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Development of Entrepreneurship Textbooks Using Project-Based Learning for Economic Education Graduate Students

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Abstract. The S2 Economics Education Study Program produces graduates who can have a career as educators in the field of Economic Education and can have a career as Entrepreneurs and Practitioners in the field of Economics. The Entrepreneurship Studies course provides insight to students about the basic concepts of the economy, marketing, and interaction between economic actors so that students are able to understand the issues that occur and are able to solve the entrepreneurial problems they are facing. Entrepreneurship Studies lecture activities so far still tend to lecture activities by lecturers. This causes student participation in discussion activities to be limited. The purpose of the research is to develop a 4-D learning model in the Entrepreneurship Studies course to develop learning tools supported by project-based learning modules to improve the quality of learning so as to produce graduates with high economic insight and problem-solving skills. This study uses a 4-D instructional design development model which includes the stages of define, design, develop, disseminate. Data collection uses validation techniques and questionnaires with instruments including graph validation sheets, material validation sheets and student response questionnaires.

Keywords. Entrepreneurship Studies Course; Textbook development; Project Based Learning

Introduction

The world is entering the Industrial Revolution 4.0. The Industrial Revolution 4.0 is marked by the application of information and communication technology in industry. The impact of the Industrial Revolution 4.0 is a fundamental innovation and massive change that changes all systems, orders, and landscapes in the old way to the new way. Innovation and massive change are commonly called Disruption [1].

Disruption occurs in all fields, including the field of entrepreneurship [2]. Changed most of the landscape and business model. Coupled with Covid-19, the use of technology and the internet must be really done. The behavior of economic actors is changing, both producers and consumers. The new habits of economic actors have completely changed the old perspective regarding economic activities. If they want to survive with changing conditions, economic actors must be able to quickly adapt. Otherwise, then they will be left behind with those who are able to quickly adapt. The challenge of changing this new habit does not only apply in

Indonesia. However, globally it also faces the same innovation challenges.

The Industrial Revolution 4.0 is a phenomenon that collaborates cyber technology and automation technology. The industrial revolution 4.0 was born in the 21st century by having the main characteristics, namely the merger of information and communication technology into the industrial field [3]. In the world of education, especially in Indonesia, it has entered a new industrial era marked by the era of digitalization in various sectors of life [4]. In the learning system during the industrial revolution 4.0, the application of the 4Cs is maintained, namely Creativity, Critical thinking, collaboration and Communication. [5]

The creation of a collaborative and participatory classroom with a project-based learning approach, in the learning process, learning materials that will be used by educators and students are needed to facilitate the learning process in the form of reading books, workbooks and impressions [6]. In the creation of teaching materials, they are presented in a systematic, interesting manner, using writing rules that are in accordance with applicable standards and using language that is easy for learners to understand [7]. In the development of teaching materials, educators prepare materials according to the development of the current era [8].

Literature review

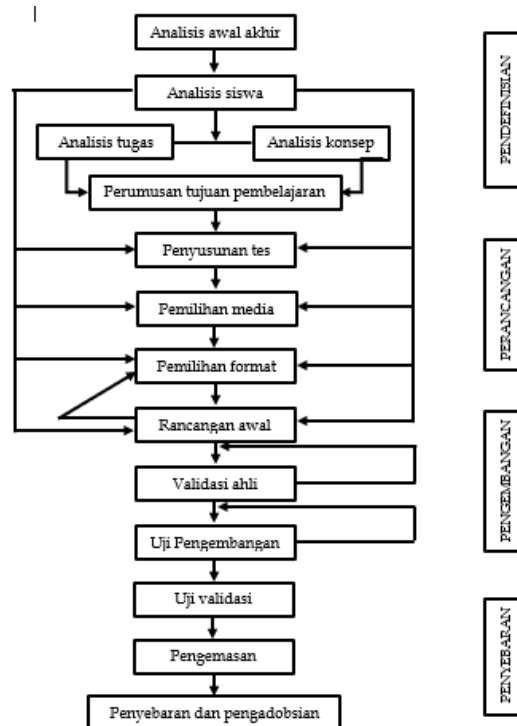
The learning model is used to assist teachers in applying teaching materials that need to be delivered to students. With the learning model, teachers have instructions in planning learning in the classroom (1). The learning model is a conceptual framework that contains systematic steps to be applied in learning activities. The CORE learning model is a learning model designed to build students' abilities through connecting, organizing, reflecting, and extending knowledge (2). Through the CORE syntax, students become the main players in learning, first students connect old knowledge with newly acquired information. Next, students organize these knowledges. In the third step, students weigh, think and rediscover the knowledge that has been acquired. And in the fourth step, students develop, expand, find alternative problem-solving and use that knowledge.

