

THE EFFECTS OF SCENARIO BASED BLENDED LEARNING ENVIRONMENT ON ATTITUDES OF PRESERVICE TECHNOLOGIES TEACHERS TOWARD TEACHING PROFESSION

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ABSTRACT

The purpose of this study was to define the effects of experiences that have been acquired at the Teacher Experience Course and skills acquired at the Blended Learning Environment on attitudes of preservice technologies teachers toward teaching profession. In the study, a pretest-posttest quasi-experimental design was used. The study group is consisting of 37 students who were registered for Teacher Experience Course of Computer Education and Instructional Technology, Faculty of Educational Science, Ankara University. In order to collect data a 5 point likert scale with 34 items, which is developed by Üstüner (2006), was used. The scale was used both at the beginning and at the end of the semester. At the beginning of the semester students who would go to the public schools institutions once a week were randomly assigned to one of the five schools. The study took 10 weeks. Beginning from 4th week, students were given scenarios once a week, totally 8 scenarios. The main aim of these scenarios was to assist students in order to improve their standpoints according to the problems that they encountered in the school. Scenarios and solutions were discussed at the face to face courses, semiweekly. The period of Teaching Practice and generated solutions according to presented problems were assessed with students at the last week of the study. Descriptive statistics and t-test statistical technique were used to analysis of data.

The result of the study indicated that there is a significant difference in favour of average points of posttest.

Keywords: Scenario based learning, blended learning/online learning, attitudes toward teaching profession.

INTRODUCTION

Purpose of education is to bring up individuals beneficial to society. Bringing up of new generations beneficial to society, and the human resources needed by the country is under the responsibility of the teachers, as being key element of education (Küçükahmet, Külahoğlu, Güçlü, Çalık, Topses, Öksüzoğlu and Korkmaz, 2002). Success of an education system is closely interrelated with the qualities of teachers, altogether comprising the key element of education. In the report, having been drawn up by ISTE (2008), prerequisite qualities of teachers are described as, "being helpful to the learning and creativity of pupils, developing and designing modern learning experiences and assessment methods, serving as a model by keeping up with the times, being aware of the responsibilities of digital age, keeping up with professional developments, and setting an example via lifelong learning and leadership characteristics". Qualities of

skillful teachers have also been specified in various studies (Alkan and Hacıoğlu, 1997; Keser, 1999; Küçükahmet, 1999; Özdemir and Yalın, 1999), conducted throughout Turkey. Bringing up of teachers with such qualities is predominantly under the responsibility of Educational Faculties. Mission of Educational Faculties in general is comprised of bringing up of teachers aware of their individual and professional responsibilities, conceived of their places, and those of their profession as well, within socio-educational development, provided with professional competence and ethical responsibility, aspiring after continuous self-development, and getting hold of such high-level skills of thinking, including creative and critical thinking, and lifelong skill of learning (AU FoES, 2008).

Preservice teachers are provided with programs related with knowledge of teaching profession throughout four years of education of teaching profession, alongside knowledge on general culture, and field knowledge (Küçükahmet et al, 2002). Disregarding the bulk of theoretical knowledge being provided throughout the term of their teaching education, the most critical acquisition of education and knowledge by preservice teachers may be realized by means of the experience they would acquire during their respective practices being performed at classrooms. Purpose of pre-service education is to bring up preservice teachers as experts structuring knowledge as a resource, provided with the skill of lifelong learning in line with their tuition skills, continuously adding onto their knowledge and skills, and keeping up with the times, by providing them with a broader understanding on the essentials of tuition and learning, and by helping them to apply these essentials to their professional lives (Bransford, Darling-Hammond and LePage, 2005).

At the Educational Faculties, students are enabled to implement their theoretical gains throughout their learning period in the Teaching Practice courses.

By virtue of the protocol, having been undersigned by Ministry of National Education and The Council of Higher Education (CoHE) for practical use in the year 1998, "Directive, dated July 28th, 1998, on the Teaching Practices of Preservice Teachers at the Educational Institutions affiliated to Ministry of National Education" has been put into effect.

By extending the time allotted for in-house practices within teacher training programs, this new arrangement prescribes the acquisition of teaching experiences of professional necessity by preservice teachers at real-life environments (CoHE, 2007).

