



Using Online Learning Systems to Measure Students' Basic Teaching Skill

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Abstract

The purpose of this article is to find out the achievement of the nine basic skills of teaching students through a scientific approach at the Department of Elementary Education Teacher Education (PGSD) of the Universitas Muhammadiyah Sidoarjo and to find out the constraints found during learning through the scientific approach in the PGSD of Universitas Muhammadiyah Sidoarjo. The purpose of this research is to improve the achievement of nine basic skills of teaching students through a scientific approach at the PGSD department of Muhammadiyah Sidoarjo University. This research was conducted using classroom action research (CAR) methods. In each PTK cycle, namely cycle 1, cycle 2, and cycle 3 there are several activities carried out, which are design, action and observation, reflection, and revision. Nine basic teaching skills for students have increased from cycle I to cycle II, and from cycle II to cycle III. This is indicated by the increasing skills of conducting variation, strengthening skills, and conducting evaluation skills.

Keywords: Online learning systems, teaching skills, seesaw class

1. Introduction

The Basic Teaching skills are skills that require decision making [1] and are complex [2]. These skills are applied by teachers in the teaching and learning process starting from the beginning to the end of teaching-learning process. Every basic teaching skill is the result of a decision, whether conscious or unconscious, that is made by the teacher after complex cognitive processing of available information. In addition, we know that not only the organizational conditions of the learning process but also the individual characteristics of the teacher influence their teaching skills [3]–[5].

All of these skills include: (1) skills in opening and closing lessons, (2) skills in explaining, (3) skills in asking questions, (4) skills in conducting variations, (5) skills in giving reinforcement, (6) skills in classroom management, (7) individual management skills, (8) small group teaching skills, and (9) skills in guiding small group discussions.

Students of elementary school teacher education study programs are prepared to become classroom teachers at the elementary school level, so starting from semester 5, they are trained to be able to master and practice the nine basic teaching skills in several courses. Based on the results of observations conducted by researchers in the 5th semester PGSD students, the following data was obtained:

Table 1: The Result of the Initial Observation on Basic Teaching Skills

No.	Skill Type	Description
1	skills in opening and closing lessons	Performed by praying, attending, and singing
2	skill in explaining	Performed by delivering

3	questioning skills	material orally Performed through question and answer
4	skill in making variations	Performed with a variety of seating settings and group divisions
5	skill in giving reinforcement	Done nonverbally
6	classroom management skills	Performed by accompanying each group in completing the task
7	skills in managing individually	Done, but not comprehensive yet
8	skills in teaching small groups	Not done
9	skills in guiding small group discussions	Not done

In order to optimize achievement nine basic teaching skills, one approach that can be used is a scientific approach. Learning that uses the scientific approach means learning by doing a reaseach (Team Assembly of Primary and Secondary Education (Dikdasmen) Executive Board of the Muhammadiyah Region (PWM) East Java, 2015). Research is an attempt to find the truth about something. Efforts in research in the form of research activities. In researching activities, scientific methods are needed. This method provides guidance for scientific thinking with systematic, methodical, objective measures, and applies to the public.

The stages in using a scientific approach are observing, asking questions, gathering information / exploration, associating / reasoning, and refining, and proceeding with creating. When the learning process reaches the stage of creation, the stage of communicating is repeated as a media to explain its creation.

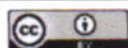




Figure 4: Feed view to give score and revise students assignments

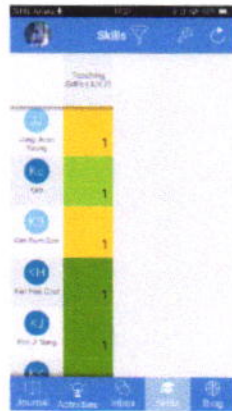


Figure 5: Student Score sheet

What follows is the use of seesaw from the perspective of students who use it. Displaying the use of seesaw class applications in students is explained in Figure 6 to Figure 9. Students can use mobile phones through applications or laptops through the website to use seesaw class.

In Figure 6 shows the display after students input the class code or scan the class QR Code. Figure 7 shows the activity pages to be carried out by students with several activities such as online worksheets. Figure 8 shows how students input or upload their answers or responses in several stages. Figure 9 shows the input of student data that is not automatic due to not entering email data when the application or website login.