Entrepreneurship is a science that studies a person's values, abilities, attitudes and behaviors to meet challenges in life, both individuals and groups effectively and efficiently. Therefore, entrepreneurs are expected to be able to be independent and able to develop in a better direction, because entrepreneurs are someone who always wants to develop their potential [18]. In line with Barnt's (2015) opinion, that to manage entrepreneurship an entrepreneur must bear the risk of taking a business, both facing business uncertainty and volatility, especially for people who start a business for the first time (startup), and finally making profits [19].

Entrepreneurship as a form of business and entrepreneurship is a pioneer of business success in society. The ability to seize opportunities, the ability to innovate, with their capacity to succeed in entrepreneurship is considered an indicator of new entrepreneurship. Entrepreneurs play an important role in economic growth in terms of leadership, management, innovation, efficiency, job creation, competitiveness, and productivity. Studying entrepreneurship is important for several reasons: a) entrepreneurial ability leads to innovation as well as to economic growth; b) entrepreneurship is a process in which supply and demand are equal; c) entrepreneurship has become an important profession and needs to be understood for its role in the development of intelligent human capital; d) Entrepreneurship is an important key in the growth and development of the country because it provides many job opportunities and offers many goods and services [20].

Project Based Learning is an inquiry-oriented learning strategy and requires total student activity to complete a project. During the learning process, teachers act as facilitators and

motivators to direct students, so that students can work on projects well and complete them on time. The final stage of project-based learning is to produce scientific products in the form of scientific papers, reports, posters, leaflets, or media that can be shown to other groups [21].



Gambar 3.1 Tahap Pengembangan Model 4-D
Sumber: Diadaptasi dari Al-Tabany (2014: 233)

Research method

Developing a textbook for entrepreneurship studies courses based on project-based learning. The method used in this study is the Research & Development (R&D) method. [23] Research & Development (R&D) is a research method used to produce a specific product and test the effectiveness of that product. Meanwhile, the development model used in this study uses the 4-D development theory developed by S. Thiagarajan. This development model consists of 4 main stages, namely Define, Design, Develop, and Disseminate [24]. The development of the 4D model was chosen by the researcher because it was in accordance with the stages needed in the textbook development process. As can be described as below:

Data collection is carried out using validation techniques and questionnaires with instruments in the form of validation sheets, graph validation sheets, material validation sheets and student response questionnaires. The percentage data obtained from expert validation is then interpreted using the following criteria:

Tabel 1. Interpretation of student response questionnaire scores with the Guttman scale

Percentase	Interpretation Criteria
81% - 100%	Highly Worthy

61% - 80%	Proper
41% - 60%	Keep
21% - 40%	Not Eligible
0% - 20%	Very Unworthy

Based on the criteria on the scale above, the design of the development of the 4D learning model can be said to be feasible if it gets a percentage of $\geq 61\%$ (3).

Result and discussion

Project-Based Learning Entrepreneurship courses allow students to learn in a more engaging and in-depth way, which can increase their readiness to face real-world challenges in the field of entrepreneurship. The development of this Project-Based Learning-based entrepreneurship textbook uses a 4-D development model consisting of a series of processes, as follows:

1. Define

The registration stage carries out activities by identifying learning requirements that are in accordance with entrepreneurship materials. In this stage, there is also a process that must be passed, as follows :

Curriculum Analysis

The entrepreneurship studies course is a course in the S2 economic education study program in semester 2 for new students of the 2023 batch. The basic competencies that exist are; Introduction to Entrepreneurship, Introduction to Business Plan and Innovation, Market Dynamics, Operational Aspects of Entrepreneurship and Creative Economy, Leadership in entrepreneurship, Entrepreneurial Management, Competitive Advantage of Small Businesses, Challenges and the Role of Entrepreneurship in Economic Development, Business Ethics and Human Resource Management

Textbook Development

In the development carried out, the initial analysis of abilities is carried out through the analysis of students' characteristics when taking entrepreneurship courses with the intention of preparing them for a career in the business world or the development of their own business.

