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# Learning System Model of Accounting for CSME Subject (Empirical Study in Accounting Department, Jenderal Soedirman University)

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#### ABSTRACT

The vision of Jenderal Soedirman University is to be globally recognized as the center of rural development resources and local wisdom. In line with the university's vision, Faculty of Economics and Business has committed to change the curriculum. As the real practice of the curriculum changes, the Accounting Department has managed Accounting for Cooperatives and Small dan Medium Enterprises (Accounting for CSME) as a prerequisite subject for students since batch 2012. The aim of this study is to determine whether the learning system applied for Accounting for CSME is sufficient and effective annually. In the second year of the course implementation, the teaching team made a change in the lecturing material and the weight assessment study. One of the lecturing material in Accounting for CSME is SAK ETAP. In 2015, students received few topics about SAK ETAP, whereas in 2016, the students got a lot of the same topics. Moreover, in the first year of Accounting for CSME, the students wrote a paper as the final project, while in the second year, they did the exam that consists of diverse type questions. To determine the effectiveness of the weight assessment study on learning outcomes, the researchers conducted linear regression analysis. Testing for the feasibility of the model was done by using the R Square value result. ANOVA was then employed to see whether there was a difference in the learning outcomes of Accounting for CSME between 2015 and 2016. The results showed that weight assessment study had significant effects on learning outcomes, the learning system remained robust, and there was a considerable difference in the learning outcomes of the application of the course between 2015 and 2016.

*Keywords*: Accounting for CSME, weight assessment study, learning system, learning outcomes

#### Introduction

#### Research Background

The vision of Jenderal Soedirman University is to be globally recognized as the center of rural development resources and local wisdom. In line with the university's vision, Faculty of Economics and Business has committed to change the curriculum. As the real practice of the curriculum changes, the Accounting Department has managed Accounting for Cooperatives and Small dan Medium Enterprises (Accounting for CSME) as a prerequisite subject for students since batch 2012.

The curriculum in the Accounting Department before the year 2012 does not require students to take a course in Accounting for Cooperatives, Small and Medium Enterprises (Accounting for CSME). But since 2012, this Accounting for CSME course became compulsory subjects students who have taken on the sixth semester with weights three credits.

Year of 2015 was the first year of implementation of Accounting for CSME as compulsory subjects. In short, the learning process of Accounting for CSME in 2015 has been robust. Learning model that has been done is able to significantly influence learning outcomes. Giving quizzes, structured tasks, seminars, midterm and final exams proved a significant effect on the final value (Herwiyanti, et al., 2016).

Year of 2016 became the second year of implementation of the Accounting course KUKM as compulsory subjects. At this year lecturer make changes on the content of learning materials. If in 2015 students received only a few topics of financial accounting standards for entities without public accountability (SAK ETAP), in 2016 students received a lot of topics SAK ETAP. SAK ETAP as the accounting standards issued by the Indonesian Institute of Accountants (IAI) is expected to be a reference in preparing the financial statements in the small and medium enterprises. Therefore, it is expected this will be the provision of material supplies that are beneficial to students who engage in the practice of CSME.

Accounting students as academics are required to master the preparation of financial reports and also understand SAK ETAP well. Therefore, the change in the weight of SAK ETAP topics may affect the learning achievements of students in the course Accounting for CSME. Thus, it is interesting to do a study that tested the robustness of Accounting for CSME learning model in the Accounting Department, Unsoed, and do a comparison between 2015 and 2016.

# **Research Purposes**

This research aims to:

- 1. Testing the effect of weight assessment study to learning outcomes of Accounting for CSME subject in 2016.
- 2. Test the robustness of learning system of Accounting for CSME in 2016.
- 3. Examine the differences in learning outcomes of Accounting for CSME between 2015 and 2016.

## **Research Question**

The research question posed is as follows:

- 1. Does weight assessment study affect the learning outcomes of Accounting for CSME subject in 2016?
- 2. Is the learning model of Accounting for CSME in 2016 already robust?
- 3. Is there any difference in learning outcomes of Accounting for CSME between 2015 and 2016?

# **Literature Review**

## **Learning Design**

Learning design as a science is sometimes equated with learning science (Reigeluth, 1999: 11). Both of these disciplines put the same attention to the improvement of the quality of learning. But scientists are learning more focused on the observation of learning outcomes arising from the manipulation of a method in certain circumstances, this is done to obtain the learning theories (prescriptive).

