Basic communication skill drill in microteaching context to improve the teaching skills of civil engineering and planning education students, faculty of engineering, Yogyakarta State University

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Abstract. This study aims to investigate whether the drill method (verbal and non-verbal communication skill drill) is able to improve the basic teaching skills in microteaching context. This is classroom action research. The population consisted of students majoring in Civil Engineering and Planning Education Department, Faculty of Engineering, Yogyakarta State University who were taking microteaching practice course. The sample of the study was class A1 consisted of 11 students. The study was conducted in three cycles. Cycle 1 contained basic verbal communication, cycle 2 encompassed basic non-verbal communication, and cycle 3 covered both basic verbal and non-verbal communication types. Observation and skills assessment sheets were employed. The qualitative descriptive and descriptive statistics methods were then used to analyze the data. The results show that: (1) basic verbal communication skill drill in microteaching practices improves student teachers’ basic microteaching skills and (2) basic non-verbal communication skill drill in microteaching practices improve student teachers’ basic microteaching skills.

1. Introduction

One of the essential skills for teacher is communication skills. Communication is the foundation for an effective teaching and learning process [1]. The micro-learning in this study is divided into two stages. The first stage is microteaching practices in which the students are trained on one learning section at one time such as the opening section, closing section, or whilst teaching activity. The second stage is an integrated microteaching practice involving all microteaching skills such as opening classes, delivering materials, interacting with students, using classroom language, administering learning evaluation, and closing the classes. The integrated microteaching practices are carried out in accordance with the YSU microteaching guidelines. It was observed that some student teachers do not have adequate communication skills when they carried out microteachings. To solve this problem, continuous verbal and non-verbal communication skills trainings are necessary. The two communication types are essential to support teaching skills. Microteachings are typically conducted in the form of repeated practices such as practicing how to open and close classrooms as well as to conduct whilst teaching activities. These typical practices are considered ineffective because of the many skills that should be repeated. In the drill method, student teachers are trained on micro-skills such as how to speak clearly and loudly and how to move around the classroom. If these micro-skills are mastered by the student teachers, then it will be easier for them to develop other teaching skills.
1.1 Drill Method
There are several attempts made by experts to define the drill method. Nana Sudjana defines the drill method as a repetition of the same activity in an earnest manner to strengthen certain associations or to perfect and internalize certain skills [1]. The distinctive characteristic of this method is the repetition of the same activity. Further, Toto Hernawo states that the drill method, also called the training method, is a beneficial teaching method to instill and maintain habits, and to develop dexterity, accuracy, opportunities, and skills [2]. In line with the previous opinions, Sugiyanto defines the drill method as a method in which students perform movements according to what the teacher instructs and do it repeatedly [3]. The repetition of this movement is intended to enable movement automation. All definitions of the drill method proposed by the aforementioned experts have one similar characteristic, i.e. repeated training to acquire and internalize certain skills.

1.2 Basic Communication Skills
Communication is the process of transferring an understanding in the form of ideas and information from one to another. It means that communication is more than just transferring meaning but also make the meaning understandable. Communication can be verbal or non-verbal. The former type is the communication that uses verbal media or spoken words in conveying messages. On the other hand, the latter is the type that uses non-verbal media in conveying message such as one’s face, eyes, body, touch, sound, space, time, physical appeal, clothing, and environment [4]. Verbal communication is considered effective when meeting the following requirements: (1) building positive environment to develop fun communication, (2) encouraging students to speak up, (3) seeking opinions, (4) sympathizing with students’ feelings, (5) reaching agreement, (6) building sufficient eye contact, (7) bonding, (8) leaving a good impression, (9) motivating, (10) showing lively voice and body language, and (11) addressing students with positive names. Meanwhile, non-verbal communication has the following characteristic: (1) continuous in nature, (2) rich in terms of meaning, (3) sometimes confusing, (4) conveying emotion, (5) controlled by norms, and (6) related to culture.

