The Development of Financial Management Textbook Base on Problem-Based Learning with Blended Learning Approach

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ABSTRACT

The now days education is hoped to be a learning process which the students as the central of learning activity. This way of teaching is aimed to increase the comprehension of the students toward the material independently. In other way, the application of the technology in teaching process is needed in order to make the teaching process more comprehensive. This point of view emerges the implementation of blended learning which combine offline and online to lead the students to the broader knowledge comprehension. The objective of this research is to find the different of the problems-based learning finance management textbooks implementation and proper when the books are used in teaching process with blended learning approach. The method of this research is RnD (Research and Development) while the subjects of this research are 12 students. The stages of this research are: 1) The previous researches, 2) problems identification, 3) Data collecting and textbooks designing, 4) textbooks validation by experts, 5) Textbooks revision, 6) Small Scale trial, 7) ongoing textbooks revision, 8) textbooks trial, 9) the textbook final revision. The data analysis technique in this research is textbooks validation data, and static comparative analysis. The analysis is helped by SPSS software. The result of the research produces valid problem-based learning finance management textbooks to apply in lecturing. The significant increase of studying result is found before and after the finance management textbooks. The comparative statistic found the significant different in problem-based learning finance management textbooks taught by using blended leaning approach.

Keywords: Textbooks, Problem-Based Learning, Blended Learning

INTRODUCTION

The development of education recently is influenced by some factors like teacher and students, teaching method, and teaching instruments applied to lead the teaching into higher level. The continuous among those factors is hoped to build conducive teaching process especially the students' center learning to increase the students' comprehension independently. One of the teaching models which support this matter is problem-based learning. Moreover, the recent condition makes the technology is needed to smoothen the learning process. As a result, the existence of the blended learning needed in order to increase the students' learning interest because the up to date information is available in internet. [1] Beside the implementation of method and proper approach, the other important aspect is teaching media to support the learning process. This is the reason why the textbook is must be developed situational and conditional based on the teaching field. The objective of the development is to achieve the effectiveness of teaching. The availability of the textbook as teaching

materials influence significantly in the learning process of new curriculum. [2]

LITERATURE REVIEW
Textbooks

Textbook can be used as reference for the teacher in implementing teaching process. [3] Textbook is one of the teaching instruments which has significant role in teaching process which the existence of the proper teaching instrument could create effective teaching process. A good textbook has the following characters: 1) Use the standard language and understandable; 2) the interesting presentation completed with pictures and notes; 3) the content of the book represent the writer's idea. [4] The arranging of a textbook based on the standard will make the books better and as the situation needs. Next, the forms of teaching materials are: 1) the teaching materials come in printed like student worksheets, hand out, books, module, brochure, leaflet, wild chart, etc; 2) audio visual teaching materials forms like: film/video and VCD; 3) audio visual teaching material like: cassette, radio, audio CD; 4) Visual like: photograph, picture, model/scale model; 5) multimedia like: interactive CD, computer based learning, internet. [5] The textbook created in this research is printed textbooks. The researcher hoped that the book could increase the teaching process effectiveness and efficiency. From this finance management textbook, the students could be facilitated the students comprehension especially in understanding the materials of finance management lecture.

Problem-Based Learning

The problem-based learning is a teaching method which uses situation or particular problem as the operant of learning so that the students will learn actively and cooperatively to gain or integrate new knowledge. [6] Problem base teaching model involve a group to solve the problem as the main focus. [7] Next, the characteristics of problem-based learning are the focus of problem solving during the learning process, responsibility to solve the problem is on the students and teacher during the process. [8] It can be concluded that the problem-based learning is a teaching method which focus on the students problem solving with responsibility and ask the students to be active in integrating new findings. In this case, the problem base teaching method is to make the presentation of finance lecture be easier because everyone knows that finance management is more to give emphasize on the comprehension both individually or in group by giving form problem to solve by the students.

Blended Learning

Blended learning is defined as a teaching model where the teachers maximize the technology. The common way is in giving instruction trough web, daily tasks, or the guidance as main instructor. [9] Blended learning is as a combination of traditional teaching method and strategy in to gain the objective of that learning process or blended learning. [10] Blended learning is a teaching method which combines two or more methods and strategies in teaching. [11] This research use two types of teaching methods, those are offline and online. The offline teaching has been done before the covid-19 pandemic attacked Indonesia especially and the world generally. The online learning has been applied also by using the Spada (Sistem Pembelajaran Daring), in this case is the use of Spada in Nusantara PGRI University. Beside Spada, this research also uses Google Classroom application and Google Meet for video conference. Blended learning is used because the pandemic so that the application of blended learning can be use to increase the students comprehension in solving the problems or case study in the finance management textbook.

