

# Education and Science tedmem

Vol 41 (2016) No 187 115-136

# Determination of Admittance Standards for Teacher Training Institutions: A Delphi Study \*

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# Abstract

The aim of the study is to determine admittance standard fields and performance indicators for teacher training institutions using the Delphi technique. The expert group of the study consisted of 34 experts fulfilling certain criteria. Delphi technique was utilized in determination of the standards. The technique was completed in three rounds. In the analysis of the data using the Delphi process, descriptive analysis, one of the content analysis methods was conducted during Delphi I. In Delphi II and III rounds, first quarter, median, third quarter and amplitude values were utilized. At the end of the study, the standards for admittance to teacher training institutions were determined within 8 standard areas and 56 performance indicators. Thus, 19 indicators in the field of personality traits, 7 in interest, 1 in health, 3 in field knowledge, 8 in intellectual level, 8 in attitude, 9 in skills and 10 performance indicators in technology standard were determined.

# Keywords

Teacher training Admittance standards Delphi technique

# Article Info

Received: 08.06.2015 Accepted: 04.10.2016 Online Published: mm.dd.2016

DOI: 10.15390/EB.2016.4737

# Introduction

A qualified teacher is one of the most significant determinants of quality and efficiency in education. Teachers are an important factor in attaining school objectives. At the same time they are the rightful owners of the educational product and the key to the student achievement (Oktay & Unutkan, 2008, p. 8). For the elements of the educational program and the teacher, student, school administration, and families to function together as a whole, qualified teachers are a requirement (Oktar & Yazçayır, 2008). Thus, the teacher and teacher's quality becomes prominent among the components of education (Bıkmaz & Güler, 2002; Adıgüzel, 2005; Sağlam & Kürüm, 2005; Çakmak, 2009). Initial prerequisite for a qualified teacher is a quality teacher training. Sustaining the desired quality in teacher training is dependent on the quality of the instructors, physical equipment, administration, educational programs of teacher training institutions and on the quality of the pre-service teachers admitted in these institutions (Erişti, 2004, p. 28). Qualified teacher training could be expressed as the activities performed by qualified teachers and qualified students. Thus, the components of the qualified teacher training are conceived as "successful teacher," "qualified student," "quality education" and "a serious and disciplined educational environment" (Adıgüzel, 2008, p. 2).

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<sup>\*</sup> This study is a part of the dissertation titled "A Study on the Admittance Standards to Be Used in Student Selection in Teacher Training Institutions and How to Measure These Standards".

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For qualified teacher training, qualified pre-service teachers are required. Thus, the candidates, who chose the teaching occupation, must have certain traits to be qualified students. Because, in studies scrutinizing the traits that a good teacher must have, personal traits of teachers were determined to be the most significant (Sherman & Blaackman, 1975; Das, El-Sabban, & Bener, 1996; Wilson & Cameron, 1996; Tezer, 1998; Pozo-Munoz, Rebolloso, & Fernandez-Ramirez, 2000; Cetin, 2001; Senemoğlu, 2001; Kızıltepe, 2002; Yoncalık, 2002; Aydoğdu, 2003; Sarpkaya, 2005; Arnon & Reichel, 2007; Genç, 2007; Oktar & Yazçayır, 2008; Telli, Brok, & Çakıroğlu, 2008). Thus, the personal traits of the teachers cardinally affect the achievements of the students and these personal traits of the teachers also directly affect the student behavior (Ünal & Ada, 2000, p. 78; Açıkgöz, 2004, p. 12). This fact makes itself evident significantly in every stage of formal education. However, the quality of teachers, their efficiency and their proficiency in the occupation is not always a natural result of a quality educational system and their quality training. There is also a need for the harmony between the personality traits and the occupational traits of the teachers (Hotaman, 2011, p. 128). In other words, the efficiency of teachers is not only related to the improvement of the programs implemented in teacher training institutions (Uras & Kunt, 2005). Values, attitudes, personality traits and experiences that teachers have altogether affect the student behavior directly (Bilen, 1996, p. 16). At this point, it is of essence to consider the personal traits of the individuals to select qualified students for the teacher training institutions.

