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Context, Process and Change: The Status of Prospective Teachers' Perceptions of Teaching Process

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Abstract

Teacher candidates come to teacher education programs with beliefs shaped out of traditional contexts in their earlier lives. Those beliefs influence their new learning outcomes. It is therefore important for teacher education programs to identify the degree of perceptions that entry- and exit-level candidates hold. The purpose of this study is to identify and compare entry- and exit-level candidates' degree of perceptions about teaching process and to understand if their perceptions relate to their personal variables. This is a descriptive study. The data were gathered by 28-item Teaching Process Perception Scale developed by the researchers. Collected from 267 teacher candidates in a primary level teacher education program, the data were analyzed by using frequencies, percentages, *t*-test, and *ANOVA*. Comparing the perceptions of both groups, the results indicate a significant difference on behalf of the last year candidates, though the difference is small. The variables of gender, high school education, mother-father's education and mother-father's job do not significantly relate to the perceptions of the participants. The last-year female participants, however, scored significantly higher than their male counterparts. The results propose a need for practitioners to invite experiences that best challenge perceptions.

Introduction

The influence of authoritarian teaching practices on students' perception of teaching remains an ongoing issue. As a result of living in markedly traditional classrooms, Ira Shor (1992) claims, students internalize the notion that education is something done to them rather than something they do. Shor goes: "A good student answers questions but doesn't question answers. Knowledge and authority are fixed and unilateral. To get a good grade, agree with the teacher, compete with other students, and memorize as much as you can. A serious classroom is one where the teacher does most of the talking and gives lots of tests" (p. 117). According to Clark (1988), the similar thoughts of teacher candidates are shaped when they have observed their own teachers for many hours before they came to a teacher education program. The traces resulting from the socializing effect of traditional instruction deeply influence the way teacher candidates interpret the new input from teacher education courses. Our idiosyncratic experiences with teacher candidates support the claims mentioned above. When teacher candidates, in the first week of the semester, are asked about their expectations from a course, they state that they expect democratic approach by the instructor, student-centered teaching, the right of speech, active participation, and so on. The one or two week period of time after this participative dialogue reveals that the ostensible expectations of the teacher candidates are not genuinely meant. In fact,

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the embedded perception and beliefs manipulate the behaviors of the candidates in such that they, being unprepared and unequipped, would come to class merely to "listen" to a supposedly forthcoming talk by the instructor. Finding themselves at the very center of teaching process, some even begin to question why the instructor does not preach and then go. These subjective experiences along with the previous research show that a mere transference of knowledge is not enough for the education of teacher candidates. In fact, the process of teacher education must be such that it crumbles the ingrained beliefs of teacher candidates (Bahruth & Steiner, 1998).

One of the critical attention spot for the education of a teacher candidate is then the traditional teaching contexts that shape the candidates' perceptions of teaching in the last 10 years of their schooling lives. Saban's (2003) study demonstrates that a subject- and teacher-centered approach has been prevalent in the earlier schooling experiences of teacher candidates and that these experiences were more teacher-centered than the expectations of teacher candidates. Moreover, Saban (2003) pointed out that some of the teachers who entered into the earlier schooling experiences of candidates apply different ways of "control" and "power" on students. These teacher-centered experiences compose and settle a range of beliefs consistent with the traditional and authoritarian teaching contexts. Therefore, teacher candidates come with assumptions that identify teaching with telling (Calderhead & Robson, 1991; Saban, Koçbeker, & Saban, 2006), learning with a passive listening (Dewey, 1944), classroom management with controlling students (Jones & Vesilind, 1995) and motivation with rewarding (Salisbury-Glennon & Stevens, 1999).

At the basis of this and other similar perceptions of candidates lies the old understanding like behaviorism that has once been a dominant surge (Salisbury-Glennon & Stevens, 1999). The close link between one's perceptions and actions (Kincheloe, Slattery, & Steinberg, 2000) and the fact that perceptions affect the new acquisitions (Scheurman, 1996) in the teacher education program make it necessary for teacher educators to construct a teaching context where the candidates could challenge and transform their own perceptions and beliefs about teaching. Therefore, the researchers point at the nature of beliefs and perceptions and at the fact that the belief changes do not occur with a mere transfer of knowledge. Goodlad (1990) states that teacher candidates' settled beliefs do not fundamentally change in teacher education programs and that the candidates maintain their beliefs during the process of teacher education.

