

LEARNING MEDIA FOR WRITING FANTASY STORY TEXT BASED ON SCIENTIFIC PLUS USING ADOBE FLASH

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Abstract

This study aimed to find out the validity of learning media based on the alpha test, find out the practicality of instructional media based on beta test, and determine the effectiveness of instructional media based on product trials. The method of development and research applied the Alessi and Trolip (2001) model consisting of the planning, design and development stages. The data were collected through expert reviews, interviews, and tests. The alpha test results showed that the validity of the instructional media was 92.50% with the very appropriate category. The beta test results showed that the practicality of the product was 85.49% with very good category. In brief, the products in the form of instructional media based on scientific plus using adobe flash can be applied in learning to write fantasy story text.

Keywords: *Instructional media, scientific plus, fantasy story text*

Introduction

Learning media is tools, simulation material or program used in teaching and learning activities. Learning media is used to attract students' interest so that it can foster learning motivation and clarify the meaning of teaching material, teaching methos become more varied and students can do more activities (Hamalik, 1997; Arsyad, 2014). The use of instructional media also helps teachers present and explain subject matter with varied activities and an atmosphere that is not boring. Therefore, learning media is important to use because it can help to overcome the barriers in learning and educators can use new learning styles to be applied in the classroom so that the learning process becomes effective and learning objectives can be maximally achieved (Daryanto 2019; Rusli, et.al, 2017).

Adobe flash is one of the applications that can be used to create instructional media. The application can be used to present the lesson started from the learning objectives, material, summary to evaluation by combining various forms of images, video, sound, and text. Instructional media made with the adobe flash application can present images, videos, audio and games that can attract students' attention without reducing their effectiveness in delivering the subject matter (Widada & Wulansari, 2019; Lutfi & Usamah, 2019). This application provides the final result in the form of learning media that can be used offline and has a small document size (Rahmaibu, et al., 2016; Sari, Riswanto, and Partono, 2019).

Nowadays the learning process applies curriculum 2013 by using scientific approach as the foundation of learning in the classroom. Indonesian language learning in schools nowadays also contains more text in it so that learning tends to lean more towards text-based learning. In line with Kemendikbud (cited in Suryani, et al. 2014) and Nurfidah, Mahsun, & Burhanuddin (2020), Indonesian language learning is structured on a text-based, both oral and written, by placing Indonesian as a means for expressing feelings and thoughts and it is expected that students will be able to produce text according to their goals and social functions in curriculum 2013. Learning Indonesian in seventh grade, one of which is fantasy story text, is a text that is compiled based on the author's imagination with the characteristic of magical things or miracles beyond human reason that appear in his writings. Fantasy story text are very in accordance with the general characteristics of junior high school students who are included in the category of teenagers who like fantasy even though only imaginations (Hairul, 2020). Moreover, scientific plus learning combines a scientific approach and a text-based approach.

Based on the results of needs analysis, the results of the student's needs analysis show that students need mastery of fantasy story text writing materials, presentation of topics of writing fantasy story text in learning media, presentation of examples of fantasy story text with several different themes, the use of scientific learning approaches and text-based approaches, as well as learning media including elements of images, videos, charts, text, and audio. The results of the teacher's needs analysis showed that teachers still have difficulty in presenting fantasy story text writing material so that students can write fantasy story text in accordance with the structure of fantasy story text, and teachers use learning only limited to giving material only not to the evaluation stage.

Therefore, the researcher tried to develop instructional media for writing fantasy story text scientific plus based using adobe flash so that the learning was not fixated on giving text or material only but instructional media was designed in a very complete to cover all important aspects of learning such as basic competence, competence achievement indicators, objectives, material, examples, general instructions, practice questions, evaluation, summary, author bio and references. The completeness of instructional media greatly supported learning activities in the classroom so that learning objectives can be easily achieved. Similarly, Arsyad (2019) and Sutisna, Novita, & Iskandar (2020) states that media becomes an inseparable part of teaching and learning process in order to achieve educational goals in general and learning objectives at school in particular.

The use of media in learning process is carried out with an appropriate learning approach to obtain maximum learning outcomes (Putri et al, 2020; Sari & Nurgiyantoro, 2020). The selection of scientific plus learning to support the learning process using instructional media becomes more meaningful and the stages can help students in the learning process using instructional media.

