

E-module Model for Language Skills Courses Based on Digital Literacy for Implementing the Independent Campus Learning Program

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Published: May, 2024



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Abstract: This study aims to develop an e-module model for digital literacy-based language skills as an effort to implement the Merdeka Belajar-Independence Campus program. Using research and development methods, this study uses a development procedure with ten steps including potential and problem analysis, information gathering, product design, product validation, product revision, initial product trial, initial product revision, final product trial, final product revision, and the final product. The data collection technique used in this study was carried out by the method of literature and questionnaires. Meanwhile, the data analysis technique was carried out by descriptive statistical methods. The results of the assessment of the feasibility of the e-module are 85.45% from material experts and 90.01% from media experts. Student response to the e-module is 82.51%. The results of the pretest and posttest after using this development product increased by 25.87%. Thus, the use of this e-module is stated to be proven to improve the quality of learning language skills courses so that it is feasible to use.

Keywords: era of abundance; language skills; digital literacy; independent learning-independent campus

INTRODUCTION

The world is moving to become increasingly dynamic. The Industrial Revolution 4.0 then gave birth to digitalization which occurred in almost every aspect of human life. The relationship between humans and technology is increasingly impossible to deny. Fulfilling needs such as buying and selling activities, social relations, and teaching and learning activities are now migrating to digital mode. The digital era as a logical consequence of the dynamics of modern progress is no longer possible to avoid.

Piliang (2020) interprets this recently emerging digital trend phenomenon as "digital lifestyle", an event of massive real-time urbanization of humans from the physical-geographical environment to cyber-virtual space. This "pseudo" space, even though it is not real, is a new reality that is "really happening" and that we are facing as part of the inevitable identity of changing eras. This fast-paced change is marked by, for example: the presence and development of technology around computer screens, internet networks, and big data, to smart telephone devices.

This universal era then found a derivative era called abundance. Namely, the automation trend is characterized by the exchange of huge data in factory technology including cyber-physical systems, the internet of things, and cloud computing. Like a flood, the sources of information flow in the era of

abundance become increasingly unstoppable and abundant. This era as a time when everyone can freely access information, freely express opinions, and actively participate in public discussions regarding common affairs. Communication patterns formed between citizens are becoming increasingly common in the digital information-communication landscape.

Language skills are seen as one of the important aspects that determine the success of communication activities. Even about communicating in digital mode, language skills remain a factor that cannot be ignored. Activities in the digital realm, such as surfing for information, connecting on social media, and spreading ideas and thoughts, require adequate language skills so that they can be pointed out as several examples of the close relationship between language skills and digital literacy.

This view is in line with what Syofiani, Zaim, Ramadhan, & Agustina (2018) believe that someone who has an adequate level of language skills will find it easier to receive and disseminate information in both oral and written form. Language skills in the digital realm are needed not only so that digital society can avoid the threat of hoaxes. However, more than that, this is intended to create a climate for a literate digital society. Meanwhile, a literate civilization can be achieved—especially—with strong support from a literate society.

Irhandayaningsih (2020) defines digital literacy as the skill of reading and/or writing digital information sources in various formats. Meanwhile, Silvana & Cecep (2018) describe digital literacy as an effort to use digital-based media which includes the use of various media to convey ideas. So, practically speaking, skills in accessing information and disseminating it to the public in form or through digital devices can be said to be digital literacy.

Therefore, the role of language skills courses which examine aspects of language skills including listening skills, speaking skills, reading skills, and writing skills is increasingly finding relevance. This course is expected to be able to contribute to the basic skills that digital citizens must have in carrying out new interaction styles supported by advances in information and advanced technology (Malatuny, Labobar, & Labobar, 2020).

Optimistically, Purlilaiceu (2021) calls the era of abundance a time when excess gifts are abundant. It is called excess grace because the era of abundance can bring about convenience and goodness for many aspects of human life. One of the ways that this convenience and kindness occurs in the world of education is that it is characterized by a close relationship between education and technology. This also proves that the rapid progress of technology directly or indirectly forces humans to be able to adapt so as not to sink into being left behind.

If you want to take part in this era which many people call disruption, like it or not, the quality of human resources must be improved. Human resource skills that are competitive and able to answer the challenges of the times can be prepared, one the way through education (Syamsuar & Reflianto, 2018). Quality and time-sensitive education is the key word for facing this digital era. So, it is hoped that contributions from all parties will be able to jointly push the educational train in a better direction.

The world of education today is also required to be able to equip students with 21st-century skills. Namely, the skills to think critically and be able to solve problems; creative and innovative; as well as communication and collaboration skills. Apart from that, skills in searching, managing, and conveying information are also skilled in using technology and information. Komara (2018) explained that the abilities that must be possessed in the 21st century include leadership, digital literacy, communication, emotional intelligence, entrepreneurship, global citizenship, problem-solving, and team-working.

