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Students' Perceptions of Education and Teaching Quality in a Teacher Training Programme*

Bir Öğretmen Eğitim Programında Öğrencilerin Eğitim ve Öğretim Kalitesi Hakkındaki Algıları*

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ABSTRACT

The aim of this study is to examine students' perceptions about the quality of education and teaching in a teacher education program. For this purpose, "Student Course Experience Scale" which was adapted to Turkish by Özcan (2013) and whose validity and reliability studies were completed was used. In addition, an online semi-structured interview form consisting of open-ended questions was used to get detailed views of students on the quality of learning-teaching processes. The study included 74 students enrolled in a pedagogical formation certificate program of a private university. For quantitative analysis, t-test and one-way ANOVA for independent samples were used, and for qualitative analysis, content analysis was used. Student perceptions of education and teaching quality did not differ significantly according to their gender or graduated programme. Findings from the data provide clues about student perceptions and understanding of the quality of their learning process, including where they need support, and in which areas they feel competent. The findings of this study provide insights for teacher training programmes, institutions, and teaching staff. This study also discusses the factors that should be considered for educating qualified and competent teachers.

Keywords: Education quality, Teaching quality, Teacher training programme, Student perceptions

ÖZ

Bu araştırmanın amacı, bir öğretmen eğitimi programında öğrencilerin eğitim ve öğretim kalitesi hakkındaki algılarını incelemektir. Bu amaç doğrultusunda, Özcan (2013) tarafından Türkçe'ye uyarlanan ve geçerlik güvenirlik çalışmaları tamamlanan "Öğrencilerin Ders Deneyimleri Ölçeği" kullanılmıştır. Ayrıca, öğrenme-öğretme süreçlerinin kalitesi ile ilgili detaylı görüş almak amacı ile açık uçlu sorulardan oluşan çevrimiçi yarı yapılandırılmış bir görüşme formu öğrencilere yöneltilmiştir. Araştırmaya, özel bir üniversitenin pedagojik formasyon sertifika programına kayıtlı olan 74 öğrenci katılmıştır. Nicel verilerin analizi için t-testi ve tek yönlü varyans analizi, nitel verilen analizi için içerik analizi kullanılmıştır. Öğrencilerin eğitim ve öğretimin kalitesine ilişkin algıları cinsiyetlerine veya mezun oldukları programa göre anlamlı farklılık göstermemiştir. Verilerden elde edilen bulgular, öğrencilerin ihtiyaç duydukları ve hangi alanlarda yetkin olduklarını da içerecek şekilde, öğrencilerin algılarının ve öğrenme sürecinin kalitesinin anlaşılması ile ilgili ipuçları vermektedir. Bu çalışmanın bulguları, öğretmen yetiştirme programları, kurumları ve öğretim kadrosu için anlayış sağlamaktadır. Bu çalışma aynı zamanda nitelikli ve yeterli öğretmen yetiştirmek için dikkate alınması gereken faktörleri tartışmaktadır.

Anahtar Sözcükler: Eğitim kalitesi, Öğretim kalitesi, Öğretmen yetiştirme programı, Öğrenci algıları

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INTRODUCTION

The quality of education and teaching in higher education is a problem that involves multiple influencing factors and uncertainties (Yin, Wang, & Hang, 2016; Zheng, 2016). Education and teaching quality includes effective curriculum design and course content development, use of feedback, various teaching and learning contexts, administrator and teacher responsibilities, effective assessment of learning outcomes, and well-adapted learning environments (Hénard & Roseveare, 2012). There are also many quality gaps and no widely accepted methods for evaluating education and teaching quality and assessing the impact on students (Altbach, 2006). Thus, researchers are increasingly interested in the quality and improvement of student learning. Rowe (2003) expressed that education and teaching quality has an obvious influence on students' cognitive, affective, and behavioural outcomes, regardless of their gender or academic backgrounds.

Calvo, Markauskaite, and Trigwell (2010) considered that several factors, such as year of study, class size, and coordinators' professional development, were significantly related to education and teaching quality. Higher education has important social and economic impacts; as such, it is the object of an entire field of research. 'Higher education also attracts the attention of research because the object of its study is the institutional basis of all academic disciplines and the contribution of systematic knowledge to the future of society' (Brennan & Teichler, 2008, p. 259). For this reason, it is important to investigate and improve education and teaching quality in higher education.

Education and teaching quality includes the following: 'quality learners who are ready to participate and learn; quality content that is reflected in relevant curricula and materials for the acquisition of basic skills; quality processes through which trained teachers use student-centered teaching approaches in well-managed classrooms and schools; quality learning environments that are healthy, safe, protective, and gender-sensitive, and provide adequate resources and facilities; and quality outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society' (UNICEF, 2000, p. 3).

According to Nikel and Lowe (2010) the 'fabric' of quality in education and teaching includes conceptual dimensions, i.e., effectiveness, efficiency, equity, responsiveness, relevance, reflexivity, and sustainability. Moreover, according to Wang and Xiao (2017), 'Education and teaching quality, refers to a series of changes, such as diversification of training objectives and education model, expansion of education function, change of educational philosophy, curriculum, teaching method, admission qualification, management mode and relationship between higher education and society' (p. 6792).

