PENGEMBANGAN MEDIA PEMBELAJARAN INTERAKTIF BERBASIS POWERPOINT PADA MATERI REKONSILIASI BANK UNTUK SISWA KELAS XI AKUNTANSI DAN KEUANGAN LEMBAGA

THE DEVELOPMENT OF POWERPOINT-BASED INTERACTIVE INSTRUCTIONAL MEDIA ON BANK RECONCILIATION FOR 11TH GRADE AKL STUDENTS

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Abstrak: Pengembangan Media Pembelajaran Interaktif Berbasis Powerpoint pada Materi Rekonsiliasi Bank untuk Siswa Kelas XI Akuntansi dan Keuangan Lembaga. Penelitian ini merupakan penelitian pengembangan (Research and Development) dengan mengadaptasi model pengembangan four-D (Define, Design, Develop, Disseminate). Tujuan penelitian ini adalah untuk mengembangkan Media Pembelajaran Interaktif Berbasis PowerPoint pada Materi Rekonsiliasi Bank untuk siswa kelas XI Akuntansi dan Keuangan Lembaga SMK Muhammadiyah 1 Yogyakarta, mengetahui kelayakan media yang dikembangakan, dan mengetahui tanggapan siswa terhadap media. Validasi media dilakukan oleh Ahli Materi, Ahli Media, dan Praktisi Pembelajaran yaitu guru akuntansi SMK Muhammadiyah 1 Yogyakarta. Penilaian siswa terhadap media dilakukan oleh 25 siswa kelas XI Akuntansi SMK Muhammadiyah 1 Yogyakarta. Teknik pengumpulan data dalam penelitian ini menggunakan angket. Data yang diperoleh dianalisis secara deskriptif kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa kelayakan media pembelajaran interaktif berbasis PowerPoint berdasarkan penilaian ahli media memperoleh skor 4,20 dengan kategori Layak, penilaian ahli materi memperoleh skor 4,00 dengan kategori Layak, penilaian praktisi pembelajaran memperoleh skor 4,72 dengan kategori Sangat Layak, dan pendapat siswa memperoleh skor 4,27 dengan kategori Sangat Layak.

Kata kunci: PowerPoint, Media Pembelajaran Interaktif, Akuntansi.

Abstract: The Development of Powerpoint-Based Interactive Instructional Media on Bank Reconciliation for 11th Grade AKL Students. *The approach of this research was Research and Development with adapting four-D (Define, Design, Develop, Disseminate) model. This research aims: 1) to develop PowerPoint-based Interactive Instructional Media on Bank Reconciliation for 11th Grade AKL Students in SMK Muhammadiyah 1 Yogyakarta, to know its feasibility, and to know the student response towards the media. The validation was conducted by media expert, material expert, and learning practitioner. Developmental testing was conducted among 25 11th grade AKL students in SMK Muhammadiyah 1 Yogyakarta to gather their responses towards the media. The data was collected through the questionnaire. The collected data then analysed by using descriptive qualitative and quantitative methods. The result showed that the feasibility of the PowerPoint-based Interactive Instructional Media validated: 1) by media expert received the score of 4.20 within the "Feasible" category; 2) by material expert received the score of 4.00 within the "Feasible" category; 3) by learning practitioner received the score of 4,72 within the "Strongly Feasible" category. The student response received the score of 4.27 within "Strongly Feasible" category.*

Keywords*: PowerPoint, Interactive Instructional Media, Accounting.*

INTRODUCTION

Education is extensively significant to existence. Educational success can be obtained by increasing instructional quality. The instructional quality means that the teaching-learning process attains its instructional objectives effectively and efficiently. The instructional objectives purpose to generate self-sustained learners through education (Rahmah, Sudiyanto, & Octaria, 2016: 74). The key to success in the teaching-learning process is determined by various and appropriate instructional media used (Shalikhah, Primadewi, & Iman, 2017: 12). Instructional media is all materials used to transfer knowledge and educational messages from teachers to students to encourage them to learn. It helps teachers conduct the teaching-learning process and supports students in achieving the instructional objectives. Using instructional media leads the students to be more motivated in learning (Sartikaningrum, 2013: 108). Moreover, implementing instructional media brings advantages as as making the teaching-learning process interesting, providing clearer instructional material, creating various learning methods, and increasing students' involvement in the learning activities (Sudjana & Rivai in Sanaky, 2013: 5). Implementing instructional media will motivate the students as the teaching-learning process becomes more interesting. It also makes instructional material more evident, in consequence the instructional objectives can be achieved. Furthermore, integrating instructional media in learning methods can lead the teaching-learning process more appealing to students since it provides diverse learning activities.

