

**ASSESSMENT OF ENTREPRENEURSHIP INTERACTIVE E-BOOK BASED ON
LEARNING CYCLE 7E FOR SECOND GRADE STUDENT IN-STATE VOCATIONAL
HIGH SCHOOL**

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ABSTRACT

This research aims to determine the feasibility of the use of the Entrepreneurship Interactive E-Book based on Learning Cycle 7E for a second-grade student at State Vocational High School 1 Kaligondang Purbalingga. Methods used in this research is quantitative descriptive analysis. This research describes the results of the feasibility assessment of the Entrepreneurship Interactive E-Book based on Learning Cycle 7E from several validator experts, practitioners, and students before being used in the learning process. The subjects of this research were validator of media expert, material expert, linguist, and 2 practitioners. The data were collected using expert, and practitioner validation questionnaires. Data analysis techniques were using a Likert scale. The results of the research obtained were that Entrepreneurship Interactive E-Book based on Learning Cycle 7E obtained an assessment 98.18% from media experts, 95,38% from material experts, 100% from linguists, and 94,51% from practitioners. The conclusion is that Entrepreneurship Interactive E-Book based on Learning Cycle 7E is feasible to use as a media in entrepreneurship learning at State Vocational High School 1 Kaligondang Purbalingga.

KEYWORDS: Feasibility, Interactive E-Book, Entrepreneurship Education, Learning Cycle 7E

INTRODUCTION

The digital revolution and the era of technology disruption is another term for the 4.0 Industry. It was called the digital revolution due to the proliferation of computers and automation recording on all fronts. The progression of technology may allow automation in almost all areas. Technology and a new approach that combines the physical world, digital, and biology will fundamentally change the pattern of life and human interaction (Tjandrawinata, 2016). Information technology that advances so rapidly spawned innovations created to facilitate human life, especially in the field of education.

The success of the study depends on the accuracy of teachers in using technology to match the learning objectives and, in particular, to create meaningful learning for students. Teachers can use a variety of instructional media that suits their needs and learning objectives to be achieved.

In this century, education must evolve with the times, a lot of innovation in the field of education that can be applied to facilitate the delivery of information to students. But in fact, there are still found conventional teaching materials, for example, print modules and E-book that given by the government. Simply, E-book can be interpreted as an electronic book or digital book (Triyono,

2012). Electronic books are digital versions of books that generally consist of printed papers that contain text or images. E-book displays integrating sound, graphics, images, animation, and film so that the information presented is more than the conventional book (Nelson, 2008). The e-book is more efficient and effective because of its small size that so easy to carry, unlike conventional books that have a big size and bulky. Various efforts are still needed to optimize the utilization of multimedia-based e-book in the learning process. One of the efforts is the development of interactive e-book. The interactive e-book is an e-book that comes with interactive multimedia features or animation that makes the student easier to understand no matter what was the subject. According to research that conducted by Abualrob and Shah (2012: 814), interactive e-books encourage students to become more involved in self-study or student-centered learning which is students are required to actively seek and find answers to questions that arise in him.

In addition to learning media development, other things that can be used to support learning activities are by applying appropriate learning models. One of them is the Learning Cycle 7E model. Learning Cycle Model 7E model is a learning model that corresponds to the curriculum in 2013 that applies to Indonesia. This learning model consists of 7 stages of learning, there are Elicit which means it raises a preliminary understanding, Engagement which means involving, Exploration which means investigating, Explain which means explaining, Elaboration which means outlining, Evaluation which means assessing, and Extend which means expanding. The stages of this activity in accordance with the application of learning to the curriculum in 2013 that consists of activities to observing, asking, gathering information, logical reasoning and communicating the results, with various display examples of mock objects.

Fielman (1997) argued that combining media and models was needed when the learning process takes place to stimulate students' interest in learning and understanding the information conveyed. When interactive e-book and learning cycle 7E combined, it can increase motivation and sense of curiosity of students in learning so the learning objectives will be achieved.