Providing quality in education and teaching is a complex process that involves a combination of political, economic and cultural factors. According to Ome, Menendez, and Le (2017), teacher training constitutes a promising policy area to raise the quality of education in developing countries. Comprehensive teacher training studies should be included in order to increase the success of students in developing countries. It is necessary to pay attention to teacher training in order to increase the standard of quality for education and teaching (Wang & Xiao, 2017).

It is important to learn about the quality of education in different countries in order to build a better future (Michelli, Dada, Eldridge, Tamim, & Karp, 2016). Rapidly evolving technology has shaped learning and changed the modern classroom. Understanding the views of students who are new to the field of education and related technologies can provide insights to the profession of teaching (Avcı-Yücel, 2017). These perceptions of students and their academic experience will later be reflected in their professional lives. In this context, the perceptions of students who are pursuing a career in teaching, therefore, play an important role in this complex process.

Within the published literature, there are some studies in which the quality of education and teaching has been examined in terms of certain variables. Some of the studies have explored students' or teacher candidates' attitudes, expectations, and satisfaction levels, and perceptions towards the teaching profession and teaching quality. Başbay, Ünver, and Bümen (2009) examined teacher candidates' attitudes towards the teaching profession according to their gender and academic department (Computer Education and Instructional Technology, Biology, Physics, Chemistry, Mathematics, Geography, Philosophy, English, Turkish Language and Literature, Music Teaching). Their longitudinal study concluded that there were no differences or interaction effects in students' attitudes towards the teaching profession by genders and departments. They found that developing positive attitudes towards the profession is difficult for students in the one and a half year programme for teacher candidates. Because their students were not willing to participate in the programme. This situation might not only affect the quality of the lessons but also prevent students from developing positive attitudes. They recommended activities, such as orientation sessions, to improve student attitudes of towards teaching.

Özcan (2013) studied undergraduate students' perceptions of education and teaching quality in higher education. He adapted the Student Course Experience Questionnaire (SCEQ) scale developed by Ginns, Prosser, and Barrie (2007) and then compared undergraduate students' perceptions of teaching quality in the faculties of education at five universities. Students' perceptions did not differ in terms of teaching quality between the previously and newly established faculties of education at universities. Student perceptions differ according to the university's academic background about their establishment (e.g., newly established = five years; developing = 20 years]. According to the perceptions of the students, there are quality problems in education faculties; for example, the students expressed that they did not receive feedback about their projects from their teachers. In addition, the study recommended that teachers enrich their courses by using various methods and approaches, such as active learning, collaborative learning, or problem-based teaching. Özcan (2013) noted problems

in the assessment methods. However, he also found that many students perceived their teachers to be extremely effective at explaining lessons and maintaining student attention. The study concluded with suggestions for university administrations, emphasizing the need to take the necessary actions to improve teaching quality. Üstünlüoğlu (2016) aimed to investigate the perceptions of students and lecturers on teaching quality in higher education in Turkey and Slovakia. The results showed a difference in perceptions about the pedagogical competence of lecturers in both countries and pointed to the failure of university lecturers to meet student expectations in terms of teaching quality. The study emphasized the importance of self-reflection, awareness, improvement of teaching skills, and consequent changes in students learning. Üstünlüoğlu (2016) drew attention to the administrators' responsibility to have realistic expectations of lecturers.

The quality of education and satisfaction levels has been associated (Wei & Ramalu, 2011); therefore, student satisfaction and opinions are important considerations when activities and curricula are being revised or restructured at educational institutions. Based on these results, Özçakır, Sümen, and Çağlayan (2013) studied different variables affecting the satisfaction levels of prospective teachers regarding educational services. They found that prospective teachers were not very satisfied with their school of education, teaching staff, management services, resources, and computer facilities. There was no significant difference in student satisfaction levels according to gender, department, or grade-point average. The results showed that students wanted modern buildings, social environments, technological possibilities, new methods, free and scientific classrooms, practical courses, and teachers who were professionals, experts in their fields, and role models for students in terms of their personal characteristics. The authors concluded that student opinions about education faculties have to be considered with the aim of enhancing the quality of education and teaching.

Studies in the extant literature are usually based on the systems of student evaluations of education and teaching (Clayson, 2009; Sojka, Gupta, & Deeter-schmelz, 2010; Goos & Salomons, 2017; Hammonds, Mariano, Ammons, & Chambers, 2016). Such systems are widely used to measure education and teaching quality in higher education. Hammonds et al. (2016) studied student evaluations of teaching used for documenting and improving education and teaching quality in both North America and the UK. According to these authors, the evaluation of education and teaching is an important part of higher education. They found various problems, including issues in engaging students to become active participants in improving quality. They recommended that higher education administrators should maximize the practical information gained from student evaluations of education and teaching. Yin, Wang, and Hang (2016) used the CEQ to examine undergraduate students' perceptions of education and teaching quality. They found good teaching to be the only factor having a positive effect on student attitudes, whereas student assessment methods were found to have a negative effect on student perceptions. According to researchers studying university teaching, the role of teacher-centred pedagogy and the nature of student assessments need to be re-examined. Yin, Lu, and Wang (2014) examined Chinese university students' course experience using the CEQ and its influence on their approaches to learning. They stated that students are not independent in the learning process because of the teacher-centred nature of education in China. According to those researchers, increasing instructors' efforts and commitment to teaching tends to facilitate surface-level rather than deep changes in the approach to learning. One of the means to change the quality of teaching, according to Ome et al. (2017), is the improvement of education and teaching quality through teacher training and professional development. Ome et al. (2017) examined a teacher training programme conducted in the Republic of Georgia and analysed the impact of this programme on student achievement measured by mathematics and reading test scores. They argued that their study, as a first rigorous evaluation of a teacher training programme in Eastern Europe, would be particularly valid for developing countries trying to raise education and teaching quality in the region. They suggested that in the process of teacher training, in addition to simply lessons for teachers, comprehensive teacher training, including constructive feedback and pedagogical materials would be most effective.