The numbers of instructional media used by teachers nowadays are substantial. The most common instructional media used is PowerPoint. It has been widely used because of its capability to present instructional material more efficient compared to the board. The implementation of instructional media helps not only teachers but also students as students can get much more information, compared to the conventional learning implementation. PowerPoint can make the teaching-learning process more systematic, produce a better visual effect for students, and expedite the transfer of information (Xingeng dan Jianxiang, 2012: 61). However, implementing PowerPoint in the teaching-learning process does not make the teaching-learning effective and efficient suddenly. It depends on how it is used. A simple PowerPoint presentation which only contains texts does not exceptionally give a significant impact on students. PowerPoint presentations that simply replace the board will only make the transferring information faster. However, it does not entirely have something to do with the students'

understanding of the material given. Making PowerPoint presentation interactive can be done from the simplest way to more complex way. It can be done simply by adding button with hyperlink feature or for more complexity that requires scripting or coding. Furthermore, applying kiosk mode and saving the project with PowerPoint Show (.pps) format can make PowerPoint presentation not way different with other media development programs' final product. Nevertheless, PowerPoint mostly used to present in the simplest way. This phenomenon shows that PowerPoint has not been fully utilised to its maximum potential. Therefore, the innovation in PowerPoint as instructional media is necessary.

The use of interactive instructional media can increase students' motivation and their achievement in learning (Khusna, 2016: 110). Interactivity is related to two-or-more-way communication between the user and the computer (software/application) reciprocally (Munir, 2015: 110). In the interactive process, there are interactions between the users and the media where the users have control over the operation, and the media responds to that control. The implementation of interactive instructional materials can encourage the students to become more self-sustained in accounting instruction (Rahmah, et al, 2016:81). Moreover, it can increase students' motivation, learning achievement, and independence. Thus, the implementation of interactive concepts in PowerPoint-based instructional media can be an alternative to achieve instructional objectives.

In the interview with an accounting teacher in SMK Muhammadiyah 1 Yogyakarta, the teacher uses PowerPoint as the instructional media. The reason is that PowerPoint can be operated easily compared to other presentation software. Besides, some limitations such as the lack of time and resources and teacher's workload cause the lack of innovation in instructional media that lead to simple PowerPoint implementation. Based on the front-end analysis, Bank Reconciliation material is quite difficult for the students. In addition, students also have difficulty finding learning resources for Bank Reconciliation materials other than those given by the teacher.

LITERATURE REVIEW

Simple or traditional lecture-format PowerPoint that has been commonly used is not entirely effective for increasing learning quality and students' independence. Instead, the instructional media in question was considered to be less interesting that led to student low-interest and motivation. It also affected student involvement in the teaching-learning process, causing students not having profound understanding of the materials taught. In this case, the material was Bank

Reconciliation. Bank reconciliation according to Weygandt, Kimmel, and Kieso (2013: 343) is the process of comparing bank cash balances with company cash balances and adjusting for discrepancies between the two. Students considered that Bank Reconciliation is a difficult material. In addition, the students were struggling with finding other instructional materials other than those given by the teacher. While implementing more advanced and complex media can help increasing student motivation and involvement, the teacher had to deal with some limitations that caused the lack of innovation in instructional media. In consequence, simple PowerPoint presentation was the only option left.

PowerPoint is a software developed by Microsoft. This computer program is useful for making presentation material in the form of a slide show. PowerPoint can be operated by combining text, images, graphics, audio, and video on a slide layout and can be presented with transitions or animations. However, PowerPoint has not been fully utilised to its maximum potential. In fact, PowerPoint can do better than presenting points and bullets. There are some features that allow the users to make a presentation become interactive.