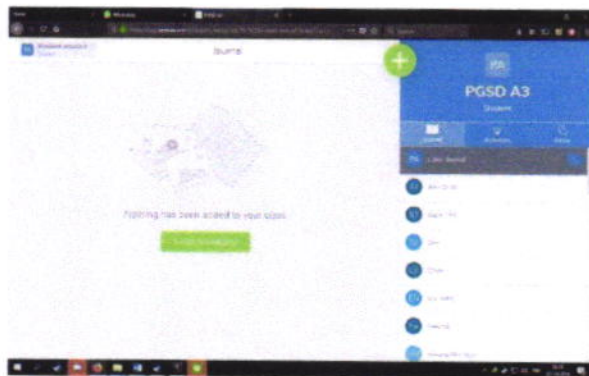


Figure 6: First layout for students

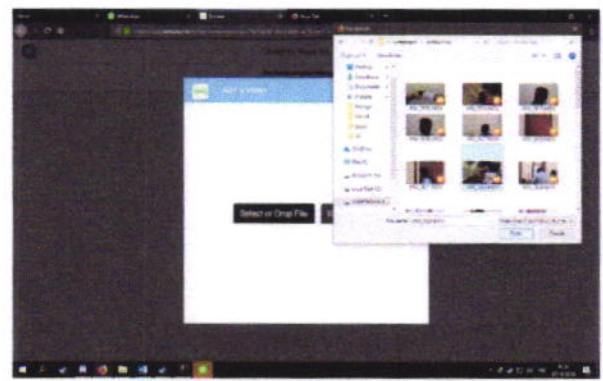


Figure 7. how to upload video's student

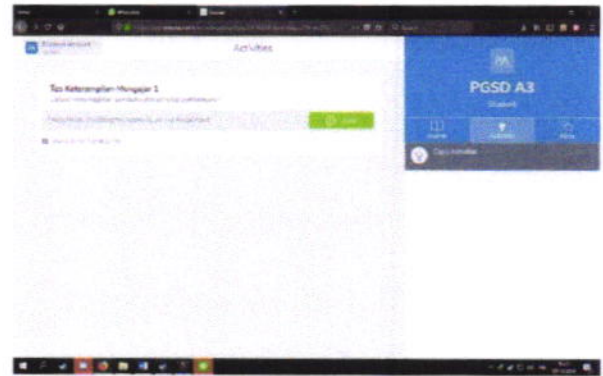


Figure 8. layout of class

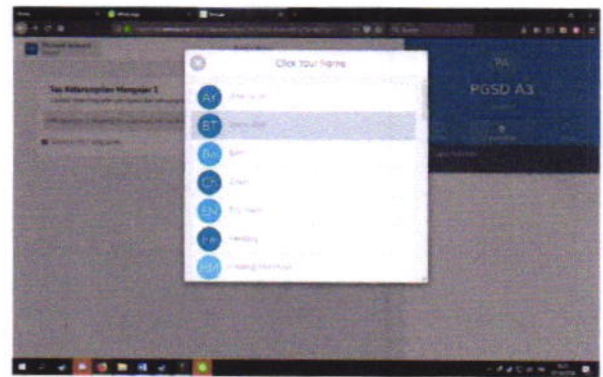


Figure 9. input the name of students

The use of online learning systems has made a considerable intuitive appeal for the concept of integrating the advantage of synchronous (face-to-face) learning and asynchronous learning activities (text-based Internet). At the same time, there is a considerable complexity in its implementation with the challenge of possibilities of application that are not limited to many contexts [11].

It is undeniable that campus-based higher education institutions will adopt an integrated learning approach in a significant way. As several institutions have shown, after a clear policy and strong leadership, evolution will be fast (eg, University of Central Florida). In just a few years, higher education institutions can be transformed in ways that are consistent with their values and reduce fiscal and pedagogical challenges and shortcomings that currently challenge the quality of classroom experience. Academic benefits, evidence and competitive advantages are clear; only the will and commitment are left. Online learning systems can begin the process needed to redefine higher education institutions as centralized learning and facilitate higher learning experiences. Some might argue that the fact that there is a significant difference between midterm values is an indication that there is a difference between online classes and traditional classes in terms of learning. But as mentioned in the restriction section of this paper, this

difference seems to be more of a problem of adjusting to online learning than being an indication that online classes are rather low in terms of learning outcomes [12].

The Result of Students' Basic Teaching Skills

The results obtained in this study are in the form of a full assessment of student teaching practices, which includes nine basic teaching skills per cycle.

Design

In the cycle I to III research design, the tools and equipment prepared include: Course Outline (RPS), Lesson Plan (RPP), assessment sheets for teaching practices, and, learning media needed during the activities.

Actions and Observations

The action taken by the researcher was in the form of teaching and learning activities of cycles I to III held on February 28, 2018. It began with an introduction, core activities, and then ended with a closing and 5 stages. On the scientific approach, what was done was lecturers giving motivation by conveying problems in learning that are often experienced by a teacher. Furthermore, students observe the symptoms of the cause of these problems. In the second activity, the lecturer divided the group and asked each group to discuss the nine basic teaching skills. The activities carried out are: students together with group members discuss in their group, then the class discussion for questions about various matters related to the nine basic teaching skills. Figure 10 is the result of the 3 cycles obtained during the study with a scale of 0-4 which shows the increase in each cycle by students.

