

The Effectiveness of the Implementation of Cash Flow System Model to Enhance the Ability to Write Cash Flow Reports

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ABSTRACT

This study aimed at finding out the effectiveness of the cash flow system model that has been validated from experts in a focus group discussion (FGD). This study used the continuation of the stages in the development method of the previous study, that is, the implementation stage. At this implementation stage the cash flow system teaching model was tested in a class of students who programmed financial accounting course, one of whose learning achievements was the ability to write cash flow reports. Data collection techniques carried out by means of observation, interview, documentation, and a learning achievement test. The study used the quantitative descriptive analysis technique by measuring the students' learning achievement as seen from the scores they obtained in the teaching process of cash flow report writing sessions. This study was done based on the scores obtained in the process of the writing of cash flow reports. The assessment was done based on the scores obtained for the assessment process of attitude, participation, assignment and learning achievement as seen from the evaluation of the products produced. From the implementation it was found out that the students' learning achievement in writing cash flow reports in terms of attitude, participation, and product evaluation respectively fell into a very good category. Hence, the cash flow system model is effective for use in the teaching process.

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1. Introduction

In this era every graduate of a university or college is expected to have the ability to absorb and use information technology wisely. The same is true for the graduates of the study program of accounting who are expected to have the ability to combine competencies in accounting and information technology. The main competency that they have to possess is the ability to write cash flow reports. In the curriculum of the study program of accounting there are courses that are related to cash flow such as "Introduction to Accounting, Financial Accounting, and Accounting Practicum" (Undiksha, 2016). The financial report that they have to master is the one which suits the standard of financial accounting such as reports of balance, profit and loss, capital change, cash flow and note on financial report.

Cash flow report is the report for "a period and is classified according to operation activities, investment activities, and financing activities" (Ikatan Akuntan Indonesia, 2009). The students still have problems in cash flow reporting, "To be an expert in financial accounting, the students are required to understand the basic concepts of accounting the process of writing a financial report from an economic entity" (Sulindawati, 2017). Furthermore it is explained that "To make it easier for the students to understand the process of writing a cash flow report, they need to be helped with the use of a teaching model, teaching material, or material that is appropriate and tools and equipment or computer program to write a cash flow report" (Sulindawati, 2017).

"To help the students in writing cash flow reports and to enhance their ability a model was developed for the cash flow system. This cash flow system contains steps in writing a cash flow report." (Sulindawati, 2017). "The steps are explained as follows: The stages in presenting a cash flow report can be done by using a computer program application to improve the students' ability in presenting a cash flow report. In this study a teaching model for presenting a cash flow report through computer media was developed through computer media. The development of this teaching model was designed by following six stages. All the stages in the teaching model are interconnected one another in order to improve the students' competence in presenting a cash flow report. The first stage is directing the students in learning through pictures and power points media that are related to cash flow reports from various types of businesses. The second is understanding concepts and procedures in presenting a cash flow report. The third is an activity of presenting a cash report through Microsoft excel program. The fourth is an activity of presenting a computer-based cash flow report. The fifth is presenting the process of writing a cash flow and the sixth is evaluating the result." (Sulindawati & Meitriana, 2019)

Based on research development methods, a product or model produced after being tried out and evaluated by experts needs to be implemented. After this cash flow system model was validated it was then implemented in the classroom. The teaching model developed went through six phases. The six phases in the model are related with each other to improve "the students' competencies in writing cash flow reports" (Sulindawati, 2017). "the six phases are (1) orienting the students toward the teaching of how to present a cash flow report; (2) an activity to understand concepts and stages for presenting a cash flow report; (3) an activity to write a cash flow report using Microsoft Excel media; (4) an activity of presenting a computer-based cash flow report; (5) presenting a cash flow report; and (6) evaluating learning achievement" (Sulindawati & Meitriana, 2019).

The definition of an implementation of a strategy according to Wheelen and Hunger is a process to place and apply information in operation (Alihamdan, 2017). Furthermore, according to Van Meter & Van Horn implementation is an execution of an action by individuals, officials, government agencies and private groups with the objective of achieving the ideal that has been stipulated in a particular decision (Alihamdan, 2017). The process of implementation can be done if the goal and objective have been determined, the program of activities has been designed and the fund has been available and channeled to achieve the objective.

The process of implementation can be said to have been effective if the goal has been reached. According to Hidayat (1986), effectiveness is a measurement which indicates to what extent the target (quantity, quality, and time) have been reached. The higher the percentage of achievement, the higher the effectiveness (Putro, 2015).

