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The Introduction to Accounting Digital Book for Online Course in Responding Learning Activities During Covid-19 Pandemic

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ABSTRACT

This research aims to develop a digital book to support online learning of the Introduction to Accounting course. The development of the digital-book expects to support online and self-learning during Covid 19 pandemic. The development process consists of three stages: Analysis Stage, Design Stage, and Development Stage. This research has produced a digital book of Introduction Accounting course. The expert judgment indicates that this digital book is valid enough, in terms of The Suitability Of The Material and The Accurate of Material

Keywords: Digital Book, Online learning, Introduction to Accounting course

1. INTRODUCTION

During the Covid 19 pandemic, students studied online and at their homes. The lecturer can do online learning by synchronously and asynchronously meeting. The lecturer presents the material in multiple types of learning objects of text, audio, video, or a combination of various elements of the media.

Introductory Accounting is the course for the first-semester students with different educational backgrounds, namely those from high schools and vocational high schools—even students who are not familiar with accounting because they study science in high school.

[1] state that the learning process can be more efficient and lead to increased education quality with multimedia. [2] state that multimedia can lead to increased student achievement and motivation.

Using a digital book on accounting courses is essential according to support the student to learn independently. This research is a digital book expected to support online learning of the Introduction to Accounting course.

After attending this course, the expectation for the students are: 1) Students can master the concepts, scope, and basic financial accounting principles for trading companies and service companies; 2) Students creatively and analytically acknowledge and

record transactions of trade and service companies; 3) Students are analytically able to make financial reports for service and trade companies.

Students have various educational backgrounds. Some students come from social and vocational senior high school, and some come from science high school, who have never studied accounting before. The situation of Covid 19 requires students to learn at home. So the students need supporting learning media that can guide them to learn Introduction of Accounting.

Digital-book development as a learning media to increase the students' understanding of accounting and financial statements. The use of a digital book is essential, especially the use of educational resources based on Android and e-learning so that students can easily access various existing educational resources.

Digital-book development as a learning resource can help students in independent learning at home. As an educational resource based on Android and elearning, this digital book is essential to access various educational resources. This research problem is: How to design a digital book to support online and self-learning of the Introduction to Accounting course?

2. RESEARCH METHOD

According to the research purpose, the development process of Introduction to Accounting

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Course digital book has three stages: Analysis Stage, Design Stage, and Development Stage.

2.1. Analysis Stage

In the analysis stage, the activities carried out are: analyzing the needs of open course participants in studying Introduction to Accounting. The analysis of all existing material and the learning media needed, such as video tutorials, cases, ppt, media interactive learning, and practice questions and evaluation, matching the current sub material.

In this analysis stage, an analysis of the expected competencies, syllabus, review of existing references, and interviews with fellow lecturers of Introduction to Accounting The results of this stage is the Mapping Program of Introduction to Accounting Course. The purpose of the Mapping Program is to make the instructional design of the course.

The format of program map are: 1) Identity of the course., 2) Learning objectives,.The results of the instructional design is tabular form, that consist of: the information of primary competency, material learning objects, lecturer interaction with students and students with students, student learning activities, teaching resources, and time allocation.

2.2. Design Stage

The design stage is the next stage of the analysis stage. After analyzing the instructional media and evaluation tools suitable for each sub-subject, the next step is the detailed design of each learning media.

In the design stage, there are several items, such as: 1) Interactive media, 2) Video, then at this design stage, the scenarios in the video are determined, 3) Exercises with the question practice material, like multiple choice, essay, matching, etc.

The outputs of this Design Stage are: Design (scenario) for each learning media for each subsubject and determine the application of practice questions and evaluation suitable for each sub-subject to achieve learning objectives.

2.3. Development Stage

After designing the learning media suitable for each sub-discussion, the next step is making media according to the existing design at the Development Stage. After developing the learning media, media and material experts have validated it to get input and make improvements following current suggestions.

This Development Stage output is digital-book. The revisions follow the advice given by experts in accounting studies and education experts from expert validation results. After revising, the online course material and open online course are ready to be implemented and evaluated (second stage

validation/field testing) by users in the learning process.

