



Development of Network-Based Populer Writing Teaching Materials

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Abstract. This study was aimed to produce network-based teaching materials for writing learning materials that were feasible to use. The teaching material was based on the explanation of the planning and initial development of written teaching materials using the network according to students and lecturers' needs. This study was motivated by populer writing learning's unavailability, which made it easier for students in that the teaching material contained subject matter that can be more easily studied and observed by students. According to Reeves, this development used the research method Design-Based Research (DBR) model based on research procedures. Data collection in this study was carried out in closed groups of 30 students and 2 lecturers who teach Populer Writing Skills in the Indonesian Language and Literature Education Program, Universitas Negeri Jakarta. This research was a descriptive qualitative study with data for approximately 6 months. Data were collected through interviews, documentation and observation. The data were analyzed through data reduction, data presentation, and data conclusion by utilizing data analysis techniques. After a validation test by experts to ensure the test, the product design was declared worthy of being implemented in the Populer Writing Skills course. In general terms, the product was suitable for teaching material that can help students carry out network-based learning. The development reflection of this product, namely producing teaching materials in the form of a website by relying on the *Padlet* website for network-based populer writing learning which was designed consisted of three learning activities, namely introduction to populer writing skills, introduction to types of populer works, and writing populer works online.

Keywords: teaching materials · populer writing · network-based

1 Introduction

Advances in technology require the development of science that produces various kinds of changes and benefits to today's education world. The rapid development of technology is no longer a continuation of the third industrial revolution but is the beginning of the Step towards the Industrial Revolution 4.0. In the research of (Bai, Dallasega, Orzes, & Sarkis, 2020), they define the Industrial era 4.0 as cyber-physical systems, which means that technology is no longer a "tool" is embedded in people's lives. Some of the solutions in the world of education are to carry out and ensure that the policies given in the era

of the industrial revolution 4.0 can meet the requirements and human resources who are ready to use the role of Information and Communication Technology (ICT). (Riegel & Branker, 2018) This is based on the readiness of learning facilities and infrastructure provided in obtaining learning information that affects student learning outcomes.

Teaching material is one component that plays an essential role in the learning process and one part that can help students. Thus, teaching materials can change the role of educators from teachers and lecturers to become facilitators simultaneously. Besides, this can improve the learning process to be more effective and interactive (Irawati & Saifuddin, 2018). The application of popular writing skills courses is still less than optimal due to the pandemic situation, so learning is through distance learning. Several conditions require students to take popular writing lessons through the network. This condition affects students regarding their understanding of the material presented by the lecturer.

To achieve learning targets, it is necessary to develop teaching materials to attract students' interest in writing and understanding popular writing material. Students can contribute their thoughts based on information or insights as material for discourse or discourse on particular topics in writing popular texts for their readers. Students can develop popular text writing skills based on empirical facts (research) and observations (reflection).

This research aimed to develop a network-based teaching material model in the form of a website supported by the *Padlet* application site as this research novelty. The teaching material product developed by the researcher was packaged as a novelty for this research. In understanding and applying popular writing material, students experience difficulties understanding and applying it when blended learning conditions must be carried out. However, this does not rule out the possibility that students can use more interesting teaching materials and keep up with the current developments in the education industry revolution. This teaching material uses electronic mobile learning media to answer students who have difficulty digesting, differentiating, and applying popular writing material in analytical learning assigned by the lecturer. The learning component consists of Popular Writing Skills courses packaged in detail and easy to apply with examples of writing and training as evaluations presented. *Padlets* that are packaged with the use of attractive facilities and visualizations can support and increase student interest. The facilities provided to support the learning process are as follows: 1) a place for discussion; 2) feedback; 3) group work; and 4) well organized documentation.

The Popular Writing Skills course is a compulsory subject for students of the Indonesian Language and Literature Program, Universitas Negeri Jakarta, with a weight of 4 credits. This subject is held in the second semester. Researchers researched in the 2019/2020 school year. Thus, the study's data collection was approximately 6 months when the courses in the semester took place. There were some of the research that can be reviewed as this development research improved. Nevertheless, previous research on writing skills teaching materials developed in research (Maulina, Kusdiana, & Halimah, 2018; Nita Mildasari, Hodidjah, & Aan Kusdiana, 2019). In the research on the development of teaching materials for teaching writing based on local wisdom through language games in elementary schools, they stated that in the research of developing teaching materials for writing skills, the Reeves model used the Design-Based Research

(DBR) research method. The research on developing writing skills for teaching materials provides a solution by compiling teaching materials in the form of poetry based on local wisdom with language games. The final product in the development research is a collection of poetry collected through games based on Indonesian local wisdom. Other previous development research on writing skills was then carried out by (Mustafa & Efendi, 2016) in research on developing teaching materials for learning to write stories based on a process approach for junior high school students. In the development research, it is said that this research is development research using the development procedure according to Borg and Gall. The results showed that students needed teaching materials that contained writing stories based on a process approach for junior high school students. The planning and development of teaching materials were adjusted to the needs analysis results by writing story material and how to write stories. The quality of learning materials is developed by the content, language and images, and aspects of presentation and feasibility.