The discussion activity continued with Gathering Information by searching for information from various sources, namely books, journals, information from friends and learning videos. In addition, students also designed various teacher activities in learning to demonstrate the nine basic teaching skills. After designing learning activities, the students then prepare a report based on the results of the discussion. The report contains a series of activities conducted by the teacher to practice basic teaching skills in learning. After each group collects the report, then the student communicates in the form of teaching practice in the classroom individually to demonstrate the nine basic teaching skills.

Reflection

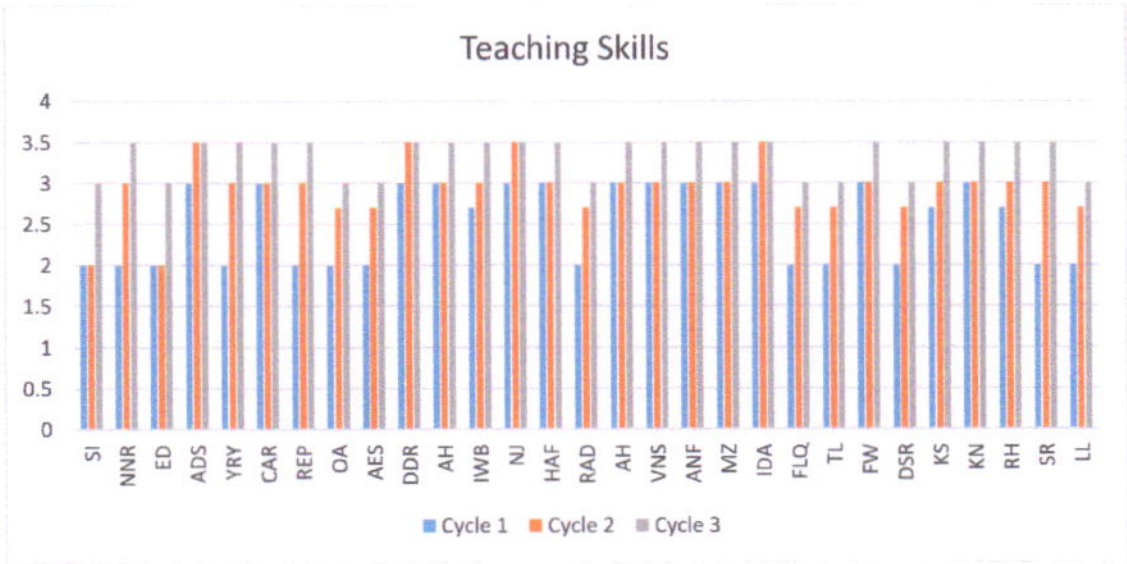
From the results of observations made in the first cycle, it can be seen that the shortcomings during the practice of teaching students is that most students still have difficulties in performing the skills of opening and closing lessons. Many students have not done all kinds of variations in learning. They also have not optimally provided small group guidance because of the difficulty in understanding the characteristics of students.

From the results of observations made in the second cycle, it can be seen that the shortcomings during the practice of teaching students is that only some students who have difficulty performing skills open the lesson to focus students' attention. Some students provide variations in learning only in the form of variations in teaching positions. Some students who are less than optimal provide small group guidance.

From the observations made in the third cycle, it can be seen that there are no significant weaknesses during the practice of teaching students, except for the problem of time control, which is still not able to be properly regulated by a small number of students.

Revision

This phase discusses improvements to be carried out in the second cycle after reflection on the implementation of teaching and learning activities in cycle I. These improvements are carried out to improve the achievement of nine basic teaching skills in the first cycle that have not reached the target or not maximized. The revision is done by the lecturer in giving additional time to students in carrying out "Observing" activities. Lecturers guide students as a whole in information gathering activities. Lecturers provide information related to media that should be used in demonstrating nine basic teaching skills, such as: miniature custom clothing, human respiratory organs, as well as two-dimensional figure media. This makes students able to maximize their ideas in communicating the results of activities in reasoning. Revisions made in the second cycle are lecturers giving examples of demonstrating skills in opening lessons, so that students can observe the examples directly. Lecturers guide students individually in the activities of assisting learning tools in gathering information and reasoning.



4. Conclusion

Based on the results and discussions, it can be concluded that the intact basic teaching skills consisting of nine skills have been achieved with good categories. In ICT-based learning can improve several aspects that support learning so that students or higher students improvement or ease in learning, as well as the use of

augmented reality in learning to improve students spatial abilities [13][14].

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