Some previous research related to fantasy story text has been conducted by Ramadhani & Yunus (2021) and Noprianti & Fujiastuti (2021). The research is included in research and development model on learning media for students. Research and development methods used in previous research such as ADDIE and R2D2. The results of previous research in the form of product descriptions and validation tests. The differences between current research and previous research are research and development methods, subjects of the research, learning media, and learning approach used.

Besides, this study aimed to describe the results of the validity test based on media experts, material experts, and linguists, describe the practicality test which included aspects of the feasibility of content, graphics, the attractiveness of the video, the effectiveness of navigation, sound and langugae, and describe the test results of the effectiveness of instructional media in writing fantasy story text.

Method

This study applied research and development (R&D) method. This study also produced a product in the form of instructional media to write fantasy story text that went through the stages of needs analysis to test the effectiveness of the product. This research was also conducted on seventh grade students in Public Junior High School 8 Palembang.

The design of this research used the Alessi and Trolip's model development model which was devoted to the development of instructional media (Admadja & Marpanaji, 2016; Husnul, Ermiana, & Rosyidah, 2021). The steps taken included the planning, design, and development stages (Alessi & Trolip, 2001). The subjects of this study conducted validity tests by giving questionnaires to media experts, material experts, and linguists, conducted practicality tests by giving questionnaires to 9 students, and conducted product trials by giving tests on 32 students.

The results of the questionnaire data obtained from the validity test and practicality test were used to determine the level of validity and practicality of instructional media in writing fantasy story text. These results were calculated and converted based on the conversion formula in four scales according to Sugiyono (2016: 141). Here is a data conversion table.

Table 1: Data Conversion

Score	Conversion	Interpretation
4	76 % – 100 %	Very Appropriate
3	51 % – 75 %	Appropriate
2	26 % – 50 %	Inappropriate
1	0 % – 25 %	Very Inappropriate

Furthermore, the results of the data obtained from product trials were used to see the level of effectiveness of instructional media products written in fantasy story text. The results were calculated and converted according to Hake's formula (in Nulhakim et al, 2020; Ikhbal & Musril, 2020). Here is a data conversion table.

Table 2: Score Conversion

N-Gain (g)	Criteria
$(g) \geq 0,7$	High
$0,3 \leq (g) < 0,7$	Medium
$(g) < 0,3$	Low

Based on these criteria, instructional media to write fantasy story text was successful if they met the average percentage of 0.3 to 0.7.

Results and Discussions

Results

Validity Test of Instructional Media to Write Fantasy Story Text

The validity test was obtained from the questionnaire assessment from media experts, material experts, and linguists. Each expert assessment questionnaire had different assessment indicators. The following is a table of the results of the three experts' assessments.

Table 3: Validity Assessment Results

Aspects	Total Score	Average	Category
Appearance of Instructional Media	66	91.67 %	Very Valid
Material Content	84	95.45 %	Very Valid
Linguistic Elements	47	90.38 %	Very Valid

Based on the table, the average validity test result is 92.50% with the very appropriate category. The results of the overall validity test showed that the instructional media for writing fantasy text based on scientific plus designed by using Adobe Flash application were valid in terms of media appearance, material content, and linguistic elements.

Practicality Test of Instructional Media to Write Fantasy Story Text

The practicality test was obtained from an assessment questionnaire given to nine students. The nine students were selected based on the category of students with abilities

above average, average, and below average. The following is an explanation of the results of the practicality assessment by students.

Table 4: Practicality Assessment Results

No	Aspect	Total Score	Average	Category
1	Content eligibility	217	86,1%	Very Good
2	Graphics	90	83,3%	Very Good
3	Video attractiveness	89	82,4%	Very Good
4	Navigation effectiveness	33	91,6 %	Very Good
5	Sound	60	83,3 %	Very Good
6	Language	62	86,1 %	Very Good
Total		551	85,4 %	Very Good

Based on the table, the average practicality test result is 85.4% with the very good category. The results of the practicality test as a whole showed that the instructional media of writing fantasy story text based on scientific plus which was designed by using adobe flash application was practical in terms of aspects, design, video, navigation, sound and language.

Effectiveness Test of Instructional Media to Write Fantasy Story Text

The effectiveness test was obtained from the results of the pre-test and the post-test that had been given to 32 students of seventh grade. the average result of the pre-test score was 61 and the average post-test score was 74. The average increased from the pre-test and the post-test was 13, so that the n-gain result was 0.4 in the moderate category. The following is a diagram of the results of students' pre and post tests.