Literature review revealed that there is no standard used for student selection for teacher training institutions in Turkey, and the only study on the issue was conducted by Ok (1991). In countries such as the USA, the UK and Sweden, admittance standard studies are conducted by regional or statewide relevant institutions, and teacher-training institutions admit students based on these standards (George & Kathryne, 1996; Günay & Gür, 2009, p. 6; Jacobowitz, Delorenzo, & Adirim, 2000). Standards for teacher training institutions provide a realistic view on the definition of teaching. As a result of these standards, a framework that includes suitable criteria was formed in the selection, training and monitoring the developments of pre-service teachers in the pre-service dimension of teacher training reflect the specifications that should be accomplished to train qualified teachers in teacher training institutions.

Faculties of education that are teacher training institutions in Turkey accept students based on scores obtained in central tests conducted by OSYM and the students' middle education GPAs. Teacher training programs in Turkey accept students based on scores in tests that only measure cognitive behavior (YÖK, 2007). However, conducted studies reported that this situation is quite problematic and established that academic knowledge of pre-service teachers had a low impact on predicting their teaching achievements (Beswick, 1990; Baskin, Ross, & Smith, 1996; Mikitovics & Crehan, 2002; Olstad, Beal, & Marrett, 1987; Özsov & Ünal, 2010; Riggs & Riggs, 1990; Salzman, 1991; Vaughn, Everhart, Sharpe, & Schimmel2000; Guyton & Farokhi, 1987; Haberman, 1987; Sheehtman & Godfried, 1993). Furthermore, Ercoşkun and Nalçacı (2009) stressed that there was a negative correlation between university entrance test performances and academic success of pre-service classroom teachers. Different negative situations arise when the reasons of pre-service teachers to prefer teaching profession are scrutinized. Studies on this subject demonstrated that most pre-service teachers chose the profession because their scores were only sufficient for teaching departments and again most pre-service teachers had teaching profession as their 11th or lower preference (Şara & Kocabaş, 2012, pp. 11-12). Certain other studies showed that pre-service teachers preferred the teaching profession due to selfish and external factors (Kaya, 1984; Eskicumalı, 2002; Gürbüz & Sülün, 2004; Ubuz & Sarı, 2008; Üstüner, Demirtaş, & Cömert, 2009; Çermik, Doğan, & Şahin, 2010; Erdemir, 2010; Özsoy, Özsoy, Özkara, & Memiş, 2010; Çetin, 2012). Furthermore, negligence of the interests and abilities of the students in the field was also stressed as another problem (Kaya, 1984; Haberman, 1987; Russel, Persing, Dunn, & Rankin, 1990). As a result, it could be argued that the criteria determined by teacher training institutions for pre-service teachers in Turkey are inadequate. Thus, it is necessary for teacher training institutions to consider affective characteristics while selecting students and they should vary their acceptance criteria to measure affective traits as well and abovementioned studies clearly demonstrate the significance of the sitation.

Studies demonstrated that the determination of the standards in educational process and teacher efficiencies was quite significant to accomplish qualified teacher training. Another significant factor is the criteria that would be used when students were admitted to teacher training institutions. In this context, this study is quite significant in determination of admittance standards on the teacher training institution student candidates' personal traits, interests, health, field knowledge, intellectual levels, attitudes, skills, technological predispositions and technology use. Furthermore, this study stresses an important deficiency in the teacher training system and presents suggestions to complement this deficiency.

Within the framework of this significance, the study aims to determine the admittance standard fields and performance indicators for teacher training institutions using the Delphi technique. Based on the above-mentioned aim, the research question was expressed as the following: "What should be the admittance standard areas and performance indicators expected in pre-service teacher candidates for teacher training institutions?".

#### Method

The present study is a qualitative research and criterion sampling method, which is one of the purposeful sampling methods, was utilized. Furthermore, in the study, admittance standards for candidates that aim to become teachers for teacher training institutions were attempted to be determined using Delphi technique. The technique is an effort to obtain a rational consensus from a selected group of experts, in a way, an effort to reach a consensus (Quinn, 1986; Sackman, 1975; Demirel, 2006, p. 86). The implementation of the technique entails the completion of survey forms by the experts successively. After each application the results are shared with the experts and this operation continues until a consensus is reached. The researcher planned the process of the determination of admittance standards for teacher training institutions in three rounds and at the end of the third round the standards that received maximum consensus were accepted as admittance standards. The implementation of the method is presented in detail in Figure 1.

