The Implementation of a Village Financial Administration Teaching Model through Microsoft Excel Program

Ni Luh Gede Erni Sulindawati¹, Naswan Suhasono¹, Wayan Lasmawan¹, Nyoman Natajaya¹, Gusti Arya Sunu¹,¹Ganesha University of Education, Indonesia, Email: esulind@gmail.com

This study aimed at testing the validity and evaluating the implementation of a village financial administration teaching model through a Microsoft program excel that has been developed. The study used Sugiono’s development method in its trial and product revision stages. The data were collected through observation, interview, documentation and evaluation of learning achievement of the village apparatus. The data used in this study were analysed using a quantitative analysis. The quantitative analysis was used to evaluate the result of the trial of the model and to evaluate the learning achievement of the village apparatuses. Based on the result of the validity testing by experts it was found that the mean of the content validity is 3.24, falling into a reliable category, R = 93.8% and the mean of the construct validity is 3.22 with R = 92.8%, falling into a reliable category, which means that the teaching model is valid and reliable. The mean of the learning achievements of the village apparatuses = 87.63%, falling into a very good category, which means that the village apparatuses understands the teaching model and this model helped them to do the administration and operate the village financial system.

Keywords: teaching model, excel Microsoft program, village financial administration

Introduction

In an organisation, highly qualified human resources are needed. To improve the quality of Human Resources or those needed in the organisation there is always a learning process. Learning is not only for children but learning is also aimed at adults both those who are working or not. In order for the learning process to be successful it needs to be managed properly. Good learning management begins with planning. There are several concepts of human resources; Wendell defines human resources planning as the process of analysing an
organisation’s human resource needs based on its objectives and regulatory environment, as well as developing appropriate plans for qualified personnel (Wendell, 2003). Ali similarly defines it as a prediction and subsequent analysis of an organisation’s human resources demands and the development of supply-demand matching strategies, which many consider an important factor in the strategic planning process (Ali, 2019). This requires human resources planning to be consistent with the strategic plan of the organisation in question (Eidm 2018) as it enables the plan’s success regardless of the support, or lack thereof, from human resources management (Faruk, and Mehmet, 2019)” (Al-bahadli & College, 2019)

The teaching model that was tested in this paper contains teaching strategy and teaching media of the previous study from which it was found information about “the need and learning strategy in teaching village financial administration”. From the strategy a teaching model was designed through Microsoft excel program to help the village apparatuses in administrating and operating the village financial system.

A teaching model is ”a system that consists of various components that are related to each other. The components consist of objective /competence, material, method and evaluation. The four components have to be considered by the teacher in selecting or determining an approach and a teaching model” (Rusman, 2017). The teaching model that has been developed in this paper contains steps of ”the orientation of the village apparatuses in the village financial administration, the activity of understanding the material that is needed in administrating the village finance, teaching activities in the village financial administration, presentation of the village financial administration report and learning achievement evaluation”.

“The media used to prepare the material before getting into the village financial system is Microsoft excel program at the first stage on the first sheet where the village revenue and budget plan is written, on the second sheet the village assets, liabilities and then on the third sheet and the next sheets the general cash book, the village bank book, the tax book, the authorization to pay, the purchase accountability statement, the monthly cash book closing entries , receipt ledger, expenditure ledger and village income and expenditure budget plan.”

The teaching model needs to be tested and implemented; a validity test is “a measure the shows the validity of an instrument, the testing of the validity refers to what extent has an instrument done its function. An instrument is said to be valid if it can be used to measure what it is supposed to measure” (Sugiyono, 2008). Furthermore, it is explained “there are three types of validity that are often used in writing an instrument, namely content validity, construct validity, prediction validity” (Sugiyono, 2008)

Implementation according to Wheelen and Hunger “is a process to place and implement information in an operation ”(Alihamdan, 2017);(Erni Sulindawati, 2019). According to Van Meter & Van Horn “implementation is the execution of an action by an individual, official, a government organisation and a private group with the objective of reaching a
dream that has been determined in a certain decision (Alihamdan, 2017) (Erni Sulindawati, 2019)”. “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 channelled to achieve the objective.” (Sulindawati, 2019).

**Literature Review**

"Villages are villages and customary villages or what are called using other names, henceforth called Village, which is a unit of legal community with its borders and has the authority to regulate and manage its administration, the local people’s interest based on the initiative of the community, rights of its origin, and / or traditional rights that are recognised and respected in the system of the nation of the Unitary State of the Republic of Indonesia” (State Secretariat, 2014).

