Improving Teaching Skills Through Learning Model Development Microteaching Based on Experimental Learning

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Abstract—The aim of this research is to develop the implementation of experiential learning model of microteaching learning through the role of model and cooperative group in the microteaching course and to develop a set of instruments needed to assess the validity, practicalities and effectiveness of the developed learning model. Development of experiential learning-based microteaching learning model uses the stages of learning model Plomp (1997) but researchers only use 4 stages namely: a) initial assessment phase, b) design stage, c) realization / construction stage, d) test phase, evaluation and revision. The subjects of the study were the students of the Education Economics Faculty of Teacher Training and Education of the University of PGRI Ronggolawe Tuban in the sixth semester who took Microteaching courses and in the seventh semester took the Field Teaching Practice 2. Data collection was done by questionnaire, observation and documentation. The data were analyzed by descriptive technique. The results of this study indicate that: 1) development learning tools included in good category and can be used, 2) instrument of assessment instrument of microteaching model based on Experimental Learning result of development (teaching book valuation instrument, lesson plan, student activity sheet assessment and assessment of modeling) included good category.

I. INTRODUCTION

A. Background of the Study

This research is motivated by the researcher’s concerns about the tendency of students in the seventh semester during teaching practice in schools that have many obstacles, especially in the mastery and application of basic teaching skills, including: basic teaching skills, material mastery, classroom management, time management, and creativity development. Based on the study on the students’ grade teaching skill assessment sheets 2012 during PPL 2 revealed that 20% of them in good ability category, 60% categorized as good enough and 20% in less category. (Documentation of Economic Education Study Program, 2015)

Efforts have been made by the team of microteaching lecturers by increasing the frequency of simulation exercises, but the results have not been optimal. This is because teaching is a complex act; sometimes they face different real situation with the simulation. According to Brown (1975) although teaching is a complex act, the elements of basic teaching skills can be learned and trained. It is supported by the Hamalik (1999) which stated that teachers are not born, but first formed through education and microteaching training in order to be the professional teachers.

Microteaching learning began in Stanford University, USA in 1963, as one of the efforts to improve the quality of professional teachers, it is spread to Asian countries, especially Malaysia and Philippines (Asril, 2012). In Indonesia micro learning was introduced by several LPTKs. In May 1977 a seminar was held that recommended Microteaching in syllabus and curriculum. Therefore Microteaching course is a compulsory course in educational institutions (LPTK), such as in Economic Education Study Program of FKIP Uniorw, Tuban.

Various learning models have been applied in microteaching lectures, such as observation and simulation model, learner centered model (Kartikowati, 2014, Killic, 2010), contextual model (Elmy, 2013), based on microteaching theory (Allen & Brown, 1975), Personal Model of Teaching and Social Model of Teaching (Weil and Joyce, 1996), and the theory of contextual teaching and learning (Johnson) and other experiential learning models and teaching practices. One of the learning models that put forward direct experience is experiential learning. Experiential learning orientates learning on direct experience; this is in line with the objectives of the microteaching course. As stated by Allen, the objectives of microteaching for prospective teachers are: 1) provide real teaching experience and practice some basic teaching skills 2) prospective teachers can develop their teaching skills before they go into the real teaching 3) give some opportunities for prospective teachers to get various basic teaching skills.

The evidence of the success in using of experiential learning through modeling and the role of groups as a learning approach that can improve teaching skills presented by Fadlan (2009) which states that Modeling is part where the lecturer becomes a model in the learning directly and students can observe it, then they will adopt the lecturer’s style of teaching. Research on the application of Experiential Learning is also shown by research Septi Aprilia (2015) which states that Experiential learning is not only able to improve student achievement but also increase skills of teachers, on average cycle I teacher skills was 3, 11 with percentage of 48.3% (good in scale) in cycle II rose to 3,5 with percentage 88.8% (very good in scale).

According to Pasaoran and Liliarusi (2010), modeling in learning is the first phase in the effort to improve prospective teachers’ skills as well as the discussion phase, enrichment phase, and peer learning phase. This shows that
modeling phase has a very important role in providing direction for students in managing learning.