There are also some research findings apparently pointing out a contrary stance. Unlike Goodlad's claims, some research pointed out that the teacher candidates seem to be adopting a relatively student-centered understanding. Aagaard and Skidmore (2002) asked teacher candidates to define a good teacher and found out that the participant candidates put "being student-centered" and "teaching methods" into foreground. Similarly, in the research that Fajet et al., (2005) asked teacher candidates to define "good" and "bad" teacher, the candidates brought into foreground the teacher's "affective qualifications" and his/her "approach to student," both of which are inevitable features of student-centered understanding. The researchers attempting to look at both the perceptions and actions of participants came across an interesting result. Simmons et al. (1999) observed that new teachers display teacher-centered instructional practices as opposed to their proclamation that they apply student-centered teaching. Similarly, Goodman (1986) observed a teacher candidate and found out that the candidate has an innovative and progressive understanding of teaching in the first week, but in two-three weeks period his approach turns into a subject- and textbook-oriented teaching. Although the teacher education

programs have influence upon the knowledge of teacher candidates, they are perhaps not effective enough to transform their teaching behaviors. This circumstance approves Goodlad's (1990) claim that embedded beliefs are not exposed to a fundamental change in teacher education programs. As a result of this, the candidates who have just become teachers simply adapt themselves to traditional teaching contexts and start exhibiting authoritarian teaching practices, which were once prevailing in their schooling lives. The researchers (Martínez, Sauleda & Heber, 2001; Saban, 2004) demonstrate that the experienced teachers are closer to behaviorist/teacher-centered approaches than the prospective teachers and away from constructivist/contextual and student-centered understanding. Martínez et al., (2001) proposed that this difference might stem from the distinction between the overt and covert knowledge of the participants. It is, however, the responsibility of the teacher education program to give opportunities for the candidates to close the gap between their overt and covert knowledge.

The conducted research studies illustrate that it is arduous to make fundamental changes upon the embedded perceptions and beliefs. It could be claimed that the contextual factors such as the settled arrangement of desks in rows, crowded classes, the dominant use of standard tests, instructors overloaded with teaching hours, and the resulting domination of traditional instructional methods also prevent the effective transformation of perceptions and beliefs in teacher education programs. It thus becomes crucial to identify the level of teacher candidates' perceptions in two particular points: (1) in entrance to the teacher education program and (2) just before they graduate from the program. Saban (2003) points at the fact that it is necessary to conduct research in order to determine whether the teacher education programs changes teacher candidates' perceptions and if it changes which direction they change at. Thus, the basic aims of this research include:

1. To identify the background information about the participants who come to teacher education program
2. To determine the level of the first year and the last year candidates' perceptions about teaching process
3. To determine whether there is a significant difference between the perceptions of the new coming candidates (freshmen) and the last-year teacher candidates (seniors).
4. To determine whether the perceptions of teacher candidates differ according to other individual variables such as gender, type of high school graduated, and socio-economic level.
5. To educe meaning by interpreting the obtained data.

Method

The Context of Research and the Participants

This research was conducted in a relatively large public university with an enrollment of approximately 20,000 students in Turkey. Established in 1992, Pamukkale University takes its name from a small neighboring town, Pamukkale, which has the well-known cotton-like travertine and ancient cities attracting visitors from all over the world all year long. The College of Education at Pamukkale University currently enrolls about 4000 teacher candidates in various specializations and gives about 1000 graduates each year. Among the graduates, about 350 are specialized to become primary school teachers. The university, in which this study was carried on, presents opportunities to access information from the national/international databases. However, the computer laboratory facilities presented by the university are limited and far away

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from meeting the actual needs of the student population. Since the campus is in the city centre, it is, however, convenient for the candidates to access various facilities with individual efforts and in alternative ways. There are also some contextual elements that hinder effective development of teacher candidates. The contextual conditions such as negative situation in the old buildings which shape education surroundings, the traditional arrangement of desks in rows, instructors overloaded with teaching hours, and the crowded classes contradicting with the expectations of new coming teacher candidates are among those.

Carried out in 2004-2005 school year, the participants of this research were a total of 267 teacher candidates studying at the elementary education department to become primary school teachers. 136 of these teacher candidates were the first year candidates (freshmen) and 131 of them were comprised of the last year candidates (seniors) who are actually at the very end of teacher education program. Five sections (3 daytime and 2 evening sections) were selected randomly from the total ten sections (6 daytime and 4 evening sections) of the primary school teaching specialization. This selection method is stated as "cluster sample" (Karasar, 1991). The participant candidates from the selected groups represent about 40 percent of total 350 candidates in each of freshmen and senior levels of primary school teaching specialization.

