Practicality of Using E-Learning Learning Media in Entrepreneurship Courses

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ABSTRACT

This development research aims to develop a learning media in the form of E-Learning in entrepreneurship courses. This e-Learning is designed to improve student learning outcomes so that students can fully understand the material provided in the entrepreneurship course. This research uses the IDI (Instructional Development Institute) development method, the IDI development procedures are: define, develop, and evaluate. The type of data is primary data where data is provided by media experts, lecturers and students. The data analysis technique used is descriptive data analysis technique, namely by describing the validity and practicality of using E-Learning. The results obtained from this research and development are as follows; (1) The validity of E-Learning is declared very valid in the content and interest aspects with a total validity value of 84.54%, while in the media and language aspects it is declared valid with a total value of 85.55% (2) The practicality of E-Learning is based on lecturer responses after going through validation declared practical with a total score of 81.25%, while the practicality of E-learning based on student responses after going through validation was declared very practical with a total score of 82.75%. Based on the findings of this research, it was concluded that E-Learning is valid and practical to be used as a learning medium in entrepreneurship courses and recommended for other courses.

Keywords: *E-Learning, Entrepreneurship, Learning Outcomes*

INTRODUCTION

Achievement of student learning outcomes at school is determined by several factors, namely internal factors such as: motivation, interests and talents of students, and external factors such as: curriculum, teaching staff, learning methods, costs, facilities

and infrastructure, and the environment (Abuhmaid, 2020). If these factors are maximized, it will expedite the learning process and support optimal learning outcomes. Learning outcomes are generally used as a measure of learning success. Learning outcomes can be measured using a series of tests or evaluations. Learning outcomes are an indicator of the quality of educational programs obtained through the learning process (Adri & Ganefri, 2020). Learning is a necessary part of progress and the advancement of a state (Hafeez et al., 2022). The goal of the development of the national education system today is to ensure its global competitiveness (Vachkova et al., 2022).

The world of education is currently starting to be influenced by developments in information and communication technology. In this way, the use of information and communication technology in the world of education gives rise to new ideas in learning, resulting in a paradigm shift from previously being more passive which only relied on what was given by the teaching staff or still being conventional to being more active and centered on the participants (Alharbi & Khalil, 2022). The world of education is currently starting to be influenced by developments in information and communication technology. In this way, the use of information and communication technology in the world of education gives rise to new ideas in learning, resulting in a paradigm shift from previously being more passive which only relied on what was given by the teaching staff or still being conventional to being more active and centered on the participants. educate. Learners have changed from passive recipients of knowledge to positive seekers of knowledge, thereby realizing fundamental educational reform (Wang, 2022). Additionally, the current COVID-19 pandemic has left educational institutions with no choice but to adopt virtual learning media to promote safety and comply with social distancing protocols. (Tweissi et al., 2022).

In Padang City, Metamedia University is one of the private universities that is very popular with the public. This is because of the high quality that Metamedia University has compared to other universities in Padang City. Meta University pays close attention to all matters, such as: discipline of students and lecturers, facilities and infrastructure, and achievement of the syllabus in all courses. The higher education sector has undergone transformation in recent decades in response to profound change, including wide-ranging technological innovations, design initiatives, and modes of delivery (Creely & Lyons, 2022).

Of the many courses at Metamedia University, Entrepreneurship is a course that must be mastered by students, because the entrepreneurship course teaches how to become an entrepreneur who has an idea or business idea to become a business field and By understanding the situation and conditions that occur around you, you can create successful entrepreneurs and create jobs for others others. This course is also an implementation of various theories taught in entrepreneurship so that students are expected to can become a new entrepreneur who has ideas and implementation of new business fields that can advance the personal economy, companies, religions, and countries. Due to the important role of entrepreneurial learning, the learning outcomes

of entrepreneurship courses at Metamedia University need to receive full attention from all parties involved. Judging from the ongoing learning process at Metamedia University, especially in entrepreneurship courses, it is still dominated by the teacher center system or is still centered on the knowledge conveyed by teachers. This results in students not being able to explore their potential and the learning process becomes boring.