Regarding previous research that is relevant in this research, (Huda, Mulyono, Rosyida, & Wardono, 2019) stated that learning products using technology allow students to obtain teaching material anywhere and anytime by using various kinds of wireless electronic devices such as; smartphones, Personal Digital Assistants (PDAs), wireless laptops, personal computers (PCs), and tablets. Furthermore, online learning research using android was carried out by (Agustriandi, 2018), he shows that learning using learning media with android developed can help visualize students in solving practice and evaluation questions and has been tested to increase learning motivation learners. Besides, the benefits of teaching materials using online learning according to research (Handayani & Suharyanto, 2016) are: a) Fostering motivation to learn because learning can attract attention, b) Subject matter is straightforward and easy to learn, and c) Educators have alternatives various teaching methods. This is success both in class and independently.

2 Research Method

The research method used in this research is using the research method Design-Based Research (DBR). Design-based research is a research method that is based on design research. This research method is included in the development method based on Cobb & Bakker (Siregar, Wahyu, & Sopandi, 2020). The term design research is also included in developmental research because it relates to its use in developing materials and development materials. Herrington (Hong, 2019) defines design-based research as an approach to produce new theories, artefacts, and models that are simpler and more practical in their use and have a potential impact on natural learning. The process of developing this teaching material refers to the design of the development model proposed by Reeves in (Yanto, 2019).

3 Results and Discussion

3.1 Problem Identification and Analysis

The identification and problem analysis activities obtained through interviews with 2 lecturers teaching Popular Writing Skills courses and 3 semesters 2 students of the

2019/2020 academic year who were taking these courses at the Indonesian Language and Literature Education Program, Jakarta State University. Based on the results of this analysis, the researcher found that based on the Indonesian National Qualifications Framework (*Kerangka Kualifikasi Nasional Indonesia*) of program curriculum and Semester Learning Plan (SLP), which was updated in the course, students were required to be able to write with various texts and themes that can be developed following the objectives of popular writing itself so that they can write with full awareness of the reader. (Rahman, 2019). The lecturer who taught the Popular Writing Skills course explained that they had not used the blended learning method that could be developed under the education industry revolution 4.0 technology in the teaching-learning process. (Boud et al., 2016; Suwandi, 2018) Then, they argued that the learning model had taken place contextually with conventional methods that have been used so far.

Furthermore, the teaching material applied to popular writing learning through the Popular Writing Skills course has used conventional methods involving printed books and several sources from electronic books. Based on the results of the interview, researchers got the same opinion results conveyed by students and lecturers regarding their lack of optimism in developing popular writing teaching materials. Lecturers and students agreed that the teaching material that was considered effective in carrying out the learning process of popular writing is network-based. Given the very importance of teaching materials in the learning process, the development of innovative teaching materials is vital so that educators and students can better utilize and carry out popular writing learning even with a distance learning system. (Megawanti, Megawati, & Nurkhaifah, 2020).

3.2 Product Design Development

Based on the identification of the problems that have been carried out, the researcher compiles the stages of product design under popular writing skills based on Mapping of teaching materials and making teaching material designs according to Subject Learning Outcomes on Semester Learning Plan (SLP) in Semester Learning Design in the Popular Writing Skills course.

In the learning process of writing popular texts offline and online, lecturers can use *Padlet* media to support students' delivery of teaching material. *Padlet* media's functions in learning popular writing include the following: 1) a place for discussion; feedback; 3) group work; and 4) organized documentation. In previous research conducted by (Qulub & Fauziyah Renhoat, 2020), *Padlet* has achieved international education standards, The International Society for Technology in Education (ISTE). (Raman, Thannimalai, & Ismail, 2019) Therefore, the use of *Padlet* itself has been said to be appropriate for practising educators and students based on the empowerment of learning (Empowered Learner), digital society (digital citizen), knowledge construction (knowledge constructor), innovative design (innovative designer), computer-based thinking (computation thinker), creative communicator (creative communicator), and global collaboration (global collaborator). (Riegel & Branker, 2018) Thus, students can understand the teaching material provided practically and describe popular texts starting from a paragraph in popular text types aimed at the main ideas conveyed by clearly describing objects, places, or events to readers (audience design). (Driscoll, Paszek, Gorzelsky, Hayes, &

Jones, 2020) Thus, the readers of the text described by students can feel what is being expressed in the popular text.