The role of cooperative groups in microteaching is required to take turns of performing tasks for a skill component, such as the role of the teacher, the role of the written observer, the role of the oral observer, the role of the students, the role of the supervisor. It is done so that all students can have direct experience related to these roles, thus supporting the improvement of teaching skills. Referring to the description, it is necessary to develop an experiential learning microteaching model through the role of model and cooperative group to improve teaching skill.

B. Problems of the study

Based on the previous description, it can be formulated the problems of the study as follow:
1. How to develop experiential learning-based microteaching learning model through the role model and group to improve quality of teaching skill (valid, practical, and effective)?

2. How to develop a set of support equipment of microteaching learning model through role model and group to improve quality of teaching skill (valid, practical, and effective)?

C. Objects of the Study

The objects of this study are:
1. Develop experiential learning-based Microteaching learning model through the role model and group to improve quality of teaching skill (valid, practical, and effective)

2. Develop a set of support equipment of microteaching learning model through role model and group to improve quality of teaching skill (valid, practical, and effective)

Supporting instrument of this model includes: lesson plan, Student Activity Sheet, Student Book, Lecturer Handbook, and Valuation Sheet, a basic teaching skill model video.

D. Benefits of the Study

In general, the benefits of this study are:
1. Give a significant contribution in the education world, especially about learning model based on experiential learning microteaching through the role of models and groups to improve quality of teaching skills.

2. The use of the model can improve the quality of learning done in the class and help lecturers to produce learning process more effectively.

3. Assist the students in understanding the teaching materials in the form of: microteaching material books, basic teaching skills training videos, and direct practice comprehensively in order to improve students’ teaching skills.

E. Urgency (the benefit) of the Research

Mastery of teaching skills for prospective teachers has become a necessity that cannot be postponed. Considering that students have to do real teaching in school during PPL 2, students must master teaching skills, so that they do not contribute more harm than good in the school during their apprenticeship. Through experiential learning students are expected to combine the acquisition experience (grasping experience) and the transformation of experience (transformation of experience). Grasping experience can occur directly, ie through the senses and indirectly, ie in the form of symbolic forms, such as concepts. Activities transforming experience (transforming experience) is in the form of reflection and involvement of students in a learning activity and teaching practice. Experiential learning model describes two models of information acquired: concrete experience and abstract conceptualization, and two experience transformation models, namely reflective observation and active experimentation.

It is assumed that if the learning process is done through direct experience, then the experience has an important role in the construction of knowledge. Madnesen & Sheal argued that the meaningfulness of learning depends on how the way to learn. If you learn only by reading the meaningfulness of learning can reach 10%, from seeing 30%, both listening and seeing 50%, communicating will reach 70%, furthermore learning by both doing and communicating can reach 90% (Suherman, 2006). It is clear that learning activities with an active role of students in real experience can optimize activities in achieving learning objectives.

Therefore, it is necessary to develop a learning model of experiential learning through qualified model and group roles (valid, practical, and effective) to improve teaching skill.

II. RESEARCH METHODOLOGY

A. Types and Research Design

This research belongs to the type of research development. The research design used is the development plan according to Plomp (1997) and Ekawati (2017) as in Figure 2.

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Fig. 2.1. The Design of Plomp Development
Research activities that will be done are research and development or R & D. The general steps of the R & D method are identified in Figure 2.2.

![Diagram of Research Year 1st and Research year 2nd with activities](image)

**B. Subject of the Study**

This research was conducted in Economic Education Program-FKIP UNIROW Tuban, on the students of semester VI who engaged in Microteaching course (PPL 1), simulation, furthermore they took Real Teaching (PPL II) in the semester VII. It consists of 15 students.

**C. Implementation of First Year Study**

There are three components that will be developed in this development research: (1) learning model of experiential learning microteaching, (2) learning instruments to support experiential learning model of experiential learning and (3) instrument that will be used to evaluate the quality of learning model Microteaching is experiential-based learning.

The development of experiential learning-based stages of the Plomp model (1997: 6-15), which is only up to 4 stages from 5 stages: (a) preliminary study phase, (b) planning stage, (c) realization / construction stage, (d) test phase, evaluation and revision, while the fifth stage of Implementation will be done in second year. The components covered in the model refer to the components of the learning model which are stated by Joice, Weil, and Shower (1992): (a) syntax, (b) the social system, (c) the principle of reaction, (d) the support system, and (e) the impact of instructional and companions (Tompo et al, 2016).