Niswariyana & Muhdar (2021) Language activities are active activities carried out by humans involving two or more people in the process. Through the door of language, humans will be able to represent the ideas and creativity they have. Apart from that, language as part of social institutions will have an impact on other aspects of human life, for example, education. In the realm of education, the existence of language plays an important role. Educational activities are carried out through language as the medium of instruction.

Language skills are one of the subjects taught in the elementary school teacher education study program in semester 7. This course aims to equip students with four language skills, namely listening, speaking, reading, and writing—or what is commonly referred to as linguistics. Language as a skill emphasizes the integration of aspects of language skills with each other without considering one as more important and the other less important.

In the era of Industrial Revolution 4.0, language skills education must be able to answer the challenges of the times. The practice of language skills will be faced with the reality that the world is now increasingly changing towards cyber-digital. Adjustments to remain relevant must be made despite challenges and obstacles. The increasingly abundant learning resources—especially those in digital mode (whether in the form of text, video, or other objects) must be utilized as fully as possible to create learning that is in line with the demands of the times.

The increasingly rapid development of information technology is no longer possible to avoid because it has become an important part of everyday life. There is no exception for education and learning. As one of the core parts of education, educational institutions and their learning processes must be able to adapt to be able to balance the learning system with technology which is increasingly developing day by day. Learning innovation must be carried out, for example by relating learning materials to the needs and challenges of an increasingly complex era.

Merdeka Belajar-Kampus Merdeka, which was launched in early 2020, is the government's most ambitious effort to read the challenges of the times to realize educational innovation that is always relevant (Siregar, Sahirah, & Harahap, 2020). To prepare the Indonesian generation to face rapid social, cultural, and industrial changes and technological advances, the Directorate General of Higher Education, Ministry of Education and Culture of the Republic of Indonesia (2020) stated that to adapt to the needs of the times, student competencies must be prepared.

This relationship is not only related to the industrial world, which is increasingly diverse and complex in shape, but also to future challenges whose changes are occurring very quickly and are almost unpredictable (Directorate General of Higher Education, Ministry of Education and Culture, 2020). Educational institutions are required to be able to design and organize innovative learning activities to achieve learning outcomes that cover several basic things, including optimal attitudes, knowledge, and skills that are always relevant.

METHOD

This research uses research and development methods, or what is often referred to as R&D (research and development). Sugiyono (2013) explains that research and development methods are research methods adopted by researchers to produce a product as a result. Meanwhile, this development research was carried out in 10 stages, including potential and problem analysis, information gathering, product design, product validation, product revision, initial product trial, initial product revision, final product trial, final product revision, and final product. To produce a tested product, product effectiveness is an important part to consider

in this research. Meanwhile, this research was carried out to develop a product that can be used for learning activities in language skills courses. The development that will be implemented, in this case, is to integrate language skills and digital literacy materials. Thus, the resulting product is an e-module for language skills courses based on digital literacy.

The instrument used in this research was a questionnaire used to obtain data regarding the feasibility of e-modules for language skills courses based on digital literacy. Questionnaires were given to experts/experts and respondents in this research. The questionnaire was prepared based on a Likert scale in checklist form. According to Sugiyono (2013), a questionnaire functions as a tool to measure attitudes, opinions, or perceptions of a person or group regarding certain social phenomena in a research activity.

Meanwhile, data collection techniques in this research were carried out using literature and questionnaire methods. The library method is used to conduct a preliminary study regarding the research topic that will be carried out based on library sources such as books, journals, and other sources. There is a questionnaire containing several questions regarding the suitability of the e-module which was prepared to identify its shortcomings and weaknesses and then make improvements based on suggestions or input from there. Questionnaires were given to experts/experts and respondents.

Data sourced from research subjects and objects can be in the form of data quantitative and qualitative. Quantitative data is obtained from assessment scores given by experts/experts. Meanwhile, qualitative data was obtained from comments and suggestions. Referring to Nurgiyantoro (2013), data analysis techniques can be achieved using descriptive statistical methods, namely statistical techniques that provide information only about existing data and are not intended to test hypotheses. This technique is used to process data from validation test results.

Meanwhile, the steps for analyzing data on the quality of e-modules for digital literacy-based language skills courses are taken based on the following approach.

1. Add up the scores for each assessment aspect item from all assessment subjects.
2. Calculate the average score with the formula:

$$V = \frac{\text{Total validation score}}{\text{Maximum total score}} \times 100\%$$

3. Convert the average score into a value in the form of categories referring to Yulianti's (2013) 5-point scale conversion guidelines as follows.