The solution of the problem is to overcome the lack of the teacher's innovation in instructional media due to limitations the teacher had to deal with which affects the implementation of simple PowerPoint presentation that caused the student low motivation and involvement, by developing PowerPoint for teacher and students yet including interactivity to encourage student involvement.

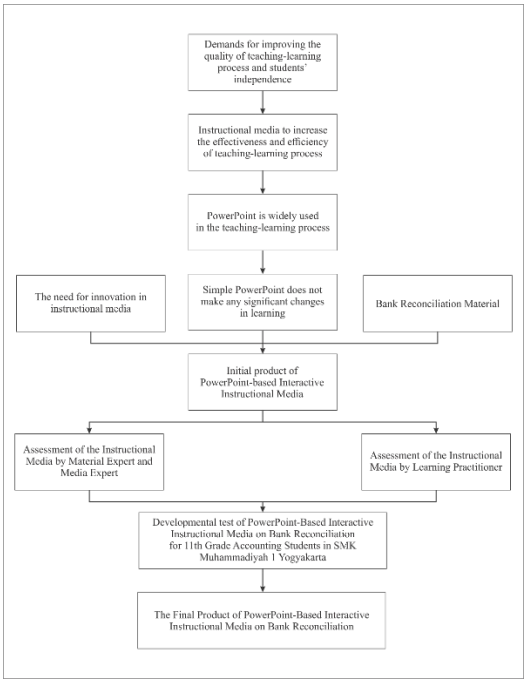

Figure 1. Research Paradigm

RESEARCH METHODS

Type of Research

This research used the Research and Development (RnD) method. Research and Development is a scientific way of producing a product by researching, designing, producing, and testing its validity (Sugiyono, 2015: 30). This research aims to develop PowerPoint-based interactive instructional media on Bank Reconciliation materials systematically and tested its feasibility in terms of materials, media, and use for

practitioner. The development procedures and stages used refer to the four-D development steps by Thiagarajan (1974) which consist of Define, Design, Develop, and Disseminate (Sugiyono, 2015: 37-38).

Research Subject and Object

The subjects of this research were the 11th grade AKL Students in SMK Muhammadiyah 1 Yogyakarta, a media expert, a material expert, and a learning practitioner. The object of this research was the feasibility of the PowerPoint-based Interactive Instructional Media.

Data Collection Technique

The data collection technique used in this research was questionnaire. Questionnaire is data collection techniques in the form of a set of questions and written statements given to respondents to find out what can be expected from respondents based on respondents' answers to research variables (Sugiyono, 2015: 216). Questionnaire in this research was used to obtain data from Material Expert, Media Expert, and Learning Practitioner, as well as students.

In this research the questionnaire used adopted Likert scale. The Likert scale is a two-pole scale method that measures positive and negative responses to a statement (Mulyatiningsih, 2013: 29). The Likert scale used in the questionnaire is a modified Likert scale with five scale options i.e., Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, and Strongly Disagree = 1.

Data Analysis Technique

Qualitative data in this research was in the form of suggestions or input given by Material Expert, Media Expert, and Learning Practitioner, as well as students that were analysed descriptively. Quantitative data obtained from the questionnaire was analysed by changing the quantitative assessment data into qualitative ones, calculating the average score for each indicator, interpreting qualitatively using criteria. In this research, the data obtained was converted into numbers using a Likert scale with five scale options to analyse the feasibility of the media with the following steps.

