

Training of Trainer Model in an Effort to Improve the Professionalism of Accounting Teachers

Dhika Maha Putri ^{1,*}, Sunaryanto², Slamet Fauzan³, Sheila Febriani Putri ⁴, Mohd. Rizal Palil⁵

^{1,2,3,4} Universitas Negeri Malang, Indonesia

⁵ Universiti Kebangsaan Malaysia

*Corresponding author. Email: dhika.maha.fe@um.ac.id

ABSTRACT

The Industrial Revolution 4.0 demands a comprehensive individual portfolio in communicating and collaborating to improve learning abilities. Competent teachers are able to create an effective learning environment and carry out tasks optimally for the benefit of student learning outcomes. Thus the professional competence of teachers is the ability which is the result of cognitive work to carry out tasks so that students get quality learning results. The purpose of this study is to develop a TOT (Training of Trainer) model for ICT-based accounting learning in an effort to improve the professionalism of accounting teachers. This research is based on an analysis of the professionalism of teachers to face the industrial revolution 4.0. This research is a development with research stages that refer to the ADDIE development model. The research data were collected from both public and private vocational school teachers in the Malang city area. Based on the results of expert validity, the TOT learning model obtained a score of 85% while the limited field test results obtained a score of 90%. These results indicate that the TOT model is feasible to be used as an ICT-based accounting learning model. The questionnaire given to the accounting teacher shows a positive response that the TOT model helps the professional development of vocational teachers in creating an effective learning environment for the benefit of students. The broader implementation of this study is empirical evidence of the professional benefits of teachers attending training in the teaching and learning process.

Keywords: *Industrial revolution, Education, Training of trainer, Teacher.*

1. INTRODUCTION

The Industrial Revolution 4.0 demands a comprehensive individual portfolio in communicating and collaborating to improve learning and cooperative abilities [1]. These skills are able to be achieved through some methods. One of the most effective ways is through social communication between the learners and the educators (teachers). The teachers have to be able to prepare, implement, and evaluate learning activities according to the students' needs. The teachers are required to develop learning innovation according to the technology development based on the Industrial Revolution 4.0.

A professional teacher is an educator who is able to manage himself in doing daily tasks. A competent teacher is able to create an effective learning environment and carry out the tasks optimally for the importance of the learning outcomes. Thus, the

competence of the professional teacher is the ability as the result of the cognitive works to carry out tasks, so the students achieve optimal learning outcomes and therefore, creates qualified education. The skills of the teachers' professionalism are; (a) mastering teaching materials; (b) the ability to manage the lesson and (c) the knowledge about evaluation. The social communication which is created by the teachers in the learning process has to be developed based on the technology development. It has to be done, therefore the students' learning outcomes will be in line with Human Resource requirements in Industrial Revolution 4.0.

Industrial Revolution 4.0 with its challenge and impact has made people from every social status realized that upgrading skills and competences is an important part that has to be done to keep competitive in a real life. Long life learning becomes the thing to do for everyone to keep them skill full and well educated even though the time changes fast and dynamically.

Because of that, therefore the teachers as part of the society also need to upgrade their skills and keep learning in order to be able to encounter the challenge of the time. The teachers who are always upgrading their skills and keep learning are well known as the learner teacher.

Become a learner teacher is defined as the ideal teacher who keeps learning and develops his skills every time and everywhere. A learner teacher will always think about the future of the learning process that he manages and never feels satisfied of the current achievements. Becoming a learner teacher is very important in Industrial Revolution 4.0, because at this time, information and technology develops rapidly. Without the willingness to keep learning, the educational process which is managed by the teachers can be obstructed and not developed. A learner teacher is defined as the ideal teacher who keeps learning and develops his skills every time and everywhere. A learner teacher will always think about the future of the learning process that he manages and never feels satisfied of the current achievements.