Table 1. Score conversion guidelines

Mark	Score Range	Percentage	Category	Criteria
A	$X > 4,2$	81%-100%	Very Good	Very Valid
B	$3,4 < X \leq 4,2$	61%-80%	Good	Valid
C	$2,6 < X \leq 3,4$	41%-60%	Pretty Good	Quite Valid
D	$1,8 < X \leq 2,6$	21%-40%	Not Good	Less Valid
E	$X < 1,8$	0%-20%	Very Not Good	Very Invalid

In this research, the feasibility of e-modules for digital literacy-based language skills courses will be determined with a minimum grade of “C” in the “fairly good” category. So, if the results of the assessment by experts/experts and respondents have an average value of “C”, then this product is declared “fit for use”.

RESULTS AND DISCUSSION

The e-module design was created using the Anyflip application which is available online after previously preparing the module design in PDF format. This design was created by referring to the semester learning plan (RPS) for the 6th-semester language skills course of the Primary School Teacher Education study program which includes 4 language skills, namely listening, speaking, reading, and writing. The preparation of this e-module is tailored to needs according to the results of initial information collection until the final product is created. By including digital literacy content as a basis, this e-module is expected to be able to answer the challenges of learning in the digital age. Meanwhile, validation is carried out on materials and media by those who are experts in their fields. Validators provide suggestions and input on the e-module until it is suitable for use.

Material Validation

At this stage, the e-module design is requested to be validated by 2 material experts in the first stage using a questionnaire. Meanwhile, suggestions given include questions that need to be added, and novelty in making examples. The results of validation by experts in this first stage can be seen in the following table.

Table 2. Results of the first stage of material validation

Indicator	Score
Suitability of material to learning objectives	13
Up-to-date material	12
Linguistic aspect	12
Accuracy of material and content	11
Total	48

$$V = \frac{48}{80} \times 100\%$$

V = 60% (Fairly Valid)

Based on the results of the first stage of validation, improvements were then made and then the second stage of validation was carried out with the following results.

Table 3. Results of the second stage of material validation

Indicator	Score
Suitability of material to learning objectives	15
Up-to-date material	16
Linguistic aspect	15
Accuracy of material and content	14
Total	60

$$V = \frac{60}{60} \times 100\%$$

80

V = 75% (Valid)

Media Validation

At this stage, the e-module design was requested to be validated by 2 media experts in the first stage using a questionnaire. Meanwhile, suggestions given include: the design needs to be enriched, the proportion of color combinations needs to be increased, some fonts are too small, and illustrations are not appropriate. The results of validation by experts in this first stage can be seen in the following table.

Table 4. Results of the first stage of media validation

Indicator	Score
Cover design	11
Content design	10
Serving components	11
Ease of operation	10
Total	42

$$V = \frac{42}{80} \times 100\%$$

V = 52,4% (Fairly Valid)

Based on the results of the first stage of validation, improvements were then made and then the second stage of validation was carried out with the following results.

Table 5. Hasil validasi media tahap kedua

Indicator	Score
Cover design	16
Content design	16
Serving components	15
Ease of operation	16
Total	63

$$V = \frac{63}{80} \times 100\%$$

V = 78,75% (Valid)

Next, trials were carried out on Elementary School Teacher Education students and then questionnaires were distributed after the activity. As a result, there were 10 positive statements, while there were 5 negative statements. Meanwhile, the average of the response assessments is explained as follows.

Table 6. Results of student response questionnaires

Indicator	Score
Cover design	17
Content design	17
Ease of operation	16
Visualization	18

Total	68
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$$V = \frac{68}{80} \times 100\%$$

V = 85% (Sangat Valid)

Assessment of students' language skills using tests is carried out with pretest and posttest. There are 10 questions presented with a maximum score of 100. Based on these activities, the average assessment results are as follows.

Table 7. Average test scores

Pretest	Posttest	Enhancement	%
72	88	16	22,5

CONCLUSION

Based on the results of research on the development of e-modules for language skills courses based on digital literacy as in the description above, it can be concluded that the development of this e-module is feasible and can be used for learning activities in language skills courses. Based on the research activity plan, e-module development activities were carried out in 10 stages. First, analyze the potential and problems by conducting a preliminary study to determine the need for developing language skills course modules. Second, collecting information by looking for appropriate literature sources. Third, product design by preparing an initial e-module design. Fourth, validate the product with 2 material and media experts each. Fifth, revise the product based on expert input. Sixth, initial product trials. Seventh, revise the initial product according to the evaluation results of the initial product trial. Eighth, test the final product. Ninth, revise the final product based on the evaluation of the final product trial. And tenth, the final product is an e-module for language skills courses based on digital literacy.

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