The details of the activities undertaken at each stage in the development of the learning model can be explained:

1) Preliminary study phase: The activities undertaken at this stage are: (1) study of theoretical learning models especially related to: (a) model rationality, (b) theories that support the model, and (c) the components of the model: syntax, the social system, the principle of reaction, the support system and the impact of instructional and companions (Zulkifli, M:2013); (2) microteaching theories based on experiential learning and its impact on teaching ability.

2) Planning Stage: The main activities at this stage are: (1) designing outline the components of experiential learning-based learning model, these includes: syntax, the social system, the principle of reaction, the support system, and the impact of instructional and companions (2) outline the theories of model support. d) Designing the type of micro teaching video to be created.

3) Realization / Construction Stage: In this phase, prototype I of experiential based learning model is modeled and grouped to improve student teaching capability which is arranged in 4 parts covering: (a) rationality, (b) supporting theories, (c) the components, and (d) the implementation guidance of experiential learning-based learning model. Prototype I is what will continue to be developed in the next development stage. Prototype I includes, the learning model tested on the Economic Education Program-FKIP UNIROW Tuban.

Furthermore, for the development of learning devices, experiential learning-based learning model refers to the stages of “Plomp model” development:

1) Preliminary study phase: At this stage the study done are (1) learning device format that will be developed, namely: Lesson plan (RP), Student Activity Sheet (LKM), Student / Lecturer Book, and assessment Sheet, (2) the syntax of experiential learning-based learning model as a reference for developing RP, Student/ Lecturer book, and Assessment Sheet, (3) theories of Microteaching based on experiential learning.

2) Planning Phase: The main activities details at this stage are designing: (1) student books and lecturers’ book about the implementation of microteaching, (2) lesson plan (RP) as guidance in teaching materials and practice of micro teaching, 3) student worksheets (MFIs) to strengthen students’ understanding of teach-
ing materials and at the same time train its application in the practice of micro teaching, and (4) assessment sheets. (5) Learning videos.

3) Realization / Construction Phase: In this stage, a Prototype I instructional instruments are developed such as: (1) student and lecturer books, (2) student worksheets, (3) lesson plans (RPs), and Assessment Sheet. Prototype I includes, learning device for Economic Education Program. Prototype I is then tested, evaluated, and revised at the next stage of development (second year)

Furthermore, for the development of the instruments developed are: 1) Model of Evaluation Sheet, 2) Student Assessment Sheet, 3) Lecturer Assessment Sheet, 4) Observation Sheet Model, 5) Student Microteaching Observation Sheet, 7) Student Response Questionnaire on Application of Model, 8) Student Response Questionnaire to LKM, 9) Student Response Questionnaire to Student Books, 10) Teaching Material Testing, and 11) Instruments for the assessment of basic teaching and simulation skills.

The last step of the research of the first year, after producing the model book, equipments and instruments, before conducting the test, evaluation and revision, the validation test was conducted which includes: 1). Validation of model books, equipments and instruments which were done by validators. The validators consist of expert of technology of learning, language and content, 2) conceptual analysis and 3) revisions to development.

D. Data analysis technique

Data analysis activities conducted in this study refers to Nieveen (1999), namely validation test, practicality test, and effectiveness test. For the first year of study only comes to the analysis of validation model. Activities undertaken in the process of data analysis and evaluation of experiential learning model based learning is:

1) Finding the mean validation results of all validators for each criteria \( \bar{R_i} \)
2) Finding the mean of each aspect \( \bar{A_i} \)
3) Finding total mean \( \bar{X} \)
4) Determining the category of validity of each criteria or aspect or whole aspect by matching the criteria mean \( \bar{R_i} \) or the mean aspect \( \bar{A_i} \) or the total mean \( \bar{X} \) with the following categories:

\[ 3.5 \leq M \leq 4: \text{very valid} \]
\[ 2.5 \leq M < 3.5: \text{valid} \]
\[ M < 2.5: \text{invalid} \]

Description: \( M = \bar{X} \) to find the validity of all aspects of what is being investigated.