This method made the students unable to explore their potential, and the learning process became boring. Integrating the vision of the students and the teaching team allows for customization of experiences that support the students' learning processes (Cardenas et al., 2022). Table 1. Total of Student Metamedia University Semester Ganjil 2022/2023.

Table 1. Total of Student Metamedia University 2022/2023

No	Study Program	Number of students
1	Bisnis Digital	16
2	Informatika	34
3	Information System	590
	Total	640

Source: Archive of Academic Office.

Based on presented in Table 1, it is necessary to innovate and utilize information and communication technology in the learning process supaya semua mahasiswa yang belajar pada semester ganjil 2022/2023 bisa lulus. Technology plays an important role in everyday life, especially in learning (Ganokratanaa & Ketcham, 2022). One form of technology implementation that can be used in education is *e-learning*. The use of e-learning is expected to improve the quality of learning and push student creativity and active class participation. Besides that, with the support of e-learning, students can have an earlier opportunity to learn materials. Lecturers can also assist students in managing learning better and being involved in E-Learning (Gunasekara et al., 2022).

The program for developing e-learning is a Learning Management System (LMS) Modlle. The model platform is chosen because it provides many learning resources and is flexible for use as a learning media (Xie, 2022). The management of the e-learning process, which was developed based on LMS, can be a learning media that includes various activities for lecturers and students, such as upload and download material, quiz, and exercises. It is expected to fulfill the needs of the learning process at Metamedia University.

Along with the development of Information Technology (IT), IT can be used to bring about changes in learning traditions or culture. Utilization of IT in learning can be in the form of an independent learning system or combined with a direct learning process (face-to-face in class). Computer-based learning uses a computer as a tool, and teaching materials are presented via a computer, so teaching and learning activities are more interesting and challenging for students. Interactive learning designs will be able to increase student motivation. Digital tools or resources are software, platforms, and

applications that allow users to experience interaction (with software and other users) and develop knowledge and skills (Perdomo et al., 2022). In Computer Base Instruction (CBI), learners interact directly with computer-based interactive learning media and teachers design and create learning media. There are four forms of computer-assisted teaching software, namely: (1) exercise and practicum, (2) tutorials, (3) simulations, and (4) learning with computer-managed instruction. Advances in computer science technology in the areas of multimedia, web-based learning, digital technology and others are exciting to explore as they benefit academics, office employees and people working at home. (Alharbi & Khalil, 2022).

Based on the description above, it can be concluded that learning with a computer can be done face-to-face with lecturers or study independently. The use of computer media in learning is interactive; namely, there is an interaction between students and computers so that in the learning process, students do not only see and listen but also carry out activities. Interactive learning with computers results in feedback between students and the media, and the media immediately respond to the student's answers in the form of right or wrong. The availability of online instruction is a clear rationale for good technology management (Mendoza Diaz et al., 2020). Through the interaction of students and the media, students have experience in learning, and they can evaluate the extent of their understanding of the material presented. Through experience (interaction with the media) and evaluation of student progress, learning outcomes can be improved.

The paradigm of traditional learning models such as direct learning, the learning and teaching process occurs in the room with the presence of lecturers and students with pre-set schedule management. The teaching and learning process can only happen at a predetermined time and place. E-learning is an asynchronous learning media where learners interact with educators and other learners accessed using technology and the internet (Pham et al., 2022). E-learning uses digital technology tools and information systems to apply learning experiences, and enhance interaction in the asynchronous teaching and learning process. (Reem Baragash, Hanan Aldowah, 2022). E-learning is a highly varied area of research with an evolving scope and scale (Peters et al., 2022). E-learning has had a significant impact on higher education, such as in the implementation of asynchronous learning (Ningsih et al., 2022).

