

# The Development of Procurement of Goods and Services Training Model

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This study aims to: (1) analyse the existing training model for procurement of goods and services, (2) develop the training model for procurement of goods and services (3) produce a model that suits the needs of the trainees. The study involved alumni of goods and services training from the Institution of Goods and Services Procurement. This study was conducted at Institution of Goods and Services Procurement. The sampling technique used stratified random sampling; the sample was divided by age level. The design of this study was research and development (research and development). The results showed that of the various training models available, the most suitable and appropriate use the problem-based training model.

**Key words:** *Development, Education, Goods and Services Procurement, Management Training.*

## Introduction

Training is a process where people achieve certain abilities to help achieve organizational goals (Mathis, 2002). Training is part of an investment in human resources or human investment to improve the ability and work skills, and thus improve employee performance. Training is usually conducted with a curriculum that is tailored to the needs of the position, given in a relatively short time, to equip someone with work skills (Simanjuntak, 2005).

Procurement of goods / services carried out by the government is intended to obtain goods / services with the appropriate price, quality, quantity (volume) criteria, partners and appropriate procurement methods, and in accordance with the agreement made so that users can use the goods / referred service. The reason for conducting goods and services procurement at government agencies is because the main task of the government institutions

is not to produce goods / services that are profit oriented, but to provide services to the community. Therefore, the needs of government for goods / services to improve public services are fulfilled on the basis of logical and systematic thinking, following principles and ethics and based on applicable procurement methods and processes.

Basic Level of Goods / Services Procurement Training is training that can provide initial skills and knowledge for participants to take the Basic / First Level procurement of goods / services certification test. The curriculum provided is based on 29 competency standards to understand Presidential Regulation Number 16 of 2018.

Training management has not given maximum results. From the data available that of the 102,000 participants, those who successfully graduated and were entitled to obtain certificates were only 29,000 people or only around 31%. After they become procurement officials, more than 50% of graduates have low competence, graduates have difficulty in handling the problem of Procurement of Goods / Services in their respective institutions. This case is suspected as the cause of the lacks of planning on goods / services procurement training, such as the inaccuracy of determining the learning method which was focused on lectures, curricula that were rarely reviewed, the lack of case studies on exam questions, rote learning training material and textbooks which have not illustrated procurement cases and practices on the field, LKPP does not make test specifications for the exam, the validity and reliability test of exam questions have never been performed, the instructor's low pedagogical competence, the lack of selection on the training participants from the institution. Due to poor planning, the goods and services procurement and evaluation stages were also poorly implemented.

The existing learning methods are lectures, brainstorming, questions and answers, exercises and discussions. These methods are not effective for the purposes of training in the procurement of goods and services because they: (1) cannot provide practical experience in the procurement of goods and services; (2) cannot provide examples of practical problems encountered in the process of procurement of goods and services; (3) do not provide examples of practical solutions in the process of procurement of goods and services; and (4) do not provide examples of regulatory developments, prices of goods and services in the market, and specifications for prices of goods and services in the market. These four reasons were explained by several representatives from Institution of Goods and Services Procurement and the trainees. The Institution of Goods and Services Procurement explained that the learning method that has been used so far needs to be reviewed because: (1) the examples of cases and their solutions are considered to be impractical and textual; (2) participants have not felt like they actually work in the procurement of goods and services; and (3) they have difficulty in understanding the regulations and procedures for the procurement of goods and services.

Theoretically, the lecture method has the disadvantage that the mastery of participants is limited to what the instructor has lectured. This issue is indeed the most dominant limitation of lecture method, because the lecture material from the instructor is what the participants master, so that what the trainees master depends on the instructor's knowledge. The question and answer method have a weakness because it is not easy to construct test items that are appropriate to the level of thinking and are easily understood by participants. The brainstorming method has the tendency to be more dominated by participants who understand the material and are active, while trainees who do not understand the material and are less active will have difficulty understanding the training material.

