, promotional comics, puppet comics, and martial arts comics [10]. The type of comic developed in this study is an online educational comic.

Developed online educational comics require software that serves as a link between users and hardware. The software can also be used as a translator, commanding that computer users run to be forwarded or processed by hardware.

The computer system divides the software into three parts: system software, programming software, and application software. The system software helps the hardware and computer system work. This includes operating systems, device drivers, diagnostic tools, servers, windowing systems, and utilities. Programming software provides tools to assist a programmer in writing computer programs and software using different programming languages in a way better suited to the programmer. These tools include text editors, compilers, interpreters, linkers, and debuggers. The application software sections include industrial automation, business software, educational software, medical software, databases, and computer games. None of these programs will work completely with just one program, but require additional software from the existing software to complete.

The research method used in the development of teaching materials based on portable e-comics is an R&D method through 4-D steps, i.e. define, design, develop, and disseminate. The first stage, define, examines the curriculum and sets the material in the 7th grade to be included in portable e-comics. The second stage is designed contents of portable e-comics adapted to the material at the stage of determination. In addition, the design of portable e-comics and portable e-comics application design (offline) to be installed on a laptop or smartphone, the third stage of development that is the stage of testing and validation. The fourth stage of implementation results of the development of portable e-comics teaching materials to schools and students of 7th grade widely.

3. Results

This research produces teaching materials based on portable e-comics. The researchers validated the instrument and product validation to four experts. Validators 1 and 3 validated the odd instruments and chapters, while validators 2 and 4 validated the even instruments and chapters. A limited trial was conducted on as many as 30 7th grade students.

Expert validation was carried out to see the relevance, consistency, adequacy, and attractiveness of portable e-comics teaching materials, and this trial was conducted to observe the understanding, interest, and pleasure of 7th-grade students in learning Indonesian language material through portable e-comics. Based on those obtained data as follows.

TABLE 1: Experts' validation of results on portable e-comic-based teaching materials.

No.	Aspects Tested/ Chapters Validated	Validator 1				Validator 2				Validator 3				Validator 4				%	%	Total (%)
		1	3	5	7	2	4	6	8	1	3	5	7	2	4	6	8			
1.	Relevance	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	100	-	100
2.	Consistency	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	100	-	100
3.	Adequacy	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	100	-	100
4.	Attractiveness	i	i	i	i	i	i	i	i	i	i	i	i	i	i	i	i	100	-	100

Based on expert validation data on portable e-comics teaching materials, it can be stated that portable e-comics-based teaching materials are seen to be valid in terms of relevance, consistency, adequacy, and attractiveness.

Based on the results of a students' comprehension test on teaching materials based on portable e-comics data were obtained as follows.

Based on the results of the student comprehension test on the material, from the three chapters given, the average of their overall understanding was within a value of 87. Based on the results of the questionnaire provided that explored the response of students to the ease of understanding the materials, 29 students (96.66%) stated that it was easy to understand the teaching materials in regard to meaning type, structure, and linguistic elements of a text presented in portable e-comics.

The aspect of interest is tested through a questionnaire regarding student response to teaching materials with portable e-comics. Things observed in regard to interest

TABLE 2: Comprehension of portable e-comic-based teaching materials.

No.	Aspects Tested	Average Value Text I	Average Value Text II	Average Value Text III	Total Score	Average
1.	Comprehension of the meaning type of text.	86	87	94	267	89
2.	Comprehension of text structure.	85	89	87	261	87
3.	Comprehension of linguistic elements.	82	86	87	255	85
Total Score		253	262	268	783	
Average		84.33	87.33	89.34		87

include display, design and drawing, type and font size, color composition, space, and layout. Student interest data on teaching materials with portable e-comics can be seen in the following table.

TABLE 3: Students' interest in portable e-comic-based teaching materials.

No.	Aspects Observed	Interested		Disinterested		Average Value in Percentage (%)	
		Score	%	Score	%	I	DI
1.	Display	30	100	-	-	100	-
2.	Design and Drawing	30	100	-	-	100	-
3.	Type and Font Size	30	100	-	-	100	-
4.	Color Composition	30	100	-	-	100	-
5.	Space and Layout	27	90	3	10	90	10
Total						490	10
Average						98	2

Based on data obtained from the students' response to the pleasure in using portable e-comics instructional materials, it can be stated that portable e-comics-based teaching materials provide an element of fun. This is evidenced by the fact that 98% of the students expressed pleasure, and only 2% of the students expressed displeasure, because they are considered to have no uniqueness value, and there was still one student who stated that they are difficult to use.

