



Learning Writing Skills in React-Based Colleges

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Abstract. Learning has experienced very rapid development at this time, especially supported by the development of technology and information. Advances in technology and information are used to support textbooks for textbook development. Developing learning materials that support advances in technology and information produces learning materials that are relevant and easy to learn for so-called Generation Z students. Therefore, there is a need for learning materials that can increase understanding of the material. One of them is educational materials developed through digital media. The training materials are built on a learning model based on a constructivist approach. The selected learning model is a REACT-based learning model. This type of research is developmental research. It uses quantitative and qualitative research methods. The method of data collection was through tests, questionnaires and interviews. The purpose of this study is to develop skills in writing educational materials. The learning process on writing skills through the application of REACT-based teaching materials using digital learning media based on the results of observations in the first cycle with an average of 79.00 belonging to the good category. In the second cycle, students using REACT-based teaching materials in learning writing skills got an average of 85.63, classified into the very good category. In the third cycle, students using REACT-based teaching materials in learning writing skills got an average of 88.25 with a very good category.

Keywords: teaching materials · writing skills · REACT-based learning model · digital learning

1 Introduction

The thing that is very important in shaping human nature and character to become a good person is education. Education is a process towards a better direction. Building children's character from an early age is very necessary in order to prepare a quality generation of the nation's children and is needed in national development. Through education, be it family, school, or the surrounding environment, humans can open their minds that whatever exists in this universe there is a lot of knowledge [1]. Education as a process of personal formation. As a process of personal formation, education is defined as a systematic and systemic activity directed at the formation of the personality of students [2, 23].

Education is advancing very rapidly, including the existence of digital learning (digital learning). With the development of information and communication technology, education can reach all levels of society. Education is not an antipathy or allergy to the progress of science and technology, but rather becomes the subject or pioneer of its development. Those interested in education, also known as technical literacy or digital literacy, need to understand technology as necessary because technology plays an important role in life today and in the future. As a result, the world of education is growing today and in the future with ease in education.

One of the educational tools used to support the learning process is learning materials. A learning material is a set or learning resource that includes learning materials, learning methods, skills, constraints and assessment methods, designed to be systematic and attractive to achieve the expected goal of achieving a competence or sub-competency at any complexity [3]. Teaching materials are made and developed according to the needs of students is an important factor to improve the quality of learning. Teaching materials used for learning are also supported by using appropriate learning modes in their preparation. One of them is a REACT based learning model. REACT is one of the appropriate learning models to be used as a learning model for the development of writing teaching materials. REACT refers to Vygotsky's learning theory which explains that students are able to form their knowledge and understanding better if they study together with their peers [4].

REACT learning model stands for relating (connecting), experiencing (experiencing), applying (applying), cooperating (grouping), and transferring (moving). The REACT learning model was first introduced by the Center of Occupational Research and Development (CORD, 2003) in America. CORD develops contextual learning to improve students' abilities and learning outcomes. REACT learning model is a learning model that can help teachers to instill concepts in students. Therefore, this model is a development of contextual-based curriculum and learning. This learning model departs from the understanding of contextual and constructivist learning which emphasizes the meaning of learning [5]. The learning theory that underlies REACT learning is constructivist learning theory. Constructivism is a philosophy of knowledge which emphasizes that knowledge is our own construction or formation [6]. The REACT learning model is designed to improve students' abilities and learning outcomes by connecting the concepts of learning materials with everyday life, and students are able to find their own concepts of the material being studied by conducting experiments. REACT learning model is a learning model that can help educators to instill concepts in students. Students are invited to find their own concepts they learn, work together, apply these concepts in everyday life and transfer them in new conditions.

One of the goals of learning Indonesian is to improve communication skills both orally and in writing. Writing skill in learning is an important thing. This is because writing skills function as a communication tool indirectly, not face to face with other people [7]. Writing is an activity of expressing complex ideas and requires broad insight and knowledge about the elements or problems to be written [8]. It is further explained that writing activities are defined as activities to transfer ideas or opinions into the form of elements of language symbols accurately, clearly, and briefly [9]. At the time of writing someone expresses the things that are on their mind in written form so that it can be

known by others. But in describing ideas, writers must pay attention to aspects that affect their writing, so as to be able to describe the author's ideas and opinions well. Therefore, it is necessary to know the rules of good writing so as to help writers make writings that are clear and easy to understand.

Heaton defines writing as an activity that involves learners in manipulating words into grammatically correct sentences and connecting these sentences into writing that can communicate the thoughts and imagination of readers on a particular topic [10]. Learning to write is the result of learning the previous language skills, namely: listening and reading, then followed by the ability to write and speak. The ability to write is almost the same as the ability to speak because they both issue someone's ideas or opinions. In speaking, the main thoughts and ideas are conveyed orally, while in writing the ideas or main ideas are conveyed in written form.

To be able to write well, one must master the rules of the language of a writing. This is in accordance with Byrne's opinion which states that writing is translating the author's mindset through language in the form of symbols that are arranged based on applicable provisions and then arranged to produce a certain set of interconnected sentences [11]. The application of knowledge about language rules is applied in the form of a good and correct written structure. This is confirmed by the opinion of Bell and Burnaby [12] which states that writers must know the structure of grammar, vocabulary, punctuation, spelling and letter formation as well as organizing and integrating information into cohesive and coherent paragraphs to become a cohesive and coherent text.