1. Determining the scoring of media feasibility

Table 1: Scoring Condition

Criteria	Score
Strongly Feasible	5
Feasible	4
Moderatly Feasible	3
Less Feasible	2
Not Feasible	1

Source: Eko Putro Widoyoko (2012: 106)

2. Conducting research data recapitulation
3. Calculating the average score for each aspect

$$\bar{x} = \frac{\sum x}{N}$$

Description:

$\bar{x}$ = average score

Σx = total score

N = number of questions

4. Summing up the aspect average scores

Table 2: Guidelines for Conversion of Quantitative Data and Qualitative Data

Score	Score Interval	Value	Category
5	$\bar{x} > 4.2$	A	Strongly Feasible
4	$3.4 < \bar{x} \leq 4.2$	B	Feasible
3	$2.6 < \bar{x} \leq 3.4$	C	Moderately Feasible
2	$1.8 < \bar{x} \leq 2.6$	D	Less Feasible
1	$\bar{x} \leq 1.8$	E	Not Feasible

Description:

$\bar{x}$: Actual Score

$\bar{x}_i$: Ideal average score

= ½ (Ideal max score+ideal min score)

= ½ (5+1)

= 3

Source: Eko Putro Widoyoko (2012: 112)

FINDINGS AND DISCUSSION

The Development of PowerPoint-Based Interactive Instructional Media as Instructional Media for Accounting Subject

PowerPoint-based Interactive Instructional Media as an accounting instructional media for bank reconciliation materials was developed by adapting the four-D model by Thiagarajan and Semmel. The Media development was conducted in 4 stages i.e., define stage, design stage, develop stage, and disseminate stage.

1. Define

The define stage consisted of front-end analysis, learner analysis, task analysis, concept analysis, and specifying instructional objectives. Based on the front-end analysis and learner analysis, it could be concluded that the media used was media that could help teachers and students achieve an interesting teaching-learning process and encourage student involvement, as well as improve student understanding. Therefore, the media chosen to be developed was interactive instructional media.

Task analysis, concept analysis and specifying instructional objectives had a role in determining the types of tasks, concepts, and materials, as well as instructional objectives that would be included in the media. Basic Competence and Indicators of Competence Achievement on Bank Reconciliation materials were analysed through task analysis to determine the assessment instruments and instructional materials. Concept analysis was conducted to identify the main concepts to be taught to facilitate the preparation of instructional

materials. Afterwards, the task analysis and concept analysis were combined to specify instructional objectives.

2. Design

The design stage included constructing criterion-referenced test, media selection, format selection, and initial design. The results on the design stage were evaluation test scripts, storyboard, and prototype. The evaluation test script was prepared based on Basic Competence and Indicators of Competence Achievement. Media selection was a follow-up to the analysis at the define stage. At the media selection, the developed media was obtained i.e., interactive instructional media. Consideration in the selection of the format lied on the appropriate software for the media development. In this research, the software used was PowerPoint. PowerPoint was chosen because it supported interactive instructional media and had been widely used so that it was more familiar to teachers and students. The initial design of learning media was storyboard and prototype. They facilitated the media development and provided an overview of the steps that could be taken in developing media, as well as provided an overview of the results of the developed media.

3. Develop

At the development stage, the initial design of the media was validated by material expert, media expert, and learning practitioner, and tested on students. The expert appraisal was conducted to determine the feasibility of the media based on aspects in the media and material. The result obtained from validation by media expert and material expert was feasible and revised based on the results of the assessment. Based on the learning practitioner validation, the media was considered as strongly feasible as an instructional media. The developmental testing was conducted to determine the student responses to the developed instructional media. Based on the developmental testing result, the media was considered as strongly feasible as an instructional media.

Table 3: Recapitulation of Media Expert Validation Result

No	Aspect	Total Score	Average
1.	Software Engineering Aspect	29	4.14
2.	Visual Communication Aspect	46	4.18
3.	Learning Aspect	13	4.33
	Score		4.20
	Category		Feasible

Source: Processed Quantitative Data

The Feasibility of PowerPoint-Based Interactive Instructional Media by Media Expert on the software engineering

aspect received a score of 4.14 with the "Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Media Expert on the visual communication aspect received a score of 4.18 with the "Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Media Expert on the learning aspect received a score of 4.33 with the "Strongly Feasible" category. Based on the validation by Media Expert, the overall score of PowerPoint-Based Interactive Instructional Media was 4.20 with the "Feasible" category as an instructional media.

