

DEVELOPMENT OF EDMODO-BASED E-LEARNING MEDIA OF GEOGRAPHY LESSON CLASS XI STATE SENIOR HIGH SCHOOL 1 OF SUWAWA

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ABSTRACT

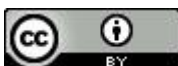
The Covid-19 pandemic brought challenges for education sector in the learning process. The problems faced in learning during the pandemic were the lack of use of ICT-based media by teachers. This study aims to produce Edmodo-based learning media of geography lesson on the topic of Indonesian cultural diversity. This development research applied ADDIE model that consist of five stages includes analysis, design, development, implementation, and the evaluation. The results of the media development were validated by three experts namely media design expert, material expert, and geography teacher. The validation result from media design expert is very valid with score of 87.27%. Validation result from material expert is very valid with scored 80%, and validation from geography teacher is very valid with score of 88%. Media trials were carried out on students to collect student responses on the clarity of the material, appearance of the media, ease of understanding, and the use of language. The average student response to learning media gets 91.82%. Based on the research result, it can be concluded that the Edmodo-based learning media is suitable for learning process both offline and online learning.

Keywords: *ADDIE; E-learning; Edmodo; Indonesian Cultural Diversity.*

INTRODUCTION

Currently, the use of the internet in education is very popular, especially in the development of internet-based learning media. Advances in technology have a significant impact on the transfer of information in education (Prihadi et al., 2022). Learning media plays a crucial role in the educational process, serving as a valuable tool. Incorporating learning

media into teaching and learning fosters motivation, encourages active learning, and exerts psychological effects on students (Asyhari & Silvia, 2016). The selection of learning media must consider the characteristics of the material, the characteristics of the students and the availability of resources. The selection of appropriate learning media will create a



smooth teaching and learning process and achieve learning objectives. According to Hakim et al., (2020) utilizing appropriate learning models aids students in comprehending the teacher's instruction effortlessly and contributes to the attainment of learning objectives.

The advances of information technology in education allow the provision of online learning facilities through electronic media and the internet. Variety of digital learning approaches have emerged as consequence of IT penetration in education (Yang, 2022). Information technology-based learning (e-learning) has been widely implemented at various levels of education, especially during the Covid 19 pandemic. E-learning enables the dissemination of educational materials to students through the internet or other computer network media. (Munadi, 2010). According to (Murjainah, 2019), internet-based learning allows students to obtain information and access various sites more easily as learning resources.

The Covid-19 pandemic that has hit the world and Indonesia since March 2020 is a challenge for all lines of life including the education sector. The implementation of work from home and learn from home requires learning activities from home.

The only way to adapt to the pandemic is the implementation of e-learning from elementary school to university level. Learning at home requires media that can be accessed anytime and anywhere by teachers and students.

Based on the observation findings at State Senior High School 1 of Suwawa, Bone Bolango Regency, Gorontalo Province, some teachers often use the lecture method during the learning process, some teachers rarely use ICT-based learning media. Teachers at the school tend to use power point media to deliver the material, but this media is still not very effective in increasing student response in learning. Geography learning material at the school level is very complex and dense, thus it requires appropriate learning methods and media so that geography study materials can be understood by students. This is aligned with (Utomo et al., 2015) that geography learning requires learning media to link between classroom learning and actual environmental conditions.

The implementation of online learning can utilize various e-learning platforms. One of the free e-learning platforms that can be utilized to develop learning media is Edmodo. Result research conducted by (Ekawati, 2018) concluded that implementation of blended learning using



Edmodo application can increase student learning achievement. The research results of (Vania et al., 2018), the use of Edmodo as web-based learning increases student motivation in the learning process. (Hizbullah et al., 2018) concluded that the use of Edmodo in project-based learning is more effective in increasing learning outcomes than conventional learning models. A study conducted by (Listiqowati et al., 2021) discovered that during the Covid 19 pandemic, the use of the Edmodo application was more effective in improving student learning outcomes in online learning. Research by (Mumaridah et al., 2018) concluded that blended learning using Edmodo was implemented well, students were very active in learning and teacher performance was very good. As stated by (Wahyuni et al., 2020), Various learning models can incorporate teaching materials that are based on Edmodo.

The advantages of Edmodo are also stated by (Wicaksana et al., 2020), Edmodo simplifies the process of connecting, collaborating, sharing content, accessing academic progress, conducting assessments, and delivering notifications for both students and teachers (Choirunnisya' & Sudira, 2021)

considered that Edmodo support teacher in upload learning materials, give questions and assignments for student. The research results of (Gabrina & Rahmawati, 2019) show that Edmodo is a useful tool for teachers to support learning and teaching process. (Alwan, 2017) stated that Edmodo can encourage students to enjoy participating in the learning process. According to (Prisuna, 2022), the use of Edmodo during the pandemic was the right solution for carrying out online learning from home. Edmodo supports teachers to create virtual class through various features.