Related to the Industrial Revolution 4.0, a real learner teacher has to keep learning and develop his skills to master the required fields in this Industrial Revolution 4.0. One of the needed fields in this Industrial Revolution 4.0 is ICT (Information and Communication technology) field. A learner teacher needs to have the willingness to learn, the ability to master and use ICT as the part which will be used in the learning process. That is because nowadays, the educational world with every process has used ICT in many aspects to support the school activities. Start from the learning process, administration, until the report of the learning outcomes. Information communication technology (ICT) has witnessed tremendous innovations and changed our daily lives [2].

In the learning process, there is now the term blended learning, which is the learning process that combines face-to face learning and online learning. With this blended learning, a teacher has to learn many things related to online learning, one of them is e-learning and application based examination. Despite learning things about online learning, the teachers also need to develop their skills in the utilization of computer-based learning multimedia. The computer based learning multimedia can be as interactive multimedia or virtual lab. The presence of the computer-based learning multimedia is really helpful for the learning process, because it is able to present something that was hard to be presented in the class before. Thus, an impossible thing that was to be presented in the class before, through the computer-based learning multimedia can be presented to the students to give the more meaning full learning. The advance of the utilization of ICT in the learning process needs to be balanced with the teachers' ability in that field. Increasing the frequency of ICT application would probably enhance teachers' ITC [3]. Therefore, becoming a learner teacher

in ICT field is really recommended in order to present variative and innovative learning.

Based on the explanation above, in order to fill the requirements of the human resources in Industrial Revolution 4.0, a teacher has to be professional. An educator has to master and utilize the technology in the learning process in order to manage qualified education which is able to prepare the learners to encounter Industrial Revolution 4.0. Therefore, a training model which is able to help the teachers to improve their mastery in technology needs to be developed. This model is designed based on the teachers' needs and condition in the field. TOT model for ICT based learning is expected to be able to facilitate the improvement of the educators' technological skills in the learning process.

2. METHOD

We did the research at a time when teachers had to teach at home (work from home) and study from home (study from home) in the era of the Covid-19 pandemic. Specifically, the implementation time is July - August 2020. The research time is considered very appropriate because teaching in the pandemic era is required to use digital media. The purpose of this study was to develop a TOT (Training of Trainer) model for ICT-based accounting learning as an effort to improve the professionalism of accounting teachers in the vocational school. The procedure of the research refers to ADDIE development model [4] which consist of five steps, those are to analyze, design, develop, implement, and evaluate as can be seen in figure 1.



Figure 1. Integration of ADDIE model in the development of soft-skill training model by alumni

This research was adopted ADDIE development model consisting of five main stages, namely analysis, design, development, implementation, and evaluation:

a. Analysis

The need analysis in this research was strengthened by extracting the data from accounting teacher in Malang City. The process was carried out online, via video conference called as Online Focus Group Discussion (FGD). This activity was followed by 20 teacher from various school. The result of the online FGD was processed to find the core of existing problem and the result was confirmed to teacher.

b. Design

The result from the analysis of the core problems in the field was then followed up by designing training design. This stage was carried out by discussion with teacher following previous activities. This discussion produced a design for the development of ICT-skill.

c. Development

The training design that had been designed was then developed by the researchers' team. The details for the implementation of this training activity was described and the module development was also carried out to support the success of the training. The result of this development was then validated by experts from various disciplines, such as: lectures, teachers, and IT Expert. Criticisms and suggestions from various experts were needed to perfectly complete the training design that had been design previously. Summary for the result was expected to be a correction material for the development of this product. The results of this product validation were responded by fixing several things that became important to be revised. Revisions were made in stages until the product was deemed feasible to be implemented.

d. Implementation

This stage was also called as limited field test carried out to teacher representatives. There were 10 teacher from various school and then they were trained in the stage of limited trial stage. The implementation data were collected by distributing opened ended and closed ended questionnaires. These questionnaires were given to determine the evaluation on the feasibility of the product and teacher' responses on the products.

e. Evaluation

Criticism and suggestion from the limited field test were then followed up. Revision was made to improve the product by consultation with the teachers and expert team. Final result of this stage was ready to be used after going through the process of validation.