The Collection of Data and Analysis
The data in this study were collected by a questionnaire form. The instrument of collecting data has two parts. The first part includes questions to gather background information of the participants (year in the program, gender, age, the type of high school they graduated from, the level of their parents' education, the occupation of their parents). The second part of the instrument is formed by 28 items which aim to determine the participants' level of perception of teaching process. Items in this section include two different types of statements. The half of those items in the second part is made up of "teacher-centered" understanding, stated by Salisbury-Glennon and Stevens (1999) as "lay theories" and "old theories", and the other half represents the "student-centered" understanding, which is usually called constructivist teaching. While composing the items of the questionnaire, it has been paid a close attention to include statements which will represent the philosophical foundation of teaching (for example, I don't get skeptic about the accuracy of the information in resources), the classroom management (for example, the rules of classroom must be put together with the participation of students), the planning of the instruction (for example, the teachers must also prepare course notes), the instruction methods (for example, the active participation and cooperation activities makes learning better) and the evaluation (for example, students must be able to give marks to their own works). The participants were asked to respond to the items with four-point Likert scale (1= I totally disagree, 2= I don't agree, 3= I agree, 4= I totally agree). Since such statements are close-ended, they limit the choice of the participant with the categories presented to him and prevent any ideas beyond these statements (Smith, 1975). In order to enhance the construct validity of the questionnaire, the opinions of experts were applied during the process of composing the questionnaire items and the recommended improvements were made. The first figure of 46-itemed questionnaire was applied to a group of 80 candidates. After the reliability analysis of the instrument was checked, the items that reduce reliability were detached. The Cronbach alpha reliability coefficient for the last figure of 28-itemed-scale was obtained as 0.76. The perception levels of candidates were defined as low (1.00-1.99), middle (2.00-2.99) and high (3.00-4.00) by taking the point intervals as base in the quad scale.

During the collection of data, the first year candidates were already taking their very first pedagogical domain course, *Introduction to Teaching Profession*. The first year candidates completed the questionnaire at the beginning of 2004 school year, in October. The last year candidates filled out the questionnaire at the end of May 2005, after completing all of the coursework as well as the process of field-based *Student Teaching*. It is thought important to apply the questionnaire to the last year candidates just after the end of *Student Teaching* process, because the research showed that, with teaching experiences, the perceptions change significantly (Goodman, 1986) and overt/covert beliefs are influenced by the student teaching experience (Martínez, et al., 2001). The participants were informed of the facts that they can participate in this study voluntarily, that they do not need to write their names on the questionnaire form, that it is important for them to reflect their real opinions in order for researchers to obtain reliable results, and that their participation in this research would have no effect on their grades, graduation, or whatsoever.

The SPSS package program has been used for the statistical analysis of the data collected through the questionnaire. First of all, the responses to the background information questions in the first part of the instrument have been presented with frequencies, and the findings have been interpreted. Then, in order to make the statistical analysis of the data gathered by the Perception Scale of Teaching Process (PSTP), the marks of answers, given for the teacher-centered statements were reversed ($4 \rightarrow 1; 3 \rightarrow 2; 2 \rightarrow 3; 1 \rightarrow 4$) in quad scale. After the first year and the last year candidates' average perception scores were calculated, the *t*- test was used in order to determine whether there was a significant difference between the perception scores of two groups. Similar analyses were conducted to figure out if there are differences between the mean scores of those who come from teacher training high schools and from other types of high schools, and between male and female candidates. Additionally, in order to determine if the perceptions scores of participants relate to the education and occupation of their parents, the ANOVA test was applied. The comparisons were made in 0.5 significance level.

The Findings and Interpretations

In this section, the findings about the background features of the participants and the perception levels of the participants will be presented consecutively. About a half of the candidates who participated in the study are comprised of the first year candidates, and the other half are comprised of the last year candidates. Gender data revealed that more women than men took place in the teacher education program. These findings about the gender characteristics of the participants are in line with the findings Saban (2003) obtained from a research conducted in a similar context and with the Western cultural belief that (Hatch, 1999) teaching profession, especially being the teacher of young pupils, is more appropriate for women than for men. It is also interesting to find out that the percentage of female teacher candidates among the first year candidates is notably more than the percentage of female among the last year candidates.