Educational aids are an integral part of the teaching and learning process to achieve educational goals in general and learning goals in schools in particular. One of them is a digital learning tool. Digital learning media is one of the most technologically advanced learning tools. Learning media in the form of machines (technology) is seen as the application of knowledge in the form of electronic media or other learning machines occupying a strategic position to facilitate and facilitate learning. The range of learning has also become wider (distance learning) and faster (access to the internet or learning through computer), which in the end the application of learning technology has a major contribution to learning.

Writing cannot be done without sufficient preparation and knowledge for the author to express his opinion in the form of sentences so that it becomes a cohesive and coherent text. This is because writing is basically a process. The process of expressing the author's ideas and opinions in written form so that other people or readers know. The process in this writing activity can be known by students through the teaching materials provided. The teaching materials provided must be appropriate and in accordance with the abilities of students. Therefore, a good teaching material that can be used for writing skills is to use REACT -based teaching materials supported by digital learning media. Digital learning media needs to be used in learning because in today's era known as the 4.0 revolution era that relies on technology as learning, for example.

2 Method

This study includes developmental studies. Developmental research is a process used to develop and validate educational products [13]. Development studies are based on

the industrial development model, the results of which are used to design products and procedures and are systematically tested, evaluated and improved in the field to meet specific criteria of efficiency, quality and standards.

The development research procedure includes: (1) Preliminary study, this stage is divided into two steps of activity, namely (a) literature study containing needs analysis that underlies the development of REACT-based learning media, reviewing relevant research, and reviewing and analyzing basic competencies and indicators of the principal discussion. (b) field observations containing the results of observations made on the learning process, (2) media planning containing an analysis of learning objectives based on indicators that have been adjusted to competency standards and basic competencies, preparation of REACT -based digital learning media for antenna systems based on the syllabus and the formulation of supporting software (3) preparation of product drafts includes identification of learning media concepts to be designed and designed into storyboards based on the syllabus, (4) product validation by media experts, material experts I and material II experts, (5) revisions, (6) group trials, (7) revisions, (8) field trials, and (9) final product revisions.

The trial design in this study was carried out in stages, the validity test was an initial trial to determine the feasibility of the product carried out by material experts and media experts. Then revised by paying attention to criticism and input from a team of experts until the product is feasible to be tested on students. The next stage is conducting field trials, namely small group trials and large group trials. Based on the test results obtained, the product is revised and ready for publication.

3 Result and Discussion

The result of this research is an innovation in the development of learning materials which was first carried out using 4 stages of validation in the form of data on the assessment of product development of teaching materials which was carried out in four stages: (1) The first stage was obtained from the results of an assessment of the product development of teaching materials carried out by one lecturer. Indonesian Language and Literature Education (PBSI) as an expert in Indonesian language science, (2) the second stage is obtained from the results of an assessment of the product development of teaching materials conducted by a PBSI lecturer as a media expert, (3) the third stage is obtained from the results of an assessment of the product the development of teaching materials carried out by one teacher of Indonesian language studies in class X SMA as a learning expert, and (4) the fourth stage was obtained from the results of the validation of the product development of teaching materials carried out in field trials. The evaluation was carried out involving character experts, education experts, graphic design experts, and users of teaching materials (teachers and students).

The value obtained by students is correlated with the rating scale developed by Nurgiyantoro [14] as follows (Table 1).

The development product submitted for field trials of Indonesian language learning is in the form of teaching materials. The development product was submitted to a field trial consisting of 40 correspondents. The results of the field trial assessment of the product development of teaching materials are 100% valid for data processing and analysis of

Table 1. Rating Scale Correlation

Scoring scale	Information
85–100	Very good
75–84	Well
60–74	Enough
40–59	Not enough
0–39	Very less

Table 2. Student Rating Scale Grouping

Scoring scale	Information	Frequency
85–100	Very good	22
75–84	Well	19
60–74	Enough	0
40–59	Not enough	0
0–39	Very less	0

the results of research that has been carried out on the application of REACT -based writing skills teaching materials using digital learning media in universities.

The learning process on writing skills through the application of REACT -based teaching materials using digital learning media based on the results of observations in the first cycle with an average of 79.00 belonging to the good category. In the second cycle, students using REACT -based teaching materials in learning writing skills got an average of 85.63, classified into the very good category. In the third cycle, students using REACT -based teaching materials in learning writing skills got an average of 88.25 with a very good category (Table 2).

In the three cycles the values are grouped according to Nurgiyantoro [15]. This has been classified into a rating scale, where 22 students who scored on a scale of 85–100 with very good qualifications, 19 students who scored 75–84 with good qualifications, and students who scored on a scale of 60–74, 40–59, and 0–39 add up to 0.

This shows that REACT -based teaching materials are feasible to be developed in the process of learning writing skills and as a support for achieving learning success and in order to achieve learning objectives.