“In order to improve the economic growth of the village and the living standard of the people in the villages the government allocated funds from the state budget which were managed independently by the village government. In this case the central government and local governments tend to take the position and role as facilitators, provide financial assistance, foster and supervise the management of village funds (Azwardi, 2014)” (Winarningsih, Yudianto, & Handoyo, 2019).

Villages must be managed effectively and efficiently. "Effectiveness and efficiency are the two most important concepts in successful management. These two concepts help to provide clarification with regard to organisational processes and performance. Recent research has identified that effectiveness and efficiency may be understood as complex mechanisms within organisations” (Rashid, Al-maawali, & College, 2019).

To be managed effectively and efficiently, the Indonesian government established a village financial system. Village finance needs to be managed by competent resources.

‘The competency of the village apparatus is also very important, because competencies related to knowledge, skills, abilities and personality characteristics directly affect their performance (Mangkunegara, 2012:40)” (Winarningsih et al., 2019).


The Financial Accounting Standard Board (FASB, FRQ) indicates that financial statements must provide accurate information and a true reflection economic performance of a business entity (Weil, Schipper, & Francis, 2013)”(Rajabhat, 2019).

Financial statements can be made in a certain time period for example monthly, two monthly, three monthly, or annually or interim reports.” the primary objective of the interim financial
reporting is to express the results of the financial position of the entity, in light of what has actually happened” (Naeem, Mahdi, & Idan, 2019).

Plans "Regional Revenue and Expenditures Budget, hereinafter abbreviated as APBD, are regional annual financial plans stipulated by Regional Regulations. Guidelines for APBD Preparation are the main policy set by the Minister of Home Affairs every year as a guide and direction for regional governments in the preparation, discussion, and determination APBD” (Mendagri, 2019).

Assets in general can be interpreted as "Assets are economic resources that are controlled and / or owned by the government as a result of past events and from which future economic and / or social benefits are expected to be obtained, both by the government and the community, and can be measured in money units, including non-financial resources needed to provide services to the general public and resources maintained for historical and cultural reasons” (Handani, 2019).

According to the Asset Financial Accounting Standards "Future economic benefits that are manifested in assets are the potential of these assets to contribute, directly or indirectly, to cash flows and cash equivalents to the entity. Such cash flows can occur through the use of assets or disposal of assets” (Ikatan Akuntan Indonesia, 2009).

Assets can be grouped into "Current assets and non-current assets” (Ikatan Akuntan Indonesia, 2009).

In village financial administration, villages have village assets, liabilities, and equity. “Village Assets are items belonging to the Village that originate from the village's original wealth, are bought or obtained at the expense of the Village Budget and Expenses or other legal rights.”(Mendagri, 2016). “Village Asset Management is a series of activities ranging from planning, procurement, use, utilization, security, maintenance, deletion, alienation, administration, reporting, valuation, guidance, supervision and control of Village assets” (Mendagri, 2016).

Liabilities represent "Debts arising from past events whose settlement results in an outflow of economic resources owned. These obligations can be in the form of Short-Term Obligations and Long-Term Obligations. For example, third party debt, tax deduction debt, loan installment debt, long-term loan, c. Net Wealth Is the difference between village-owned assets and liabilities that must be fulfilled by the village until 31 December a year.”(IAI-KASP, 2015)

Village officials still face difficulties in applying the village financial system. To improve the competence of village devices, an adequate and appropriate learning model is needed.
The model developed in this research uses the information technology perspective, which is the Microsoft excel media program.
Learning from an information technology perspective can be used as a means to facilitate a learning process. "Factors that influence or support the realization of a quality learning process in an effort to achieve educational goals, one of which is the use or utilization of information and communication technology in the education and learning process."(Yusufhadi Miarso, 2004),“(Ismaniati, 2013),(Chaidar, 2014),(Tekege, 2017),(Roychan & Leny, 2016),(Munir, 2017),(Mustikarani & Irwansyah, 2019),(Nurvitasari & Poerwandar Asmaningrum, 2018),”(Yuberti, 2015)

“The rapid progress of technology cannot be denied more and more spoiled humans, for example in terms of communication. Interactions that occur with the help of technology are becoming easier and more diverse”(Chaidar, 2014).
“Effective learning is learning that facilitates students actively interacting with various learning resources so that students achieve learning goals effectively, efficiently, and fun (power-pulling). Improving the quality of learning means the efforts made in realizing and achieving the expected level of learning quality.”(Ismaniati, 2013)

“Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources” (Januszewski A & Molanda, 2008)”(Situmorang, Lagun, Ibrahim, & Lagunsiang, 2019).