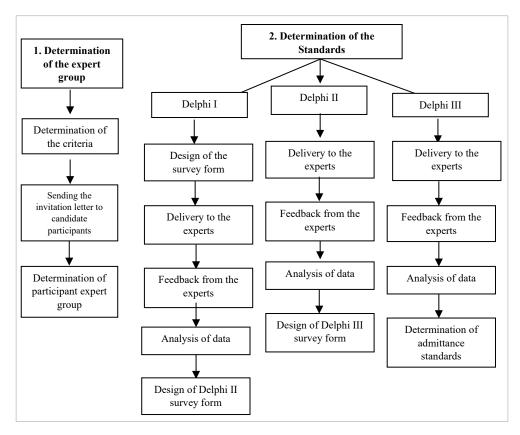


Figure 1. Stages of the Application of the Study Method

# 1. Determination of the Expert Group

During the formation of the expert group for the study conducted to determine admittance standards for teacher training institutions using the Delphi technique, certain criteria were sought in the experts to obtain efficient and reliable results.

The following criteria were considered in the selection process for the experts:

- To participate in the study on a volunteer basis,
- To have a doctorate in the field of education,
- To work at a teacher training institution, and
- To be published in a peer-reviewed journal in the field of teacher training.

It was considered that the criteria identified based on the aim and content of the study would increase the validity of the data obtained in relation to the objective of the study. An expert pool was created using the information on the web sites of universities that incorporated a faculty of education based on the criteria mentioned above. The expert pool consisted of 145 experts and an invitation letter explaining the aim of the study, the details of the methodology and requesting whether he or she would be able to participate in the study was sent. The letter was sent to the designated experts using e-mail and 34 experts replied stating that they would participate on a voluntary basis. Others stated that they would not be able to participate due to various reasons.

# 2. Determination of the Standards

In this stage, admittance standards for teacher training institutions were determined using the Delphi technique. The technique was planned in three rounds and finalized after the third round.

# 2.1. Delphi I

# Designing the Survey Form

Initially studies conducted in Turkey and abroad on the subject matter were researched for the Delphi I application. In the research, the traits required for the candidates of teacher training institutions were studied and listed. Data classification process was conducted based on the classifications denoted by Ok (1991) in his study and draft standard fields were created. Opinion of 3 experts from Mustafa Kemal University (MKU) Faculty of Education, Educational Sciences, Primary Education Science Department was obtained on the draft standard fields. At the end of the study conducted in the light of the opinion obtained, it was determined that the standard fields would be limited with the following and their content would be determined: Personality traits, interest, health, knowledge, attitude, skill, technology and others. Thus, Delphi I survey form was finalized. The application expert group was then asked to itemize the traits required from teacher candidates based on the determined standard fields.

# Delivery of the Survey Form to the Experts and Their Feedback

The survey designed was delivered to 34 experts via e-mail. The response period for Delphi I survey form was determined as one month. At the end of the deadline 24 experts provided feedback, the others did not reply although they were warned via e-mail. The feedback rate of the survey was 71%.

# Analysis of the Data and Design of Delphi II Survey Form

24 survey forms were sorted based on data quality. 21 survey forms were accepted in the analysis based on data quality and 3 were discarded due to non-conformity with the objectives of the survey. Remaining 21 survey forms were analyzed using descriptive analysis method. Initially the responses in standard fields were organized based on predetermined themes and divided into specific codes. These codes were expressed as performance indicators and in addition to these items; certain traits studied in the literature were accepted as performance indicators and were included in the survey form that was sent to the experts in the second round. Validity studies were conducted on the Delphi II survey designed by the authors with 6 experts from the departments of Educational Sciences, Science Education, Turkish Education and Classroom Teaching prior to its delivery to the experts. Required alterations were implemented in the light of the expert views and then the survey was presented to an

expert from Turkish Education Department for Turkish language validity study. After the necessary corrections executed as a result of this study, the Delphi II survey form that would be sent to the panel members was finalized.

There were changes implemented in the standard fields of the survey. In parallel to the views of the panel members and the experts who contributed to the validity study, "knowledge" standard field was renamed as "intellectual level" and it was decided that the traits originally considered in the standard field of "others" would be placed in other standard fields. Consequently, the survey consisted of 7 standard fields (Personal Traits, Interest, Health, Intellectual Level, Attitude, Skill, and Technology) and 112 performance indicators. In the survey 5-item Likert-type scale was used between "I completely agree" (5) and "I completely disagree" (1). The survey form designed was sent to the same expert group. The experts had the opportunity to write comments and notes for any item in addition to expressing their opinion on the 5-item scale.