MATERIALS & METHODS

The method applied in this research is Research and is Development (RnD). RnD is a research method which is used to

produce specific product and to test the effectiveness of the product. [12] The subject of this research is the 12 third degree

students of Economics Faculty. The stages of the research are explained as follows:
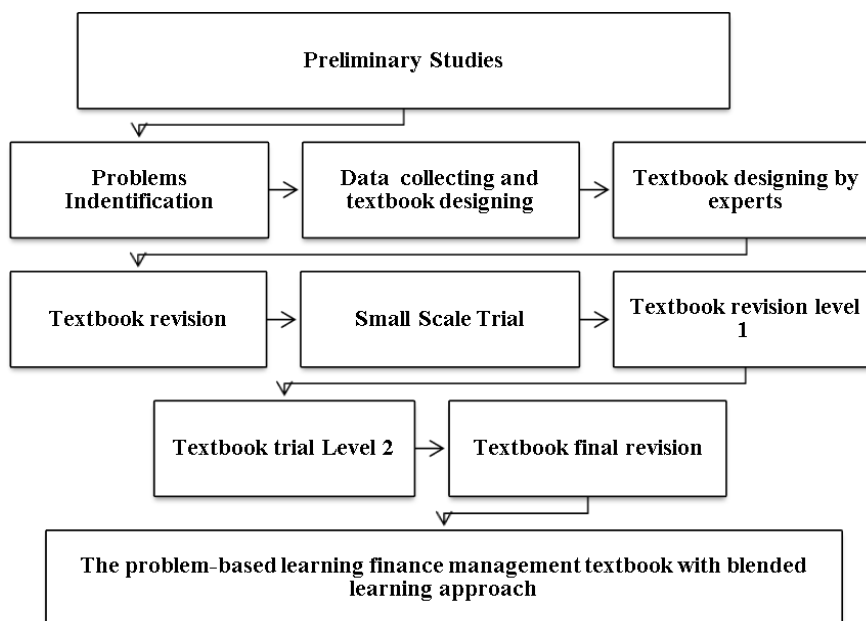

Figure 1: The Research Stages and Textbook Development

The research stages are planned as the followings: 1) Preliminary research, it is conducted by doing literature study on books and lecturer journal; 2) Problems Indentifying, This stage is to collect the various problems found during the teaching process; 3) Data collecting and textbook designing, the materials are adjusted based on curriculum base syllabus and Teaching plan; 4) Textbook design validation by experts. There are three experts to validate the content, presentation and language; 5) Textbook revision, this stage is done by following the notice from the experts; 6) Small scale trial, it is done to the research subjects, those are the students, 7) Revision level 2, the weaknesses found in small scale trial is revised; 8) the trial of book, this step is to know the influence of the problem-based learning finance management textbook with blended learning approach; 9) the final revision, it is done to fix all aspects of the book based on the suggestion. The stages of research and development are hoped to make the arrangement of the books proper with the recent situation and condition. Moreover, the textbook is hoped

to be a useful problem-based learning finance management textbook with blended learning approach.

Statistical Analysis

The data analysis used in this research are: 1) validation of the textbook data with the formula [13] $P = \frac{\sum xi}{\sum x} \ x \ 100\%$. To make the decision making easier, the result from the experts is defined using the following guideline:

Table 1. Guidance of Decision Making [13]

The Learning Objective Achievement	Qualification	Information
81 – 100%	Very Good	No revision
61 – 80%	Good	No Revision
41 – 60%	Fair	Revision
21 – 40%	Not Good	Revision
0 – 20%	Very Not Good	Revision

The second data analysis is comparative statistical analysis. This analysis is use to know the different between the implementation of the problem-based learning finance management textbook with blended learning by using the SPSS software.