“Information technology plays a crucial role in most organisations. Without the advance information technology in an organisation, operations and management become less effective, low quality and slow in production. Information technology can also ensure companies’ survival in the competitive environment”(Ramli, Fatin, Abdul, Siti, & Hayati, 2019).

“Technology strategy (TS) is one of the most important aspects of any firm's strategic posture especially in dynamic environments such as the computer software industry. Not only do new ventures face the pressures that accompany all young companies (e.g., shortages of capital), but they also have to keep up with a rapid rate of technological change”(Zahra, S. A., & Bogner, 2000)

“It is an essential precondition that takes advantage of current and effective technology. It works as a fundamental tool for rivalry and establishes practical and physical alternative actions (Itami and Numagami, 1992), in a similar way, organisations’ core capabilities are dependent on technology as a primary foundation.”(Sukri & Yusoff, 2019)

The information technology used in this learning model is the Microsoft Excel program.

“Microsoft in the form of spreadsheets (spreadsheets). This software is part of the Microsoft Office software package in which there is a lot of software (office requirements) for example: Microsoft Word (word processor), Microsoft Power Point (for presentation purposes), and Microsoft Access (for database purposes)”(Stafnew UNY, n.d.)
Microsoft Excel is a "General Purpose Electronic Spreadsheet that can be used to organize, calculate, provide and analyze data and present it to graphs or diagrams. Another convenience obtained from this program is the integration of the Microsoft Excel program with other Windows application programs. When you open Microsoft Excel, a workbook is ready for use which includes several worksheets"(Team Lab Komputer DPP INfokom, 2013).

“Excel is a spreadsheet program in the Microsoft Office system. We can use Excel to create and format workbooks to analyze data and create data itself. Specifically, we can use Excel to track data, build models to analyze data, write formulas to do calculations on that data, process data in various ways, and present data in various graphs”.(DIDSI IPB, 2017)

The learning model developed needs to be tested for validity and reliability. According to Ali, et,al “Firstly, the development of any module, whether it is an academic module, motivation module, or training module should be tested in terms of validity and reliability. Previous studies have shown that the construction of tools, materials or resources such as modules is a guide for module developers to obtain a wealth of information related to studies that need to be tested in terms of their validity and reliability”(Ali, Amat, Nissa, & Mohd, 2019).

“The validity of the module describes how well the results should be achieved. An instrument is said to have high validity if it shows a high degree of ability in measuring variables (Mohd Majid, 1990; Sidek, 2002). The validity of a module's content is considered to be good and high if it can effectively measure all its content and produce the achievement of the objective that the researcher wants to measure. Content validity refers to the extent to which the study instrument measures the variables to be measured.”(Ali et al., 2019). After testing the validity and reliability of the learning model, it needs to be tested and implemented.

Method

In this study, Sugiyono’s teaching material development model was used (Sugiyono, 2012) in its trial and implementation stages. Before it was trialled or implemented, the validity of the model needed to be tested. After the teaching model was designed the next step was conducting a focus group discussion to get inputs from experts. The next step was a trial which was conducted with the village apparatuses. After that, the trial questionnaires were distributed to find out the perceptions of the village apparatuses. The teaching model that was developed was tested by three experts in a group discussion called Focus Group Discussion (FGD). “The focused discussion activity is done to test the validity of the teaching model being developed theoretically”. (Sulindawati & Meitriana, 2019).

The evaluation of the content validity was viewed from six aspects of evaluation according to Arrends, Arends, 2012; Nieveen, McKenney, & Akker, 2007; Joyce & Weil., 2003 “(Nieveen, N., McKenney, S., 2007); ”(Sulindawati & Meitriana, 2019) is as follows: (1) the need for developing the teaching model in the village financial administration , (2) the most recent knowledge (3) the theoretical support that underlies the teaching model, (4) the planning and implementation of the teaching model, 5) the supporting learning environment, and (6) the application of the method of evaluation.
Content validity according to Arends, 2012 (Arends, 2012) is viewed from five aspects of evaluation: (1) the need for developing the teaching model in the village financial administration, (2) the theoretical and empirical supports to the teaching model, (3) the planning and implementation of the teaching model in the village financial administration, 4) the learning model environment, 5) the use of evaluation techniques and 6) the teaching model: a final thought.