According to Greenstein (2012: 7) that 21<sup>st</sup> thinking skills include critical thinking, problem solving, creativity, and metacognitive. Thinking skills of the learners can form skills in their daily lives. Liliyasi (2011) corroborates that the role of science, especially biology for future life is very strategic, especially in preparing someone who is critical, creative, competitive, able to solve problems and dare to make decisions quickly and correctly, so that they can survive in the midst of competition full of opportunities and challenges.

Indicators of learning success can also be observed from the mastery of the concepts of the learners that is required to assist in the next learning process. The fact of retention value based on survey research which is a *scope* stage in the development research flow by conducting a retention test after two weeks of final semester examination of basic concepts of natural science shows that 50.3% of the number of students were categorized as poor and 0.4% of the number of students were categorized as very poor. Based on these data, the retention value of students must be increased to obtain the achievement of learning objectives (Muhlisin *et al.* , 2016b).

In addition to mastery of concepts and retention, the application of learning models also has an impact on thinking skills such as critical thinking and metacognitive. The level of critical thinking of students taking basic concept courses based on survey research on the scope phase of the research development showed that 80.9% of students were categorized as less critical. This is corroborated by the students' activities in learning which showed that students only asked few questions or felt reluctant to answer questions from lecturers or their peers in the discussion during presentation, students provided less logical reasons when arguing, and giving assumptions, and students' responses are less based on facts during the evaluation (Muhlisin *et al.* , 2015).

Based on the description above, it is necessary to implement problem – oriented education and practices address any problems in the training process of procurement of goods and services. This can be achieved through learning innovation with the development and

application of relevant training models. Based on ideal conditions / expectations, empirical and theoretical phenomenon, it is necessary to investigate and develop a training model which is based on the relevant model to solve the problems in training process to increase the number of graduates in government training procurement.

## Literature Review

According to Widodo (2015: 82), training is a series of individual activities in systematically increasing expertise and knowledge so as to be able to have professional performance in their respective fields. Training is a learning process that allows employees to carry out their works in accordance with current standards.

According to Rivai and Sagala (2011: 212), training is the process of systematically changing employee behaviour to achieve organizational goals. Training deals with the expertise and ability of employees to carry out their current works. From some of the above definitions, training is a process to improve employee's competence and it can improve their abilities, skills, expertise and knowledge of employees to carry out their works effectively and efficiently to achieve goals in a company.

According Sastrohadiwiry (2002), the implementation of the training can be achieved when it is based on the following principles: (1) individual differences; (2) Relation to job analysis; (3) Motivation; (4) active participation; (5) Selection of trainees; (6) Selection of trainers; (7) Training of trainers; (8) training method; (9) principle of learning.

Specifically, in relation to work, Kamil (2010: 11) classifies training objectives into five areas, namely: 1) updating the expertise of employees in line with technological transformation. Through training, trainers ensure that employees can effectively use new technologies. 2) Reducing study time for employees to be competent at work. 3) Help solve operational problems. 4) Prepare employees for promotion, and 5) Orient employees towards the organization.

The following are the ten steps of training management according to Kamil (2012: 17): (1) recruitment of trainees; (2) identification of learning needs, learning resources and possible obstacles; (3) determine and formulate training objectives; (4) determine initial and final evaluation tools, (5) arrange sequence of training activities; (6) training for trainers; (7) implement initial evaluation of trainees; (8) implement training; (9) Final evaluation; (10) evaluation of training programs. Proper training management is one of the important factors in producing human resources who are ready to compete. In line with the management of the training program revealed by Sudjana in his book, training management consists of three stages: planning, implementation, and assessment.

Presidential regulation No. 16 of 2018 is a change from Presidential regulation No. 54 of 2010 concerning Procurement of Goods / Services in Government institutions has changed over the past two years. Presidential regulation No. 35 of 2011 concerning Amendments to Presidential Regulation No. 54 of 2010 on Procurement of Goods / Services in Government institutions. It was then amended again in Presidential regulation No. 70 of 2012 on the Second Amendment to Presidential Regulation No. 54 of 2010 on Procurement of Goods / Services in Government institutions.