The common point of the studies carried out both in Turkey and in other countries is to examine the professional development of the teachers with a comprehensive approach. In these studies, it is seen that the quality of education and teaching in teacher training programmes, and the effects of variables such as student achievement and satisfaction of increasing this quality are investigated. It is also clear that various programmes have been studied and various education policies identified to increase these effects. As in other countries, in Turkey there are also programmes for teacher training. In this current study, the quality of education and teaching in teacher training programmes and students' perceptions was examined from the perspective of Turkey.

The purpose of this study is to examine the perceptions of students about education and teaching quality in the teacher training programme. For this purpose, the following questions are addressed:

(1) What are the perceptions of students on education and teaching quality in the teacher training programme?

(2) Are there any significant differences in student perceptions towards education and teaching in the teacher training programme according to (a) their gender or (b) graduated programmes?

METHOD

In this study, a convergent parallel design, which is a type of mixed research method, is used (Creswell, 2012). In this design, quantitative and qualitative data were collected in parallel, analysed separately, and then combined to determine whether the results support each other.

Participants

Students were enrolled in the teacher training programme (n = 74) in the fall semester of the 2015–2016 academic year at a private university in Ankara, Turkey. While determining the sample group of the study, purposeful sampling method was used. Purposeful sampling allows the identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). Only 74 of the students enrolled in the program responded the data collection tools. The sample was 68.9% (n = 51) female and 31.1% (n = 23) male. The mean age of the participants was 29, with ages ranging from 23 to 38 years old. In terms of their computer usage skill levels, 4.1% (n = 3) of participants were beginner, 74.3% (n = 55) were intermediate and 21.6% (n = 16) were advanced. Regarding academic background, 45.9% (n = 34) of the participants graduated from a sport sciences programme, 25.7% (n = 19) graduated from a math programme, and 28.4% (n = 21) graduated from a health sciences programme. This programme is for students who have graduated from a variety of undergraduated programmes. However, the participants of this study are limited to the programmes applying for registration to the university concerned.

Procedure and Context

The teacher training programme which is called 'Pedagogical Formation Certificate Programme' in Turkey, offers formal teaching education while providing methodological and practical information to students. Pedagogical formation students represent a group for whom teaching was generally not the first choice of profession and who later decided to become teachers for various reasons. Students within the Pedagogical Formation Certificate Programme take courses in order to obtain teaching competencies equivalent to other courses in education faculty programmes. This programme also prepares them for their future teaching positions.

The Pedagogical Formation Certificate Programme has been used to train teachers since 2010 in Turkey. Students of undergraduated programmes and graduate students from the departments designated by the Ministry of National Education can apply to the certificate programme. A certain degree of graduation average (minimum 2.5 / 4 or 65/100) is required for the application. The programme can be completed in one academic year, consisting of two semesters. The programme consists of the following courses: Introduction to Educational Science; Educational Psychology; Measurement and Evaluation in Education; Principles and Methods of Instruction; General Instructional Methods; Special Instructional Methods; Classroom Management, Instructional Technologies, and Material Development; and Teaching Practice.

Data Collection Tools

As a quantitative measure, the SCEQ was used in this study. This questionnaire was adapted by Özcan (2013) from that developed by Ginns, Prosser, and Barrie (2007). It consisted of 23 items rated on a five-point Likert scale, where '5' represented 'strongly agree' and '1' represented 'strongly disagree'. The questionnaire was adapted to the Turkish context using SPSS 15.0 and Lisrel 8.80. Exploratory and confirmatory factor analyses were used to assess the reliability and validity of the questionnaire. The Cronbach's alpha value of the SCEQ was 0.83, showing very good reliability in internal consistency. In this study, the Cronbach's alpha value was 0.79 for the questionnaire. Five factors are covered in the questionnaire (Özcan, 2013, p. 144). 1) The Good Teaching Scale (GTS) consists of items relating to lecturers' efforts to increase student interest, to give students feedback, and to motivate and guide students to become successful. 2) The Clear Goals and Standards Scale (CGS) consists of items regarding the ways lecturers determine their lesson standards and explain their expectations to students. 3) The Appropriate Assessment Scale (AAS) consists of items related to assessment methods. 4) The Appropriate Workload Scale (AWS) consists of items covering lecturers' course preparation time. Finally, 5) the Generic Skills Scale (GSS) includes items that determine students' analytical, problem-solving, and communication skills levels.

As a qualitative measure, a semi-structured interview form, which was created by the researchers of the current study, was used; two experts with a PhD in the field of education technology evaluated the open-ended questions in terms of content validity. The final version of the questions was given in consultation with the experts as follows:

(1) What are your opinions about the definition of a quality course?

(2) What are your opinions about the quality of the teacher training programme's courses in terms of preparing you for your profession?

(3) What are your opinions about the overall quality of the courses you have taken?

(4) Can you give examples of the courses that you found to be of good quality?