1.3 Microteaching
According to the YSU microteaching guidelines, microteaching is also called internship practice II. The basic competencies in micro teaching are as follows: (1) understanding the basics of microteaching/ Internship II, (2) designing lesson plans, (3) practicing the basic skills of microteaching, (4) practicing the basic skills of the integrated teaching, (5) evaluating microteaching practices. Further, microteaching is carried out in each faculty's study program under the supervision of in-charged lecturers and under the coordination of a study program’s and faculty’s microteaching coordinator. Microteaching is for the sixth semester students. There are ten components of basic teaching skills. The following components are required to open the lessons: (1) drawing students' attention, (2) motivating students, (3) providing references, and (4) providing apperception. The component of closing the lesson includes: (1) reviewing the material, (2) evaluating student learning outcomes, (3) making conclusions or summaries of the material, (4) providing significant (appropriate, meaningful, and useful) assignments.

2. Method
This is classroom action research. This study sought to improve the student teachers’ (S1/ undergraduate program) basic microteaching skills by drilling basic communication skills in microteaching practices. The student teachers would participate in integrated field practices (PLT) in vocational schools. The population of this study consisted of students majoring in Civil Engineering and Planning Education, Faculty of Engineering, Yogyakarta State University who were taking microteaching courses in the 7th semester in 2016. The sample of the study was class A2 comprising 11 students who were under the supervision of the research team’s members.
This study follows the action research model proposed by Kurt Lewin consisting of four steps: (1) planning, (2) acting, (3) observing, and (4) reflecting. The purpose of the planning step is to prepare all the instruments needed for the second step which involves designing microteaching syllabus, lesson plans, and observation sheets. The plan formulated in the first step was then carried out in the action step. In this step, a microteaching practice was conducted to examine the student teachers’ prior communication skills. Afterwards, a series of treatments in the form of drill method was given. The microteaching practice was continued after the student teachers were drilled on the basic communication skills. During the microteaching process, observation was conducted. The observation results of the microteaching prior and after the drills were then compared to examine the changes. The student teachers’ skills were also assessed qualitatively. The reflection step involved discussions between the research team members and student teachers on how to improve the microteaching quality. Observation and skills assessment sheets were used to collect the data. The collected data were then analyzed statistically and qualitatively.

3. Result and Discussion

This part describes the process, results, and discussion of the following aspects: (a) the student teachers’ prior microteaching skills, (b) cycle 1 on the basic verbal communication drill, (c) cycle 2 on the basic verbal communication drill, and (d) cycle 3 on the basic microteaching skills practices.

3.1 The Student Teachers’ Prior Microteaching Skills

This study starts with the very basic teaching skills, i.e. opening and closing the lessons. This activity is intended to find out the student teachers’ prior micoteaching skills. A total of 11 students were given a chance to conduct a 10 minute microteaching. The observation results show that all students are not adequate in terms of verbal and non-verbal communication skills. Further, not all components of opening and closing the lessons were included when the students conducted their turns.

Cycle 1 focuses on the basic verbal communication skill drill. The student teachers are trained on how to use verbal communication skills for a ten-minute teaching. The skills trained in this cycle are voice volume, speech flexibility, clarity, and fluency. In a meeting, each students get 2 to 3 turns to practice all those basic skills. The assessment results of Cycle 1 are presented in Table 1.

| Student Number | The basic verbal communication skill score | Total Score | Mean Score |
|----------------|-------------------------------------------|-------------|------------|
|                | Voice | Flexibility | Clarity | Fluency |            |             |
| 1              | 3     | 2           | 2       | 2       | 9           | 2.3         |
| 2              | 3     | 3           | 3       | 3       | 12          | 3.0         |
| 3              | 3     | 3           | 3       | 2       | 11          | 2.8         |
| 4              | 2     | 3           | 3       | 3       | 11          | 2.8         |
| 5              | 4     | 3           | 3       | 4       | 14          | 3.5         |
| 6              | 3     | 2           | 3       | 2       | 10          | 2.5         |
| 7              | 3     | 3           | 2       | 2       | 10          | 2.5         |
| 8              | 3     | 3           | 3       | 2       | 11          | 2.8         |
| 9              | 3     | 3           | 2       | 3       | 11          | 2.8         |
| 10             | 3     | 2           | 3       | 3       | 11          | 2.8         |
| 11             | 4     | 3           | 3       | 4       | 14          | 3.5         |
The research team reflects and discusses what steps are needed to improve the microteaching practices based on the observation and assessment. The reflection results suggest that the student teachers should seriously act as teachers or students. In the next cycle, the student teachers are asked to write and memorize a script containing what they will say in the next meeting. The results of this reflection are used to design the next exercises.