Learning design is the development of learning systematically to maximize the effectiveness and efficiency of learning. Design learning activities begins with analyzing the needs of learners, define learning objectives, develop materials and learning activities, which include the determination of learning resources, learning strategy, learning steps, media learning and assessment (evaluation) to measure the success rate of learning. The results of these evaluations are used as a reference to determine the level of effectiveness,

efficiency and productivity of the learning process (Sujarwo, 2015). The process of learning activities generally include three stages. The first stage is to design and develop a learning system. The second stage is the implementation and design of learning system, the third stage is the evaluation of learning. The learning cycle can be seen in Figure 1 below:

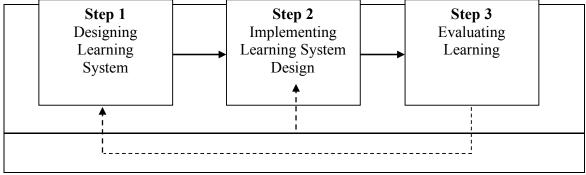


Figure 1: Learning Cycle (Source: Suparman, 1997)

## **Hannafin and Peck Model**

Hannafin and Peck Model is teaching design models are comprised of three phases, namely the requirement analysis phase, design phase and phase of development or implementation (Sujarwo, 2015). In this model, assessment and repetition should be run in every phase. This model is a model of learning design oriented products. Figure 2 below shows the three main phases in the model Hannafin and Peck.

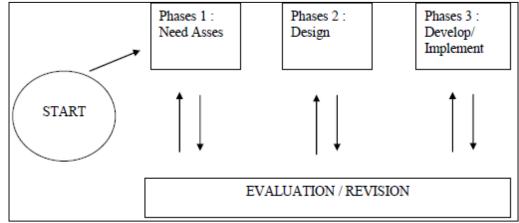


Figure 2: Hannafin and Peck Model (Source: Supriatna and Mulyadi,2009)

The first phase of the model Hannafin and Peck is a needs analysis. This phase is needed to identify the needs in developing an instructional media including the purpose and objective of learning media created, the knowledge and skills required by the target group, equipment and instructional media purposes. After all the needs are identified, Hannafin and Peck stressed to carry out an assessment of the results before proceeding to the design phase of development.

The second phase of the model Hannafin and Peck is the design phase. Within this phase information from the analysis phase was transferred into a form document that will be the goal of making learning media. Hannafin and Peck (in Supriatna and Mulyadi, 2009: 14) states the design phase aims to identify and document best rule to achieve the goal of making the media. One of the documents generated in this phase is to document the story board to follow the order of teaching activity by the purposes and objective

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media student learning as obtained in the phase of analysis purposes. As in the first phase, the assessment needs to be undertaken in this phase before continuing to the development and implementation phases.

The third phase of the model Hannafin and Peck is the phase of development and implementation. Hannafin and Peck said the activity undertaken in this phase is earning a flowchart, testing and formative assessment and summative assessment. Story board document will be used as basis for making a flow chart to help the process of making learning media. To assess the smoothness of the resulting media such as continuity links, ratings and testing carried out in this phase. The results of the assessment process and this testing will be used in the adjustment process to achieve the desired quality of the media. Model Hannafin and Peck (in Supriatna & Mulyadi, 2009: 14) emphasizes the assessment process and repetition should include processes of testing and learning media assessment involving all three phases simultaneously. Further Hannafin and Peck (in Supriatna and Mulyadi, 2009: 14) mentions two types of assessments are formative assessment and summative assessment. Formative assessment is assessment conducted throughout the development process media while summative assessment is done after the media has been developed. With a design based on the learning that has been arranged, then the classroom learning can be implemented more purposeful and planned.

Based on the literature review that has been mentioned above, it can be put forward hypotheses as follows:

- H1: Weight assessment study affect learning outcomes of Accounting for CSME subject in 2016
- H2: Learning model of Accounting for CSME in 2016 already good
- H3: There is any difference in learning outcomes of Accounting for CSME between 2015 and 2016

## **Research Method**

#### **Data Source and Sample Selection**

This study was conducted using quantitative design. The data used in this study are primary data. Data is taken directly from the subjects of the research. The sample selection was done by purposive sampling, the sampling of the population based on certain criteria (Jogiyanto, 2013).

In this study, the sample is students of Faculty of Economics and Business (FEB), Jenderal Soedirman University (Unsoed) with the following criterias:

- 1. Students of Bachelor Degree in Department Accounting, FEB Unsoed,
- 2. Students of Regular Program in Departement Accounting, FEB Unsoed,
- 3. Students who follow Accounting for CSME subjects due to curriculum 2012, and
- 4. Students who follow Accounting for CSME subjects in 2016.

Primary data from the learning process is collected directly by the researcher. Feedback from the learning process is reflected in the weights assessment study of the values obtained by the students during the course. Quiz, structured assignments, midterm and final exams are combined then converted to the final mark.

# **Data Analysis Technique and Hypotheses Testing**

Data analyzes is done using IBM SPSS version 23. This analysis tool is used to calculate the level of the coefficient of the independent variable on the dependent variable was analyzed with regression. Furthermore, it also performed calculations for the value of the coefficient of determination  $R^2$ , and Independent-test the samples.