Based on the condition infield, there was Entrepreneurship education at State Vocational High School 1 Kaligondang still used centered teacher learning model. This makes communication in the classroom is only one-way, so that students are passive in the learning process. In addition, Entrepreneurship education materials are still used the conventional module, there are in print modules and E-book that given from the government. The available e-book is just moving format from hardcopy into a soft copy format (pdf). E-Book looks so monotonous, as it consists of a series of sentences without animated images, video, and audio so that students quickly feel bored in learning and this condition is made on student learning outcomes decrease.

Based on condition infield, there is a need for a media that is able to support the learning process in accordance with developments in technology and curriculum that apply in Indonesia. Therefore, this research developed an Interactive E-Book learning media based on Learning Cycle 7E. Before it

used in the learning process, Interactive E-Book based on Learning Cycle 7E will be assessed by experts who are competent. The purpose of this assessment is to obtain appropriate learning media for use in the learning process in accordance with the development of technology and Curriculum 2013, which applies in Indonesia so that the learning objectives can be achieved. The novelty of this research is the development of the Interactive E-Book based on the Learning Cycle 7E model for Entrepreneurship Education because there no previous research on this topic.

LITERATURE REVIEW

1. Entrepreneurship Education

Entrepreneurship education is one of the subjects taught at the vocational school. Entrepreneurship can be defined as a trait or behavior that innovative and creative to create opportunities in every opportunity, creative and innovative entrepreneurship is the key. Kris (2009) argues that entrepreneurship is a science, art and behavior, nature, characteristics, the character of the individual who has the ability to realize innovative ideas into real-world creatively (create new & different), Entrepreneurship education in Vocational High School will develop the entrepreneurial spirit and form entrepreneurial behavior of students. Entrepreneurship education with the planting of an entrepreneurial character of competence required to be owned by the generation of people to answer the challenges of the future (Suyitno, 2013).

2. Interactive E-Book

The E-book is an electronic book, the other name of that is the digital book. Nelson (2008) defines that e-book as an electronic book can be read digitally on a computer screen, a special device e-book reader (e-book reader), personal digital assistant (PDA), or even on mobile phones. In a simple e-book can be interpreted as an electronic book or digital book (Triyono et al., 2012). Electronic books are digital versions of books that generally consists of papers that contain text or images. E-book displays integrating sound, graphics, images, animation, and film so that the information presented is more than the conventional book (Nelson, 2008). The E-book is more efficient and effective because of its small size so easy to carry, unlike conventional books that have a big size and bulky. Various efforts are still needed to optimize the utilization of multimedia-based e-book in the learning process. One is the development of an interactive e-book. The E-book is an interactive e-book that comes with multimedia features interactive or animated is making it easier for students to understand the subject matter. According to research conducted by Abualrob and Shah (2012: 814), interactive e-books encourage students to become more involved in self-study or student-centered learning in which students are required to actively seek and find answers to questions that arise in him. Thus, the interactive e-book is expected to increase motivation and a sense of pure curiosity students in learning so they can improve learning outcomes.

3. 7E Learning Cycle

The world education learning cycle model is popular in some countries, one of them is the Learning Cycle 7E. This cycle learning model first introduced by Robert Karplus in Science Curriculum Improvement Study (SCIS). Learning Cycle 7E model consists of 7 stages of learning there are elicit, engage, explore, explain, elaborate, extend, and end with Evaluate. The model begins with Elicit, which means the child is directed to pay attention to new things or old things that have never noticed before. Next is the Engagement phase at this stage the child is directed to focus on a particular topic. This model was followed by directing the child to be able to examine more deeply the topic, it is Explore. If the child is considered to have been able to understand the topic, then the child will easily be the topic briefly explain both verbally and in writing, it is Explain. The next stage Elaborate / Extend it was stage characterized by a child has to be able to explain the understanding obtained in their friends and share information that was obtained. The highest stages in this model are Evaluate, the formal and informal summative stage where the child is considered to have really understood the topic.