Practical in-house activities, being realized within the framework of pre-service teacher training, constitute a quite significant phase, in view of preservice teachers' applying and experiencing the knowledge and skills, being acquired throughout their undergraduate studies, at schools, and classroom environments themselves (CoHE, 2007), and their familiarizing with various teacher models as well. Throughout this period, preservice teachers may conduct observations at the schools in which they practice, meanwhile they may recognize the good and bad examples thanks to their practice teachers, and acquire pre-experiences throughout lecturing sessions for their own accounts with regard to teaching profession. Thus, it is being aimed to train quality teachers, provided with such high-level thinking skills as problem solving, multiple points of view, critical and creative thinking, thanks to the new experiences they come by. Beside these skills, and general culture, field experience, and professional knowledge as well, a quality teacher should also be provided with a positive attitude toward teaching profession.

Within this context, throughout the whole period of preparation to teaching profession, it should be aimed to have the preservice teachers adapted to their profession, and by having them instilled with encouragement, to attain a positive change in their attitudes to their profession. Demirel (2005) defines attitude as, "the learned tendency, leading the individual toward performing certain behaviors in face of certain persons, objects, and circumstances". Attitude, according to Ülgen (1994), is "a fact, being attained via

learning, shaping the behaviors of the individual, and leading to biasness in times of decision-taking". Negative or positive attitudes, being possessed by preservice teachers, with regard to their profession, are among the key factors, affecting their professional successes (Küçükahmet, 1987, 2002).

From these findings forth, it may be possible to say that, Teaching Practices courses would be effective in the development of either positive or negative attitudes by preservice teachers toward their profession. Thus, teaching of this course, as well as the methods and practices being made use of within the framework of it, are critically important in preservice teachers' development of positive attitudes toward their profession.

By virtue of demonstrating practices via such methods as problem-based learning, scenario-based learning, and conditional learning, it would be possible to get the preservice teachers adopt positive attitudes towards their profession. Despite having been demonstrated different examples in their practicing schools, and faced with different experiences therein, the special conditions the preservice teachers come across may not necessarily be the same. Enrichment of professional practices with real-life examples, that they would come across throughout their professional lives, may be effective in having them adopt different points of view.

Scenario-based learning is such a learning model, based on having the student put him/herself into an actor/actress, and display the goals and behaviors for solving the problems they come across, by plotting the expected goals and behaviors within the framework of a scenario. By having true, or likewise stories from real-life brought in the classroom environment, scenario-based learning enables the students to think about real events, transfer their knowledge over these new events, and do researches for solving the problem given in the plotted scenario. Thus, students come to structuring their knowledge (Veznedaroğlu, 2005). Paulus, Horvitz and Shi (2006) have pointed out to the fact that, in cases, being introduced by having the contents modeled in form of stories, and interrelated with real events, students may attain the aimed gains more easily by solving the given tasks.

In Teaching Practices course, upon being introduced with theoretical knowledge with regard to the contents of the course for the first three weeks, students begin visiting practicing schools. It would be more fruitful to have the course conducted at a blended learning environment both face-to-face and online, so as to have the students exchange their experiences with both their tutors, and peers in a continuous interaction. By virtue of online learning environment, students continuously keep themselves informed with each other. Scenarios being introduced at such an environment enable the students think over these scenarios free from time and space, and discuss with their peers when necessary.

There are a number of works within the literature, emphasizing the importance of preservice teachers' attitudes, and points of view towards teaching profession, with regard to successful and quality performance of teaching profession. There are also various researches, related with reviewing the attitudes of preservice teachers toward teaching profession according to various variables (Tanrıöğen, 1997; Çapa and Çil, 2000; Erdem and Anılan, 2000; Hoşgörür, Kılıç and DüNDAR, 2002; Baykara-Pehlivan, 2004; Semerci and Semerci, 2004; Serin, Serin, Saracaloğlu and Kesercioğlu, 2004; Oral, 2004; Aslan and Köksal-Akyol, 2006; Çapri and Çelikkaleli, 2008; Sayın, 2005; Temizkan, 2008; Çetinkaya, 2009; Durmuşoğlu, Yanık and Akkoyunlu, 2009), specifying the opinions of preservice teachers toward Teaching Practices course (Dursun and Kuzu, 2008), toward their practice teachers and tutors (Paker, 2005; Özen, Ergenekon and Batu, 2009), and with reviewing the effects of Scenario-Based Learning Environment on the attitudes and self-sufficiency perceptions of preservice teachers (Veznedaroğlu, 2005).

For the quality of education, it is sine qua non to have fruitful, and ambitious teachers with adequate knowledge, skills, and attitudes, and fondly performing their profession as well.

Within the scope of bringing up of teachers, courses such as In-School Experiences, Teaching Practices, are of critical importance on preservice teachers' adoption of either positive, or negative attitudes and opinions toward their profession. Students' attainment of positive attitudes within pre-service education is decisive on their successes throughout their professional lives.

