Penelitian pengembangan ini bertujuan untuk mengembangkan media e-learning dengan menggunakan aplikasi google class room untuk sekolah dasar kelas V. Metode yang digunakan dalam penelitian ini adalah penelitian pengembangan (Research and Development). Penelitian ini dilakukan di SD Darul Hikmah. Metode yang digunakan dalam pengumpulan data adalah kuesioner. Hasil penelitian dan pengembangan ini dilaksanakan dalam beberapa tahap yang diadaptasi dari model penelitian pengembangan versi ADDIE. Tahapannya adalah: Analisis, Perancangan, Pengembangan, dan Implementasi. Tahap analisis meliputi studi lapangan dan studi literatur. Tahap desain meliputi pembuatan e-learning. Tahap pengembangan meliputi pembuatan google class room. Tahap pelaksanaan dilaksanakan dalam dua siklus yaitu uji coba produk kelompok kecil yang melibatkan 4 siswa dan uji coba produk kelompok besar yang melibatkan 27 siswa. Hasil uji coba pada siswa memperoleh nilai rata-rata 4,6 dengan kategori sangat baik. Dengan demikian media e-learning dengan menggunakan aplikasi google class room layak digunakan sebagai media pembelajaran siswa kelas V SD.

Kata kunci: e-learning, google class room, media pembelajaran

Abstract

This development research aims to develop e-learning media using the google classroom application for grade V elementary schools. The method used is research development (Research and Development). This research was conducted at SD Darul Hikmah. The technique used in data collection is a questionnaire. This research and development results were carried out in several stages adapted from the ADDIE version of the development research model. The steps are Analysis, Design, Development, and Implementation. The analysis stage is field studies and literature studies. The design stage includes making e-learning. The development stage provides for the creation of a google classroom. The implementation stage is carried out in two cycles, namely small group product trials involving four students and large group product trials applying 27 students. The results of the tests on students got an average score of 4.6 with the perfect category. Thus the e-learning media using the google classroom application can be used as a learning medium for grade V SD.

Keywords: e-learning, google classroom, learning media
INTRODUCTION

The learning process has an essential role in improving the quality of education so that learning carried out by prioritizing benefits for learners. Today's learners are more directed to modernization activities with the help of advanced technology with the hope of helping students digest subject matter in an interactive, productive, effective, inspirational, constructive and fun way. The learning program is the most critical process because there is direct interaction between educators and students. Here also direct intervention so that it can be ascertained that educational outcomes are highly dependent on educators' behaviour and students' behaviour. Thus, it can be believed that change only occurs when there is a change in educator's and students' behaviour. Therefore, teachers and students' position has a strategic role in improving learning (Wahyuni dkk., 2020).

Darul Hikmah Elementary School (SD) is a school that has used e-learning as a learning medium using google classroom. Students are given an assignment by the teacher and send the report results to the google classroom application in the learning process. Students are also given additional material to understand more broadly about material that may not be conveyed directly. E-learning is an alternative media for media improvisation that does not always use print media. However, in practice, some teachers still have not used google classroom media in this lesson.

The purpose of this study was to determine whether the effect of implementing e-learning using the google classroom application in elementary schools (SD), to determine students' perceptions of the use of the Google Class Room as a learning medium, to assess teacher perceptions of the constraints of using google classroom as a medium learning.

METHOD

This study uses the research and development (R&D) method. R&D are methods used to produce certain products and test the effectiveness of these products (Syah, 2008). The development research method in research refers to the 4D research and development steps, namely Define, Design, Develop, Disseminate. The definition stage consists of four main steps, front-end analysis, concept analysis, task analysis and specifying instructional objectives. It consists of 3 degrees include selecting teaching materials, format selection (format selection), and initial design (initial design). The development stage (Develop) consists of 5 steps: validation, product revision, product testing, product revision, and teaching materials. Stages of Disseminate, at this stage, carried out by distributing instructional media products to the school studied in this study, namely SD Darul Hikmah Medan.

Techniques can be done using interviews, questionnaires, and documentation. In addition to compiling an e-learning module using the google classroom application, a research instrument used to assess the module developed is also collected. Data analysis techniques use a Likert scale to measure attitudes, opinions, and perceptions of a person or group of people.

RESULT AND DISCUSSION

This development research discussion describes the suitability of
the final product with development objectives, expert validation results consisting of material experts and media experts and trials, and the advantages and disadvantages of the resulting teaching materials' outcome.

This development aims to develop e-learning media using the google classroom application in class V. Researchers use the research and development procedure used is the Research and Development (R&D) development method. In this development, to produce the developed module product, the researcher used the 4D research and development procedure. The outcome of this research is a teaching material in the form of a module that contains experimental activities. The e-learning media module using the google classroom application was developed to achieve mastery of core competencies (Argatami, 2017).

The material developed in e-learning media using the google classroom application presented sequentially, namely the cover of the module, the front page of the module, the introduction, the table of contents, the introduction, the contents of the module, feedback and follow-up, the cover, the bibliography list, and attachments. From the results of media testing and material testing, the e-learning media module using the google classroom application carried out a product trial consisting of small group testing and field testing on fifth-grade students of SD Darul Hikmah Medan. The development of e-learning learning media using the google classroom application through 4 stages, namely 1. Analysis; 2. Planning; 3. Development; 4. Implementation.