Effectiveness can be measured by comparing the plan that has been determined and the real result that has been realized. (Dan & Kota, 2017). From the explanations above the aim of this study was to find out whether the cash flow system model developed is effective for use for improving the students' ability to write cash flow reports.

2. Methods

The method used in this study was the continuation of the method of developmental research of the previous study which was the implementation stage. At this implementation stage, the teaching model of cash flow system was tested in a class of the accounting students who programmed financial accounting course one of whose learning achievements was the ability to write cash flow reports. Data collection techniques carried out by means of observation, interview, documentation, and a learning achievement test.

The observation was used to find out the participation of the students in the teaching process the interview was used to obtain information on the opinions of the students who took the course taught using the cash flow system model. The documentation was used to collect data on the students' performances in the assignments given and to evaluate them. The test was used to measure the students' ability in writing cash flow reports

The data were analyzed with the quantitative descriptive analysis by measuring the students' learning achievement as seen from the scores they obtained from the learning process in terms of attitude, participation, task, and learning achievement as seen from the evaluation of the product that they produced.

The criterion for measuring the students' ability was based on the study guide published by Ganesha University of Education and Indonesian Art Institute Padang Panjang which reads

Penilaian pembelajaran di perguruan tinggi merupakan penilaian terhadap proses dan hasil belajar mahasiswa dalam rangka pemenuhan capaian pembelajaran lulusan. Penilaian proses dan hasil belajar mahasiswa tersebut berkaitan dengan: prinsip penilaian, teknik dan instrumen penilaian, mekanisme dan prosedur penilaian, pelaksanaan penilaian, pelaporan penilaian, dan kelulusan mahasiswa. (Undiksha, 2017), (ISI Padang Panjang, n.d.).

The evaluation of learning in the university is the evaluation of process and product of the student's learning achievement to meet the graduate's learning achievement. The process and product evaluations are related to : the principle of evaluation, techniques and instruments, mechanism and procedure of evaluation, evaluation implementation, evaluation reporting, and student's graduation. (Undiksha, 2017),(ISI Padang Panjang, n.d.)

3. Result and Discussion

After the judges validated the model, it was implemented in the classroom to the students of the Accounting Department. The teaching activity which was conducted started with the giving of information concerning the syllabus, the semester teaching plan, and the course contract. In the teaching instruments there are the identity of the course, the learning achievements, i.e., the learning achievement in attitude, that in knowledge, and that of general achievement as well as the indicators of achievements. Twelve hours in 4 face-to face meetings was allocated for the learning achievement related to the writing of cash flow and assignments for this topic were to be done outside the teaching hours. At the first meeting the lecturer gave an introduction to the topic of cash account which contained the concept of writing cash flow reports and illustrations of the cash flow reports for service, business, cooperative and industrial firms , and here the concept of cash flow report writing was discussed using the Microsoft excel. At the second meeting the guide for writing cash flow reports by using a computer-based system was discussed. At the third meeting there was the activity of writing cash flow reports by using the cash flow system. At the fourth meeting an evaluation was done related to the product produced and the presentation of the cash flows which had been written was conducted. To reach the objective of the teaching which had been implemented there was a need for the use of a strategy which was suitable . By implementing a strategy, a teacher will have a guide in doing an activity related to various alternatives of option which can be selected, so that the teaching and learning activity can proceed systematically, with a clear direction , smoothly and effectively. Thus, the strategy is expected to help the teachers in doing their job, on the other hand, a teaching activity which is done without a strategy will make the activity run without a clear direction (Hamruni, 2015).