Table 1: Participants Demographic Information. (n=267)

Characteristics	Freshmen		Seniors		Total	
	n	%	n	%	N	%
Participants	136	50.9	131	49.1	267	100
Gender						
Male	49	36.0	62	47.3	111	41.6
Female	87	64.0	69	52.7	156	58.4
Age						
19 and below	87	64.0	1	0.8	88	33.0
20-23	48	35.3	120	91.6	168	62.9
24 and above	1	0.7	10	7.6	11	4.1
Secondary schooling						
Teacher education high	3	2.2	14	10.7	17	6.4
school	133	97.8	117	89.3	250	93.6
Others						
Mother's education						
Uneducated	7	5.1	13	9.9	20	7.5
Primary school	90	66.2	85	64.9	175	65.5
Middle school	14	10.3	11	8.4	25	9.4
High school	17	12.5	17	13.0	34	12.7
Post secondary	8	5.9	5	3.8	13	4.9
Father's education						
Uneducated	1	0.7	1	0.8	2	0.7
Primary school	50	36.8	57	43.5	107	40.1
Middle school	30	22.1	25	19.1	55	20.6
High school	26	19.1	28	21.4	54	20.2
Post secondary	29	21.4	20	15.3	49	18.3
Mother' occupation						
Housewife	114	83.8	109	83.2	223	83.5
Tradeswoman (self-	2	1.5	1	0.8	3	1.1
employed)	3	2.2	2	1.5	5	1.9
Farmer	2	1.5	5	3.8	7	2.6
Worker	3	2.2	3	2.3	6	2.2
Public servicewoman	12	8.8	11	8.4	23	8.6
(e.g., nurse)						
Others (e.g., retired, dead)						
Father's occupation						
Trader (self-employed)	23	16.9	26	19.8	49	18.4
Farmer	18	13.2	24	18.3	42	15.7
Worker	33	24.3	12	9.2	45	16.9
Public serviceman (e.g.,	30	22.1	30	22.9	60	22.5
teacher)	32	23.5	39	29.8	71	26.6
Others (e.g., retired, dead)						

n = number of participants; % = percentage of participants

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The results about the age characteristics show that the candidates take up the program at early ages and, therefore, they graduate at a relatively early age. When the candidates are examined in terms of their secondary education, it is seen the majority of the candidates come from common and vocational high schools. Only a small segment of the candidates come from teacher training high schools, a particular type of secondary schools that offer preliminary preparation courses on teaching profession along with other requirements. This proves that only a small segment of the candidates have a secondary education leaning toward teaching profession. The other variables reveal that the candidate population represents all segments of the society and that mothers of the participants have relatively lower level of education than their respective spouses (Table 1). There is no immense difference between the features of the first year participants and the last year participants in terms of their mothers' and fathers' status. Treated together with the data in the second part of questionnaire, the coming section presents the level of perceptions and if their perceptions link to some personal background variables.

The impact of the teacher education program on teacher candidates is assumed to be the primary factor for shaping and changing their perceptions. The average points gathered by Perception Scale of Teaching Process (PSTP) were treated as follows: 1.00-1.99 points are accepted as low level, 2.00-2.99 points as medium level and 3.00-4.00 points as high level. Thus, the average of new candidates' PSTP score is accepted as medium level since it is found as 2.58. Although it may be true that the teacher candidates come to the programs with established beliefs (Clark, 1988), they could also have developed positive perceptions depending upon the opportunities to evaluate various teachers they met during their schooling experiences. The candidates could have, therefore, developed some positive point of views as a result of the quality of each various experiences and the individual gains provided by these experiences. It is seen that the average of PSTP points of candidates who completed the teacher training process is 2.71. This score is 0.13 more than the points of the first year candidates, but it still remains at the medium level. As a result of the analysis of the independent t-test, the difference between the average points of the two groups was determined to be statistically significant (Table 2). According to this result, it is realized that the last year candidates' perceptions about the instruction process is more positive than those of new candidates in the program. If the similarity between the background features of the first and the last year candidates is taken into consideration, it could be claimed that the teacher education program might have had some effect on perceptions. That is to say, the exit level candidates present a better perception level than those of entrance level.