The standard used to judged that experiential learning-based learning models have sufficient validity degrees are (i) the X value for the overall aspect is at least "quite valid", and (ii) the value is in the "valid" category. If this is not the case, a revision is required based on the suggestion of the validator or by reviewing the aspects that are of less value until the minimum value falls within the valid category.

III. RESULT AND DISCUSSION

A. Initial data result

To ensure that this research is important and necessary in the development of Microteaching learning, it is necessary to retrieve preliminary data which will strengthen the research. Preliminary data as mentioned in addition has been showed the data about student achievement in PPL II that is based on the assess on the grade of students' teaching skill grade 2012 when PPL 2 shows 20% good ability category, 60% good enough and 20% less category. (The documentation of Economic Education Program, 2015). Based on the results of this study indicates that there will be new efforts to improve student achievement that less satisfactory through the use of Experiential Learning approach. However, it is not enough to rely on the results of the study, it still needs a survey through questionnaires for lecturers of Microteaching course and PPL II especially about their understanding related to this experiential Learning approach. From the questionnaire data of 10 lecturers. It is obtained: 1). 90% of lecturers said they have known the term Experiential Learning and 10% have not, 2). 20% stated that they understand the implementation of the approach, 30% less understood and 50% of lecturers do not understand, 3). 30% said there was no need for special training, 60% percent needed and 10% stated it is significant necessary, 4). Then 85% stated that they were ready to implement experiential learning approach, 5% stated less ready and 10% stated not ready to do, and 5). When they were asked for a response to the belief that this approach is useful for improving student achievement, 80% said it was useful, 15% less useful. Based on the review results of the positive lecturer's response to the importance of the Experiential Learning approach in the micro teaching course, it indicates that it needs to be done by introduction or short training.

Further questionnaire results distributed to 15 students who took microteaching courses or PPL 1 can be briefly described: 1). 100% of students said microteaching courses are important for improving students' teaching skills, 2). 80% of students answered the importance of updating in teaching micro teaching and 20% stated less important, 3). 40% of students are familiar with experiential learning, 60% not yet, 4). 75% of students are interested in experimental learning approach and 25% less interested. Based on this questionnaire results are clearly illustrates that students are interested in experimental learning approach to improve their teaching skill.
B. Validation test result

To know the validity of the designed model consisting of the following components: 1) Supporting theories, 2) Syntax, 3) Social System, 4) Principles of Management Reaction, 5) Supporting System, 6) Instructional Impact and Companion Impact 7) Learning Environment and Management Tasks, conducted by requesting an assessment based on the assessment instrument that has been prepared by researchers to two validators, namely the design expert of learning.

Based on the validation file of two validators after averaging the score obtained 3.3 in the category valid. Furthermore, based on the results of this validation model, the microteaching model book based on experiential learning model declared feasible to be implemented.

Furthermore, for learning devices that have been prepared consisting of: 1) Syllabus, 2) Lecture Units, 3) Semester Program Activity Plan, 4) Lesson Plan, 5) Textbooks. The validation results by the validator obtained results as follows: 1) syllabus got a value of 3.35 in category Valid, 2) Lecture Units achieved a value of 3.7 in very valid category, 3) Semester Program Activity Plan got a value of 3.55 in very valid category, 4) Lesson Plan achieved a value of 3.6 in a very valid category, 5) Teachers got a value of 3.7 in a very valid category. Upon the results of research where all showed the level of validation then the next learning device will be used in the next stage of the implementation phase (on second year).

IV. CONCLUSION

Based on the plan of achievement of the research results in this first year then based on existing data analysis process obtained results as in this brief exposure into conclusion: 1) the book model is categorized as valid category, 2) syllabus is categorized as Valid category, 3). Lecture Units is categorized as very valid category, 4). Semester Program Activity Plan is categorized as very valid category, 5). Lesson Plan is categorized as in very valid category, 6). The lesson is categorized as into the very valid category. Based on the results of the research where all showed a significant level of validity then the next book model and learning equipment will be used in the next stage of the implementation phase.

V. REFERENCES