The lecturer's role is dominant and responsible for the effectiveness of the teaching and learning process, and the lecturer is also the dominant source of learning. In the current paradigm, with the SCL (Student Centered Learning) approach, the dominance of lecturers is reduced, and most of them only act as facilitators and not as the only source of learning. As a facilitator, the lecturer should be able to facilitate students so that they can learn anytime, anywhere, and whenever they need it. With the development of digital technology, universities must provide the latest learning facilities such as internet networks, hardware and software. The concept of ICT-based learning like this is better known as E-learning.

E-learning is an asynchronous learning media that provides storage facilities for teaching materials that can be accessed by learners using the internet and intranet. E-learning is an asynchronous learning media that uses all electronic applications to support learning activities. The term E-Learning has a comprehensive meaning, so many researchers define E-learning from various perspectives. Not only providing teaching materials, the concept of E-learning is also characterized by a system that regulates and monitors the interaction between lecturers and students, both directly and asynchronously. In E-learning, this system is known as the Learning/Course Management System (LMS/CMS.) Popular commercial LMS software includes WebCT, Blackboard, TopClass, and eCollege. Meanwhile, the well-known open-source ones include Dokeos and Moodle. LMS/CMS not only provides space for teachers to store course materials and links with online resources, but also provides other facilities such as direct communication (chat, teleconference, video conference), delayed communication (e-mail, mailing-list), tracking progress, subject matter (syllabus, subject matter, collection of questions, online training).

There are several advantages of e-learning compared to conventional learning models, including:

a. Time and Place For Learning are Flexible.
    E-learning can make students learn more flexibly according to the time they have. Students can access lessons more flexibly, unlike conventional learning, which has to be done in certain rooms and for hours. It also includes students being able to spend more flexible time according to their conditions.

b. The Atmosphere of Learning Is Not stressful.
    E-learning makes the learning atmosphere less stressful than face-to-face. Students are more courageous in doing the exercises because they are not afraid of being embarrassed or yelled at if they make a mistake.

c. It is easier to Update The Materials
    In contrast to updating learning materials arranged in the form of printed books, the material on e-learning can be updated at any time.

d. Get used to the use of ICT.
    In applying e-learning, ICT is not something that can be learned, but it also can be utilized in daily activities, and it will become part of students' daily activities. Using ICT to seek information is part of the soft skills (creativity, tenacity) needed by students to continue improving their skills and knowledge.

    In addition to providing benefits, e-learning has weaknesses, especially in terms of the need for investment in supporting networks with software and human resources. To be able to get optimal benefits from e-learning requires fast and stable network support. The use of e-learning can improve the quality of learning outcomes and trigger students' creativity and active role (Maulana et al., 2021). Electronic learning (e-learning) has notoriously emerged as an innovative teaching approach in higher education (Widiantoro et al., 2022).

RESEARCH METHODOLOGY

The research method used is the development research method. The type of development method chosen is the IDI (Instructional Development Institute) method. The IDI method applies development principles that are suitable for learning media development. The IDI method applies a design and development process consisting of 3 stages, needs analysis, system development and system development evaluation (Maulana & Firdian, 2019).

The first cycle or stage is needs analysis, namely problem identification, curriculum analysis, learning models and media used, learner characteristics, and analysis of teaching materials. The second cycle is system development, i.e. E-learning prototype design, E-learning development and E-learning validation. The third cycle is evaluation, E-learning trial, and E-learning testing through questionnaires given to teaching staff and students. The results of the questionnaire were analyzed using a Likert scale (Rahmelina et al., 2019).

Data collection instruments
Validity

The first instrument is a validity instrument. The validity instrument was used to determine the validity of the E-learning. E-learning was validated by experts and lecturers. The validated aspects are content and design aspects of E-learning. The validity instrument uses a Likert scale. On a Likert scale, the variables will be measured and explained into variable indicators.