(5) What are your opinions about the strengths of education in your department?

(6) What are your opinions about the weaknesses of education in your department?

(7) What suggestions would you give for improving course quality?

Data Analysis

Quantitative data were processed with the SPSS 18.0. Frequencies and percentages were used to analyse the data. An independent samples t-test was carried out to determine whether there was any statistically significant difference among students in their perceptions towards the teaching quality according to their gender and one-way ANOVA for independent samples according to their graduated programme.

Skewness and kurtosis values were computed to check the normality assumption. The skewness value was −0.733, and the kurtosis value was 0.688 in this study. Given that these values were in the range of −2 and +2, it can be said that the distribu-

tions are normal (Tabachnick & Fidell, 2007; George & Mallery, 2003). In addition, before performing statistical analyses, the normality of t-test and ANOVA was tested. According to the Kolmogorov–Smirnov test, the data were distributed normally (p = .098). After testing the assumptions, t-test and ANOVA analyses were carried out.

The qualitative data were analysed using content analysis. The data were prepared for analysis, the authors defined the themes of analysis based on the objectives of the study, developed categories, and then coding text process was initiated. Each answer given for questions was read more than once, and data were coded according to the categories, and then frequency tables were created. Moreover, codes and categories were rearranged and classified until consensus was reached between the authors. After coding the whole dataset validity and reliability were checked.

The coded answers were cross-checked along with the themes and code whether they were adequately reflecting the issue investigated or not. For ensuring the reliability of the codes generated in the data analysis process, some of the data were re-analysed by the researcher after ten months later. Percentage of internal consistency of two coding processes was found to be 0.84. This result could be considered as evidence for the required reliability. Finally, the results were supported by significant ideas and statements of some of the participants as quotations to illustrate the findings from the qualitative dataset.

RESULTS

Quantitative Results

Students' perceptions of education and teaching quality in the teacher training programme were analysed using answers from the questionnaire; gender and graduated programme variables were of particular interest.

Students' perceptions of teaching quality in higher education

Students' perceptions of education and teaching quality are given in Table 1 as frequencies and percentages with means and standard deviations.

According to the GTS in Table 1, 66.2% of students agreed or strongly agreed that their teachers gave helpful feedback, motivated them, spent a lot of time commenting on their work, and made a real effort to understand the difficulties that students may be having with their work. Among the participants in this study, 81.1% agreed or strongly agreed that their teachers were extremely good at explaining concepts, 79.7% agreed or strongly agreed that their teachers worked hard to make their subjects interesting to students. In the CGS, 86.4% of the students agreed or strongly agreed that they had a clear idea about the courses; thus, courses met their expectations; 81% agreed or strongly agreed that it was easy to understand the standard of work expected; 85.1% agreed or strongly agreed that teachers made their expectations clear; and 55.4% disagreed or strongly disagreed that it was difficult to know what was expected of them in their courses. Students' responses in the AAS showed that 51.3% of students disagreed or strongly disagreed that the teachers seem more interested in testing what they had memorized than what they had understood; 70.3% agreed or strongly agreed that instructors asked questions only about facts; and 32.4% were undecided as to whether having a good memory is sufficient for success in their courses. In the AWS, 39.2% of the students disagreed or strongly disagreed that they felt they were under considerable pressure as students; 62.2% disagreed or strongly disagreed that the course workload was too heavy; 79.7% agreed or strongly agreed that they were given enough time to understand the information they had to learn; and 44.6% were undecided as to whether completion of all the activities in courses indicated full comprehension. Students' responses in the GSS showed that 75.7%, 78.3%, 81.1%, and 70.2% of the students agreed or strongly agreed that the courses improved their teamwork, analytical, problem-solving, and written communication skills, respectively; 77% agreed or strongly agreed that the courses increased their self-confidence in solving unfamiliar problems. Finally, 77% of the students agreed or strongly agreed that the courses developed their ability to plan their own careers.

Results according to gender

An independent samples t-test was conducted to identify gender differences for the factors of the SCEQ in Table 2.

The mean GTS score of the male students was 24.83 compared with 23.18 for females. Thus, there was no significant difference found based on gender (p = 0.245). The mean CGS score was 14.00 for females and 13.70 for males; this was not a significant difference (p = 0.434). The mean AAS score for males was 8.22 compared with 7.92 for females, a difference that was not significant (p = 0.657). The mean AWS score for females was 14.08 and 13.39 for males, a difference that was not significant (p = 0.353). The mean GSS score was 25.39 for males and 23.67 for females; there was not a significant difference (p = 0.114).

Results according to graduated programme

A one-way ANOVA for independent samples was used to analyse differences according to graduated programme. Descriptive statistics collected from the SCEQ based on the graduated programme are presented in Table 3.

Math students recorded the highest scores in the GTS; health sciences and sport sciences students recorded the highest scores for the GSS when they expressed their perceptions of education and teaching quality. All students recorded the lowest scores for the AAS. When graduated programme scores were compared to each other, math students gave the highest scores in the GTS, CGS, and AWS. Health sciences students recorded the highest scores for the AAS, and sport sciences students gave the highest scores for the GSS.

According to the one-way ANOVA results, student perceptions of teaching quality did not differ according to their graduated programme (p > 0.005; Table 4).

