The effect of micro teaching application on the preservice teachers’ teacher competency levels.

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Abstract

In this study, it is aimed to examine the effect of the micro-teaching application on teacher competency level of early childhood preservice teachers who are included in the activity. Students’ teacher competency levels were measured by “Prospective Teacher Competency Sub-Scale” which was developed by Erişen and Çeliköz (2003). For the study the pretest- post-test design of experimental research model has been used without control group. The data is analyzed by the Paired Samples t test and ANOVA test for repeated measures. After the experiment of micro teaching, significant differences have been found between participants’ pre-test and post-test scores. The results show that the micro-teaching activity may affect students’ teacher competency levels positively.

Keywords: Teacher education; micro-teaching; teacher competency.

1. Introduction

Micro-teaching is a technique that can be used for various types of different professional development. Especially, it has become a successful and an interesting method for transferring theory into practice for a pre-service teacher in a teacher education program. The purpose of microteaching application is to develop skills in teaching.

Micro-teaching has been used in many countries used to train technicians, counselors, where the normal complexities of the classroom are drastically curtailed and immediate feedback on performance can be given (Kpanja, 2001). Preservice teachers are evaluated about a micro lesson performance to teach peers by a videotape. During their peers recorded evaluations of the lessons using checklist, commented and critiqued on simple teachers behaviours in class.

In microteaching, the evaluation of the student’s simple teacher attitude whose performance is viewed is provided with peer and counsellor’s feedbacks. A checklist, classroom discussion and making comments are used for these feedbacks.

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Researches supported that the effective video tape recording in micro-teaching worked for teacher education (Kpanja, 2001). The video not only reflected their performance but also provided to evaluate themselves in classroom. This technology supported the strategy of doing, reviewing and doing again that seemed effective in improving teacher performance (Jurich, 2008).

According to Jurich (2008), video technology entered the field of teacher training intertwined with micro-teaching, a behaviourist strategy to enhance the teaching/learning process. As applied to teacher training, micro-teaching has four main objectives:

- assess the student teachers’ overall teaching skills;
- identify skills that require improvement;
- provide a system for practicing the skills; and
- monitor the skill development process.

It is accepted that micro teaching method has not only advantages but also some limits. One of these limits is pre-service teachers’ receiving limited feedback because of time constraints, with just two instructors to many students and limited class time. Another problem is that pre-service teachers have limited opportunities to reflect on their own teaching (Lee and Wu, 2006). In a study which is evaluated by microteaching based on students’ views, the video camera records’ negative effects on the pre service teachers, necessity of preparation and technical problems are presented as the limitations of the method. In spite of these, pre service teachers recommended the use of the method in teacher education because of the advantages (Taşdelen-Karçkay and Baydemir, 2007).

The aim of this study is to investigate the effect of the micro-teaching application on teacher competency level of early childhood preservice teachers who are included in the activity.

2. Method

2.1. Research design

The study of the pre-test- post-test design of experimental research model has been used without the control group.

2.2. Participants

Participants of the research consist of early childhood teaching department’s normal education and second education students who take Instructional Technologies and Material Development course at Cumhuriyet University.

| Variables            | N  | %   |
|----------------------|----|-----|
| Gender               |    |     |
| Female               | 70 | 92.1|
| Male                 | 6  | 7.9 |
| Type of education    |    |     |
| Normal education     | 38 | 50  |
| Second education     | 38 | 50  |
| Total                | 76 | 100 |

As showed Table 1, 28 participants out of 104 whose measurements can not be matched, weren’t included the research because participants’ repeated measurements need to be matched. In this way it was evaluated by 76 preservice teachers’ pre-test and post-test measurement results. When the preservice teachers’ features was analyzed according to their gender %92 (n=70) female, %7.9 (n=6) male and the number of normal education students and second education students is scattered equally (n=38).
2.3. Procedures

The students attending to Microteaching application after six weeks theoric lessons, they studied in groups related to “activities supporting early childhood period language and concept development” in the first semester of 2006-2007 academic year. In accordance with the steps of micro teaching application, after classroom discussion and group works, the activities are formed last time. The lesson plan for 15-20 min. was prepared as being suitable for the activity theme chosen by the students. It was practiced in state nursery school and private nursery schools and at the same time in society for the protection of children. Recording of the studies by video camera, watching of the records, being evaluated by the counsellor teacher and the classmates, filling the “micro teaching evaluation form” and supplying verbal feedback by the other students and their evaluation of themselves were practiced.

2.4. Measures

2.4.1. Personal information form

This consists of questions about gender and type of education (normal education, second education).

2.4.2. Teacher competency sub-scale

Students’ teacher competency levels were measured by “Teacher Competency Sub-Scale ” which was developed by Erişen and Çeliköz, in 2003, is called “prospective teachers perceive themselves as competent in terms of general teacher behaviours related to teaching field”.

2.5. Data analysis

In this study pre-test and post-test’s means were checked by normal distribution with a Q-Q plot. Both variables are normally distributed. So, it is appropriate to use The Paired Samples t test and ANOVA test for repeated measures. The data was analyzed using SPSS.

3. Results

Results of teacher competency level of the Paired Samples t Test in pre-test and post-test scores are displayed in Table 1.

|            | N | Mean | Sd  | Df | T     | p      |
|------------|---|------|-----|----|-------|--------|
| Pre-test   | 76| 17.36| 3.38| 75 | 4.788 | <.001  |
| Post-test  | 76| 19.16| 2.78|    |       |        |

The results of the paired samples test indicated a significant difference (t= 4.788, p=<.001) between pre-test and post test of Teacher Competency test. As seen Table 2, arithmetic means of teacher competency of pre-test was 17.36, post-test this average raised to 19.16. The study pointed out that the micro teaching activity may affect university students’ teacher competency levels positively.
As can be seen table 3, there is a significant difference (F=5,611; p<.05) among teacher competency means of pre-test and post test scores for gender groups. It is possible to conclude that micro teaching practice affects both female and male students’ teacher competency levels positively.

| Groups  | N   | Mean | sd  | Mean Square | F     | p   |
|--------|-----|------|-----|-------------|-------|-----|
| Pre-test | Female | 70  | 17.27 | 3.47 | 30,614 | 5,611 | .020 |
|         | Male   | 6   | 18.33 | 1.97 |         |       |     |
|         | Total  | 76  | 17.36 | 3.38 |         |       |     |
| Post-test | Female | 70  | 19.10 | 2.83 |         |       |     |
|          | Male   | 6   | 19.83 | 2.04 |         |       |     |
|          | Total  | 76  | 19.16 | 2.78 |         |       |     |

As can be seen table 3, there is a significant difference (F=24,517; p<.001) among teacher competency means of pre-test and post test scores for type of educations groups. It is possible to conclude that micro teaching practice affects both normal education and second education students’ teacher competency level.

4. Conclusion and Recommendation

The aim of this study is to examine the effect of the micro teaching application on teacher competency level of early childhood preservice teachers who are included in the activity. The results of the research showed that there is a significant difference between pre-test and post-test scores of teacher competency levels of preservice teachers who attended the micro teaching practice. The study pointed out that the micro teaching activity may affect early childhood preservice teachers’ teacher competency levels positively. The results of this study support the other related researches (Kpanja, 2001; Copeland, 2001; Fernandez, 2005; Fernández and Robinson, 2006).

The results of the study suggest that micro-teaching can be used as an effective method for especially practical lessons of teacher education program.

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