DEVELOPING THE ACCOUNTING POCKET BOOK TO IMPROVE STUDENTS' MOTIVATION ON TOPIC ADJUSTMENT ENTRIES

PENGEMBANGAN MEDIA PEMBELAJARAN BUKU SAKU AKUNTANSI UNTUK MENINGKATKAN MOTIVASI BELAJAR PADA PELAJARAN JURNAL PENYESUAIAN

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Abstract

This research aims to: develop the Accounting Pocket Book for grade X of Accounting program in SMK Muhammadiyah 1 Yogyakarta on basic competence Writing Adjustment Entries of Service Enterprises. This research aims to identify the improvement of students' learning motivation by looking at media suitability aspects according to the evaluation by the material expert, media expert and students through media visualization, material, and learning design aspects. This research is Research and Development (R&D) adapted from a development model ADDIE. The results of the research showed five stages of the making of the Accounting Pocket Book, they were: 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation. The level of the suitability of the Accounting Pocket Book according to the assessment was: 1) by the material expert, the mean score was 4.65 with category Very Suitable, 2) by the media expert, the mean score was 4.57 with category Very Suitable, The suitability assessment done by the students gained mean score 3.81 with category Suitable. In paired sample t-test, t-hitung was -19.650 with sig. 0.000 showing that the assessment was significant. In conclusion, the Accounting Pocket Book can improve the students' learning motivation.

Keywords: Accounting Pocket Book Learning Media, Adjustment Entries, Students' Motivation, ADDIE.

Abstrak

Penelitian ini bertujuan untuk: mengembangkan Media Pembelajaran Buku Saku Akuntansi kelas X Program Keahlian Akuntansi SMK Muhammadiyah 1 Yogyakarta dengan materi kompetensi dasar Menyusun Jurnal Penyesuaian Perusahaan Jasa. Penelitian ini bertujuan untuk mengetahui seberapa besar peningatan motivasi belajar siswa dengan melihat dari aspek kelayakan media berdasarkan penilaian ahli materi, ahli media dan siswa melalui aspek tampilan visual media, aspek materi, dan aspek desain pembelajaran. Penelitian ini menggunakan pengembangan atau Research and Development (R&D) *yang diadaptasi dari model pengembangan ADDIE. Hasil penelitian menunjukkan lima tahap dalam pembuatan Buku Saku Akuntansi Jurnal yaitu: 1) Analysis, 2) Design 3) Development, 4) Implementation, dan 5) Evaluation. Tingkat kelayakan media berdasarkan penilaian: 1) Ahli Materi diperoleh rerata skor 4,65 (Sangat Layak), 2) Ahli Media diperoleh rerata skor 4,57 (Sangat Layak). Penilaian kelayakan media oleh siswa uji coba akhir diperoleh rerata skor 3,81 (Layak). Pada uji t berpasangan diperoleh t hitung sebesar -19.650 dengan sig. 0,000 yang menunjukkan pengukuran signifikan sehingga kesimpulannya adalah Pengembangan Media Pembelajaran Buku Saku Akuntansi dapat meningkatkan Motivasi Belajar.*

Kata kunci: *Media Pembelajaran Buku Saku Akuntansi, Jurnal Penyesuaian, Motivasi Belajar, ADDIE*

INTRODUCTION

Education is a process of communication which contains the transformation of knowledge, values and skills, whether it takes place inside or outside the educational institutions that lasts a lifetime (life long process) from generation to generation.

It is stated in government regulation no. 32 year 2013 section that learning is a process of interaction among students, between teachers and students, and between learning sources and learning environment. Learning strategies are one of the factors that teachers have to pay attention toin the teaching and learning processes. Learning strategies consist of: (1) strategies of learning organization, (2) strategies of learning delivery, (3) strategies of learning management (Hamzah B.Uno, 2006: 45). The second strategies are strategies of learning delivery which one of the example is the use of the right learning media when teacher delivers materials to the students.

In conclusion, learning media is a tool to deliver materials to students. Learning media has been well developed by teachers in primary and secondary education levels. They are graphic, written, picture, projection, visual aids, audio, movie, computer multimedia.

In Business and Management Vocational High School, especially in SMK Muhammadiyah 1 Yogyakarta, it is found that one of the obstacles in the learning processes, such as students' lack of motivation. Students pay very little attention to the teacher's explanation. They are busy with themselves and get bored easily. They also lack interest to borrow or enrich their learning sources like textbooks, etc.