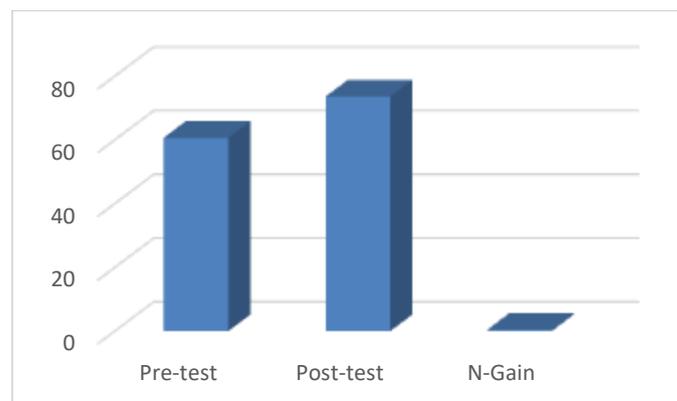


Figure 1: Diagram of the pre-test, post-test and N-gain

The results showed that there was an increase in the ability to write fantasy story text based on scientific plus using adobe flash. The increase was obtained from N – gain between pre-test and post-test. In line with Hake (cited in Ibrahim & Ishartiwi, 2017; Nulhakim et al, 2020; Ikhbal & Musril, 2020), the increase in learning outcomes can be determined by calculating the gain value (normalized gain or n-gain).

Discussions

Validity Test of Instructional Media to Write Fantasy Story Text

The validity test results consist of assessments of media experts, material experts, and linguists. First, the results of the media expert's assessment indicated that the instructional media was valid in terms of overall appearance of all the components contained in terms of images, text composition, video, and sound. Similarly, Heinich et al, quoted by Wicaksono et

al., (2018) and Putri & Dewi (2020) states that all elements contained in the media must be balanced and in accordance with the topic or idea. Second, the results of the material expert's assessment indicated that the instructional media was valid in terms of the content of the material in accordance with the basic competencies of learning. Teaching materials must be based on basic competencies in order to produce good teaching materials (Daryanto quoted by Yerimadesi, 2018). Moreover, Panjaitan et al., (2020) states that the media must be adapted to the learning objectives so that it can produce effective learning. Third, the results of the linguist's assessment showed that the instructional media was valid in terms of good language use. A quality teaching material must be communicative, meaning that the content of the teaching material was easy to digest, systematic, clear, and did not contain language errors (Yerimadesi, 2018; Lestari et al., 2018).

Practicality Test of Instructional Media to Write Fantasy Story Text

The practicality test results consist of aspects of content eligibility, graphics, video attractiveness, navigation effectiveness, sound, and language. First, student's assessment of the content eligibility aspect showed that the content of the instructional media was in accordance with the basic competencies contained in the Indonesian subject curriculum (Pralidasari, 2019; Panjaitan, 2020). Second, student's assessment of the graphic aspect indicated that the instructional media to write fantasy text based on scientific plus in the graphic aspect were good in the ease of understanding pictures, learning objectives, and text. Moreover, Henich et al, (cited in Wicaksono et al, 2018) and Prastowo (cited in Anditasari, 2018) states that the media should be easy to read and implementation was not confusing. Third, student's assessment of the video attractiveness aspect showed that the instructional media for writing fantasy text based on scientific plus in terms of the attractiveness of the video was good in the compatibility of the video with the subject matter as well as the attractiveness of animation. Besides, Munadi (cited in Wicaksono et al., 2018), Anshor (cited in Putri & Dewi 2020), and Munir (cited Anditasari, 2018) state that attractive learning media must have symbols and the ability to combine all media elements such as text, video, animation, images, graphics, and sound. Fourth, student's assessment of the navigation effectiveness aspect indicated that the instructional media for writing fantasy text based on scientific plus, the effective aspect of the navigation was good in the ease of use of the buttons contained in the media. Similarly, Santosa (cited in Anditasari 2018) states that provision of icon facilities with certain symbols in accordance with the wishes of the user will provide the freedom to choose any menu that appears on the screen. Fifth, student's assessment of the sound aspect showed that the instructional media to write fantasy story text based on scientific plus in terms of the sound aspect was good in the clarity and attractiveness of the audio or sound. In line with Munadi (cited in Wicaksono et al, 2018) and Anshor (cited in Putri & Dewi 2020), attractive learning media must have symbols and the ability to combine all media elements such as text, video, animation, images, graphics, and sound. Sixth, student's assessment of the language aspect indicated that learning media to write fantasy story text based on scientific plus in terms of sound was good in using the language that is easy to understand and unambiguous. In addition, Depdiknas (cited in Lestari et al., 2018; Yerimadesi, 2018) states that teaching materials must contain clear sentences and not contain too long sentences.