Referring to the many advantages of the Edmodo Application for learning in previous studies, research on the development of Edmodo-based learning media is very important to do in schools that rarely use ICT-based learning media. This study aims to develop Edmodo-based E-Learning media for geography subjects at State Senior High School 1 of Suwawa. This media development research applied ADDIE model that consist of five stages includes analysis, design, development, implementation dan evaluation.



MATERIALS AND METHODS

This research was conducted at State Senior High School 1 of Suwawa, Bone Bolango Regency, Gorontalo Province. The research was carried out in 6 months from the preparation stage to the evaluation stage and report writing. The data used in this research to determine the effectiveness of the results include quantitative data and qualitative data. Quantitative data is information obtained from questionnaires or validation instruments. Qualitative data is information obtained from the results of the validator's assessment.

This development research used the ADDIE model that stands for analysis, design, development, implementation, and evaluations for developing learning media. According to (Molenda, 2015), the ADDIE Model and instructional systems development (ISD) are essentially synonymous, representing a systematic approach to instructional development. The analysis stage on ADDIE models includes activities of analysis of learning problems in schools, learning process and methods, and the availability of learning facilities. At the design stage, the researcher plans the framework and media systematics based on the competencies to be achieved and

the scope of learning materials. Media systematics includes learning materials and evaluation.

The development stage is media production according to the media design. In this stage the researcher compiled learning materials based on reference studies regarding the material of Indonesian cultural diversity. Pictures that match the learning material are added to the material so that the media is more attractive to students. Implementation stage is the implementation of learning media through validation by several experts and trial of the application of learning media to students. Validity test using a research instrument in the form of a questionnaire for validators and students. The validity test involved media experts, material/content experts and geography teacher. The validation sheet filled out by validator consisting of 5 score assessments (Sukardi, 2003), namely 5 (Very Good), 4 (Good), 3 (Good Enough), 2 (Not Good), and 1 (Very Bad). The calculation of the percentage of validation results uses the following formula (Arikunto, 2009).

$$P = \frac{\sum x}{\sum x_1} \times 100\%$$

Information:

P = Percentage



$\sum x$ = Total score of validator answers
(real value)

$\sum x_1$ = Total number of highest answer
scores (expected value)

The percentage of student responses illustrates whether Edmodo-based learning media can foster learning motivation for students in learning Indonesian cultural diversity material. The formula used to calculate the percentage of student responses is as follows:

$$\text{Student response percentage} = \frac{\text{number of student responses}}{\text{total student}} \times 100\%$$

Student responses are categorized as positive if 80% or more students respond in a positive category for each aspect.

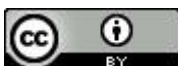
The evaluation phase is carried out by evaluating the results of the validation and test results on students. The research looks back at the quality of learning media based on the assessment criteria that have been prepared. The results of this evaluation become input in the revision and improvement of learning media.

RESULTS AND DISCUSSION

The media development research aims to produce Edmodo-based learning products with material on Indonesian Cultural Diversity which was carried out at State Senior High School 1 of Suwawa a class XI IPS 4. Edmodo-based learning media was developed using the ADDIE model, which has the following stages includes analysis stage, design stage, development stage, implementation stage, and evaluation stage.

C1. Analysis Stage

The first stage of this media development is analysis stage which includes analysis of the use of learning media in schools, analysis of learning processes and methods, and analysis of the availability of learning facilities. The analysis stage was carried out through observations at school, and interviews with teachers and students. Based on the results of the analysis stage, learning media is needed because the learning process used printed books and lecture method that makes students less enthusiastic in learning process. Assignments for students in the form of summarizing the subject matter make students feel bored and not concentrate in learning.



C2. Design Stage

The second stage in media development is the design stage, the stage of determining media specifications, the subject matter to be presented in the

media, and the design of learning evaluation tools. The story board as result of the design stage for the Edmodo based media is presented in **Figure 1**.