Table 1: Distributions of students' Perceptions of Teaching Quality

Questionnaire Items	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree			
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	$\overline{X}$	sd
Good Teaching Scale												
The teaching staff normally give me helpful feedback on how I am doing.	2	2.7	7	9.5	16	21.6	20	27.0	29	39.2	3.91	1.112
The teaching staff motivate me to do my best work.	3	4.1	8	10.8	14	18.9	21	28.4	28	37.8	3.85	1.167
The staff makes a real effort to understand any difficulties I may be having with my work.	2	2.7	4	5.4	19	25.7	23	31.1	26	35.1	3.91	1.036
My lecturers are extremely good at explaining things.	0	0	4	5.4	10	13.5	29	39.2	31	41.9	4.18	0.866
The teaching staff work hard to make their subjects interesting.	3	4.1	3	4.1	9	12.2	30	40.5	29	39.2	4.07	1.025
The staff put a lot of time into commenting on my work.	6	8.1	4	5.4	15	20.3	24	32.4	25	33.8	3.78	1.208
Clear Goals and Standards Scale												
I have generally had a clear idea of where I am going and what is expected of me in this degree course.	1	1.4	1	1.4	8	10.8	34	45.9	30	40.5	4.23	0.803
It is always easy to know the standard of work expected.	2	2.7	1	1.4	11	14.9	30	40.5	30	40.5	4.15	0.917
The staff made it clear from the start what they expected from students.	0	0	1	1.4	10	13.5	27	36.5	36	48.6	4.32	0.760
It is often unclear what is expected of me in this degree course.	19	25.7	22	29.7	17	23.0	9	12.2	7	9.5	2.50	1.263
Appropriate Assessment Scale												
The staff seems more interested in testing what I have memorised than what I have understood.	20	27.0	18	24.3	11	14.9	12	16.2	13	17.6	2.73	1.465
Too many staff ask me questions mainly about facts.	0	0	5	6.8	17	23.0	27	36.5	25	33.8	3.97	0.921
To do well in this degree, all you really need is a good memory.	7	9.5	10	13.5	24	32.4	21	28.4	12	16.2	3.28	1.176
Appropriate Workload Scale												
There is a lot of pressure on me as a student in this degree course.	11	14.9	18	24.3	16	21.6	20	27.0	9	12.2	2.97	1.271
The workload is too heavy.	23	31.1	23	31.1	18	24.3	5	6.8	5	6.8	2.27	1.174
I am generally given enough time to understand what I have to learn.	2	2.7	2	2.7	11	14.9	33	44.6	26	35.1	4.07	.926
The sheer volume of work to be got through in this degree means it cannot all be thoroughly comprehended.	13	17.6	7	9.5	33	44.6	12	16.2	9	12.2	2.96	1.210
Generic Skills Scale												
The degree course has helped me develop my ability to work as a team member.	4	5.4	4	5.4	10	13.5	33	44.6	23	31.1	3.91	1.075

Table 1: Cont.

Questionnaire Items	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree			
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	$\overline{x}$	sd
The degree course has sharpened my analytical skills.	0	0	3	4.1	13	17.6	34	45.9	24	32.4	4.07	0.816
As a result of my degree course, I feel confident about tackling unfamiliar problems.	1	1.4	1	1.4	15	20.3	31	41.9	26	35.1	4.08	0.856
The degree course has developed my problem-solving skills.	0	0	1	1.4	13	17.6	35	47.3	25	33.8	4.14	0.746
The degree course has improved my skills in written communication.	0	0	7	9.5	15	20.3	32	43.2	20	27.0	3.88	0.921
The degree course has helped me to develop the ability to plan my own work.	0	0	0	0	17	23.0	30	40.5	27	36.5	4.14	0.764

Table 2: Results of Independent Samples T-Test for Student Perceptions of Teaching Quality by Gender

SCEQ Subscales	Male			Female			*t*	*p* (2-tailed)
	n	$\overline{x}$	sd	*n*	$\overline{x}$	sd		
Good Teaching Scale	23	24.83	4.91	51	23.18	5.88	1.173	0.245
Clear Goals and Standards Scale	23	13.70	1.82	51	14.00	1.40	0.787	0.434
Appropriate Assessment Scale	23	8.22	2.86	51	7.92	2.54	0.445	0.657
Appropriate Workload Scale	23	13.39	2.92	51	14.08	2.93	0.934	0.353
Generic Skills Scale	23	25.39	3.91	51	23.67	4.44	1.602	0.114

(Equal variances assumed with p > 0.05 for Levene's test across all the factors.)

Table 3: Descriptive Statistics of SCEQ Subscales Scores According to Graduated Programme

SCEQ Subscales	Sport Sciences			Math			Health Sciences		
	n	$\overline{x}$	sd	*n*	$\overline{x}$	sd	*n*	$\overline{x}$	sd
Good Teaching Scale	34	23.12	6.21	19	25.26	4.74	21	23.19	5.30
Clear Goals and Standards Scale	34	13.85	1.71	19	14.05	1.54	21	13.86	1.28
Appropriate Assessment Scale	34	7.50	2.96	19	8.00	2.85	21	8.86	1.53
Appropriate Workload Scale	34	13.74	3.07	19	14.37	3.42	21	13.62	2.20
Generic Skills Scale	34	24.71	5.00	19	23.42	4.17	21	24.10	3.25

Qualitative Results

Student opinions about the definition of a quality course

The results indicate that students define course quality by focusing on the content and context of the course (50 students), teaching method and techniques (35 students), teacher qualifications (8 students), and instructional technologies (8 students; Table 5).