There are four essential components to the Goods / Services Procurement (PBJP) activities in government institutions. Those four components are closely related and in accordance with Presidential regulation No. 16 of 2018, including: (1) Procurement of goods, (2) Procurement of work or construction work, (3) Procurement of consultancy services, (4) Procurement of other services.

The model is defined as a pattern (for example, reference, variety) of something that will be created or produced (Indonesian Language Dictionary, 2015). Learning is the activity of educators in learning students or make students in learning conditions (Syahza & Irianti, 2008). Learning model is a design of learning models that are used by educators to help learners obtain information, ideas, skills, ways of thinking, and to express ideas themselves (Joyce *et al.*, 2011).

The learning model serves as a guide for learning designers and educators in implementing learning process. Selecting a learning model is influenced by the characteristics of the learning material, the learning objectives in teaching, and the characteristics of students. Each learning model has stages (syntax) that can be done by students with the guidance of educators (Komalasari, 2011).

Utomo (2016) in his research entitled *The Development of Training Management Model Of Soft Skill Learning Integrated With Chemo-Entrepreneurship (Cep) For High School Chemistry Teachers In Semarang*. The results showed that in the factual model, needs analysis of the training was not performed, so that relevance was low and the learning process was less interesting and meaningful. In addition, control is also not carried out effectively so it cannot assess the reaction and impact of the training.

## **Research Method**

The design of this study is research and development. According to Borg and Gall (1983: 772), research and development is "*a process used to develop and validate educational products*". Sugiyono (2013: 297) states that "research and development methods is a research

method used to produce certain products, and test the effectiveness of these products".

The development was performed in three stages: (1) a preliminary study including a literature study, a field study and preparation of initial products; (2) model development includes product preparation, product validation, product revisions, limited trials and revised results of the trials; (3) model testing includes product testing through experiments, final product preparation, and product dissemination. Product dissemination was not conducted with consideration of time and that at the development stage of the model, a valid product has been produced (Borg and Gall, 1983: 772).

Based on the ten steps of Borg and Gall's research, in this study, the ten steps were simplified into seven steps: (1) literature study; (2) needs analysis; (3) preliminary research; (4) designing the initial model; (5) limited and extended trials; (6) developing hypothetical models; (7) model validation. The seven steps are grouped into three stages: (1) the preliminary study and model design stage; (2) the model development stage; and (3) the model validation stage. According to Rachman (2011), in practice, the ten steps from Borg and Gall can be grouped into three main steps: the preliminary study, the model development stage and validation stage. The preliminary study stage was conducted to achieve the first research objective, the development stage to achieve the second research objective, and the model test stage to achieve the third research objective.

The subjects of this study were the trainees of the training of goods and service procurement registered at LKPP who had passed the certification of procurement of goods and services. In addition, those who had not passed were also included. The research data obtained from LKPP included the number of trainees and the number of LPP. Data were obtained directly or through the website provided by LKPP. In addition to LKPP, data were also obtained directly through the LPP which has completed the training of goods and services procurement.

The population of this study consisted of all participants in the training of goods and services procurement by the Institute of Goods and Services Procurement Training (LPP) throughout Indonesia. The sampling technique in this study used the stratified random sampling method, which is how to take a sample by taking into account strata (levels) in the population (Sugiyono, 2010).