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Tests on the first hypothesis by comparing the value of the coefficient, the value of t test, as well as the level of significance of each independent variable on the dependent variable. The second hypothesis testing is done by comparing the value of the coefficient of determination R<sup>2</sup>. Furthermore, the third hypothesis is done by comparing the two samples based on the value of variance Levene test and see the value of t-test to determine whether there is a difference between 2015 and 2016.

The first hypothesis is accepted if the effect of the independent variable on the dependent variable was significant (sig. <0.05). The second hypothesis is accepted if the value of the coefficient of determination  $R^2$  at the high category (close to 1). Furthermore, the third hypothesis is accepted if the result of the t-test sig. is <0.05.

## **Result and Discussion**

# **Hypotesis 1**

Interpretation of the independent variable coefficient can be conducted using standardized unstandardized coefficients and coefficients (Ghozali, 2009). Table 1 represent output for multiple regression of independent variables to dependent variable. It shown that coefficients of QZ, TGS, UAS, and UTS are sig. > 0,05. Then it can be conclude that all of the independent variables have significant effect to dependent variable. This results give support to accept hypothesis 1.

Table 1
IBM SPSS v.23 Output for Multiple Regression

		Unstandardized	Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	T	Sig.
1	(Constant)	-5.329E-15	.000		.000	1.000
	QZ	.100	.000	.169	122974215.616	.000
	TGS	.100	.000	.073	55150094.050	.000
	UAS	.500	.000	.601	442122867.214	.000
	UTS	.300	.000	.546	394286402.898	.000

a. Dependent Variable: FIN

## Hypothesis 2

A robust model has large coefficient determination. Value of  $R^2$  close to 1 means that the independent variables provide almost the same information needed to predict the variation on the dependent variable (Ghozali, 2009). Table 2 represent the value of  $R^2$  is 1. This means that independents variables provide the same information needed to predict the variation of the dependent variable. This results give support to accept hypothesis 2.

Table 2

IBM SPSS v.23 Output for R<sup>2</sup> test

Model	R	R	Adjusted	Std.	Change Statistics					
		Square	R Square	Error of the	R Square Change	F Change	df1	df2	Sig. F Change	
				Estimate						
1	1,00 <sup>a</sup>	1,00	1,00	,00	1,00	135107988821114848,0	4	120	,0	

a. Predictors: (Constant), UTS, TGS, UAS, QZ

b. Dependent Variable: FIN

# Hypothesis 3

Table 3 represent the result of independent samples test. It is seen that the value of F Levene's test of 15.054 with a probability of 0.000, because the probability <0.05 it can be concluded that Ho is rejected or have unequal variance. Thus, different test analysis using a t-test assuming unequal variance should be assumed. From IBM SPSS output seen that in unequal variance assumed value is 1.993 with significance probability of 0.048 (two-tailed). So we can conclude that the average of learning outcomes between 2015 and 2016 differ significantly.

Table 3
IBM SPSS V.23 Output for Independent Samples Test

		Levene	's Test							
		for Equality of								
		Varia	nces		t-test for Equality of Means					
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Differenc e	Std. Error Differ-		onfidence al of the erence
						tancuj	C	ence	Lower	Upper
FIN	Equal variances assumed	15,054	,000	2,012	242	,045	1,52027	,75577	,03155	3,00899
	Equal variances not assumed			1,993	205,670	,048	1,52027	,76279	,01639	3,02415

## Limitation

This study is not free from limitations. The main issue to consider is the charge of teaching materials provided to students. Learning materials of Accounting for CSME that given still need to be developed further. For example, the topic of discussion related to the emergence of SAK EMKM that is predicted will be the entity's accounting standard for micro, small, and medium enterprises. Therefore, future studies need to consider the effect of changes in the charge of new learning materials.

#### Recommendation

Based on the research that has been generated it is necessary to be considered for further research especially if in practice SAK EMKM become more relevant issue to be taught. It would be interesting if future research takes into account the involvement of other stakeholders, thereby not only measure the learning outcomes of Accounting for CSME by students.

#### Conclusion

- Weight assessment study that consists of quizzes, structured assignment, midterm and final exams has effect on learning outcomes of Accounting for CSME in 2016.
- 2. Accounting for CSME learning model in 2016 has been robust.
- 3. There are differences in learning outcomes of Accounting for CSME between 2015 and 2016.

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# **Implication**

- 1. Theoretically, this research give contribution to education science, especially in designing and developing learning system that can be implemented in teaching Accounting for CSME subject.
- 2. Practically, this research give contribution to team teaching to designing and developing learning system model of Accounting for CSME subject, especially in Accounting Department, Jenderal Soedirman University.

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