3.3 Validity Test and Product Trial

Researchers tested and implemented network-based products with the *Padlet* to students after adjustments and improvements were made based on experts or validators' suggestions. This trial was conducted online on 30 students taking Popular Writing Skills courses in the Indonesian Language and Literature Education Program, Jakarta State University. The experiment was conducted by researchers twice. Then, the researcher found several descriptions of teaching materials that lecturers should use in the learning process by including examples of popular text writing that would be delivered to students. Furthermore, there are learning steps and training evaluation procedures appropriate for learning popular writing online using the role of ICT on the *Padlet* application website. Thus, the material packaged in the *Padlet* can increase the attractiveness and enthusiasm of students in writing. The questionnaires distributed to 30 students and 2 lecturers from the Popular Writing Skills course show that researchers have developed 95% of the teaching materials.

The percentage results from the questionnaire distributed to lecturers and students in the second trial that had been carried out stated that it was "very much needed". This was supported by the percentage results from 2 lecturers and 30 students who had filled out the questionnaire. The success of the product developed by the researcher after making several revisions can be seen with the number of percentages. It was found to be so high with a total average of 95% the effectiveness of the learning material of popular writing products based on a network through the website with the support of the website *Padlet*.

3.4 Product Reflection

Learning popular writing skills using online-based media *Padlet* can have succeeded in attracting interest and improving students' ability to write texts on popular types of texts. Thus, the learning process can use *Padlet* to greatly assist lecturers in delivering material and evaluation with distance learning conditions. *Padlet* can meet the popular writing learning process's needs with the facilities provided in the form of services for discussion, feedback, group work, and brainstorming on the material provided. Thus, network-based popular writing learning with *Padlet* media can help students write popular texts quickly, easily, and fun.

4 Conclusion

Based on the research that has been done, it can be concluded that this network-based popular writing learning teaching material was designed by the researcher. It was chosen because there was no online-based teaching material that supports popular writing learning skill. Therefore, the researcher developed the learning material based on a network through the website with the *Padlet* website's support. (Lestari, Mahbubah, &

Masykuri, 2019) The development of this teaching material was carried out by first examining the aspects used in the development of the teaching material so that this teaching material can be helpful for learning popular writing in the future. These aspects began with the accuracy of the content of the material, the provision of material coverage, the teaching material understanding, the logically material presentation understanding, the structured material presentation, appropriate language use, material illustrations support understanding, and the packaged material design.

The development of this teaching material contains an introduction to popular writing skills, an introduction to various types of the popular text, and writing popular works online, which are arranged based on researchers' problems during field observations and based on analysis of the curriculum used. This popular writing teaching material was designed and developed using the *Padlet* website-based application. (Anjani, Hairunnisa, & Khoirunisa, 2019) Furthermore, the teaching material was tested and validated by experts to determine the feasibility of the teaching material that has been developed. Based on the experts' assessment results, the teaching material received criticism and suggestions considered product revision materials. Then, the product can be declared eligible to be tested. Testing the network-based popular writing teaching material through the website with the *Padlet* website's support was carried out in two meetings. The trial was carried out on students when the Popular Writing Skills course took place. In the first trial, learning popular writing material went quite well, and students seemed enthusiastic in learning to use these products. Thus, the teaching material responded well to students. The researcher found the obstacles faced by the lecturers' lack of conditioning and communication who still needed training in using the website's products. In the second trial, learning went according to what was expected. Students look more enthusiastic and give good responses to the teaching material. Constraints that were found in the first trial were still various problems, namely when using the pallet operation. In the second trial, after the lecturers' socialization on the web site's operation, significant obstacles were no longer found. The next stage, reflections on the development of network-based popular writing learning teaching materials, can be produced as a product through the website with the *Padlet* website's support. The use of popular writing material was specifically for semester 2 students in the 2019/2020 academic year in the Indonesian Language and Literature Education Program, Jakarta State University. This popular writing teaching material contains learning steps through a learning structure consisted of, as follows: introduction to popular writing skills, introduction to various popular text genres, and writing popular works. This network-based teaching material is expected to help students learn popular writing skills that can still be developed and integrated.

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