In this study, the ten steps were modified into four stages as follows (1) Preliminary Study which explored the existing procurement of goods and services training model. A preliminary study was carried out to find out and explore current technical guidance models conducted at the implementing agency in the Institute of Goods and Services Procurement Training for the procurement of goods and services. (2) Conceptual model development was carried out with the following procedures: a). selection of model components based on theoretical

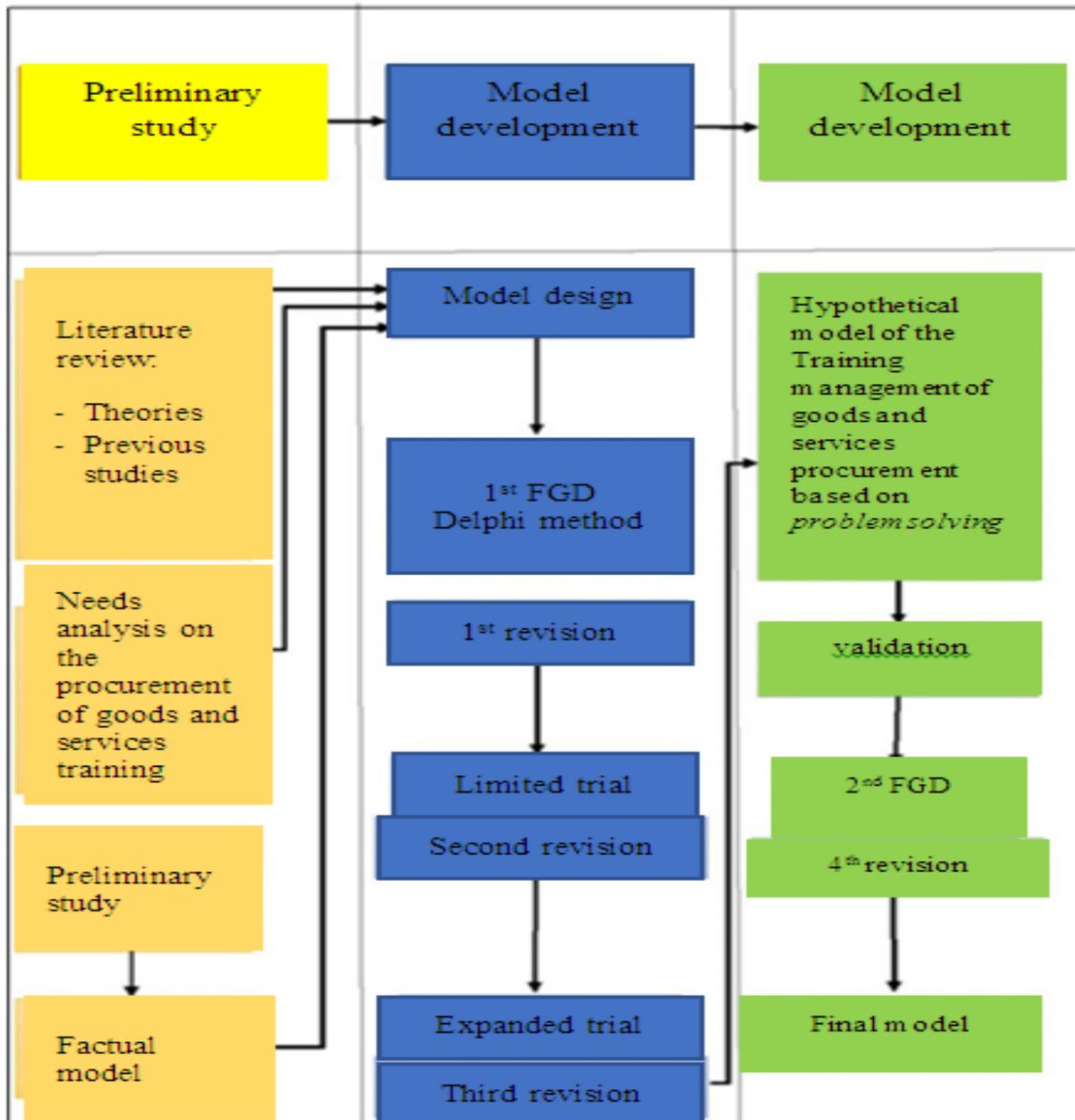
information, and b) validation of experts and practitioners. (3) equipment and learning material of the procurement of goods and services training model to be implemented. Development of equipment and learning material must be carried out by using these following procedures: a). identifying the equipment and the contents of the model; b) development of equipment and the materials of the model, and ; c ) expert validation and model testing. (4) testing the effectiveness of the model through repeated actions to obtain credible quality standards for the training model. An expanded model trial to determine the effectiveness of the model through repeated actions is based on the opinion of Hopkins (1993) which includes the following activities: a ). Planning the implementation strategy of technical guidance; b) technical guidance implementation, c ) reflection on results and technical guidance process, and d ) observation and improvement of the technical guidance process.