Practicality

The second instrument is the practicality instrument. Practicality instrument is used to determine the practicality of E-Learning. Practicality of E-Learning is tested through lecturer and student responses. Practicality instrument uses Likert scale. On a Likert scale, the variables will be measured and explained into variable indicators.

The technique of data analysis
This study uses the descriptive data analysis technique to explain the valid, practical, and effective learning level using E-learning implemented in all course at Metamedia University.
Analysis of the validity level (Maulana et al., 2021).
The validity analysis stages:
The validator provides answers with a choice of criteria:
- 5 = highly valid, 4 = valid, 3 = quite valid, 2 = less valid, 1 = not valid.
- Calculating validator scores on each question indicator.
- The percentage formula for analyzing validity data uses:

$$percentage = \frac{Score\ of\ each\ item}{Ideal\ score\ item} \times 100\%$$

$$persentage = \frac{\sum Score\ of\ each\ item}{\sum Score\ of\ ideal\ item} \times 100\%$$

Table 2 explains the level of achievement and categories of validity data analysis.

Table 2. Level of acquisition of validity (Maulana et al., 2021).

Gain Rate (%)	Group
90 – 100	highly valid
80 – 89	Valid
65 – 79	Quite Valid
55 – 64	Less Valid
0 – 54	Not valid

Analysis of the Practicality level (Omar & Mohamad, 2019).

The validity analysis stages:

The validator provides answers with a choice of criteria:

- 5 = highly valid, 4 = valid, 3 = quite valid, 2 = less valid, 1 = not valid.
- Calculating validator scores on each question indicator.
- The percentage formula of practicality data analysis is:

$$persentage = \frac{\sum Score\ of\ each\ item}{\sum Score\ of\ ideal\ item} \times 100\%$$

Table 3 explains the level of achievement and categories of practicality data analysis.

Table 3. Practicality Gain Gate (Maulana & Firdian, 2019).

Gain Rate (%)	Group Share
90 – 100	Highly practical
80 – 89	practical
65 – 79	Quite Practical
55 – 64	Less practical
0 – 54	Not practical

RESULT AND DISCUSSION

Validity Acquisition Data

Validity acquisition data can be seen in Table 4:

Table 4. The acquisition of validity test from experts

Validation Aspect	Total Score	Validity Value (%)	Criteria	
E-Learning Content	46	84.54	Valid	
E-Learning Design	55	85.55	Valid	
TotalScore/Value Validity/Category	101	85.04	Valid	

Table 4 shows the result of the learning validity test using E-learning in the all Course. E-learning content gets a validity value 84.54% and E-learning design gets a validity value 85.55%. On average, all online learning validation result using E-learning for content and design with valid values 85.04%. Learning design of all course using E-learning is declared valid as a learning media.

Practicality Acquisition Data

Practicality data based on educator responses can be seen in Table 5 as follows:

Table 5. Acquisition practicality data based on educator responses

R1 = Lecturer 1   R2 = Lecturer 2

Measurement Section	Sum			Criteria
	R1	**R2**	**Average**	
Easy to Operate	85	90	87.5	Practical
Time Effectiveness	70	80	75	Quite Practical
Media Interpretation	70	95	82.5	Practical
Equivalence	80	80	80	Practical
Average	**76.25**	**86.25**	**81.25**	**Practical**

Table 5 shows the results of Practicality test data for the use of E-learning for all courses from teaching staff. The practicality of using E-learning in the aspect of "Easy to Operate E-Learning" gets practical value 87.5%. The practicality of using E-learning in the aspect of "Time Effectiveness" gets quite practical value 75%. The practicality of using E-learning for "Media Interpretation" aspect gets practical value (82.5%). Practicality of E-learning from the aspect of equivalence with a practical value (80%). The average practicality of E-learning from 4 aspects is practical (81.25%). The use of E-learning for all courses is practical to use.