METHOD

The method used in this research is quantitative descriptive. This study describes the results of the assessment of some experts and practitioners on the use of the Entrepreneurship Interactive E-Book based on Learning Cycle 7E before being used in the learning process. The subjects were from media experts, subject materials experts, linguists, and two practitioners. Data were collected using questionnaires validation experts, and practitioners. The collected data is then analyzed using a Likert scale with scores range from 1 to 5 on each item statement through assessment scores are given by experts and practitioners. Questionnaire assessment scores can be seen in the following table:

Table 1. Score Rating by Likert Scale

Answer	Score
Very good	5
Good	4
Enough	3
Less	2
Very less	1

The data obtained from the results of the assessment of experts and practitioners, then analyzed by calculating the percentage with the formula proposed by Sudjana, (2009: 133) as follows:

$$Percentage = \frac{\Sigma(\text{Obtain Score})}{\Sigma(\text{Maximal Score})} \times 100\%$$

The quantitative data from the questionnaire results converted into qualitative data using a scale that is very good qualifications, good, enough, less and very less. It aims to provide meaning and decision on product feasibility and product implementation testing

Table 2. Conversion Rate Achievement in Narrative Distributive

Level of Achievement	Qualification
90% - 100%	Very good
75% - 89%	Good
65% - 74%	Enough
55% - 64%	Less
0% - 54%	Very less

(Source: Agung (2010: 58))

In the process of the development is done, set the value of the feasibility of the product at least is "Good", as a result of a good assessment of the subject matter experts, media experts, and practitioners. If the end results in all aspects with a minimum grade "Good", the product of the development has been considered feasible for use as a learning media.

RESULT AND DISCUSSION

The feasibility assessment of the Entrepreneurship Interactive E-Book based on Learning Cycle 7E was carried out by a team of experts, there are validator media experts, subject material experts, linguists, and two practitioners to assess the product. Assessment of media quality aspect carried out by media experts, it was assessed by Technology Education Lecturer in the Sebelas Maret University. The assessment of media experts was carried out using a media expert validation questionnaire instrument. Assessment of material aspect carried out by the subject material expert, it was assessed by Economic Education Lecturer in Sebelas Maret University. Assessment of subject material expert was carried out using a material expert validation questionnaire instrument. The language aspects were assessed by linguist expert, it was an Indonesian Language Lecturer in the Sebelas Maret University. Assessment of linguist experts was carried out using a linguist validation questionnaire instrument. Assessment relevance of Entrepreneurship Interactive E-Book based on Learning Cycle 7E in vocational high school learning carried out by two practitioner experts, they are Entrepreneurship Education teacher at SMK N 1 Kaligondang Purbalingga. Assessment of practitioner experts carried out by using a practitioner validation questionnaire instrument. The expert validation results carried out are as follows:

1. Media Expert Assessment

Table 3. Recapitulation of Validation Results Learning Media Expert

No.	Aspects	Σni	ΣN	%	Value	Conclusion
1.	Aspect Quality Media	40	40	100	100	Very good
2.	Characteristic E-Book as a medium	68	70	100	97.14	Very good
Total score		108	110	100	98.18	Very good

(Source: The Results of Data Processing 2019)

Based on table 3 about the recapitulation of the validation of media experts note that aspects of media quality obtain 100%, the characteristic aspects of E-Book as the media scored 97.14%. Overall results of media expert validation scored 98.18% which is included in the category of "very good" in accordance with the Conversion Rate Achievement in Narrative Distributive table, so the product of the development has been considered feasible for use as a learning media.