# 2.2. Delphi II

# Delivery of the Survey Form to the Experts and Their Feedback

Delphi II survey form was sent to 21 experts and a deadline was set within 10 days. 19 survey forms were returned by the deadline with a return rate of 90.48%.

#### Analysis of Data

19 Delphi II survey forms returned by the experts were all evaluated. Data was loaded into the SPSS software package and First Quarter (Q1), Median (Md), Third Quarter (Q3) and Amplitude (R) values obtained were analyzed. These values were utilized to determine whether a consensus was reached on each item in the survey. The low difference in amplitude value meant the experts has reached a consensus on that item and a high difference meant the experts were not able to reach a consensus on the item. According to Zeliff and Heldenbrand (1993), it could be accepted that in items with the amplitude between the quarters was less than 1.2 there was a consensus, and in items with a value of 1.2 and over there was no consensus (Cited by Şahin, 2001). Since there was no consensus between the experts on some items, the study proceeded to the Delphi III application.

# Design of the Delphi III Survey Form

The responses given by the experts to the survey in Delphi III application were analyzed and Q1, Md, Q3 and R values were determined. The items in Delphi II survey were conserved without any changes and the responses of the experts and statistical analyses were added next to these responses. Furthermore, the explanations and comments of the experts on the items they disagreed were also sent to the panel as an addendum.

The experts were asked to write their responses in a new column in case their views changed after they examined the responses given to the Delphi II survey, statistical analyses and explanation and comments. In this stage the aim is to allow the experts to review their responses to the Delphi II survey and to let them change their opinion if necessary.

#### 2.3. Delphi III

#### Delivery of the Survey Form to the Experts and Their Feedback

Delphi III survey including the statistical analyses, the responses of the experts to the previous survey and the explanations and comments of the experts on the items of the survey was resent to the 19 experts.

#### Analysis of the Data

18 experts replied to the Delphi III survey sent to 19 experts. 6 experts changed their responses while 12 insisted on their replies. The data collected via the new responses of 6 experts and the old responses of the remaining 12 experts was analyzed in SPSS software package. In the analysis of the data, Q1, Md, Q3 and R values were utilized. 11 items with an amplitude value of 1.2 or over were considered as no consensus items and dismissed from the survey. Furthermore the explanations and comments of the experts were evaluated and 28 more items were dismissed from the survey. It was

stated about these 28 dismissed items that certain items could not be measured or could be measured with extreme difficulty; therefore they could not be expressed as performance indicators. On 17 items, it was stated that these performance indicators could only be gained by pre-service and in-service training by the pre-service teachers and it was not possible that the candidates could have these traits. In addition experts argued that certain items included certain others and one of these should be preferred or the statement should be expressed in a more comprehensive way. As a result of these criticisms and suggestions, 8 standard fields and 56 performance indicators were established for the survey, and the survey form was finalized.

#### **Findings**

Findings of the study are presented in this section. Admittance standards for teacher training institutions are determined using the Delphi technique. The technique was implemented in three rounds and the findings are presented in accordance.

#### Delphi I Application Findings

This section presents the responses by 24 participating experts on the 8 standard fields in the Delphi I survey.

The experts participating in the Delphi I application specified 56 different personal traits for teacher candidates (Appendix 1). Total frequency of these traits was 151. The traits stressed the most by the experts were patience (f=12), self-confidence (f=10), tolerance (f=7), fairness (f=6), philanthropy (f=6), inquisitiveness (f=6), honesty (f=5) and being open-minded (f=5). In addition, experts stressed the following traits for teacher candidates: respectful, responsible, egalitarian, philanthropist, democratic, with self-respect.

Experts delivered 18 different opinions on the standard field of interest (Appendix 2). Total frequency of these opinions was 52. The trait that the experts stressed the most was "loving one's profession" (f=7) for the teacher candidates. This was followed by their interest in fields like arts, sports, etc. (f=6), genuine interest in profession of teaching (f=5), their interest in reading books (f=5), their sensitivity towards social issues (f=4), interest in learning (f=3) and their interest in the field they would teach (f=3).

Experts participating in the study delivered 11 different opinions on the standard field of health (Appendix 3). Total frequency of these 11 different traits was 46. The trait that the experts stressed the most was "to have a healthy psychology" (f=17) for the teacher candidates. Other traits mentioned by the experts in the subject of health were not having any visual (f=6), verbal (f=5), or auditory (f=5) problems, not having any orthopedic problems (f=5). In addition the experts stressed the following traits: not suffering from a contagious disease, no neurological impediments related to brain, not suffering from schizophrenia, and having basic health knowledge.