In this study the validation of construct validity considered (1) the theoretical basis of the development of the teaching model in the village financial administration using Microsoft excel program; (2) the basic framework of the teaching model in the village financial administration; (3) the planning and guidance for the use of the teaching model; (4) the supporting environment in the teaching process; (5) the implementation of the evaluation technique and (6) the teaching model in the village financial administration.

The validation of this model was determined by referring to the criterion of the reliability as shown in Table 1.

<table>
<thead>
<tr>
<th>Score Interval</th>
<th>Validating Criteria</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.25&lt; P ≤ 4.00</td>
<td>Very reliable</td>
<td>Can be used without any revision</td>
</tr>
<tr>
<td>2.50&lt; P ≤ 3.25</td>
<td>Reliable</td>
<td>Can be used with a little revision</td>
</tr>
<tr>
<td>1.75&lt; P ≤ 2.50</td>
<td>Less Reliable</td>
<td>Can be used after a lot of revision</td>
</tr>
<tr>
<td>1.00≤ P ≤ 1.75</td>
<td>Not Reliable</td>
<td>Cannot yet be used, still needs to be consulted</td>
</tr>
</tbody>
</table>

Source: Prahani, Nur, & Yuanita (Prahani, B. K. and Budi, 2014; (Sulindawati & Meitriana, 2019)

Data on the teaching model validation were obtained from the teaching model validation sheet. The validation sheet for this teaching mode was filled in by the experts who reviewed and evaluated the teaching model that was developed by the researcher at the time of the Focus Group Discussion (FGD). The reliability of the teaching model validation sheet instrument was computed based on “the statistical analysis of percentage of agreement (R)” (Borich, 1994). An Instrument could be said to be reliable if it had a percentage ≥ 75 % (Borich, 1994); (Latifa, Verawati, & Harjono, 2017); (Sulindawati & Meitriana, 2019). The village apparatuses’ learning achievements were measured according to scores based on ”the guide for converting raw scores into the criterion-referenced scores using a five point scale : 85 - 100 = A, 81 – 84 = A-, 77 – 80 = B+, 73 – 76 = B, 69 – 72 = B-, 65 – 68 = C+, 61 – 64 = C, 40 – 60 = D, 0 – 39 = E” (Undikhsa, 2017).

The subject in this study consisted of the users of the village financial system who live in the region of Bali province. The instruments used to collect the data consisted of four instruments: (1) observation guide, (2) questionnaire, (3) interview guide and (4) documentation study.
This study used a quantitative data analysis procedure by computing the content validity and the construct validity of the teaching model and by computing the mean score of the village apparatuses’ learning achievements.

**Results and Discussion**

After holding a focus group discussion, the content validity and the construct validity were obtained as shown in Tables 2 and 3.

**Table 2:** Content Validation of the Teaching Model in the Village Finance Administration

<table>
<thead>
<tr>
<th>NO</th>
<th>The Components of the Teaching Model in the Village Finance Administration</th>
<th>Reliability Score</th>
<th>Validity</th>
<th>R</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Need to Develop the Teaching Model in the Village Finance Administration</td>
<td>3.31</td>
<td>Very Valid</td>
<td>97.6%</td>
<td>Reliable</td>
</tr>
<tr>
<td>2</td>
<td>The most Recent Knowledge</td>
<td>3.35</td>
<td>Very Valid</td>
<td>94.5%</td>
<td>Reliable</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical Support that Underlies the Teaching Model in the Village Finance Administration</td>
<td>3.29</td>
<td>Very Valid</td>
<td>94.4%</td>
<td>Reliable</td>
</tr>
<tr>
<td>4</td>
<td>The Planning and Implementation of the Teaching Model in the Village Finance Administration</td>
<td>3.15</td>
<td>valid</td>
<td>93.6%</td>
<td>Reliable</td>
</tr>
<tr>
<td>5</td>
<td>The Supporting Learning Environment</td>
<td>3.12</td>
<td>valid</td>
<td>90.9%</td>
<td>Reliable</td>
</tr>
<tr>
<td>6</td>
<td>The Evaluation Technique Application</td>
<td>3.24</td>
<td>Valid</td>
<td>92.0%</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Mean: 3.24 Valid 93.8% Reliable
The content validity of the village financial administration teaching model that had been developed fell into the reliable category. The percentage of agreement between the judges of the content validity fell into the reliable category; R = 93.8 %. The result of the construct validation of the teaching model showed that it fell into the reliability category. The percentage of agreement between the judges was 92.8 %, falling into the reliable category.