Table 2: t-test results of PSTP points between freshmen and seniors

Class	N	*X*	SD	*t*	P
Freshmen	136	2.58	0.167	-6.2	0.000
Seniors	131	2.71	0.173		

p<0.05

Some extra analyses were made in order to figure out if the perceptions of candidates are linked to other individual features. One of them is the gender of candidates. It has been attempted to see if there is a difference between the perceptions of male and female candidates. As a result of the analysis of data, it was found that no statistically significant difference exists between the perception levels of male and female candidates (Table 3). This result can be interpreted that generally there is no significant difference between the male and female candidates' perception

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levels about teaching process. To delve deeper, some extra analyses were carried out in order to find out if gender plays a role in perception level of the entrance and exit level candidates respectively. In this extra examination the first year and the last year candidates' perception levels are analyzed in terms of gender. It has been found that no significant difference exists between the perceptions of first year males and first year females. However, there is a significant difference between the perception scores of the last year male candidates and the last year female candidates in favor of females (Table 4). This finding can be interpreted that the perceptions of female candidates might have experienced a more positive change during the teacher education program.

Table 3: t-test results of PSTP points between male and female

Gender	N	X	SD	t	P
Male	111	2.63	0.191	-0.87	0.39
Female	156	2.65	0.175		

p>0.05

Table 4: t-test results of PSTP points between male and female for the seniors

Gender	N	X	SD	t	P
Male	62	2.67	0.182	-2.46	0.015
Female	69	2.75	0.159		

p<0.05

Another variable is the high school education of candidates. Because of the educational foundation courses that they received during their high school years, it is wondered whether the candidates coming from Anatolian teacher training high schools score significantly higher than those of others. With this aim, it has been attempted to figure out if there is a significant difference between the average perception points of candidates coming from the teacher training high schools and other types of high schools. At the end of analysis, it was found no statistically significant difference exists between the average perception scores of common high school graduates and of the teacher training high school graduates (Table 5). This result can be interpreted that, about the instruction process, there is no significant difference between the perception points of candidates coming from common high schools and those coming from the teacher training high schools. Although there is an orientation toward the teaching profession in the curriculum of the teacher training high school, it is striking that this curriculum showed no significantly different impact on the averages score of this particular group. Since the candidates coming from Anatolian teacher training high schools are less in number, any further examination on the level of first and last year participants could not be made.

Table 5: *t-test results of PSTP points in terms of high school types*

High School	N	X	SD	T	P
Teaching Oriented	17	2.64	.147	0.13	0.89
Other High Schools	250	2.65	.184		

p>0.05

According to the results of ANOVA test, made with the aim of determining if candidates' perceptions for the instruction process link to their individual variables, the teacher candidates' perceptions for the instruction process do not significantly relate to the individual variables (the education levels of parents, the occupations of parents) (Table 6). The extra examinations on the level of the first and last year candidates, there could not be found any significant relationship between the perceptions and the education levels of parents and the occupations of parents' variables.

Table 6: ANOVA results for the other variables and PSTP points

			SS	df	MS	F	P
Mothers' Education		Between Groups	0.024	4	0.006	.176	.95
		Within Group	8.743	262	0.033		
		Total	8.766	266			
			SS	df	MS	F	P
Fathers' Education		Between Groups	0.107	5	0.021	.648	.66
		Within Group	8.659	261	0.033		
		Total	8.766	266			
			SS	df	MS	F	P
Mothers' Job		Between Groups	0.131	6	0.022	.656	.69
		Within Group	8.635	260	0.033		
		Total	8.766	266			
			SS	df	MS	F	P
Fathers' Job		Between Groups	0.172	5	0.034	1.039	.40
		Within Group	8.589	260	0.033		
		Total	8.761	265			

p>0.05

The Discussion and Suggestions

The findings obtained from the background variables of the participants present important information about the characteristics of teacher candidate population while it brings some problems into the foreground. The finding that the percentage of females amongst the first-year candidates is more than the percentage of females among the last year candidates might drive one to wonder if more and more women prefer teaching profession in recent years. If this is true, it might be construed to be a satisfactory step for women, since they have usually been deprived of the opportunities of earning their on lives. However, as Clifford states (1989), it can be interpreted as an improper development in the process of democratization if it underlies the notion that women must join to works with low-status. In addition to the gender profile of the participants, the age profile also presents interesting findings. Considering the findings that most of the candidates take up the teacher education process before they are 19 and that they graduate before they reach 24, it could be said that the teacher candidates start the teacher training program in a few years following their high school education. Although this situation seems to be in favor of candidates, it might drive one to think that it becomes difficult to enter the teacher training

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programs a long time after the high school education. This might, therefore, lead to the homogeneity of the candidates in terms of their age and to the questions if the very competitive standardized test, which is required to enter into a university program, plays a major role in it.