Table 1. “ An Illustration of Comparative Balance in an Industrial Firm

	Dec 31	
	2017 (Rp)	2018 (Rp)
Cash	Rp 125,000,000	Rp 215,000,000
Accounts Receivable	Rp 285,000,000	Rp 290,000,000
Prepaid Expenses	Rp 55,000,000	Rp 45,000,000
Inventory of Finished Goods	Rp 200,000,000	Rp 190,000,000
Inventory of Goods in Process	Rp 230,000,000	Rp 220,000,000
Inventory of Raw Materials	Rp 195,000,000	Rp 185,000,000
Office Equipment	Rp 80,000,000	Rp 95,000,000
Total Current Assets	Rp 1,170,000,000	Rp 1,240,000,000
Land	Rp 400,000,000	Rp 400,000,000
Buildings and Factory	Rp 340,000,000	Rp 340,000,000
Accum. Dep. Buildings and Factory	Rp (85,000,000)	Rp (90,000,000)
Noncurrent Assets	Rp 655,000,000	Rp 650,000,000
Total Assets	Rp 1,825,000,000	Rp 1,890,000,000
Trade Debts	Rp 345,000,000	Rp 345,000,000
Lease Income Received in Advance	Rp 180,000,000	Rp 170,000,000
Total Current Liabilities	Rp 525,000,000	Rp 515,000,000
Long Term Bank Loan	Rp 352,500,000	Rp 350,000,000
Total Long Term Liabilities	Rp 352,500,000	Rp 350,000,000
Share Equity	Rp 680,000,000	Rp 680,000,000
Agio Equity	Rp 68,000,000	Rp 68,000,000
Current Profit	Rp 199,500,000	Rp 277,000,000
Total Equity	Rp 947,500,000	Rp 1,025,000,000
	Rp 1,825,000,000	Rp 1,890,000,000

”(Sulindawati, Ni Luh Gede Erni and Metriana, 2018)

Table 2. “An Illustration of Comparative Balance of a Pawn Shop in the Period of 2017-2018

Name of Accounts	31 Dec.	
	2017 (Rp)	2018 (Rp)
ASSET		
Current Asset		
1. Cash	40,000,000.00	50,000,000.00
2. Accounts Receivable	2,650,000,000.00	2,670,000,000.00
3. Down Payment	5,000,000.00	5,000,000.00
4. Prepaid Cost	5,000,000.00	4,500,000.00
5. Income Receivable	2,500,000,000.00	2,600,000,000.00
Total Current Asset	5,200,000,000.00	5,329,500,000.00
FIXED ASSET		
1. Land	200,000,000.00	300,000,000.00

2. Buildings	300,000,000.00	300,000,000.00
3. Inventory	85,000,000.00	100,000,000.00
4. Vehicles	120,000,000.00	134,000,000.00
5. Accumulation of Depreciation	(10,000,000.00)	(11,000,000.00)
6. Accumulation of Inventory Depreciation	(15,000,000.00)	(16,000,000.00)
7. Accumulation of Depreciation	(25,000,000.00)	(27,000,000.00)
8. Assets in Progress	20,000,000.00	22,000,000.00
9. Auction Inventory	6,000,000.00	8,000,000.00
10. Problematic Goods	9,500,000.00	12,500,000.00
11. Firm's Auction Goods	18,500,000.00	19,500,000.00
Total Unfixed Asset	709,000,000.00	842,000,000.00
Total Asset	5,909,000,000.00	6,171,500,000.00
Short Term Liabilities		
1. Account Payable	15,000,000.00	26,000,000.00
2. Custom Auction Debt	20,000,000.00	32,000,000.00
3. Debts to Customers	25,000,000.00	26,000,000.00
4. Tax Payable	15,000,000.00	26,000,000.00
5. Accrued Cost	45,000,000.00	49,000,000.00
6. Other Current Accounts Payable	40,000,000.00	48,000,000.00
Total Short Term Liabilities	160,000,000.00	207,000,000.00
Long Term Liabilities		
Long Term Liabilities		
1. SHELF in Regional Office	1,300,000,000.00	1,400,000,000.00
2. Branch Office-Main Office SHELF	1,524,000,000.00	1,419,000,000.00
3. Inter-regional SHELF	100,000,000.00	100,000,000.00
4. Main Office SHELF	152,000,000.00	200,000,000.00
Total Long Term Liabilities	3,076,000,000.00	3,119,000,000.00
Equity		
1. Current Year Profit/ Loss	2,673,000,000.00	2,845,500,000.00
Total Equity	2,673,000,000.00	2,845,500,000.00
Total Liabilities	5,909,000,000.00	6,171,500,000.00

(Sulindawati, Ni Luh Gede Erni and Metriana, 2018)

At the time when the teaching occurred the evaluation of the students' learning activities was conducted. This evaluation was categorized based on the steps for the writing of cash flow based on the computer which has been developed above. The evaluation done in the course was related to the process evaluation, ie., attitude and participation, tasks, and the evaluation of the products produced. The learning

achievements are illustrated like those shown in Tables 3 and 4 below. The evaluation of process and product produced is related to the cash flow report for a service firm, trade, cooperative and manufacture.