Cycle 2 encompasses the basic non-verbal communication skill drill. Based on the Cycle 1 reflection, the student teachers are asked to write and memorize what they will say for the next meeting. The lecturers consistently remind the students to seriously immerse themselves in their roles either as teachers or students. This cycle focuses on how to give positive responses in non-verbal ways through facial expression, hand movements, human contact, and teacher movement in the classroom. The participants are trained on those skills repeatedly (drill system). The cycle 2 assessment are presented in the following table.

Table 2. The assessment of the basic non-verbal communication skill drill

| Student Number | The basic verbal communication skill score | Total Score | Mean Score |
|----------------|------------------------------------------|-------------|------------|
|                | Movement | Flexibility | Attractiveness |               |             |
| 1              | 2        | 2           | 2             | 6             | 2.0         |
| 2              | 3        | 3           | 3             | 9             | 3.0         |
| 3              | 3        | 3           | 2             | 8             | 2.7         |
| 4              | 3        | 3           | 3             | 9             | 3.0         |
| 5              | 3        | 3           | 2             | 8             | 2.7         |
| 6              | 2        | 3           | 2             | 7             | 2.3         |
| 7              | 3        | 2           | 2             | 7             | 2.3         |
| 8              | 3        | 3           | 2             | 8             | 2.7         |
| 9              | 3        | 2           | 3             | 8             | 2.7         |
| 10             | 2        | 3           | 3             | 8             | 2.7         |
| 11             | 3        | 3           | 2             | 8             | 2.7         |
| Total          | 30       | 30          | 26            | 78            | 7.8         |
| Mean Score     | 2.7      | 2.7         | 2.4           | 7.8           | 2.6         |

In cycle 2, the student teachers show serious efforts in taking their roles both as teachers and students. However, their non-verbal communication skills are not yet sufficient. In early performances, communication breakdown often occurs or in other words the stimulus and response are incompatible. For example, when ‘the teacher’ shows positive/pleased expression, ‘the students’ does not reciprocate the same sentiment. Therefore, ‘the students’ are expected to provide stimulus that supports the non-verbal communication development.

Cycle 3 is carried out in the second half of the program. The microteaching practice in this cycle is intended to examine the effect of communication skill drill on the student teachers’ performances. The first meeting focuses on training the student teachers specifically on whilst teaching activities or providing explanation of the subject matters. Before conducting microteachings, the student teachers are asked to write down a scenario on how they will orchestrate their classes. The lecturers observe and
compare the written scenario and what unfolds in the field. If there is any discrepancy, the lecturers will point the errors out (substantial or technical errors) to the student teachers.

The Cycle 3 observation shows that the student teachers are quite flexible and fluent in teaching. However, the way they explain the subject matters is monotonous. In the second meeting of Cycle 3, the students seems inexperienced in using various teaching media and technology. However, their teaching performances are considered good. They need to practice more on operating LCD projector and designing media presentation.

The third meeting focuses on the student teachers’ skills at leading classroom discussions. They are considered insufficient in leading discussion activities. There are often long pauses and even complete stops in the middle of the discussions because ‘the teachers’ do not know how to coerce their ‘students’ to participate. In these conditions, the lecturer gives guidance on how to lead the discussions. The student teachers’ performances in leading discussions are gradually improved. The observation results show an improvement in verbal and non-verbal communication skills.

4. Conclusion

(1) Basic verbal communication skill drill is considered able to improve the student teachers’ basic microteaching skills; (2) Basic non-verbal communication skill drill is considered able to improve the student teachers’ basic microteaching skills.

Acknowledgments
In regard with the effectiveness of verbal and non-verbal communication skills to improve microteaching skills, microteaching process should be conducted in three levels: (1) basic communication skills, (2) basic microteaching skills, and (3) basic integrated teaching skills. The drill method is recommended in microteaching courses. The skills in which the students are lacked is practiced repeatedly.

5. References

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