Data analysis is a process to find and compile the data obtained from the interviews, filed records, and other materials [5]. The data analysis technique used was descriptive quantitative. The technique described product development after implemented and after it is carried out validation or product feasibility test [6].

3. RESULT AND DISCUSSION

3.1. TOT (Training of Trainer) Model for ICT-based Accounting Learning

The integration of ICT (Information and Communication Technology) into the teaching-learning process makes teachers have the necessary skills to enhance the learning outcomes. There was a significant correlation between teaching motivations and perceptions towards ICT in teaching and learning Education and Information Technologies process [7].

Many education systems worldwide are believing ICT in its benefits to the learning process, enabling them to teach and learn more effectively. While the education systems are trying to improve students' competences, skills, and knowledge, the integration of ICT for teaching and learning has become a crucial task for schools [8]. The use of ICT has greatly transformed the outcomes of teaching and learning. Research has shown that ICT use in education can be beneficial for the construction of knowledge. It has great potential to enhance the teaching-learning process. For example, ICT can promote higher-order thinking levels of students, help deepen their content knowledge, improve their motivation in learning, and enhance interaction between teachers and students [3]. [9], [10].

On the other hand, the use of ICT for instructional purposes is a complex phenomenon. Although the use of ICT has strong effects on education, the integration of ICT into teaching and learning is not simply a process of purchasing computer hardware and software but also taking into consideration teacher related factors. Teachers have been identified as a key factor influencing technology integration into the teaching-learning process. These factors include teachers' perceptions of ICT and teaching motivation. Teachers' perceptions are a major predictor of the use of ICT in instructional learning. Therefore, this research aims to make a learning model to be used by the accounting teacher in providing insight into added ICT value to other teachers. This learning model is expected to help teachers in preparing skills that must be acquired to use ICT learning. Training of Trainer is a training for trainers (accounting teachers) with the aim after following the training can be a coach for others (fellow teachers).

The TOT (Training of Trainer) model for ICT-based Accounting Learning is contained in a book which is also used as a module in TOT activities. In the book discusses the terms and development of KTSP (Education Unit Level Curriculum) on pages 4 to 6, followed by a discussion of the Competency Standards for graduates on pages 7 to 12, then followed by descriptions of KKN (Indonesian National Qualifications Framework) and certification schemes on pages 12 to 14, followed by a discussion of curriculum structure contained on pages 14 to 171 which contains the meaning of learning media; the benefits and functions of media in learning; classification of learning media; media selection and development principles; and examples of learning media. The module then given to the material expert to be assessed/responded to

determine the level of validation and suitability of the book content. To get a response or an assessment of the products that have been developed, a qualitative trial was carried out through interviews and quantitative through questionnaires.

3.2. Products Validation

The module of TOT (Training of Trainer) model for ICT-based Accounting Learning was handed to the expert validity. Based on the result of expert validity, the module can improve the competence of the vocational high school teacher professionalism obtained a score of 85%, while the limited field test result obtained a score of 90%. Based on the determined success criteria, the results are valid and feasible to be used as a TOT module to improve teacher professionalism. Moreover, there were critic and suggestion for the module of TOT model as qualitative data. Generally, this product did not need any revision. Based on the expert, it had been valid and feasible to be used as a guide of the TOT model. The comments for the revision that was given from various parties were regarding to the content of the book which was less interactive. The book was less interactive because the picture of the process of the making of IT-based learning media was not added. Another suggestion was about adding tutorial video about the making of IT-based learning media

4. CONCLUSION

The result of this research concluded that there was a positive respond that the TOT model helped the improvement of the professional vocational high school teacher competence in Malang City. The result was achieved through the expert validity and trial to the teacher as a user. Based on the result of the study, it was known that TOT model was able to be used as a modul for the TOT process for vocational high school teachers in Malang City. In another point of view, there was shortcoming that must be corrected in terms of the content of the book in order to be easier for the readers to understand about the model.

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