According to the observation and interviews with the accounting teacher in SMK Muhammadiyah 1 Yogyakarta, the teacher did not give enough alternative learning sources to support students' main learning sources. Main learning sources mostly used at school are two-dimension media, such as power point presentation and accounting textbooks. Less stimulating learning media tend to make students pay less attention to the materials that it causes students' lack of motivation. Students also tend to find it difficult remembering some theories of accounting when the teaching methods mostly use long explanation in which the students are passive, while the teacher is active. Therefore, the researcher attempts to give solution by developing accounting pocket book, thus students can understand the materials and are easily motivated to learn. The learning media developed in this research is The Accounting Pocket Book.

The accounting pocket book was chosen, since in SMK Muhammadiyah 1 Yogyakarta, the teacher still used textbooks. Also, there was not the same research

conducted at the school yet. The computer laboratory there is used for accounting subject. Students are not allowed to use hand phones inside or outside the classroom for accessing internet. Textbooks in the library are complete enough, yet students are less interesting to borrow them due to the big sizes of the textbooks. The textbooks' physical appearances are not interesting either. The accounting pocket book is a visual learning media. It gives students opportunities to easily learn accounting theories. Because the size is small, it is easy for students to bring it everywhere. Therefore, students can learn materials easily and independently. It is expected that the students can be more active, creative and excited in learning accounting. Their learning motivation increases as well. As the result, students can comprehend the materials better.

Adjustment entries topic was chosen by the researcher, because, according to the interview with the acccounting teacher, adjusment journal entry was the most difficult topic for students. They need extra explanation to understand this topic. Therefore, they need alternative learning media to improve their understanding of adjustment entries. Based on the background of the research mentioned above, developing various learning media is needed to provide students with more learning sources in order to increase students' learning motivation.

Therefore, the researcher is interested to conduct a research entitled "Developing the Accounting Pocket Book as a Learning Media to Improve the Grade X Accounting Students' Motivation of SMK Muhammadiyah 1 Yogyakarta in the Academic Year of 2015/ 2016."

RESEARCH METHOD

Research Types, Setting, and Subjects

This research is a Research and Development (R&D). The research was conducted in SMK Muhammadiyah 1 Yogyakarta on Nitikan Street No.48 Umbulharjo, Yogyakarta on December 2015-April 2016

The research subjects were one material expert, one media expert, one accounting teacher of SMK Muhammadiyah 1 Yogyakarta, 34 students of X Accounting 2 class and 35 students of X Accounting 1 class of SMK Muhammadiyah 1 Yogyakarta.

This research using ADDIE procedure. ADDIE was developed by Dick and Carrey (1996) to design a learning system (Endang Mulyatiningsih, 2011: 184). It stands for Analysis, Design, Development, or Production, Implementation, or Delivery and Evaluation. The following is the explanation of five development stages adjusted with the research:

a. Analysis Stage

1) Curriculum Analysis

The adjustment of the book contents was done according to the learning context that aimed students to be more active and pushed them to find other learning sources outside learning hours.

2) Students' Needs Analysis

After conducting observation, the researcher found that students needed a practical and captivating learning media that can improve students' learning motivation.

3) Material Analysis

Adjustment entries is the most difficult materials for students. They need extra explanation practices, so they can easily undestand it.

4) Purpose Formulation

An Accounting Pocket Book was hoped to fulfill the needs of grad X Accounting students in SMK Muhammadiyah 1 Yogyakarta by providing practical and easily-understood references. Moreover, students/ motivation increased

b. Design Stage

The second stage was a design stage or media design. This stage was a media design according to the result of analysis stage.

1) Material Arrangement

Adjustment entries of Service Enterprises.

2) Accounting Pocket Book (Draft I)

In this second stage, Pocket Book Draft I was made through the following process: (1) Materials and practices in the book were be presented in the Accounting Pocket Book were summarized into from some references. (2) The researcher compiled the materials to be presented in the Accounting Pocket Book using Microsoft Word, Adobe Photoshop and Adobe Design. (3) The final stage was converting the book to PDF format. (4) The pocket book printing.

3) Lesson Plans

The researcher composed lesson plans with the same materials as well.

c. Development Stage

1) Accounting Pocket Book's draft making

In this stage, the collected materials from various references, books or internet, related to Adjustment Entries were compiled and arranged using Microsoft Word. The materials were presented briefly with comprehensible language. Additional colors made using Adobe Photoshop and Adobe

Indesign completed the pocket book.