Regarding the content and context of courses, 11 students defined a quality course as a course without intensive content; 6 students stated that the course should be easily understandable; 5 students declared that any course where learning occurs is an effective course; and another 5 reported that courses must include useful content. In terms of teaching methods and techniques, 16 students reported that teachers should communicate with students effectively; 11 students believed that that student-centered activities should be preferred and students should be supported for active participation, and 5 students indicated that hands-on experience in a course is important. In addition to these subthemes, 8 students indicated that teacher characteristics affected course quality; 8 stated that teachers should take advantage of instructional technologies and they should use these tools effectively.

According to the students, a good lesson is one: that gives importance to feedback, practice, and technology; that provides the necessary information and the opportunity [for teachers] to interact with students and provides them with feedback; and in which learners can express themselves, are active [participants] in the process, and can communicate well with the instructor. If the knowledge and experience of the teacher are good, then the lesson is good and productive.

Table 4: One-way ANOVA Results for Students' Perceptions of Teaching Quality According to Graduated Programme

SCEQ Subscales		Sum of Squares	df	Mean Square	*F*	*p*
Good Teaching	Between Groups	63.400	2	31.700	1.005	0.371
	Within Groups	2238.452	71	31.527		
	Total	2301.851	73			
Clear Goals and Standards	Between Groups	.554	2	.277	.115	0.892
	Within Groups	171.784	71	2.419		
	Total	172.338	73			
Appropriate Assessment	Between Groups	23.915	2	11.958	1.765	0.179
	Within Groups	481.071	71	6.776		
	Total	504.986	73			
Appropriate Workload	Between Groups	6.658	2	3.329	.382	0.684
	Within Groups	617.991	71	8.704		
	Total	624.649	73			
Generic Skills	Between Groups	20.460	2	10.230	.538	0.586
	Within Groups	1349.500	71	19.007		
	Total	1369.959	73			

Table 5: Student Opinions About the Elements of Quality Courses

Elements of a quality course	Number of indices
Content and Context	**50**
Without intensive content	11
Easy to understand	6
Results in learning	5
Useful content	5
Improves high-level thinking skills	4
Current content	4
Does not rely on memorization	4
Regular and planned lessons	4
Suitable for the student level and needs	3
Captures the attention of students	2
Suitable for personal development	2
Teaching Methods	**35**
Effective communication between students and teachers	16
Student-centred/active participation	11
Hands-on experience	5
Uses appropriate methods and techniques for the lesson	3
Teacher Qualifications	**8**
Qualified teachers	8
Instructional Technologies	**8**
Support of visual aids and technology	8

Student opinions on course effectiveness in preparing students for their professions

Student opinions regarding the quality of the courses in terms of preparing students for a career in teaching were gathered, and most of the students (44) believed that their coursework prepared them for their profession (Table 6). Among the 74 participants, 11 students stated that their courses did not prepare them for their profession, and 11 indicated that their courses partially prepared them. When the explanations for these answers were examined, 7 students stated that the programme was intensive; 5 students declared that the courses did not offer opportunities to put the lessons to practice.

Table 6: Student Opinions on Course Effectiveness in Preparing Students for Their Professions

Student opinions on course effectiveness in preparing students for their professions	Number of indices
Enough	44
Not enough	11
Partially sufficient (for some courses)	11
Reasons	
Intensive programme	7
Lack of practice opportunities	5

Some student opinions were as follows:

'Although not fully adequate, I have admired some teachers for their devoted and idealistic approach. They are good examples when starting out in this profession'.

'In some lessons, I was really interested. I think it adds a lot to my profession'.

'I think it partly prepared me. I do not think that very high-quality transfer preparation is provided because the training process is short and the participants are tired [after working] for hours'.

Student opinions about the overall quality of courses

Student perceptions about the overall quality of the courses were evaluated. Of the 74 participants, 47 stated that the course quality was good; 18 students indicated that some courses were of good quality, while others were of poor quality; and 6 students stated that the quality of the course were of average quality (Table 7).

When the reasons for these answers were examined, 3 students explained that they found the duration of the programme to be too short; 3 students stated that some courses covered theory mainly, and 2 students stated that course quality depended on the teacher's qualifications.

Table 7: Student Opinions about the Overall Quality of Courses

Student opinions about the overall quality of courses	Number of indices
The quality is good	47
Some good quality/some poor quality	18
Average	6
Reasons	
Short programme	3
Excessive focus on theory	3
Teacher qualifications	2

Student views on this issue:

'I think that the professors who taught the courses devoted themselves to their work'.

'It is a quality education system because it has developed my analytical thinking, encouraged teamwork, and provided solutions for the problems that we may encounter in the future'.

'It is pleasing that the level of education quality is not low despite the excessive theoretical information covered'.

Examples of high-quality courses

In terms of the courses that students found to be of good quality, 45 students found the Instructional Technology and Material design course useful; 23 considered the Special Teaching Methods course to be of high quality, and 20 found the Guidance and Counselling course effective (Table 8). Other courses that were mentioned were as follows: Teaching Principles and Methods, Educational Psychology, Introduction to Educational Sciences, Curriculum Development and Teaching in Education, Developmental Psychology, and Measurement and Evaluation. Eight students reported finding all courses to be of high quality.