2. Material Expert Assessment

Table 4. Recapitulation of Validation Results of Learning Material Expert

No.	Aspects	Σni	ΣN	%	Value	Conclusion
1.	Feasibility contents	56	60	100	93.33	Very good
2.	Feasibility presentation	53	55	100	96.36	Very good
3.	Learning outcomes	15	15	100	100	Very good
Total score		124	130	100	95.38	Very good

(Source: The Results of Data Processing 2019)

Based on table 4 about the recapitulation of the validation materials experts note that feasibility aspects of the content scored 93.33%, feasibility presentation aspect scored 96.36%, aspect of learning outcomes obtained a value of 100%. Overall results of the validation subject material experts scored 95.38% which is included in the category of "very good" in accordance with the Conversion Rate Achievement in Narrative Distributive table, so the product of the development has been considered feasible for use as a learning media.

1. Linguist Expert Assessment

Table 5. Recapitulation of Validation Results of Linguist

No.	Aspects	Σni	ΣN	%	Value	Conclusion
1.	Feasibility contents	60	60	100	100	Very good
Total score		60	60	100	100	Very good

(Source: The Results of Data Processing 2019)

Based on Table 5 about the recapitulation of linguists' validation experts note that feasibility aspects of the content obtain 100%. Overall results of the validation linguists obtain a value of 100% which is included in the category of "very good" in accordance with the Conversion Rate Achievement in Narrative Distributive table, so the product of the development has been considered feasible for use as a learning media.

4. Practitioners Expert Assessment

Table 6. Recapitulation of Validation Results of Practitioner Expert

No.	Aspects	Σni	ΣN	%	Value	Conclusion
1.	Feasibility contents	77	80	100	96.25	Very good
2	Feasibility Presentation	97	100	100	97	Very good
3	Functions and Benefits Media	74	80	100	92.5	Very good
4	Learning approaches	45	50	100	90	Very good
Total score		293	310	100	94.51	Very good

(Source: The Results of Data Processing 2019)

Based on Table 6 about the recapitulation of the practitioners expert validation note that the contents of the feasibility aspects scored 96.25%, presenting the feasibility aspect scored 97%, aspects of media functions and benefits scored of 92.5%, and aspects of learning approaches scored 90% , Overall results of practitioners expert validation scored 94.51% which is included in the category of "very good" in accordance with the Conversion Rate Achievement in Narrative Distributive table, so the product of the development has been considered feasible for use as a learning media.

Based on the assessment expert validator gives a good assessment of the Entrepreneurship Interactive E-Book based on Learning Cycle 7E. In addition to providing a good assessment, the expert validator also provides some feedback and suggestions for improvement in order to resume the development of the media and make it better correspond to the learning objectives. Here are some suggestions for improvements submitted by the expert validator: 1) Material expert validator provides input regarding the language and phrases used should be appropriate to the developmental

level of students, so as not to cause misinterpretation of the message that given. 2) Linguists expert validator provides revisions regarding errors in spelling, punctuation and typing errors that should be corrected.

CONCLUSION

Based on the results of the assessment carried out by media experts, material experts, linguists experts, and practitioners of Entrepreneurship Interactive E-Book based on Learning Cycle 7E, generally the assessment can be accumulated become a reference in the decision in the making of products developed. It was a recapitulation of expert validation and decision making can be seen in the table below:

Table 7. Decision Validation Product Development

No.	Validator	Σni	ΣN	%	Value	Conclusion
1.	Media expert	108	110	100	98.18	Very good
2	Material Expert	124	130	100	95.38	Very good
3	Linguist	60	60	100	100	Very good
4	Practitioners	293	310	100	94.51	Very good
Total		585	610	100	95.90	Very good

(Source: Results of Data Processing 2019)

Based on the table, known that the validation of media experts scored 98.18%, material experts scored 95.38%, linguist experts scored 100%, and practitioners scored 94.51%. Overall the results of expert validation obtained a total score of 95.90%, which is included in the category of "very good" in accordance with the Conversion Rate Achievement in Narrative Distributive table, so the product of the development has been considered feasible for use as a learning media. Although it was feasible, a revision of the experts still has to be implemented for the improvement of the products developed.

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