16 different traits were stated on knowledge standard field (Appendix 4). Total frequency of these traits was 63. The traits that the experts stressed the most were "to have pedagogical knowledge" (f=12) and "to have preliminary knowledge on the teaching field of study" (f=11) for the teacher candidates. In addition, traits of to have a general culture and knowledge about the world (f=8), knowledge and literacy in Turkish (f=6), knowledge on self culture (f=6) were the others mentioned by the experts. Some experts stressed that the teacher candidates should have knowledge on social, economical, educational, technological, etc. daily events (f=4) and should have knowledge on the basic concepts in social sciences (philosophy, sociology and psychology) (f=4). In addition to these traits, experts also mentioned the traits of knowing how to approach students with special needs and appropriate educational methods for these (f=3) and to know general characteristics of the occupation of teaching (f=2).

Experts participating in the study delivered 18 different traits on the standard field of attitude (Appendix 5) and the total frequency of these traits were 43. Experts stressed the most the necessity for the teacher candidates to have an attitude of acceptance towards individuals with differences (f=9). Other traits mentioned most frequently by the experts were the teacher candidates to have a democratic attitude (f=5), and to have a positive attitudes towards the school, students and the occupation of teaching (f=5). Some experts stressed that the teacher candidates should make self-sacrifices to better perform their profession (f=3), should have positive social relations with the students (f=2), should have basic ethical values (f=2) and should stress the moral side of the occupation of teaching rather than the economical side (f=2). Furthermore, the experts mentioned traits such as having a high expectation on the learning of the students and behavior that the students should gain, and not reflecting their ideologies in insruction.

Experts participating in the study delivered 29 traits on the standard field of skills (Appendix 6). The total frequency of these traits was 113. The most frequently mentioned traits that teacher candidates should have by the experts were communication (f=14), problem solving (f=12), research-analysis (f=10), critical (f=9), empathy (f=9), reflective (f=7), rhetorical and oratory (f=6), collaborative (f=6) and teaching (f=5) skills. These skills were followed by ability to act based on science, creative thinking, decision-making and reasoning skills.

Experts stated 14 different traits on the standard field of technology (Appendix 7). Total frequency of these traits was 44. Under the heading of technology, most of the experts stressed that the teacher candidates should be able to use information and communication technologies (f=12). In addition, to follow up educational and supporting technologies (f=7), to follow up information and communications technologies (f=7), to use educational and supporting technologies (f=4), to be willing to use technologies (f=3), and to be able to choose and use appropriate technologies (f=3) were the other traits expressed by the experts.

Experts expressed 5 traits on the standard field of "others" (Appendix 8) and the frequency of these traits was 5. Experts stressed that the candidates who want to become teachers should be sensitive in professional development, informed about life-long learning, not conservative and shy about human relations and should commit themselves to their profession.

#### Delphi II and III Application Findings

The survey used in the Delphi III application was the same survey used for the Delphi II. The survey that was sent to the experts contained the analysis results of the Delphi II survey and the responses of the experts for the Delphi II survey. The experts were able to see the responses of other participants as well as their own answers to the previous survey and were also able to read the explanations and comments by the experts on the items they did not agree on. Thus, the experts were given the chance of changing their answers if they changed their opinion. In this stage, the frequency of the opinion changes by the experts in the Delphi III survey, the items for which they have changed their opinion, how did the changes occur and generally the amplitude values for the responses of the 18 experts in the survey are presented.

Assigned number of participant			
experts in Delphi III application	Frequency of change (f)		
1	1		
2	2		
3	0		
4	2		
5	0		
6	0		
7	21		
8	0		
9	0		
10	10		
11	0		
12	0		
13	0		
14	0		
15	8		
16	0		
17	0		
18	Did not respond to Delphi III survey.		
19	0		
Total	44		

**Table 1.** Summary of Changes Executed by the Experts in the Delphi III Survey

In the third phase of the Delphi application, 19 experts participated in the study, but only 18 responded to the survey. One expert did not responded to the survey. 6 of the experts that replied changed their answers in the previous survey; the remaining 12 experts did not make any changes in their answers. Thus, they have insisted on their responses. The first expert that participated in the survey changed his or her view only in one item in the Delphi III survey. The second and the fourth experts changed their views in 2 items, seventh expert in 21 items, tenth expert in 10 items and fifteenth expert in 6 items. In total, 6 experts changed their views in 44 items.