2) Accounting Pocket Book's evaluation instrument making

The evaluation instruments of the accounting pocket book consist of 2 questionnaires: learning motivation and product's suitability questionnaires. Motivation questionnaires were adapted from indicators of learning motivation by Sadirman (2011: 83) and Hamzah B, Uno (2012: 23).

3) Validation of the product suitability

The pocket books' validation were carried out by one material expert, one media expert and one accounting teacher.

4) Revision I and Draft II Making

Revision or editing function to minimize mistakes and makes the pocket bok suitable to use. The first revision was validated by the material expert, media expert, and the accounting teacher.

d. Implementation Stage

1) Control Class Try-Out

Control class try-out was done after the researcher did revision on the pocket book. The control class try-out was implemented to 34 students of grade X Accounting 2. The researcher used the developed Accounting Pocket Book.

2) Field Try-Out

Field try-out was done after the researcher did control class try-out. It was done to 35 students of grade X Accounting 1. The researcher used the developed Accounting Pocket Book.

3) Product Revision II

The research did the second revision, because: (1) final conclusion of the validation results showed that the Accounting Pocket Book is suitable. (2) Students' comments was based on their subjective point of view. (3) Mistakes were not too material and learning still can run.

e. Evaluation Stage

Evaluations done by the users, media and material experts to know the suitability of the developed media, the users' responses, and evaluations after using the media. The results showed whether the media was suitable to use. Besides, the evaluation stage was needed to improve the media.

Data Collection Techniques

a. Data

1) Questionnaires

Questionnaire is a written statement that is used to obtain

information, private information or information that the respondents already know, from respondents. Meanwhile, according to Sugiyono (2008): 199), questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to be answered.

2) Interviews

An interview with the accounting teacher of SMK 1 Muhammadiyah Yogyakarta was done by the researcher as the preliminary research to find what materials taught to students that later will be contained in the accounting pocket book, basic competence, core competence, curriculum, and the needs of learning media used.

Instruments used in this research was a non-test instrument in the form of questionnaires.

b. Data Analysis Techniques

From the data and information obtained, the data analyses that needed to be conducted in this research were:

1) Qualitative descriptive analysis. Qualitative data are in the form descriptions obtained from documentation, interviews, and/or observation (Moh. Ali, 2010: 322). Qualitative descriptive analysis

technique was used to process data from validation of material experts, media experts, teachers, and students' responses.

2) Quantitative descriptive analysis. According to Moh. Ali (2010: 324), "Quantitative data are in the form of numbers obtained from a total of a calculation or an assessment. The data are scores from a calculation or an assessment, rating scale scores and other types of scale scores and test scores." In this research, quantitative descriptive analysis was used to process data obtained from questionnaires. It aimed to know the suitability of the accounting pocket book.

a) Converting qualitative data into uantitative data:

Tabel 1. Assesment Aspects of Validation Questionnaire pusing Likert Scale

Klasifikasi	Skor
Sangat Baik	5
Baik	4
Cukup	3
Kurang	2
Sangat Kurang	1

b) Calculating the mean score of each aspects using a formulation as follows:

$$\overline{X} = \frac{\sum X}{n}$$

Explanation:

$\overline{X}$ = Mean Score

$\sum X$= Total Score

n = Number of test Subject

(Sukardjo, 2005: 52)

c) Converting mean scores

Tabel 2. The Conversion of Quantitative data (Validation Scores) into quanlitative data

Kategori	Rumus	Rentang
Sangat Layak	$X > \overline{X}i + 1{,}80$ SBi	$X > 4{,}20$
Layak	$\overline{X}i + 0{,}60$ SBi $< X \leq \overline{X}i + 1{,}80$ SBi	$3{,}40 < X \leq 4{,}20$
Cukup	$\overline{X}i - 0{,}60$ SBi $< X \leq \overline{X}i + 0{,}60$ SBi	$2{,}60 < X \leq 3{,}40$
Kurang Layak	$\overline{X}i - 1{,}80$ SBi $< X \leq \overline{X}i - 0{,}60$ SBi	$1{,}80 < X \leq 2{,}60$
Sangat Kurang Layak	$X < \overline{X}i - 1{,}80$ SBi	$X \leq 1{,}80$

Keterangan:

X = Actual score (obtained score)

$\overline{X}$= 3

SBi= 0,67

Source: Sukardjo (2005: 53)

3) The steps used to calculate the percentage of students' motivation are (Sugiyono, 2010: 144)

a) The quantitative data of scores of students' response questionnaires were analyzed descriptively using score conversion table bellow:

Table 3. Assesment Criteria of Motivation Questionnaires using Likert Scale

Kriteria	Skor	
	Pernyataan Positif	Pernyataan Negatif
Selalu	4	1
Sering	3	2
Kadang-Kadang	2	3
Tidak Pernah	1	4

b) Analysis techniques of Motivation Improvement using "T" test. Hartono (2012: 181-181) :

(1) Calculating t0

$$t_0 = \frac{(\frac{\sum D}{N})}{(\frac{SDd}{\sqrt{N-1}})}$$

(2) Giving interpretation toward t_0

c) Comparing t_0 with t_{tabel}

d) These criteria:

(1) If t_0 equals to or is bigger than t_t the null hypothesis(H_0) is rejected which means that there is a significat difference

(2) If t_0 is smaller than t_t the null hypothesis (H_0) is accepted which means that there is no a significaat difference

e) Calculating scores of students' learning motivation using the score percentage of students' learning motivation (Sugiyono, 2012: 137)

FINDINGS AND DISUSSION

Description of Research Subjects

The subjects of this development research were one material expert, one media expert, one accounting teacher, and all students of grade X Accounting 2 and grade X Accounting 1 of SMK Muhammadiyah 1 Yogyakarta.

Research Report

a. Developing the Accounting Pocket Book as a Learning Media

The procedure of the research consisted of several stages explained is :

1) Analysis Stage : Curriculum Analysis, Students' Needs Analysis, Subject Analysis and Purpose Formulation

2) Design Stage : Material Arrangement, Accounting Pocket Book (Draft I), and Lesson Plans

3) Development Stage : Accounting pocket book printing, evaluatin instruments of accounting pocket book (motivation and product suitability), expert validation, and revision I and accounting pocket book making (draft II)

4) Implementation stage : Control claas try-out and field try-out

5) Evaluation stage : Motivation Evaluation.

Developing the Accounting Pocket Book on topic adjustment entries, using the models ADDIE Dick dan Carry (1996) It stands for Analysis, Design, Development, Implementation and Evaluation. The steps in ADDIE easier to apply and more rasional than others models.

b. Validation of the product's Suitability

The collected data were quantitative as the primary data and the qualitative data were comments and suggestions from the validator. Validation is an evaluation stage before the product is tested to students. The pocket books' validation were carried out by one material expert, one media expert and one accounting teacher.

1) Material Expert

Tabel 3. Recapitulation of validation results of the accounting Pocket Book

No	Aspect	Total Score	Mean
1	Material Aspects	63	4,50
2	Learning Design Aspect	44	4,89
	Total	107	4,65
Category		Very Suitable	

Referring to Table 2 about converting quantitative data (validation score) into qualitative data (score category), it was known that the mean score (X) 4.65 was in a range 4.65X>4.20 which means that the developed media got score "**A**" with category "**Very Suitable**". The validation results showed that the accounting pocket book was developed according to evaluation of material and learning design aspects**.**

2) Media Expert

Tabel 4. Recapitulation of Validation result of the accounting pocket book

No	Aspect	Total Score	Mean
1	Media Visualization Aspect	137	4,57
	Total	137	4,57
	Category	Very Suitable	

Referring to Table 9 about converting quantitative data (validation score) into qualitative data (score category), it was known that the mean score (X) 4.57 was in a range 4.57X>4.20 which means that the developed media got score "**A**" with category "**Very Suitable**". The validation results showed that the accounting

pocket book was developed according to evaluation of media visualization.

3) Accounting Teacher

Tabel 6. Recapitulation of validation result of the accounting pocket book

No	Aspect	Total Score	Mean
1	Media Visualization Aspect	63	4,50
2	Material Aspect	44	4,89
3	Learning Design Aspect	39	4,33
	Total	158	3,95
	Category	Suitable	

c. Accounting Pocket Book

Figure 1. The Accounting Pocket Book

d. The Students' Comments of the Accounting Pocket Book on Topic Adjustment Entries

The subjects of the field test of the Accounting Pocket Book were the students of grade X Accounting 1 of SMK Muhammadiyah 1 Yogyakarta in the academic year 2015/ 2016. Students' responses toward the questionnaires of the media suitability functioned to identify the suitability of the Accounting Pocket Book according to the media visualization, material, and learning design aspects.