Practicality Test Data Based on Students' Responses

Practicality test acquisition data from students can be seen in Table 6 as follows:

Table 6. Recap assessment from students

Measurement Section	Sum	Criteria
The simplicity of Using E-Learning	84.56	Practical
Time effectiveness of E-Learning usage	80.37	Practical
The attractivity of using E-Learning	83.33	Practical
Average	**82.75**	**Practical**

Table 6 indicates the results of the practicality test using E-learning for all course based on students' responses. The practicality of using E-learning for each aspect of simplicity, effectiveness, and attractiveness gets practical value 84.56%, 80,37%, 83.33%. The average of all learning validation results using E-learning for the three aspects gets practical value 82.75%. It can be concluded that using E-learning for all course is practical as the learning media based on student assessments.

Discussion

Validity test results discussion

Validity is the accuracy in performing the measurement function (Abuhmaid, 2020). The aspects of E-learning that are measured for validity are content aspects and

design aspects. Before measuring the validity of the content aspects and design aspects, an indicator validation is carried out on each statement used. The results of the questionnaire validation from experts for each question item on the content aspect were declared valid by getting a score of (85%). Based on the results of the expert's assessment, the validation questionnaire for the content aspect is valid to use. The results of the questionnaire validation from experts for each question item on the design aspect were declared very valid by getting a score of (90%). Based on the results of the expert's assessment, the validation questionnaire for the content aspect is very valid to use. Based on the results above, it can be concluded that the questionnaire to measure the validity of E-learning from the aspects of content and design is very appropriate to be used by respondents.

The questionnaire instrument that has been valid from the content aspect is then given to the E-learning expert for assessment. The questionnaire instrument for this aspect is divided into 2 parts, namely the E-learning content and interest in using E-learning. The number of statements assessed by the expert amounted to 11 statements. From the content part, the expert assessed that the E-learning developed refers to the curriculum, teaching materials in accordance with the curriculum, clear learning objectives, supports understanding of concepts, uses simple sentences and is easy to understand. In the interest group, experts assessed the characteristics and increased student interest in learning using E-learning.

Based on the assessment that has been done by the expert, from the content aspect, it gets a valid score (84.44%). This means that the E-learning developed has referred to the curriculum, teaching materials are in accordance with the curriculum, learning objectives are clear, have supported understanding of concepts, use simple sentences and are easy to understand. Based on the assessment that has been done by the expert, from the interest aspect, it gets a very valid score (90%). This means that the development of E-learning is very suitable for the characteristics of students and greatly increases student interest in learning. The average value of the validity of E-learning learning media from the content and interest aspects is valid with a value of (85.45%).

The questionnaire instrument that has been valid from the design aspect is then given to the E-learning expert for assessment. The questionnaire instrument for this aspect is divided into 2 parts, namely the E-learning display section and the lingo in E-learning. The number of statements assessed by the expert amounted to 12 statements. From the display section, the expert assesses the menu, instructions, colours, buttons and icons of E-learning. In the linguistic group, the expert assessed that the language is easy to understand and simple and is in accordance with good and correct language rules.

Based on the assessment conducted by experts, the display aspect received a valid score (84.54%). This means that the menu, instructions, colours, buttons and icons of the developed E-learning are simple and easily understood by students. Based on the assessment that has been done by experts, from the language aspect it gets a very valid score (85.55%). This means that the development of E-learning is simple and very easy

to understand and in accordance with good and correct language rules. The average value of the validity of E-learning learning media from the display and language aspects is valid with a value of (85.04%).

Discussion of practicality test results

Practicality is related to the application of E-learning media during the learning and teaching process. The application of E-learning learning media is equipped with clear instructions that make it easier for lecturers and students to use it. The level of practicality of E-learning learning media is assessed by lecturers and students who take computer network management design courses. The first step in assessing the practicality level of E-learning is to validate the practicality questionnaire for each statement item to the E-learning expert. This activity is carried out to determine the validity level of each statement item that will be asked to lecturers and students who have taken the course.