Thus, it is deemed beneficial to include such practices and arrangements, developing preservice teachers' attitudes toward teaching profession positively within the conduct of Teaching Practices course, and to have the course examined for ascertaining its effectiveness thereafter by making use of various methods.

Within this context, purpose of the said examination is to ascertain the effect of the experiences being attained by Information Technologies preservice teachers at Teaching Practices courses, and that of the knowledge and skills being attained by the said preservice teachers at Blended Learning Environments on their attitudes toward teaching profession. Knowing the attitudes of preservice teachers toward teaching profession before getting started to their profession, as well as having these attitudes developed positively would be instrumental for the future successes of preservice teachers. Beside the observations, and lecturing experiences being attained by preservice teachers, scenarios being weekly introduced at online environments, online discussions, and various respective practices have been included within the scope of this study. In other words, by virtue of trying out various methods for the development of positive attitudes in the part of preservice teachers, the examination in question may be considered as a unique work in the field of information technology.

METHOD

In terms of the examination of single grouped pre-test and post-test design, study group is comprised of 37 preservice teachers, taking Teaching Practices course at their eighth mid-term of 2008-2009 Spring term in the Department of Computer Education and Instructional Technology (CEIT) of the Educational Sciences Faculty of Ankara University. 5-point likert-type "Scale on Attitudes toward Teaching Profession", comprised of 34 articles (11 of which are negative – adversely scored), and developed by Üstüner (2006), has been used as the medium for data collection in the examination. The scale's reliability and validity have been tested on 449 university students, studying at 11 different teaching programs. While validity coefficient of the scale has been found as .89, its internal consistency coefficient has been found as .93, and its test-after-test reliability coefficient as .72. As a result of the further factor analysis conducted thereon, the scale has been found out to be comprised of a single factor (Üstüner, 2006). Beside the scale, solutions, put forth by preservice teachers in return to the problems introduced within the scenarios, have been assessed via performance assessment scale (rubric), developed by the examiners. The scale has been applied at the beginning and end of the term in two stages, as being pre-test and post-test.

Stages, having been followed at the examination for the realization of the experimental process, are briefly as follows: In the course at the first week of the term, rendered face-to-face, preservice teachers were provided with theoretical information on the purpose and scope of the Teaching Practices course, and informed of the practice period to be fulfilled therein, course management system, by which the course would be conducted online, and of the tasks required to be executed by them, and the scale was applied online.

Upon studying theoretical courses for the first three weeks, students were randomly appointed to 5 different schools to go practicing therein for 1 day a week. As from the fourth week of the ten weeks of practice period, students were rendered with scenarios in online environment, so as to have them approach to the problems, specific to teaching profession, from distinct points of view. Having been rendered with 1 scenario a week, totaling to 8 scenarios, students were required to introduce their solutions to those problems in online environment, and by virtue of the weekly rendered scenarios, and that of the experiences acquired by the students at the practicing schools, it was thereby aimed to have the attitudes of the students toward teaching profession developed positively.

At the biweekly face-to-face meetings, scenarios rendered in online environment, and solutions introduced thereto, were discussed by the students, and by virtue of further exchanges of opinions, it was attempted to have the students acquire the skills of multiple and creative thinking, and utilizing different strategies in environments appropriate thereto, exchange their experiences from the teaching practice period, and provide solutions to experienced problems. Each of the scenarios, rendered weekly throughout the practice period, was separately assessed by four examiners conducting the course via performance assessment scales (rubric). At the last week of the practice period, a general assessment was performed, and teaching practice process, as well as the solutions put forth in return to the problems rendered within the scenarios was discussed with the preservice teachers thereafter according to the results, having been attained from the performance assessment scale. At the analysis of the respective data, beside the descriptive statistical techniques, t-test was also applied, so as to prove the significance of the difference between pre-test and post-test.

FINDINGS and INTERPRETATIONS

Findings, having been attained from the data collection means in accordance with the purposes of the study, were reviewed under the title of Opinions and Attitudes toward the Profession.

Opinions toward the Profession

Opinions of the preservice teachers toward the profession are given at the Table 1 below.

Table: 1
Decisions on performing the profession
prior to, and after the practice

	Pre-test		Post-test	
	N	Percent(f)	N	Percent(f)
Yes	30	% 81.1	32	% 86.5
No	7	% 18.9	5	% 13.5
Total	37	% 100	37	% 100

Having Table: 1 reviewed, it is seen that, while 81.1% of the preservice teachers were resolute about performing teaching prior to taking the Teaching Practices course, the same rate rose to 86.5% thereafter. The higher level of the attained score than the previously attained one may be interpreted as the positive effect of Teaching Practices course on the opinions of the preservice teachers toward teaching profession. Presence of 5 students, still inclined not to perform teaching profession at the end of the process may result from their preference toward fields of employment other than teaching. From the research conducted by Keser and Bayır (2007), it has been specified that, while 56.7% of the Information Technologies preservice teachers were resolute about

performing the teaching profession after being graduated, the remaining 43.3% were inclined to work at computer companies, data processing centers of public institutions, or to work at their own businesses.