4 Conclusion

This research is important to do to add to the treasures of knowledge in the field of writing where teaching materials need to be adjusted to the changing times, so they can be used for learning writing skills in universities. This suitability is viewed from the teaching

materials that will be made to focus on the development of the industrial revolution 4.0 which emphasizes the use of the internet and other digital media.

This research contributes to scientific development in the field of language education. Especially in the area of writing skills. This research is intended to develop teaching materials that can be used for learning writing skills in universities in accordance with the development of digital media supported by appropriate learning models.

The results of the field trial assessment of the product development of teaching materials are 100% valid for data processing and analysis of the results of research that has been carried out on the application of REACT -based writing skills teaching materials using digital learning media in universities. This is evident from the average score obtained by students from the first cycle, which is 79.00, the second cycle is 85.63, and the third cycle is 88.25. Where from cycle I to cycle III the value of students has increased.

References

1. Masang, Azis. 2021. Hakikat Pendidikan. *Jurnal Al Urwatul Wutsqa*. 1(1), 16-17.
2. Kementerian Pendidikan dan kebudayaan. 2017. Kerangka Literasi Digital Indonesia. Jakarta.
3. Sadjati, Ida Malati. 2012. Hakikat Bahan Ajar. (Online)([http://repository.ut.ac.id/4157/1/IDI K4009-M1.pdf](http://repository.ut.ac.id/4157/1/IDI%20K4009-M1.pdf) -diunduh 18 Juli 2022).
4. Yuliati, L., 2008. Model-Model Pembelajaran Fisika Teori dan Praktek. Bandung: Universitas Negeri Malang.
5. Crawford, M. L. (2011). Teaching Contextually: Research, Rationale, and Techniques For Improving Students Motivation and Achievement in Mathematics and Science. Texas: CCI Publishing.
6. Trimiyaniti. 2016. Bahan Ajar Berbasis React untuk Mengembangkan Karakter Diri Siswa dalam Pembelajaran IPA SMP Kelas VII. (Online) (<http://lib.unnes.ac.id/26662/1/4201412002.pdf> - diunduh 18 Juli 2022).
7. Nisa, S A Un., dkk. 2020. Penerapan Model Pembelajaran *React* (Relating, Experiencing, Applying, Cooperating, Transferring) untuk Meningkatkan Keterampilan Menulis Teks Non-fiksi Peserta Didik Kelas V C Sekolah Dasar Di Surakarta Tahun Pelajaran 2019/2020. (Online) (file:///C:/Users/User/Downloads/40147-123909-1-PB.pdf-diunduh 18 Juli 2022).
8. Daryanto. 2012. Media Pembelajaran: Perannya Sangat Penting dalam Mencapai Tujuan Pembelajaran. Yogyakarta: Gava Media.
9. Depdiknas. 2003. Media Pembelajaran. Depdiknas: Jakarta.
10. Gazali, Syukur. 2010. Pembelajaran Keterampilan Berbahasa. Bandung: Refika Aditama.
11. Magdalena, Ina., dkk. 2020. Analisis Bahan Ajar. *Jurnal Pendidikan dan Ilmu Sosial*. 2, (2), 312.
12. Aisyah, Siti., dkk. 2020. Bahan Ajar sebagai Bagian dalam Kajian Problematika Pembelajaran Bahasa Indonesia. *Jurnal Salaka*. 2, (1), 63.
13. Heaton, J. B., 1990. Writing English Language Test. London: Longman.
14. Nurgiyantoro, Burhan. 2010. Penilaian dalam Pelajaran dan Sastra. Yogyakarta: BPFE.
15. Daryanti., dkk. 2019. Peran Media Pembelajaran dalam Meningkatkan Kemampuan Siswa Menulis. *Jurnal Basicedu*. 3, (4), 2090.
16. Rojaki. 2012. Upaya Meningkatkan Kemampuan Menulis Puisi Melalui Model Pembelajaran Sinektik Siswa Kelas X 3 SMA Negeri 2 Sekayu. *Jurnal Ilmiah Guru*. 2, (17), 60.
17. Munir. 2017. Pembelajaran Digital. Bandung: Alfabeta.
18. Sardiman. (2012). Interaksi dan Motivasi Belajar Siswa. Jakarta: Raja Grafindo Persada.

19. Semi, M. Atar. 2009. *Menulis Efektif*. Padang: UNP Press.
20. Arsyad, Z. 2014. *Media Pembelajaran*. Jakarta: Rineka Cipta.
21. Borg, W.R. & Gall, M.D. Gall. 1983. *Educational Research: An Introduction*, Fifth Edition. New York: Longman.
22. Lestari, Uray Dessy. 2012. Penggunaan Media Gambar untuk Meningkatkan Keterampilan Siswa Menulis Petunjuk Bahasa Indonesia Kelas IV SDN 37 Kubu(Online) (<https://media.neliti.com/media/publications/216730-penggunaan-media-gambar-untuk-meningkatk.pdf> - diunduh 18 Juli 2022).
23. Ulya, Ridha Hasnul. Reinterpretation of Ethic Value in Minangkabau's Superstition. *TELL-US Journal*, 2018, 4.1: 47-57.

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