Student perceptions of the strengths of the teacher training programme

When citing the strengths of the teacher training programme,

Table 8: High-Quality Courses according to Students

High-quality courses according to students	Number of indices
Instructional Technology and Material design	45
Special Teaching Methods	23
Guidance and Counselling	20
Teaching Principles and Methods	9
Educational Psychology	9
All of them	8
Introduction to Educational Sciences	4
Curriculum Development and Teaching in Education	4
Developmental psychology	4
Measurement and evaluation	3

teaching methods (24 students), teacher qualifications (21 students), and course content (7 students) were mentioned (Table 9). For teaching methods, 10 students stated that their courses were instructive and conducted in a guiding manner, 5 students stated that they preferred teachers who encouraged active student participation, and 5 students indicated applied teaching as the strength of the programme.

Table 9: Strengths of the Teacher Training Programme

Strengths of the Teacher Training Programme	Number of indices
Teaching methods	**24**
Instructive and provides guidance	10
Encourages active student participation	5
Applied teaching methods	5
Providing feedback	4
Teacher qualifications	**21**
Course content	**7**
Preparation for real life	5
Current information	2

According to students:

'Instructors have sufficient knowledge and equipment'.

'The availability of quality teaching staff, and the availability of various teaching materials related to the courses [are strengths of the programme]'.

'Innovations in lessons are important'.

Weaknesses of the programme

Among the study sample, 14 students considered there to be no weaknesses in the programme (Table 10). However, others mentioned a lack of practice opportunities (8 students), evening courses (8 students), assessment methods relying

on memorisation (5 students), intensive content (5 students), crowded classrooms (5 students), ineffective materials (3 students), lecture method (3 students), and inadequate teachers (2 students).

Table 10: Weaknesses of the Teacher Training Programme

Weaknesses of the Teacher Training Programme	Number of indices
No weaknesses	14
Lack of practice	8
Evening courses	8
Memorization of the content	5
Intensive content	5
Crowded classrooms	5
Ineffective materials	3
Lecture method	3
Undecided	2
Inadequate teachers	2

Some students' opinions were as follows:

'The fact that some instructors are compressing a 4-year programme to 13 weeks instead of giving summary information is an information overload'.

'Some of the lessons are still taught by traditional methods'.

Suggestions for improving programme quality

Twelve students stated that instructors should make use of materials, visual aids or technology in their lessons (Table 11); 10 students wanted more student-centered activities; 8 students wanted the teacher to be sufficiently qualified; 6 students suggested smaller class sizes; and 5 students wanted more practice opportunities. In addition, 5 students recommended there be more communication between students and instructors, 5 students wanted their instructors to use teaching methods other than lecturing, and 5 students wanted more interesting classes with less detailed content. Finally, 3 students stated the course should be connected to real life experiences they might encounter as teachers.

According to the participants, the programme should be improved as follows:

'By enriching the lesson presentation, slides, and various materials'.

'Something must be done to make the classes more interesting'.

'The course must be associated with real life'.

'A solution would be to increase teacher-student collaboration using a friendly approach'.

'There should be effective presentations and attention-grabbing activities'.

Table 11: Suggestions for Improving Programme Quality

Suggestions for improving programme quality	Number of indices
Use of materials/visual aids/technology	12
Student-centered activities	10
Qualified instructors	8
Smaller class sizes	6
Practice opportunities	5
More communication	5
Use of varied teaching methods	5
Interesting lessons	5
Less detailed content	5
Addressing student needs for the content	3
Real life applications	3

DISCUSSION

In this study, the perceptions of students who graduated from different programmes in the teacher training programme regarding education and teaching quality were examined. As a result of the quantitative analyses carried out, it was found that students' perceptions of quality did not differ according to their gender and graduated programme. However, in general, male students' perceptions of the teaching quality were more positive in three subscales (i.e., GTS, AAS, and GSS) than female students. Female students gave higher scores in two dimensions (i.e., CGS and AWS) than male students. The results indicate that students who graduated from sports sciences have more positive perceptions of the certificate programme's effect on their generic skills, but gave lower scores on appropriate assessment in the certificate programme. Math students have more positive perceptions of lecturer's good teaching and health sciences students have more positive perceptions of appropriate assessment in certificate programme. AAS, which expresses assessment methods, had the lowest education and teaching quality perceptions of all students. Re-examination of certification programme assessment methods may be an important step towards increasing the quality of education and teaching. In the literature, numerous studies explore the factors affecting student perceptions of education and teaching quality (Calvo et al., 2010; Akareem and Hossain, 2016). Akareem and Hossain (2016) examined students' demographic and background information to identify differences in their perceptions about the quality of education. They found that factors such as the scholarship status of students, parents' education, and age have a significant influence on perceptions of the quality of education. Calvo et al. (2016) found parallel findings to the results of this study. They found that sub-discipline and gender were not significantly related to students' learning experiences and perceptions about education and teaching quality. Similarly, Başbay et al. (2009) concluded that there were no differences in students' attitudes towards the teaching profession by either gender or department. Rowe

(2003) stated that gender is not a decisive variable in the perceptions of teaching quality, but that teacher characteristic variables are more influential than student demographics.