The findings that the majority of the participant candidates come from lower socio-economic layers and that most of their mothers do not participate in the workforce could be viewed as an unfortunate case for the teacher education program. One might think that teacher education programs, given the findings in this study, do not attract quality students coming from the better segments of the society. It is, however, true that the variations of participant families' socio-economic features also reflect the overall characteristics of Turkish society. This might then be an important finding for two reasons. The first is that the results prove the children of families in the lower socio-economic layers can reach higher education. The second is that the teacher candidates who will serve for the society in the future will actually be reflecting the overall characteristic of that society. Therefore, it could be claimed that the entrance of teacher candidates from different layers of society into the teacher education program will be beneficial for enhancing the democratization of schools and of teaching.

If we think over the fact that the new candidates come to the teacher training program with teacher-centered understanding (Saban, 2003) and with some beliefs about teaching (Clark, 1988), it is understandable for the first year candidates to have lower scores of perception than their last-year counterparts. The teacher candidates were introduced to new theories, strategies, approaches, methods, and techniques during their teacher education process. This might have had an important role for the last-year candidates' having higher PSTP score than that of the first year candidates. However, there appears a doubt for the effective transformative power of the teacher training program because of the finding that the mean scores of both groups remain in the interval of "middle" level. This is because of the minimal, though it is statistically significant, difference between the perception scores of two groups. As a result of the limited conditions in the teacher education program, the teacher candidates could have encountered some teacher-centered applications which reinforce their current beliefs. Despite the teacher education curriculum developed by the cooperation of National Educational Ministry and Higher Educational Council and put into practice in 1998, the old-fashioned learning/teaching understandings still carry on. Some contextual factors might have had negative effect on effective dismissal of the embedded beliefs of teacher candidates. Among those contextual elements are, for instance, crowded classes; depending upon the crowded classes the inhibition of alternative instructional methods; the frequent use of standard tests, which prompts the transfer of knowledge and memorization; and in addition to all these things, the resistance teacher candidates demonstrate against the democratic and student-centered teaching activities. The role overt and covert beliefs played (Martínez et al., 2001) and the adaptation of a more teacher-centered understanding by the experienced teachers (Saban, 2004) can be interpreted among the reasons of the last year candidates' getting lower scores than they must. Since the last year candidates have just completed *the student teaching* process, the gap between their overt and covert beliefs could have been filled, as the researchers stated. The minor difference between the scores of the two groups also makes one think that the first year candidates might have had better conditions in their primary and secondary schooling lives. The schooling conditions, which are closely tied to perceptions, might have got better when compared with four years earlier. However, the research results introduce the fact that it is necessary to increase the effectiveness of the teacher training process.

Since the candidates' perceptions about the instruction process do not differ according to their high school educations, the education levels of their families, and the occupation of the families; it is possible to think that these qualifications are not linked to their perceptions of teaching process. Gender does not seem to be an influencing factor for perception scores of the participants when all participants taken together. There is, however, a significant difference on behalf of females between the perception scores of the first year male candidates and of the perception scores of the last year female candidates. This difference might have occurred during the teacher education process and might be attributable to the influence of gender. It is already known from the previous research (Cepni et al., 2006; Akinoglu & Ozkardes Tandogan, 2007; Ali and Kor, 2007; Peker, 2003) that the academic successes of women in universities are higher than men. The resulting impact of that might have been the higher perception scores of females than that of men.

There is no significant difference between the average scores of Anatolian Teacher Education High School graduates and of the other high school graduates. Thus, these candidates' qualifications of perceptions in entrance to the program attract attention. Further attention might be given to the quality of education in those schools and the need to raise the number of those schools in the future.

The findings obtained from this study have shown that the candidates who are at the very end of the program demonstrated significantly higher perception scores than that of their entry-level counterparts. The findings also propose the necessity that the teacher educators need to apply more often to the approaches and methods which will transform the perceptions more effectively. It must not be forgotten that it is the first hand experiences of the candidates that will provide this transformation. For this reason, the teacher-educators need to have their courses with designs that take the candidates to acts beyond passive listening and to change the applications and environments that reinforce their existing beliefs. The researchers can conduct research about how the perceptions change during teacher education process by using open-ended data gathering techniques such as metaphors which are thought to be effective for discovering the deep-rooted beliefs and perceptions. If a similar research is carried on with the time-series designs, it might reveal more reliable information about the transformative power of teacher training programs and direction of the changes occurred during the process of teacher education. Including the new teachers into such a study will also reveal further evidence of how the change in perceptions and beliefs follow in their career lives.

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