Item Number	Item	The Change in Scale
A4	Spends time and effort to learn about innovations.	From 4 to 5
A5	Spends effort to change environmental conditions to implement innovations.	From 4 to 5
A8	Is aware of his (her) strong and weak characteristics.	From 3 to 4
A27	Displays the strength to fight occupational problems.	From 2 to 4
<b>B</b> 4	Reads different types of works (Literature, Scientific Journals, Sociology, etc.).	From 4 to 5 From 3 to 5 From 4 to 5
B5	Willing to know and understand students and their families.	From 2 to 4
B10	Participates in NGO activities.	From 4 to 5
C1	Has no orthopedic inability to prevent the fulfillment of occupational tasks.	From 4 to 5
C2	Has no visual disability to prevent the fulfillment of occupational tasks.	From 4 to 5

Table 2. Changes Implemented by the Experts in Delphi III Survey

Table 2. Continue
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Item Number	Item	The Change in Scale
C6	Has basic health knowledge.	From 1 to 5
D4	Has knowledge on subjects that affect him(her)self and his (her) immediate environment.	From 4 to 5
D8	Relates his (her) field and others in an inter-disciplinary context.	From 2 to 3
D11	Has knowledge on the basic principles of social science related disciplines (Philosophy, sociology and psychology, etc.).	From 4 to 5
D12	Has knowledge on the general cultural characteristics of different geographical regions of the country.	From 3 to 4
D13	Explains the current and future status, role and the	From 4 to 5
	responsibilities of the teaching profession.	From 3 to 4
D14	Is politically literate in a basic level.	From 3 to 4
D16	Has realistic foresight about the future.	From 3 to 2
	-	From 3 to 4
D17	Knows about his (her) own culture, belief system, and philosophy.	From 3 to 5
D18	Explains the importance of life-long learning.	From 4 to 5
	Explains the importance of the fong learning.	From 4 to 5
E1	Makes sacrifices to better perform his (her) occupation.	From 2 to 1
E3	Enjoys talking about subjects such as education and learning.	From 4 to 5
E4	Has high expectations on the behavior that the students should achieve.	From 3 to 2
E12	Develops positive contacts with people around.	From 4 to 3
F4	Expresses emotions and thoughts effectively verbally and in writing.	From 4 to 5
Te		From 4 to 5
F5	Plans for and writes usable knowledge.	From 3 to 4
F7	Designs research in compliance with the scientific research steps.	From 3 to 2
F8	Has the skill to work within a group.	From 4 to 5
F10	Is flexible against new and difficult situations.	From 3 to 4
F17	Knows about the successful entrepreneurs in immediate and distant environment.	From 2 to 3
F18	Has the skills to research and interpret the results.	From 3 to 2
	1	From 5 to 4
F19	Evaluates the criticism directed to him(her)self objectively.	From 4 to 5
-		From 3 to 4
F21	Spends effort to produce unique results.	From 3 to 4
F22	Questions self to understand why he (she) could not solve a problem when unsuccessful.	From 3 to 4
F24	Orders knowledge according to importance.	From 4 to 5
	Follows up daily events (especially educational) using	110111 1 10 0
G7	technological tools and selects the most appropriate content for him(her)self.	From 2 to 3
G8	Questions the reliability of the sources of knowledge transmitted by technological media.	From 2 to 3

Table 2 displays the items that the experts that participated in the Delphi III application changed their opinion on. The experts changed their views on 36 items and there were a total of 44 changes in opinion. 4 of these changes were in personal traits standard field, 2 were in interest, 9 were in intellectual level, 4 were in attitude, 11 were skills and 2 were in technology standards fields.

In all of the fields of personal traits, interest, health and technology standards where there was a change, the experts changed their views in the positive direction. There was a negative change in an item in intellectual level standard field (D16), in 3 items in attitude standard field (E1, E4, E12), and in 3 items in skills standard field (F9, F18, F19). In total, the experts changed their views in the negative direction in 7 items and changed their views in the positive direction in a total of 37 items that were changed.

In D16, one of the items that changed in the negative direction, the expert changed the initial value of 3 in the Delphi II survey into a 2 in the Delphi III survey. In the remaining items that were changed in the negative direction, in E1, the value was changed from 2 to 1; in E4 from 3 to 2, in E12 from 4 to 3, in F7 from 3 to 2, in F18 from 3 to 2 and in F19 the value was changed from 5 to 4.