While the average of the items regarding as having interesting course content was high in the questionnaire for the factor of good teaching, the qualitative data indicated the elements of quality as content and context. In other words, content and context, and the interesting course content are mutually supportive findings. While the students in the questionnaire focused on the item related to feedback, teaching methods were found in the qualitative analysis as an overlapping finding. Among the methods of teaching, feedback was a feature mentioned across all methods.

The findings of this study show that students associate the quality of a course with its content, context, teaching methods, and techniques. Students want the course content to be deemed useful to them, and at the same time, to be linked to real life. This can be achieved by presenting theoretical and applied knowledge in a balanced manner. Moreover, students prefer a teaching method and techniques wherein they can engage more actively. In fact, this result was found to be consistent with the quantitative results. In the results of the questionnaire, the students also focused on the teacher's characteristics, and teaching methods as most of the students confirmed feedback, motivation and being a thoughtful teacher. The quality of a course depends on the content being applied practically and on teaching methods with a more student-centered approach. Students learn in different ways and have different learning styles (Clark, & Mayer, 2003). As such, student learning is a dynamic process. Therefore, student-centric approaches have been gaining importance in recent decades. Student-centered learning focuses on student-centered workshops and group projects that foster communication and collaboration among students and teachers (Aguti, Walters, and Wills, 2014; Selwyn, 2014). Through student-centered learning, teachers allow students to be active participants in their learning by building and sharing knowledge (Avcı-Yücel, & Koçak-Usluel, 2016) and creating connections between facts, ideas, and processes.

In this study, most students believed that the courses they completed prepared them for their subsequent professional roles. This qualitative result entirely supported by the results gathered from the questionnaire items as most of the students agreed that the courses developed their ability to plan their careers. In terms of self-evaluation of the educational institution, this should be considered good. However, according to expectations of the students about effective courses, this aspect should be improved.

According to students, effective courses are those in which learning takes place. Completion of all course activities does not guarantee that students are learning. According to the participants of this study, effective courses should be practical, far from the memorizing approach and they can use of visual aids and technology. In fact, the reason for this appeared in the quantitative dataset; Most of the students were more interested in the course content presented differently. Moreover, technology support plays an important role in education. Integration of technology into teacher training programmes can help teachers integrate technology into their classes effectively (Celik & Yesilyurt, 2013). This result seems to be effective in determining the top quality course of students. Most students listed the Instructional Technology and Material design course as a high-quality course. The reason for this is that this course is practical, covering materials that may be useful for their teaching roles. In Seferoğlu, Yıldız, & Avcı-Yücel's (2014) study about quality in education, the same results were obtained. Students in that study also favoured the Instructional Technology and Material design course.

For the strengths of education in their department, students favoured the teaching methods, teacher qualifications and content of the course. Some weak points of the education they got addressed some managerial issues; class time and crowded classroom are problems that can be solved by the management. There are educators and researchers approaching the relationship between class size and student learning with different perspectives. Student, course, and teacher characteristics appear to affect the perceptions of students about education and teaching quality (Goos & Salomons, 2017).

Students preferred varied teaching methods, a teacher with adequate qualifications, and appropriate course content for the strengths of education in their department. This is also supported by the quantitative dataset; most of the students stated that teachers were good at explaining concepts; they had given them enough time to learn, motivated them and gave feedback. Some weaknesses they highlighted pertained to issues such as condensed coursework and crowded classrooms—problems that can be solved with effective management. In the literature relationship between class size and student learning was examined through different perspectives. In a study by Heredia (2015), large class size has been considered as problematic because it allows for few opportunities for students to interact and revise lessons with their peers and teachers. Calvo et al. (2010) found that class size and coordinators' professional development were significantly related to students' learning experiences about teaching quality. They suggested that reducing class size (or the effects on students of large class sizes) might improve the student learning experience. Most suggestions for improving education and teaching quality in this study were related to teachers and their qualifications. Students emphasized the importance of teachers' roles in content and material design, as well as their teaching methods and personality traits. Thus, the characteristics of teachers such as their anticipation, beliefs, and attitudes can affect the quality of the course. Research findings have confirmed the impact of teacher quality on student learning (Calvo et al., 2010; Tamim, Colburn, & Karp, 2016; Adnot, Dee, Katz, & Wyckoff, 2016). Sadler, Sonnert, Coyle, Cook-Smith, and Miller (2013) examined the influence of teacher knowledge on student learning. They suggested that developing teacher candidates' content and pedagogical knowledge in the specific subjects they will teach would improve education and teaching quality. Tamim et al. (2016) emphasized the importance of defining pedagogical

knowledge, content knowledge and skills, and professional capacity for high-quality education and teaching.

CONCLUSION

The aim of the current study was to examine the perceptions of students about education and teaching quality within a teacher training programme. As a result of the quantitative analyses carried out, it was found that students' perceptions of quality did not differ according to their gender or graduated programme. The findings also showed that students define course quality by focusing on the content and context of the course, as well as its teaching methods and techniques. They also define a course as being of high quality where it has useful content, is compatible with real-life contexts, and is practical and presents materials useful for their future profession.

This study provides clues about the expectations and understanding of students about the quality of the learning environment, including the areas in which they need support, and those in which they feel competent. In this respect, university administrators must take the lead in improving the quality of education and teaching. These results also suggest that the effects of class size, teaching methods and techniques, student-centered learning, practical course content, visual aids, technology, and teachers' qualifications need to be considered. The findings of this study should provide insights for teacher training institutions and teaching staff.

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