The results of the validity assessment of the practicality questionnaire for each statement item conducted by E-Learning experts are valid (85%). Based on the results of the expert's assessment, the practicality questionnaire is valid and appropriate for use. After the practicality questionnaire is declared valid for use, the next step is to give the practicality questionnaire to lecturers and students who take the course. The process of filling out the practicality questionnaire to lecturers and students is done online using google form. The content of the practicality questionnaire is divided into 4 parts, the first is the ease of using E-learning, the second is the effectiveness of time to use E-learning, the third is the interpretation of E-learning and the last is the Equivalence of E-Learning.

The results of filling out the practicality questionnaire conducted by lecturers who teach courses for aspects of ease of using E-learning are practical (87.5%). In the aspect of time effectiveness, it is quite practical (75%). Based on the above results, it can be concluded that E-learning applied to courses is easy/practical to use. As for the time effectiveness aspect, it is quite practical to use. This is because the lecturer must manage the time for the implementation of theoretical lectures and practicum. The results of the assessment from lecturers on the practicality of using E-learning for the interpretation section received a practical score (82.50%). Based on the results of the assessment, it means that the developed E-learning is easy to understand the operation by lecturers.

The results of the lecturer's assessment of the practicality of using E-learning for the equivalence section received a practical value (80%). Based on the results of the assessment, it means that the E-learning developed can be aligned with other learning media such as power point, interactive multimedia, edmodo web-based learning, and others. The use of E-learning can be used as one of the variations of learning media that is effective and efficient to use. Based on the questionnaire statement items filled in by the lecturer, the lecturer also conducted an overall assessment of the use of E-learning for all courses. The results of the assessment of the lecturer on the overall practicality of

the use of E-learning received a practical value (80%). Based on this assessment, E-learning used by lecturers in all courses is practical to use.

Practicality testing of the use of E-learning for all courses is also carried out to students through filling out questionnaires that have been valid at the previous stage. Practicality testing of the use of E-learning for all courses is also carried out based on student experience in using E-learning. The contents of the questionnaire testing the practicality of using E-learning all courses are divided into 3 parts. The first part asks about the ease of operation of using E-learning. The second asks about the effectiveness of using E-learning and the third is the attractiveness of E-learning.

The results of the E-learning practicality testing assessment for all courses conducted by students for the aspect of ease of operation of E-learning by students received a practical value (84.56%). Based on the assessment for the aspect of ease of operation of E-learning conducted by this student, it means that the E-learning developed is practical/easy to operate. The assessment results of E-learning practicality testing for all courses conducted by students for the aspect of time effectiveness in using E-learning by students received a practical value (80.37%). Based on the assessment for the time effectiveness aspect in using E-learning conducted by this student, it means that the developed E-learning is effective to use. The assessment results of E-learning practicality testing for all courses conducted by students for attractiveness in using E-learning by students received a practical value (82.75%). Based on this assessment, E-learning attracts students to use it. Overall, the E-leaning developed for all courses is easy to use, effective in its use time and interesting to use.

CONCLUSION

After conducting research and analysis of the application of E-learning to the learning outcomes of 2022/2023 odd semester students at Metamedia University. Several conclusions were found:

a) The resulting learning media is E-learning. E-learning contains the arrangement of course material, availability of assignment menus, attendance lists, chat, discussion forums, glossaries, lessons, quizzes, surveys, URLs, wikis and workshops.

b) The results obtained from this research and development are as follows; (1) The validity of E-Learning is stated to be very valid in terms of content and interest with a total validity score of 84.54%, while the design aspect is stated to be valid with a total score of 85.55% (2) Practicality of E-Learning based on lecturer responses after going through validation it was stated to be quite practical with a total score of 76%, while the practicality of E-learning based on student responses after going through validation was stated to be practical with a total score of 84.12% (3) The effectiveness of E-Learning was effective in increasing student learning outcomes which was marked by the large number of students who passed was 87.42%.

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