Task analysis

The researcher analyzes the assignment by looking at the basic competencies that have been determined and the indicators that students must achieve in understanding the basic competencies

Concept Analysis

In analyzing concepts to analyze material related to basic competencies, the concepts learned can be understood, and practiced.

Formulation of Learning Objectives

In accordance with the learning objectives of entrepreneurship courses in the Semester Learning Plan

2. Design

At this stage, we made a textbook design for entrepreneurship courses based on Project Based Learning. There are 2 parts in this stage, below:

a. Material design

This textbook has several main materials, namely Introduction to Entrepreneurship; Introduction to Business Plan and Innovation; Market Dynamics; Operational Aspects of Entrepreneurship and Creative Economy, Leadership in Entrepreneurship; Entrepreneurial Management; Competitive Advantages of Small Businesses; Challenges and the Role of Entrepreneurship in Economic Development; Business Ethics and Human Resource Management.

Initial design of teaching materials 1

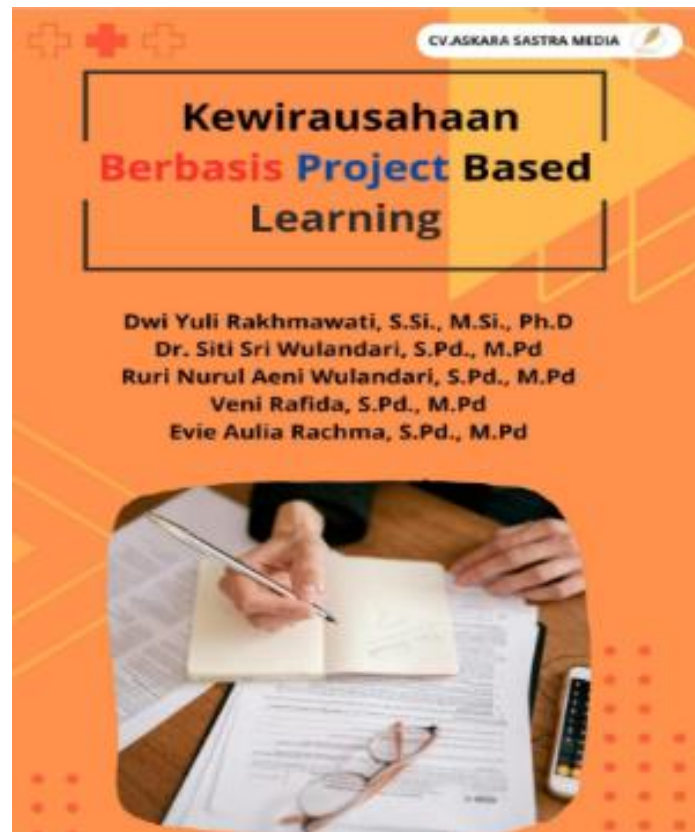


Figure 1. Cover of Project-Based Learning Entrepreneurship Textbook

Furthermore, the contents section consists of a preface, a table of contents consisting of ten chapters and a bibliography with a total of one hundred and seventy-nine pages. In chapter 1 there is an Introduction to Entrepreneurship Studies. In chapter 2, the material is Business plan and innovation. In chapter 3 there are market dynamics. In chapter 4 of the material on the operational aspects of entrepreneurship and the creative economy. In chapter 5 leadership in entrepreneurship. In chapter 6 of the material, there is entrepreneurial management. In chapter 7, the material is the competitive advantages of small businesses. In chapter 8 there are challenges and entrepreneurship for economic development. In chapter 9 of the material on business ethics and human resource management. In chapter 10 there is Textbook Development material.

3. Develop

The development stage of the Project-Based Learning-based entrepreneurship textbook aims to provide validation of the Project-Based Learning-Based Entrepreneurship Textbook.

The 2 validators came from Unesa, namely from lecturers of the educational technology study program and lecturers of the economics education study program, as well as the response of S2 Economics Education students of 20 people. The learning process with an entrepreneurial education perspective is not only at the cognitive level, but must touch on internalization and real practice in the daily life of students in the community [25].

4. Disseminate

At this stage of dissemination, we will lend the printed plan to students to be used as learning support in entrepreneurship learning for S2 students of the economics education study program, aiming to help the independent learning process of students. The application of this Project-Based Learning textbook is a teaching material for students in learning and can improve student learning outcomes. Educators need to immediately try to adapt to changes so that the learning process can achieve the goals they want to achieve. Educators are required to be able to present quality entrepreneurial learning [26].