The result of e-learning in the manufacturing process is carried out in stages and produces appropriate learning media; a series of material expert validations, media expert validations, small group trials, and large group trials were carried out. All of these series are intended to obtain data that are then carried out revisions or improvements to achieve appropriate and helpful learning media for its users. The results of the material expert validation show that the e-learning media using the google classroom application is good, with an average score of 3.8 in the aspects of learning and content. In the learning aspect, indicators of the relevance of the material to Basic Competencies, Systematics of material presentation, suitability of material, clarity of the material, appropriateness of question presentation, transparency of terms, clarity of use of discussion are considered suitable by material experts.

Meanwhile, adequacy indicators of providing training and adequacy of providing feedback were considered sufficient by material experts. In the content aspect, the image indicators support the material, and the suitability of animation is considered enough by material experts. Hands of the adequacy of material weight for achieving objectives, clarity of material presentation, the usefulness of giving examples, use of language, question formulation, and the level of difficulty of the questions were considered reasonable by material experts. While. The systematics of the presentation of the material and the truth of the material were considered very good by material experts. The media expert's validation results show that the e-learning media using the google classroom application is very good, with an average score of 4.4 in the appearance and programming aspects. In the display element, indicators of clarity of instructions for use, the accuracy of selection and colour composition, quality of image...
display, animation presentation, and text are considered suitable by media experts. After being declared feasible by material experts and media experts, the e-learning learning media using the google classroom application was tested on students. The number of assessment scores based on extensive group trial data involving 27 students with 15 indicators was 1,815 with a mean of 4.6. Referring to the table of conversion results guidelines, the criteria for e-learning learning media using the google classroom application according to student assessments are very good. Based on the results of the assessment of material experts, media experts and participants as a trial of e-learning media products using the google classroom application, it has the following advantages:

- E-learning media using the google classroom application can make it easier for students to learn (Rahmatia dkk., 2017). E-learning learning media using the google classroom application can make students enthusiastic in the learning process.
- E-learning learning media using the google classroom application with animated designs makes students interested in the learning process and gets bored. The development of e-learning learning media using the google classroom application can not entirely run well, as for the limitations in research on developing this learning media, among others: 1. E-learning media products using the google classroom application produced are still at a beginner level, only covers one Basic Competency. 2. Field trial of e-learning media using the google classroom application only at SD Darul Hikmah. 3. Developers only know the feasibility of e-learning learning media using the google classroom application without knowing its effectiveness in teaching and learning process.

**CONCLUSION**

Based on the results of the research and discussion that has been done, it is concluded that:

1. Development of e-learning learning media using the google classroom application. The development of learning media is carried out in 4 stages, namely a. analysis scene; b. planning stage; c. development stage; and D. implementation stage. The analysis stage carried out by analyzing the field observation data. The results are as follows: 1) The teacher does not use e-learning media using the google classroom application in the learning process 2) Students in the learning process tend to be bored, and students are passive when learning takes place; 3) The teacher only uses textbook learning resources as a learning medium.

2. Learning media can stimulate and arouse students' enthusiasm for learning and learning media that can be used individually and in groups. A learning media is needed that can foster student learning independence by creating interactive questions.

b. The planning stage is carried out after the analysis stage. The analysis will be helpful as a reference in planning the form of developing learning media according to student needs. The planning stage includes the formulation of learning objectives, learning indicators.

c. The development stage is carried out after the planning stage. The development stage of learning media products includes making learning media, validating material experts, and material experts
d. The implementation stage is carried out in two phases, namely 1) small group trials and 2) large group trials. 2. Assessment of e-learning learning media using the google classroom application based on the first stage material expert's assessment on the learning aspect obtains an average value of 3.8 with good category and content aspect obtained an average score 3.8 with good category. Furthermore, the expert assessment of the stage 2 material on the learning aspect obtained an average score of 3.7 in the excellent category. The content aspect obtained an average of 4 in the excellent category. E-learning learning media using the google classroom application based on the assessment of stage 1 media experts on the display aspect obtained an average score of 3.7 in the excellent category. The programming aspect obtained an average of 3.6 in the excellent category. Furthermore, the stage 2 media expert's assessment on the display aspect got an average of 4.3 with the perfect category, and the programming aspect got an average of 4.5 with the excellent category. 3. Assessment of e-learning learning media using the google classroom application based on student assessments obtained an average score of 4.6 in the outstanding category. 4. The feasibility of e-learning learning media using the google classroom application based on material experts gets an average score of 3.8 in both the learning and content aspects. The feasibility of e-learning learning media using the google classroom application based on media experts gets an average score of 4.4 with an outstanding category in the display aspect. Furthermore, the feasibility of e-learning learning media using the google classroom application based on student assessments gets an average score of 4.6 in the outstanding category.

Based on these conclusions, the learning media product using google classroom is feasible to be used as a learning medium for class V Medan students.

REFERENCES