Output target of this study was produce the procurement of goods and services training model to increase the number of participants and effective instructor competencies that can be used in a wider circle. Data analysis techniques were carried out qualitatively and quantitatively on the implementation of the training model. The effect of the implementation of the training model on competency improvement is shown based on the comparison of the gain score of the treatment group with the gain score of the control group that is as net gain (Kirkpatrick, 2006).

## **Result and Discussion**

Factual data collection was conducted throughout Indonesia by LKPP and number of certified individuals on the procurement of goods and services up to the period of 2005 to 2018 was 271. 365 people. Training methods / techniques currently used at the training consisted of lectures, brainstorming, questions and answers, group buzz, exercises, and discussions. With those existing training methods and techniques, the participants in goods and services training have not thoroughly understood the training material delivered by the instructor. This is indicated by the graduation rate on the goods and services procurement certification examination held by LKPP. The details can be seen in the following figure:

**Figure 1.** The Development of the research model



The data for the factual model consisted these following aspects: (1) training material; (2) instructor competence; (3) training planning; (4) training implementation, and (5) training evaluation. The results of the analysis of the training process for the procurement of goods and services used as a basis for developing training models were carried out through survey research by observing the learning process, interviewing the instructors for the procurement of goods and services training, and distributing questionnaires to participants who took training and certification for procurement of goods and services.

After collecting the factual data, then needs analysis for the training model was

performed. This data collection was carried out by questionnaire distribution procedures, questionnaire explanation, questionnaire filling, questionnaire collection and interviews. Identify training plans needed to determine training materials that are relevant to the needs of the trainees.

The aspect of planning of the training includes: (1) identification of needs; (2) training objectives, and (3) preparation of training programs and packages. Needs identification was required to determine the training material that is relevant to the needs of the trainees. The identification of training needs was conducted by analysing the participants' needs from the education staffs of Faculty of Engineering, Universitas Negeri Semarang. Based on these preliminary data, procurement of goods and services training needs was designed.

Formulating training objectives is very important to direct all training activities to what kind of competencies will be achieved by the trainees. The procurement of goods and services training aims to: (1) improve the competence of procurement officials; (2) providing knowledge about procurement of goods and services concepts; (3) develop the ability to implement procurement of goods and services.

The next stage is the preparation of a training program, aimed at providing practical guidance during the training. The contents of the training program consisted of; (1) program structure, training material, and training time; (2) description of training objectives; (3) description of results and training impact; (4) training schedule; and (5) preparation of the procurement of goods and services training package.

The preparation of the procurement of goods and services training package is the learning material related to competencies that will be given to the trainees. The preparation of the procurement of goods and services training program included: (1) training management manual, (2) teaching materials in the form of training modules (3) identification of resource requirements including: identification of the involving parties, training facilities, tools and materials, and training room facilities.

## **Conclusions**

The development of a training model for procurement of goods and services in government institution has undergone a standardized testing process, the design of the training model has been developed by combining various kinds of training model innovations and based on input from stakeholders is stated to meet the needs and based on the principles of effective management. The results of the limited trial, expanded trial, expert testing and pre-test and post-test showed that: (a) the final model of training is able to positively influence changes in learning, (b) There is a significant difference in the average score of pre-test and post-



test. This means that the implementation of the final model of training is effective



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