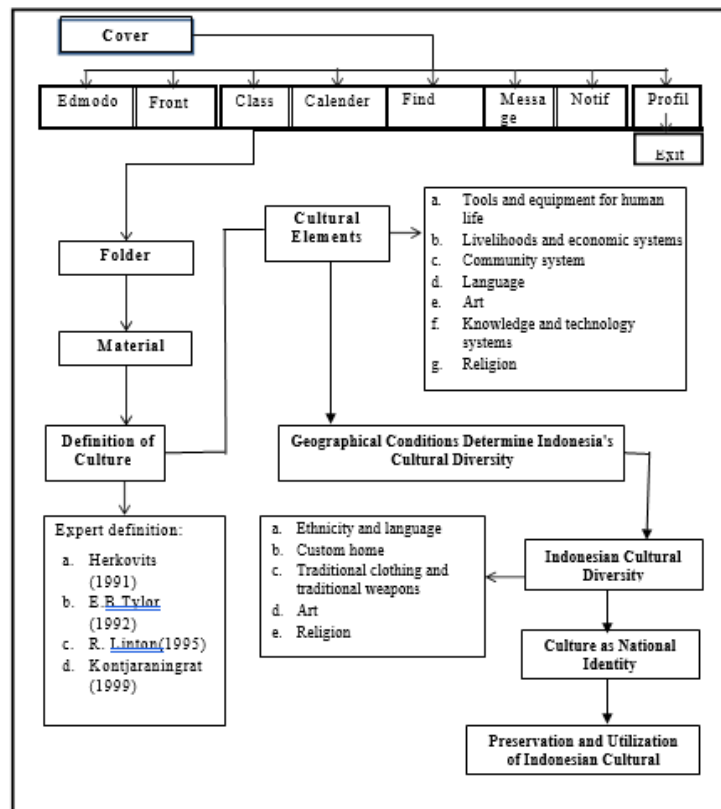


Figure 1. Story Board of Learning Media

C3. Development Stage

The development stage as a third stage in developing this Edmodo based learning media includes media production activities based on the specifications and storyboards determined in the previous stage. This development stage produces an online-based learning media can be accessed anytime and anywhere if it has an internet connection. This media is

equipped with several features of Polls, Gradebook, Files and Links, Quiz, Library, Assignments, Messages, Notifications, Calendars and so on. Learning materials are packaged in the form of videos, powerpoints, and document files. The appearance of Edmodo-Based e-learning learning media is shown in **Figure 2**.

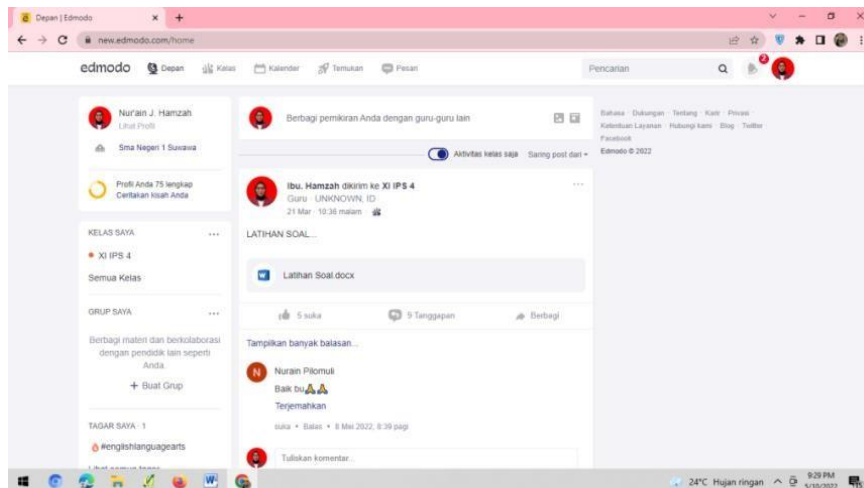


Figure 2. Display of the home page of Edmodo based learning media.

The learning media based on Edmodo that has been developed underwent validation from experts in media, material, and learning fields. The evaluation conducted by product design experts yielded a validation score of 87.27% (indicating high validity), while material experts assessed it as 80% valid. Furthermore, geography teachers, who are considered learning experts, evaluated it with a validation score of 88% (indicating high validity).

C4. Implementation Stage

The implementation stage as fourth stage was conducted by media feasibility trial in class XI Social 4 at State Senior High School 1 of Suwawa. This trial was implemented by introduce the media to student and distribute questionnaires to get student response regarding the developed Edmodo based learning media.

The student response includes clarity of the material, appearance of the media, ease of understanding, and the use of language.

C5. Evaluation Stage

For the evaluation stage, researcher analyse the student response on the developed Edmodo-based learning media. The student response got an average score of 91.82%. This shows that the Edmodo-based learning media is feasible and suitable to be applied to students in the learning process, especially online learning during the covid-19 pandemic. The evaluation stage also conducted by revising media based on input and suggestions from validators and student response in trial test.

The development of the learning media based on Edmodo aligns with the updated geography guidebook of the 2013

curriculum. The formulation of indicators incorporated in the media's development adheres to the core competencies and basic competencies outlined in the guidebook. The learning material within this media is thoughtfully designed and presented in engaging formats such as learning videos, PowerPoint presentations, textual content, and images. Consequently, the created learning media captures students' attention and stimulates their motivation to actively participate in the learning process.

CONCLUSIONS

The Edmodo-based learning media in the geography subject of Indonesian Cultural Diversity at State Senior High School 1 of Suwawa was developed through 5 stages of ADDIE namely analysis, design, development, implementation, and evaluation. The developed media was validated by media design expert, material expert, and geography teachers. Media trials were carried out on students to collect student responses on the clarity of the material, appearance of the media, ease of understanding, and the use of language. The validation score from media experts was 87.27%, score from material expert was 80% in the very valid

category, while validation score from geography teachers as learning experts got 88%. The average value of student responses to learning media is 91.82%. Based on the research result, it can be concluded that The Edmodo-based learning media in the geography subject of Indonesian Cultural Diversity is suitable for learning process both offline and online learning.

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