In certain items, more than one expert changed their opinion. Three experts implemented changes in item B4, while 2 experts made changes in items D13, D16, D18, F5 and F19.

The amplitude value analysis results of the responses by the experts in Delphi II and III surveys on personal traits standard field are displayed in Table 3.

A. PE	RSONAL TRAITS	Delphi III amplitude value	Delphi II amplitude value
		<b>R</b> 3	<b>R</b> <sub>2</sub>
A.1.	Manages stress sources that emerge instantly.	1	1
A.2.	Stays away from prejudices.	0	0
A.3.	Uses a respectful language during in-classroom or outside the classroom discussions.	0	0
A.4.	Spends time and effort to learn about innovations.	0	0
A.5.	Spends effort to change environmental conditions to implement innovations.	1	1
A.6.	Accepts that each individual has unique characteristics.	0	0
A.7.	Presents innovative ideas and designs innovative products.	1	1
A.8.	Is aware of his (her) strong and weak characteristics.	1	1
A.9.	Speaks comfortably in front of others.	0	0
A.10.	Fulfills responsibilities assigned in individual or group studies.	0	0
A.11.	Tries to live in harmony with the environment.	1	1
A.12.	Differentiates fair and unfair behavior and acts justly.	0	0
A.13.	Enjoys teaching people.	0	0
A.14.	Provides environments for others (student, colleague, etc.) where they could express themselves comfortably.	1	1
A.15.	Demands justice when he (she) thinks he (she) faced injustice.	0	0
	Behaviors are in line with universal values.	0	0
A.17.	Makes independent self-decisions.	2	2
	Stays away from tense situations.	2	2
A.19.	Investigates about the new situations related to him(her)self or the field of occupation.	1	1

**Table 3.** The Amplitude Value (R) Analysis Results for Personal Traits Standard Field for Delphi II and III Surveys

#### Table 3. Continue

A. PERSONAL TRAITS	Delphi III amplitude value	Delphi II amplitude value
	<b>R</b> 3	R <sub>2</sub>
A.20. Orders Daily tasks based on their importance.	1	1
<b>A.21.</b> Knows about basic rights and freedoms and reflects these in his (her) behavior.	0	0
<b>A.22.</b> Respects the privacy of personal life.	0	0
<b>A.23.</b> Stresses the independence of the judiciary and rule of law and reflects these principles in his (her) behavior.	0	0
A.24. Perceives individual and social differences as a source of richness.	0	0
<b>A.25.</b> Knows about the ways to reach the knowledge on new developments.	1	1
A.26. Has the strength to fight against occupational difficulties.	1	1
(If R<1,2 then there is consensus.)		

Table 3 demonstrates that the responses of experts for the performance indicators that they determined for teacher candidates in Delphi III and Delphi II surveys on personal traits did not differentiate based on consensus. In the performance indicators of "makes independent self-decisions" and "stays away from tense situations" that the experts could not arrive at a consensus in Delphi II survey, there was no consensus in the Delphi III survey (R=2) and these items were dismissed from the survey.

**Table 4.** The Amplitude Value (R) Analysis Results for Interest Standard Field for Delphi II and III Surveys

B. IN	TEREST	Delphi III amplitude	-
		value	value
		<b>R</b> <sub>3</sub>	<b>R</b> <sub>2</sub>
<b>B.1</b> .	Decides to choose teaching profession voluntarily.	1	1
<b>B.2</b> .	Reads books regularly.	1	1
B.3.	Follows the daily events related to education and the profession of teaching.	0	0
<b>B.4</b> .	Reads different types of works (Literature, Scientific Journals, Sociology, etc.).	1	1
<b>B.5</b> .	Willing to know and understand students and their families.	1	1
<b>B.6</b> .	Is sensitive about social issues.	0	0
<b>B.7.</b>	Participates in social activities (arts, sports, etc.).	1	1
<b>B.8.</b>	Is interested in learning.	0	0
<b>B.9</b> .	Is willing to help others more than self.	1	1
<b>B.10</b> .	Participates in NGO activities.	2	2
<b>B.11</b> .	Is interested in scientific research.	1	1

(If R<1,2 then there is consensus.)

The responses of experts for the performance indicators in interest standard field in Delphi III and Delphi II surveys did not differentiate based on consensus. In the performance indicator of "participates in NGO activities" that the experts could not arrive at a consensus in Delphi II survey, there was also no consensus in the Delphi III survey (R=2) and this item was dismissed from the survey.