Teaching materials are a very important learning component. Therefore, teaching materials should be well prepared. The teaching materials delivered must be easily understood by the students and provide great benefit in terms of self-development

and science and technology. Indonesian language teaching materials for 7th-grade students based on portable e-comics are expected to be alternative teaching materials that provide ease and fun in learning and improve the reading culture among the students of the 7th grade.

Based on the results of the research conducted, it can be stated that the Indonesian language teaching materials based on portable e-comics for 7th-grade students have qualified relevance, consistency, and material adequacy. This is supported by expert validation results on portable e-comics-based Indonesian language teaching materials. Similarly, this is seen from the comprehension and pleasure of students using Indonesian language material, and its attractiveness to them, based on portable e-comics. Based on the testing data regarding students' comprehension of portable e-comics-based Indonesian language teaching material it was stated that students understand well. This is supported by the average value of 87. Similarly, according to the data regarding interest and fun, as many as 98% of students expressed interest and 98% of students expressed pleasure.

Based on the research data obtained, it is expected that Indonesian language teaching materials based on portable e-comics can be used as an alternative selection of teaching materials for 7th-grade students.

4. Conclusion

Nowadays, the development of science and technology is very rapid. Therefore, its presence should be utilized to encourage renewal efforts in the field of education, especially learning. The development of portable e-comics-based Indonesian language teaching materials for 7th-grade students is one form of technology contribution used in learning that is easy to understand, interesting, and fun. The results of the research show that the portable e-comics-based Indonesian language teaching materials for 7th-grade students have been qualified seen from relevance, consistency, and material adequacy in accordance with curriculum demands. Similarly, the responses of students as users show that the teaching material is easy to understand, interesting, and fun. Based on the results of this research, the researcher hopes that the Indonesian language learning materials based on portable e-comics for 7th-grade students can be used as an alternative source of student learning in the 7th grade. In addition to improving student learning outcomes, these teaching materials can be bought anywhere and can be learned anywhere and anytime. Thus, it is expected that these teaching

materials are useful and can make a significant contribution to the achievement of educational goals in Indonesia.

Acknowledgement

Authors would like to thank Indonesian Language and Literature Education Program, Faculty of Teacher Training and Education, Pasundan University for facilitated this research.

Conflict of Interest

Authors declare that there is no conflict of interest in this research.

References

- [1] Harmer J: *The Practice of Language Teaching*. Cambridge: Ashford Colour Press; 2007.
- [2] Tomlinson B: *Principles and Procedures of Materials Development*. In N. Harwood (Ed.), *Materials in ELT: Theory and Practice*. Cambridge: Cambridge University Press; 2010.
- [3] Shin JK: Ten Helpful Ideas for Teaching English to Young Learners. *English Teaching Forum*. 2006; 44(2): 2-13.
- [4] Briggs LJ: *Instructional Design: Principles and Applications*. New Jersey: Englewood Cliffs; 1977.
- [5] Heinich R, Molenda M, Russell JD: *Instructional Media and the New Technologies of Instruction 2nd Ed*. Canada: John Wiley & Sons, Inc.; 1982.
- [6] Bertram C, Ranby P, Adendorff M, Reed Y, Roberts N: *Using Media in Teaching*. South Africa: South African Institute for Distance Education; 2010.
- [7] Heinich R: *Instructional Media and Technologies for Learning*. New Jersey: Prentice-Hall, Inc; 1996.
- [8] Locatis CN, Atkinson FD: *Media and Technology for Education & Training*. Columbus, Ohio: Charles E. Merrill Publishing Company; 1990.
- [9] Rohani A: *Media Instruksional Edukatif*. Jakarta: Rineka Cipta; 1997.
- [10] Nurgiyantoro B: *Sastra Anak: Pengantar Pemahaman Dunia Anak*. Yogyakarta: Gadjah Mada University Press; 2015.