2.3.1. Type of Data

The data used are quantitative, based on the average percentage of the online course and open online courses. The indicator used is the digital book's accuracy, including selecting learning objects (text, images, audio, video, simulation, assessment, etc.).

The validation instrument was 4 scale Likert scale (questionnaire . The criteria for each rating scale are as follows:

- a) Score 4: very good/very appropriate/very clear / very interesting/very easy
- b) Score 3: good/appropriate/clear/interesting/easy
- c) Score 2: not good/inappropriate/not clear/ not interesting/not easy
- d) Score 1: Very bad/ very inappropriate/Extremely unclear/Extremely uninteresting/ Extremely difficult

The questionnaire is an instrument in the digital book validation. It also contains a section of the validator's comments and suggestions as material for further revisions.

2.3.2. Data Analysis Technique

Quantitative data analysis used percentage analysis techniques, according to the formula:

$$P = \sum x \\ \underline{\sum x1} \qquad x \quad 100 \%$$

P = percentage; $\sum x$ = Number of answers of all respondents; $\sum x1$ = Number of the ideal answer

The validation criteria of each item are: (1) valid, (2) valid enough; (3) less valid, and; (4) not valid. Table 1 shows the result for each criterion.

Table 1. Validation Criterion

ANSWER	CRITERION		
80-100	Valid		
60 - 79	Valid Enough		
40 - 59	Less Valid (Revision)		
0 - 39	Not Valid (Revision)		

Source: [3]

3. RESULTS AND DISCUSSION

Table 2 shows the result of the expert analysis. It shows that the suitability of the material and the material accuracy has met the criteria, so the interactive learning media declared valid and did not



need to make revisions. Table 2 shows the results of expert validation.

Table 2. Validation Results from Expert

Explanation	Score		Percentage (%)	Result		
	X	Xi				
The Suitability Of The Material						
The material presented is following the prevailing theory	3	4	75	Valid Enough		
The material presented is following the learning outcome	3	4	75	Valid Enough		
Average	3	4	75	Valid Enough		
The Accurate of Material						
Definition Accuracy	3	4	75	Valid Enough		
Formula Accuracy	3	4	75	Valid		
Illustration Accuracy	3	4	75	Valid Enough		
Average	18.75	4	75	Valid Enough		

Table 3 shows the results of the validation expert. The average score is 75, so the digital book is ready to be implemented and evaluated by the user, such as students who take an Introduction of Accounting course

Table 3. Summary

No	Explanation	Percentage (%)	Validity Criteria
1	The Suitability Of The Material	75 %	Modest for the further usage
2	The Accuracy of Material	75 %	Modest for the further usage

The learning media help the interaction between learners, teachers, and teaching materials. Varied learning media can overcome the teacher's difficulties due to students' background and experience.

Digital Book helps the student for online and self-learning accounting. The digital book is necessary to improve the student's ability to do a self-learning process. Mobile learning enables access to content regardless of time or place [4]. The basic theory of the development of digital books is the constructivist theory. Digital book supports constructivist learning environments by helping students solve a problem using self-exploration collaboration and active participation [1]. The research result of [5] shows that there is an effect of video lectures in learning on learning, satisfaction, engagement, and interest (LSEI), future behavioral intentions (FBI).

The constructivist strategy (student-centered teaching) emphasizes that the students are active learners. Lecturers act as facilitators. Each student must find, change the information, and find the problem-solving independently. Multimedia supports a constructivist learning environment. Multimedia technology helps students solve a problem using self-exploration, collaboration, and active participation [1].

[6] state that online-based learning media can improve students' self-directed learning in studying economics subjects' accounting chapter. The appropriate learning media will affect the student's learning achievement

4. CONCLUSION

This research has produced a digital book for an introduction to the accounting course. The validation by expert judgment shows that the digital book is valid enough. The digital book is designed to enhance students' self-study and improve their understanding of the Introduction to Accounting course.

The digital book presented the learning media in the form of the word, ppt, video, and interactive quiz that can display the score after the student's work and practice questions to increase students' understanding.

Interactive media for learning will improve the instructional method to deliver knowledge to the learners. There is a need to adjust the teacher's teaching approach and provide learning materials using learning media.

AUTHORS' CONTRIBUTIONS

The author's contributions are the development of the Digital Book of Introduction to Accounting Course.

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