Tabel 7. Recapitulation of Validation results of Accounting Pocket Book of Control class Try-Out

No	Aspect	Total Score	Mean
1	Media Visualization Aspect	1299	3,82
2	Material Aspect	731	4,06
3	Learning Design Aspect	1054	3,88
	Total	3084	3,90
	Category	Suitable	

Table 8. Recapitulation of Validation results of Accounting Pocket Book of Field Try-Out

No	Aspect	Total Score	Mean
1	Media Visualization Aspect	1312	3,75
2	Material Aspect	853	4,06
3	Learning Design Aspect	1039	3,71

Total	3204	3,81
Category		Suitable

Referring to Table 9 about converting quantitative data (validation score) into qualitative data (score category), it was known that score mean (X) 3.90 and 3,81 was in range X>3.40<X≤4.20 which means that the developed media got "**B**" with category "**Suitable**". Validation results showed that the accounting pocket book was developed according to media visualization, material and learning design aspects

e. The Motivation Improvement after the Use of the Accounting Pocket Book on Adjustment Entries

Purpose this research is to know the students' motivation development after the use of the accounting pocket book on managing adjustment entries. The improvement of students' learning materials could be seen from the results of initial and final evaluation of students' motivation using Likert scale. The questionnaires consisted of 15 valid questions with 12 positive statements and 3 negative statements. The questionnaires were tested empirically with Cronbach's Alpha score 0.872 with instrument reliability ≥ 0.600.

The researcher knew the purpose achievement of the product development by assessing what the students achieved in the field. After the Accounting Pocket Book was claimed that it was valid, the researcher assessed the improvement of students' learning motivation. The valid questionnaires of initial motivation filling was done before learning processes without the Accounting Pocket Book. Then, the questionnaires of final motivation filling was done after learning processes using the Accounting Pocket Book.

Tabel 9. Recapitulation of Paired Statistics

	Mean		Correlation	Sig.	t	Sig. (2-tailed)
	Before	After				
Pair 1	48,17	51,71	.872	0,000	-19.650	0,000

Table of paired sample statistics showed the mean of total score of initial motivation was 48.17, while the mean of total score of final motivation was 51.71. Table of paired sample correlations showed that correlation of two variables was 0.872 with sig 0.000. It means that correlation of the total score of motivation before and after using the media was strong and significant.

If t hitung ≥ t table, so the hypothesis H0 was rejected, on the contrary, Ha was accepted. In t-test, t hitung was -19.650 with sig (p) 0.000.

Because $t_{hitung} > t_{table}$ (2.042) and p < 0.05 showed that H0 was rejected and Ha was accepted. It showed that the development of the Accounting Pocket Book could improve students' learning motivation. It influenced the score of the students' learning motivation.

Two results of motivation questionnaires before and after the use of media were compared, so the improvement score of students' learning motivation was identified.

Tabel 10. Recapitulation Results of Students' Learning Motivation

No	Indicators of Learning Motivation	Learning Motivation		Improvement
		Before	After	
1	Diligently doing assignments	74,76%	85,95%	11,9%
2	Patiently facing problems	73,09%	84,52%	11,43%
3	Needs and motivation to learn	78,21%	85,35%	7,14%
4	Like to learn independently	76,07%	87,14%	11,7%
5	Easily getting bored to routine assignments	79,04%	85,71%	6,67%
6	Able to defend arguments	81,42%	90,00%	8,58%
7	Hopes in the future	83,57%	89,28%	5,71%
	Total	76,95%	86,19%	9,24%

The highest motivation improvement was in indicator 1, "Diligently doing assignments", that was 11.90%. The second rank was indicator 4, "Like to learn independently", that was 11.70%. The third place was indicator 2, "Patiently facing problems", that was 11.43%. The fourth was indicator 6, "Able to defend arguments", that was 8.58%. The fifth place was indicator 3, "Needs and motivation to learn", that was 7.14%. The top bottom 2 were indicator 5, "Easily getting bored to routine assignments", that was 6.67% and indicator 7, "Hopes in the future", that was 5.71%.

The results of this development research were in line with a theory explained by Nana Sudjana and Ahmad Rivai (1987: 2) who says that a learning media in a learning process will attract students' attention, so it will helps students grow their learning motivation. John. D. Latuheru (1988: 17-24) explained by Derek Rowentree, he explains that one of the functions of a learning media is to improve students' learning motivation.

CONCLUSIONS AND SUGGESTIONS
Conclusions

According to the report and discussion of the research, it can be conclude that:

a. Accounting pocket book on topic Adjustment Entries Suitable as a

learning media of SMK Muhammadiyah 1 Yogyakarta

b. Accounting Pocket Book can increase the students' learning motivation

Suggestions

a. It needs more materials, so students get more complete materials.

b. It should be able to be applied to students not only during the Accounting learning hours, but also every time and everywhere.

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