Table 4: Recapitulation of Material Expert Validation Result

No	Aspect	Total Score	Average
1.	Material Aspect	21	4.20
2.	Evaluation Aspect	29	4.14
3.	Language Aspect	10	3.33
	Score		4.00
	Category		Feasible

Source: Processed Quantitative Data

The Feasibility of PowerPoint-Based Interactive Instructional Media by Material Expert on the material aspect received a score of 4.14 with the "Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Material Expert on the evaluation aspect received a score of 4.18 with the "Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Material Expert on the learning aspect received a score of 3.33 with the "Moderately Feasible" category. Based on the validation by Material Expert, the overall score of PowerPoint-Based Interactive Instructional Media was 4.00 with the "Feasible" category as an instructional media.

Table 5: Recapitulation of Learning Practitioner Validation Result

No	Aspect	Total Score	Average
1.	Learning Aspect	57	4.75
2.	Software Engineering Aspect	24	4.80
3.	Visual Communication Aspect	23	3.60
	Score		4.72
	Category		Strongly Feasible

Source: Processed Quantitative Data

The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the learning aspect received a score of 4.75 with the "Strongly Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the software engineering aspect received a score of 4.80 with the "Strongly Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the visual

communication aspect received a score of 4.60 with the "Strongly Feasible" category. Based on the validation by Learning Practitioner, the overall score of PowerPoint-Based Interactive Instructional Media was 4.72 with the "Strongly Feasible" category as an instructional media.

Table 6: Recapitulation of Developmental Testing Result

No	Aspect	Total Score	Average
1.	Learning Aspect	1392	4.28
2.	Software Engineering Aspect	522	4.18
3.	Visual Communication Aspect	542	4.34
	Score		4.27
	Category		Strongly Feasible

Source: Processed Quantitative Data

Student response towards PowerPoint-Based Interactive Instructional Media was conducted at the developmental testing. The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the learning aspect received a score of 4.28 with the "Strongly Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the software engineering aspect received a score of 4.18 with the "Feasible" category. The Feasibility of PowerPoint-Based Interactive Instructional Media by Learning Practitioner on the visual communication aspect received a score of 4.34 with the "Strongly Feasible" category. Based on the student response, the overall score of PowerPoint-Based Interactive Instructional Media was 4.27 with the "Strongly Feasible" category as an instructional media.

4. Disseminate

The disseminate stage was conducted after the developed instructional media has been tested. The distribution of the instructional media was done by hosting it through Google drive. Hosting was done by managing media files on Google drive and sharing the link through social media such as Facebook, Twitter, Instagram, and WhatsApp as well. The shared link was a simplified link from Google drive, i.e., bit.ly/CashPowerPoint for easier access. To know the users' experience on using the instructional media, feedback page was added by utilising google form feature to gather users' thoughts about the media. The feedback page was disseminated by the link bit.ly/feedbackCASH through social media.

CONCLUSION AND SUGGESTION

Conclusion

The development of PowerPoint-based Interactive Instructional Media as an accounting instructional media was developed using a four-D development model consisting of 4 stages i.e., define, design, develop, and disseminate. The validation of the feasibility of PowerPoint-based Interactive Instructional Media on the Bank Reconciliation by Media Expert received a score of 4.20 within the Feasible category, by Material Expert received a score of 4.00 within the Feasible category, by Accounting Learning Practitioner received a score of 4.72 within the Strongly Feasible category. The result of the student response towards the media by 25 11th grade AKL students in SMK Muhammadiyah Yogyakarta received a score of 4,27 within the Strongly Feasible category.

Suggestion

The limitations of developing PowerPoint-Based Interactive Instructional Media as accounting instructional media based on the research conducted are the developmental testing was limited to the product feasibility, determination of media feasibility is conducted by only one material expert, one media expert, and one accounting learning practitioner, the developmental testing was conducted only in one class. Therefore, PowerPoint-Based Interactive Instructional Media needs to be developed on other accounting materials. It also needs to be further developed by adding other features such as explanation videos. In future research, researchers can measure the effectiveness of PowerPoint-Based Interactive Instructional Media and conduct the developmental testing of PowerPoint-Based Interactive Instructional Media in more than one class and more than one school.

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