RESULT

The result of the validation level of the textbook and the problem-based learning finance management textbook proper in teaching finance management with blended learning is high. The validation result by experts, they are content expert, presentation expert and language expert are explained by the following table:

Table 2. Experts Validation result

Validated Products	Validators	Level 1		Level 2	
		Validation Result (%)	Notes	Validation Result (%)	Notes
Finance Management Textbook	Content Expert	80%	Good	90%	Very Good
	Presentation Expert	88%	Very Good	94%	Very Good
	Language Expert	75%	Good	80%	Good

From the validation result by experts, its known that the problem-based learning finance management textbook with blended learning approach is valid so that the textbook can be implemented in lecture of third grade economics education major of Nusantara PGRI University.

Next, the comparison on the different studying result of the students before and after the problem-based learning finance management textbook with blended learning approach textbook implementation. The following is the result of the textbook implementation toward the studying result:

From the data below can be found that the increase of the studying result is significant enough before and after the problem-based learning finance management textbook with blended learning approach textbook implementation.
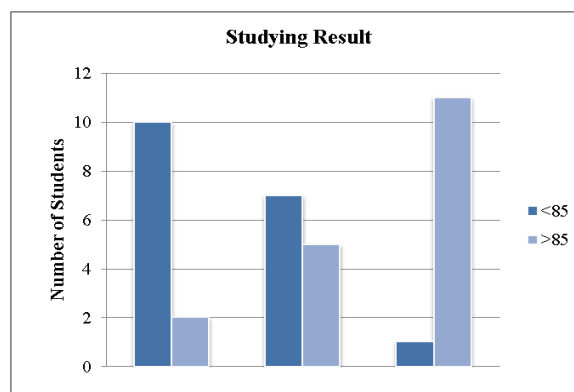

Figure 2: Students' Studying Result

The last research result is the comparative analysis using SPSS software. The comparative analysis is used to find the different in implementation of the problem-based learning finance management textbook with blended learning approach. The result of the students studying result used the non-parametric statistic. The reason is because the data is not normally contributed and the number of data is little. The result shows in the following table:

Table 3. Comparative Test Result

Ranks				
		N	Mean Rank	Sum of Ranks
Before – after the implementation of finance management result	Negative Ranks	0[a]	.00	.00
	Positive Ranks	12[b]	6.50	78.00
	Ties	0[c]		
	Total	12		
a. Before < after the implementation of finance management result				
b. Before > after the implementation of finance management result				
c. Before = after the implementation of finance management result				

Table 4. The Significance of Students' Studying Result

Statistics Test	
	Before – after the implementation of finance management result
Z	-3.087[b]
Asymp. Sig. (2-tailed)	.002
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

DISCUSSION

From table 2 which shows the validation from the experts, the problem-based learning finance management textbook with blended learning approach textbook implementation is valid so that the book can be used in the lecture for the third

grade students of economics education students of Nusantara PGRI University. In this level, the content experts scores 80% with good in category, while the increase happens in the level 2 into 90% with very good in category. Next, the presentation expert in the level 1 scores 88% with very good in category, and the increase happen in the level 2 into 94% with very good in category. And the last is the validation from language expert who scores 75% with good in category while the increase happens in level 2 into 80% with good in category.

From the figure 2, it shows that the significant increase in studying result after and before the implementation of the problem-based learning finance management textbook with blended learning approach textbook implementation. The significant different from the preliminary stage, trial level 1, and trial level 2. From the preliminary level, the score is <85 from 10 students, and 2 students get >85. From the trial level 1, 7 students get <85 and 5 students get >85. Next is the trial level 2, 1 student gets <85 and 11 students get >85.

From table 3, the negative rank is 0, it's known that the decrease of the students' studying score is not found. The positive rank is 12 where the increase of the score of the students studying score found, the mean rank is 6.50, sum of rank is 78,00, and toes is 0, the same score among the students is not found. The score of each student is different from preliminary treatment, trail level 1 and trial level 2.

From the table 4, the result of Asymp. Sig (2 – tailed) is 0,002<0.05, where the significant different of implementation of the problem-based learning finance management textbook with blended learning approach textbook implementation.

CONCLUSION

Based on the research conducted by the researcher, the textbook of problem-based learning finance management is arranged with blended learning approach is arranged. The textbook is valid so that it can

be used in lecture. Beside, the research result also found that the significant increase of the studying result before and after the application of the textbook. From the result of statistical analysis, it is found that significant different in implementation of the problem-based learning finance management book with blended learning. As a result, the existence of the textbook in the learning process could lead the process could achieve the target of learning maximally so that the students could analyze the case study given by the lecturer well both individually or in group.

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