5. Feasibility of project-based learning entrepreneurship textbook.

The feasibility of the Project-Based Learning Entrepreneurship textbook is obtained from the results of the assessment of 2 validators, namely Validators who are experts in Materials and Graphics. The 2 validators came from Unesa, namely from lecturers of the Educational Technology Study Program and lecturers of the Economics Education Education Study Program. Based on the results of the validation assessment as follows:

Table : Results of Expert Validator Recapitulation

Validator	Result Validator percentage	in Criteria	Eligibility
Graphic Expert	85%		Highly Worthy
Material Expert	94%		Highly Worthy

Source : Processed by Researchers 2024

The sentence structure used in the textbook must be able to describe the content of the message to be conveyed, not contain double meanings and irrelevant information. Entrepreneurship theory applied by students in the business world is the expected form of entrepreneurship learning. Thus, entrepreneurial spirit and skills can grow in students [28].

Based on the results of the trial given to students as material to respond to the extent of the practicality of the Project-Based Learning Entrepreneurship course textbook, students were asked to fill out a response questionnaire consisting of 16 apes which were used as an assessment with these aspects adapted from [29]. The student response questionnaire contains several aspects consisting of the quality of content and objectives, instructional quality and technical quality can be seen in the table below:

Table : Recapitulation of the results of the student response questionnaire

No	Indikator	Total Score	Interpretation
1	Quality of content and purpose	78	Excellent
2	Instructional quality	94	
3	Technical quality	117	
Total Assessment Score		289	

The highest number of scores for all items	300	
Assessment Percentage	96%	

Source : Processed by Researchers 2024

Entrepreneurship books based on Project Based Learning will be more able to attract students' interest. The Project-Based Learning model is very relevant to the context of integrating entrepreneurial values in practicum learning because project-based learning is a systematic learning method that involves learning in learning knowledge and skills through the preparation of complex inquiries with authentic questions as well as work and product design [25].

The ability to communicate material in two directions will support educators and students when carrying out the learning process. In addition, the Project-Based Learning-based entrepreneurship book will be in line with the characteristics of Generation Z who prefer challenges, love technology, are flexible, smarter, and prefer to be globally connected and networked in the virtual world. Theoretical and practical materials in the content of entrepreneurship that are challenges in learning entrepreneurship can be contained in a single unit in a digital book. So that entrepreneurship books based on Project Based Learning will be better able to overcome the problems and learning needs in the current 21st century. This book is a necessity in the entrepreneurial learning process in the 21st century. Problems related to entrepreneurship learning in order to increase the spirit of entrepreneurship can be through media that are packaged attractively.

The needs of learning in the 21st century era require material that can be presented communicatively and can maximize all senses. Digital forms make it easier for educators to adjust learning models that can improve critical thinking, collaboration, communication and creative thinking skills that are urgently needed in the 21st century education era. In addition, there are many positive views by educators on digital books to support the learning process in the 21st century. The implication of the needs analysis in this study is that it requires the development of printed and digital books as one of the supports for the entrepreneurial learning process in an effort to increase the spirit and ability to be entrepreneurial in the 21st century era.

Conclusion

1. The Process of Developing Project-Based Learning Entrepreneurship Textbooks

Project-Based Learning Entrepreneurship courses allow students to learn in a more engaging and in-depth way, which can increase their readiness to face real-world challenges in the field of entrepreneurship. The development of this Project-Based Learning-based entrepreneurship textbook uses the 4-D development model. The development stage (design) by developing material consists of covers and content materials. The development stage of the Project-Based Learning-based entrepreneurship textbook aims to provide validation of garage validation and material validation. At this stage of dissemination, we will lend the printed plan to students to be used as learning support in entrepreneurship learning for S2 students of the economics education study program, aiming to help the independent learning process of students.

2. Feasibility of Project-Based Learning Entrepreneurship Course Textbooks

The Project-Based Learning Entrepreneurship Textbook received assessment results from 2 validators, namely Material and Graphics expert Validators with very decent scores. The 2 validators came from Unesa, namely from lecturers of the Educational Technology Study Program and lecturers of the Economics Education Study Program.

3. Practicality of Project-Based Learning Entrepreneurship Course Textbooks.

The results of the student response questionnaire contain several aspects consisting of the quality of content and objectives, instructional quality and technical quality are very good and practical to be used in the learning process offline or online.

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