Effectiveness Test of Instructional Media to Write Fantasy Story Text

The use of learning media gave the positive effect to students learning outcomes. Learning media not only made the learning process more efficient but also helped students absorb the subject matter more deeply and increase the independence of students (Falahunudin 2014; Pralidasari et al., 2019; Panjaitan et al., 2020). Besides, the implementation

of instructional media could also overcome the limitations of the place and time during the pandemic because the offline school became the online school so the implementation of these media could be one of the tools that could be used in teaching and learning. According to Falahudin (2014), one of the benefits of instructional media was the learning media can be designed in such a way that students can carry out learning activities more freely, whenever and wherever, without depending on the existence of a student by designing audio-visual learning program, including learning programs using computers, enabling students to carry out learning activities independently, without being bound by time and place and making students aware of how many learning resources they can use in learning.

The use of a scientific approach plus a text-based approach also had a positive effect on student learning outcomes. A scientific approach combined with a text-based approach was used to create learning activities which were then applied in instructional media. The scientific plus approach encouraged students to search from various sources by carrying out scientific activities such as observation, observation, and analysis (Sona, 2020; Rukmana & Effendy, 2020). The scientific approach was not the only best approach in learning Indonesian, but it could be believed that a scientific approach could bring success because it is carried out systematically as scientists find out (Atmazaki, 2013). The text-based approach referred to the production of a specific text following a predefined text structure. Text-based approach to genre-based language learning (Indonesia) focuses on activities to understand, study, produce, and revise various text according to their conventions or structures (Atmazaki, 2018; Sari & Nurgiyantoro, 2020). Besides, according to Atmazaki (2013), the text-based approach was in line with the scientific approach in which to arrive at the text production stage, students need to be trained first to observe sample text, observe, analyze, and then try to create and communicate.

Previous study that was relevant to this study also showed the positive results for users of instructional media using adobe flash, a scientific approach and a genre-based approach. The research was conducted by Rahmaibu et al. (2016), Suci Laras Sari (2019), and Herson Ginting (2019). First, research conducted by Rahmaibu et al. (2016) entitled *Learning Media Development Using Adobe Flash to Improve Civics Learning* outcomes showed an increase in student learning outcomes with an effectiveness result of 0.5. Second, research conducted by Suci Laras Sari (2019) entitled *Development of Scientific-Based Indonesian Language Modules for fifth grade Students of Elementary School number 09 Airpura Pesisir Selatan* showed an increase in learning outcomes with 76% effectiveness. Third, research conducted by Herson Ginting (2019) entitled *Development of Genre-Based Exposition Text Writing Teaching Materials for Tenth Grade Students of SMK Brigjend Katamso Medan* showed an increase in learning outcomes with effectiveness results of 93.34%.

Furthermore, the learning media of writing scientifically based fantasy story text plus using adobe flash has several advantages and disadvantages. The advantage of learning media is that learning media can be used offline so that it can be read repeatedly by students and teachers, learning media already using audio, video, and images, and learning media can be used not only mobile phones but laptops or computers. The disadvantages of learning media is that the learning media in the text structure material section does not have the practice of analyzing the structure of the text, the topic of writing is not limited to the writing exercises section, and the learning media can not be used if the specifications of android phones are not versions of android nougat, oreo, pie and android 10.

Conclusion and Suggestions

The results and discussions of the study showed that the instructional media of writing fantasy text based on scientific plus using Adobe Flash which had been developed for junior high school students had a validity level with a very valid category, the level of practicality

with a very practical category, and the level of effectiveness with the medium category. In addition, the learning media has some drawbacks such as limited access to android use, still need a notebook to write exercises, the unavailability of text structure analysis exercises, and unrestricted story topics. Therefore, these disadvantages can be an important information for researchers in developing learning media based on adobe flash.

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