Then, a trial of the use of the teaching model was conducted with a wider group of the village apparatuses. The data analysis technique used in this study was a quantitate analysis by measuring the learning achievements of the village apparatuses as shown by the scores that they obtained from the teaching process of the village financial administration. The evaluation was done based on the scores of the learning process in terms of the ability to administer the village financial administration.

After obtaining the results of the validation from the judges, then the teaching model was implemented to the group of village apparatuses. The teaching activities that were carried out closely followed the steps of teaching, namely orientating the village apparatuses to the village financial administration; the activity of understanding the material required in the
village financial administration; the teaching activities in the village financial administration; the activity of the village financial system application; the presentation of the village financial administration report and the learning achievement evaluation. These teaching activities lasted for six meetings and was attended by 14 participants. The first meeting to the fifth meeting discussed material of each stage of teaching. The sixth meeting was the evaluation of the teaching process.

At the end of the teaching process an evaluation of the village apparatuses’ learning activities was carried out. The evaluation of the learning activities of the village apparatuses were grouped based on the steps of teaching that had been developed and the ability of the village apparatuses in administering the village financial administration. The evaluation done in the teaching was related to the process and product that had been produced. The results of learning achievements are illustrated in the following Table 4.

Table 4: Learning Achievements from the Process and Product Evaluations

<table>
<thead>
<tr>
<th>NO. OF ITEM</th>
<th>DESCRIPTION</th>
<th>MAXIMUM SCORE</th>
<th>MEAN SCORE OBTAINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ability to prepare the logistics needed in the teaching process</td>
<td>100</td>
<td>85.79</td>
</tr>
<tr>
<td>2</td>
<td>Ability of the village apparatuses to prepare documents required in the village financial system</td>
<td>100</td>
<td>85.29</td>
</tr>
<tr>
<td>3</td>
<td>Ability of the village apparatuses to collect documents that support the village financial administration and to prepare the data by using Microsoft Excel and Word</td>
<td>100</td>
<td>87.93</td>
</tr>
<tr>
<td>4</td>
<td>Ability of the village apparatuses in using the village financial system application according to the guide in the workbook of the village financial system with the supporting data that had been prepared before.</td>
<td>100</td>
<td>88.29</td>
</tr>
<tr>
<td>5</td>
<td>Ability of the village apparatuses in writing and printing the village financial administration report</td>
<td>100</td>
<td>88.00</td>
</tr>
<tr>
<td>6</td>
<td>Ability to write an accurate village income and expenditure budget plan</td>
<td>100</td>
<td>87.29</td>
</tr>
<tr>
<td>7</td>
<td>Ability to write a general cash book report accurately and correctly</td>
<td>100</td>
<td>87.86</td>
</tr>
<tr>
<td>8</td>
<td>Ability to write a village bank book report accurately and correctly</td>
<td>100</td>
<td>87.71</td>
</tr>
<tr>
<td>9</td>
<td>Ability to write a tax book report accurately and correctly</td>
<td>100</td>
<td>88.86</td>
</tr>
</tbody>
</table>
Table 4 shows that the mean score for the process and product obtained by the village apparatuses is 87.63%, falling into the very good category.

Conclusions

The teaching model that has been developed can be applied since the content validity of the teaching model of the village financial administration developed falls into the reliable category. The percentage of agreement for the content validation falls into the reliable category, \( R = 93.8\%\). The construct validity falls into the reliable category. The percentage of agreement is 92.8%, falls into the reliable category.

With the implementation of the teaching model, an increase has occurred in the ability of the village apparatuses in understanding and practicing the village financial system in the activities of planning and budgeting or administering the financial management with the learning achievement score of 87.63%.

Acknowledgments

This study was done with the assistance of the Research and Community Service Institution of Undiksha, research experts as expert judges and the village apparatuses from various regions in Bali Province. On this occasion the researcher would like to express her thanks to all of people who have helped this research, both financially and administratively, The
researcher also would like to express her thanks to the participants in the trial who have given information related to this research that has made this research able to be completed on time.
REFERENCES


Mendagri. PERATURAN MENTERI DALAM NEGERI REPUBLIK INDONESIA NOMOR 1 TAHUN 2016 (2016).

Mendagri. PERATURAN MENTERI DALAM NEGERI REPUBLIK INDONESIA NOMOR 33 TAHUN 2019 (2019).