Table 3. Learning Achievements from the Evaluation of Process, Attitude , Participation, and Tasks

NO	Remarks	Percentage of the Number of Students and Scores									
		0-39	40-60	61-64	65-68	69-72	73-76	77-80	81-84	85-100	
1	The ability to calculate the differences of the existing accounts in the balance accurately	0%	0%	0%	0%	0%	0%	5%	57%	38%	
2	The ability to analyze changes in accounts in the balance with an understanding of the concept of the effect of the changes of the concept on the cash flow accurately y and correctly	0%	0%	0%	0%	0%	0%	5%	52%	43%	
3	The ability to classify the accounts into three activities of operation, investment, and financing accurately and correctly	0%	0%	0%	0%	0%	0%	10%	52%	38%	
4	The ability to make a format of cash flow reports exactly and correctly	0%	0%	0%	0%	0%	0%	5%	57%	38%	
5	The ability calculate and present cash flow reports exactly and correctly using the Microsoft excel media	0%	0%	0%	0%	0%	0%	5%	48%	48%	
6	The ability to start Cash Fkiw System by opening login to cash flow system	0%	0%	0%	0%	0%	0%	5%	52%	43%	
7	The ability to manage data appropriately	0%	0%	0%	0%	0%	0%	10%	52%	38%	
8	The ability to manage transactions appropriately and	0%	0%	0%	0%	0%	0%	5%	48%	48%	

correctly										
9	The ability to print cash flow reports correctly and appropriately	0%	0%	0%	0%	0%	0%	5%	33%	62%
10	The ability to interpret the contents of cash flow reports	0%	0%	0%	0%	0%	0%	19%	38%	43%
	Average	0%	0%	0%	0%	0%	0%	7%	49%	44%

Table 3 shows that the averages of scores for attitude and students' participation and task are in the ranges if 7% (77-80), 49% (81-84) and 44% (85-100) respectively, which fall into the very good category

Table 4. Learning achievement and the Evaluation of the Product

NO	Remarks	Percentage of the Number of Sudents with Scores								
		0-39	40-60	61-64	65-68	69-72	73-76	77-80	81-84	85-100
1	The ability to calculate the differences of the existing accounts in the balance accurately	0%	0%	0%	0%	0%	0%	0%	43%	57%
2	The ability to analyze changes in accounts in the balance with an understanding of the concept of the effect of changes on cash flow appropriately and correctly	0%	0%	0%	0%	0%	0%	0%	33%	67%
3	The ability to classify accounts into three activities: operation, investment, and financing accurately and correctly	0%	0%	0%	0%	0%	0%	0%	29%	71%
4	The ability to make the format of cash flow reports accurately and correctly	0%	0%	0%	0%	0%	0%	0%	43%	57%
5	The ability to calculate and present cash flow reports appropriately and correctly through the microsolft excel media	0%	0%	0%	0%	0%	0%	0%	29%	71%
6	The ability to start System on Cash Flow System by opening login to cash flow system	0%	0%	0%	0%	0%	0%	0%	29%	71%
7	The ability to manage data accurately	0%	0%	0%	0%	0%	0%	0%	38%	62%
8	The ability to manage transactions accurately and correctly	0%	0%	0%	0%	0%	0%	0%	43%	57%
9	The ability to print cash flow reports correctly	0%	0%	0%	0%	0%	0%	0%	43%	57%

and appropriately										
10	The ability to interpret the contents of cash flow reports	0%	0%	0%	0%	0%	0%	0%	48%	52%
	Averages	0%	0%	0%	0%	0%	0%	0%	38%	62%

Table 4 shows that the averages of the evaluation of the students' products are in the ranges of 38% (81-84) and 62% (85-100) which fall into very good categories.

In addition to the evaluation above, to get the information related to the students' opinions, an interview was conducted by asking questions related to the cash flow system model. The questions asked were those which are found in Software Usability questionnaire (Ependi, Panjaitan, & Hutrianto, 2018) related to the ease in use, the function of a well-integrated system, the desire to keep on using the cash flow system model. From the interview with some (ten) of the students who took the course it was able to be found out that the system model used in the writing of cash flow reports is easy and practical to use, the system has been well integrated, and they wanted to always use the system model in writing cash flow reports.

4. Conclusion

Based on the results of the study above it can be concluded that the cash flow system model developed in writing computer-based cash flow reports could enhance the students' ability to write cash flow reports as seen from the scores obtained which fall into very good categories and from the result of the interview in which the students have the opinion that the system model was easy to use, so that this model can be categorized as an effective model for use in the teaching process. It is suggested that with the effectiveness of the cash flow system model developed it can be used in the teaching process to enhance the ability of the students to write cash flow reports, and that for further research the cash flow system model can be tried out in a larger scope.

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