While 67% of the preservice teachers stated that they chose CEIT Department willingly, 32.4% of them stated they chose the said department unwillingly. Among the students taking the Teaching Practices Course, one third of the preservice teachers' unwillingness in choosing the respective department may be interpreted as a problem of the overall education system. Bostancı's (2004) survey over 9790 teachers throughout Turkey has also revealed the fact that, around two thirds of teachers chose their profession willingly. This result is in parallel with the attained findings.

Attitudes toward Teaching Profession

Preservice teachers' attitudes toward teaching profession are given at the Table 2 below.

Table: 2
Comparison between the attitude averages toward teaching profession prior to, and after the practice

	N	\bar{x}	ss	t	sd	p
Pre-test	37	80.54	22.53			
Post-test	37	88.27	11.60	-2.55	36	.015

($p < 0.05$)

Having Table 2 reviewed, it is seen that, while average of the attitude scores of preservice teachers toward teaching profession prior to practice was 80.54, the same average score rose up to 88.27 at the next assessment after the practice. From the t-test, having been performed in order to glance upon the significance of the difference (7.72) between the average scores prior to, and after the practice, the averages prior to, and after the practice have been found significantly different [$t_{36} = -2.55$, $p < .05$].

From this finding forth, it may be said that, the practiced learning method has contributed to the attainment of positive attitudes by preservice teachers toward teaching profession.

Besides, from the assessment of the proposed solutions in return to the problems put forth in the scenarios by four examiners conducting the course via performance assessment scales, students have been seen to propose more comprehensive and practical solutions in time in return to the ever-complicating scenarios.

Glancing over the findings, having been attained from the study, it is seen that, there is a significant difference between the scores attained prior to, and after the practice, in other words, that the attitudes of preservice teachers toward teaching profession has changed positively meanwhile. According to this finding, it may be said that, use of Scenario-Based Blended Learning Environment is a method contributing in the development of positive attitudes by preservice teachers toward teaching profession. It is seen that, preservice teachers' observations, and experiences in tutoring at the practice schools they attend within the scope of Teaching Practices, as well as their expressions of opinions in return to the scenarios rendered to them in online environment, and their discussions on all these issues with their peers and tutors in online environment, altogether have a positive impact on preservice teachers' opinions towards teaching profession, and contribute to the development of diverse points of view by them as well.

CONCLUSION

The following results have been attained, based on the findings of the examinations:

- An increase in the number of the Information Technologies preservice teachers has been seen throughout the period prior to, and after the practice (an increase from 81% prior to the practice, toward 87% after the practice).
- Around 4/5 of the Information Technologies preservice teachers have chosen teaching profession by their own will.
- There is a statistically significant difference (from the attitude score average of 80.54 prior to the practice, to that of 88.27 after the practice) between the attitude scores of Information Technologies preservice teachers toward teaching profession at Scenario-based Blended Learning Environment.
- Students in time have proposed more comprehensive and practical solutions in return to eve-complicating scenarios.

RECOMMENDATIONS

- Scenario-based learning method is applicable in the professional knowledge courses at the institutions bringing up teachers.
- Preservice teachers, being brought up to perform teaching profession, should develop positive attitudes toward teaching profession. To attain this goal, it may be said that, the applied curriculum should be arranged in a way to include the activities for having the preservice teachers develop positive attitudes toward teaching profession.
- Researches may be conducted on ascertaining the reasons why the preservice teachers have chosen teaching profession.
- In this study, scenarios have been introduced to the preservice teachers in the form of texts. Further scenarios may include introduction of scenarios via video.
- Various methods may also be applied beside scenario-based learning system, in order to create positive effects on the attitudes of preservice teachers toward teaching profession.
- Longitudinal researches may largely be applied. Attitudes of preservice teachers toward teaching profession may be assessed as from first grade, and respective changes therein may be monitored accordingly.
- Researches concerned with socio-psychological variables, other than attitudes, may also be conducted.

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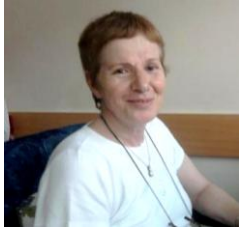
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