C. HEALTH	Delphi III amplitude value	Delphi II amplitude value
	<b>R</b> 3	$\mathbf{R}_2$
<b>C.1.</b> Has no orthopedic difficulty affecting performance in occupation.	4	3
C.2. Has no visual inability affecting performance in occupation.	4	4
<b>C.3.</b> Has no auditory problem affecting performance in occupation.	4	4
<b>C.4.</b> Has no speech problem (like stuttering) affecting performance in occupation.	2	2
<b>C.5.</b> Has no psychological problem that deeply affects daily life.	1	1
C.6. Has basic knowledge on health.	2	2

**Table 5.** The Amplitude Value (R) Analysis Results for Health Standard Field for Delphi II and III Surveys

(If R<1,2 then there is consensus.)

The responses of experts for the performance indicators in health standard field in Delphi III and Delphi II surveys differentiated only in "has no orthopedic difficulty affecting performance in occupation" indicator. Delphi II amplitude value for the indicator was 3, but the amplitude value for the indicator in Delphi III became 4. The differences in opinion between the experts increased in the process. There was no differentiation in the other indicators based on consensus.

In performance indicators of having no orthopedic (R=4), visual (R=4), auditory (R=4) and speech (R=2) problems that prevent them to perform their duties, on which there was no consensus in Delphi II survey, no consensus was reached in Delphi III survey as well. These performance indicators were omitted from the survey.

**Table 6.** The Amplitude Value (R) Analysis Results for Intellectual Level Standard Field for Delphi II and III Surveys

D. IN	TELLECTUAL LEVEL	Delphi III amplitude value	Delphi II amplitude value
		<b>R</b> <sub>3</sub>	<b>R</b> <sub>2</sub>
D.1.	Knows Turkish grammar.	1	1
D.2.	Is fluent in basic knowledge in related field.	1	1
D.3.	Has sufficient level of general culture.	1	1
D.4.	Has knowledge on issues affecting him(her)self and immediate environment.	1	1
D.5.	Has basic information on learning and developmental psychology.	1	1
D.6.	Knows about the features of self-culture.	0	0
D.7.	Understands the effects of cultural differences on eductation and utilizes this understanding in daily life.	0	0
D.8.	Relates his (her) field and other fields within the inter-disciplinary context.	0	0
D.9.	Has information about daily events (social, political, economical, educational, technological, etc.).	1	1
D.10.	Has an above-average GPA in secondary education.	2	2
D.11.	Has knowledge on basic principles in social sciences related disciplines (philosophy, sociology, psychology, etc.).	1	1
D.12.	Knows about the general cultural characteristics of different geographical regions in the country.	1	1

#### Table 6. Continue

D. INTELLECTUAL LEVEL		Delphi II
		amplitude value
	<b>R</b> 3	<b>R</b> 2
<b>D.13.</b> Explains the current and future concepts in the profession of teaching such as status, role and responsibility.	1	1
<b>D.14.</b> Has basic political literacy.	1	1
<b>D.15.</b> Knows about the difficulties and problems of the society he (she) lives in and proposes solutions.	0	0
<b>D.16.</b> Makes realistic predictions about the future.	1	1
<b>D.17.</b> Knows his (her) own belief system, philosophy and culture well.	0	0
<b>D.18.</b> Explains the importance of life-long learning.	1	1

(If R<1,2 then there is consensus.)

The responses the experts gave for performance indicators for the intellectual level standard field in Delphi II and Delphi III surveys did not differentiate based on consensus. Experts did not reach a consensus on the performance indicator of "has an above-average GPA in secondary education" in both Delphi II and Delphi III surveys and this indicator was excluded from the survey.

**Table 7.** The Amplitude Value (R) Analysis Results for Attitude Standard Field for Delphi II and III Surveys

т ат		Delphi III	Delphi II
E. AI	E. ATTITUDE		amplitude value
		value R3	R <sub>2</sub>
E.1.	Makes sacrifices to better perform his (her) occupation.	1	<u> </u>
L.1.	Does not discriminate students based on any issue (religion, language,	1	1
E.2.	race, belief, socioeconomic level, gender, etc.).	0	0
E.3.	Enjoys talking about subjects such as education and learning.	1	1
E.4.	Has high expectations on the behavior that the students should achieve.	1	1
E.5.	Displays acceptance towards individuals with differences (colleague, student, parents, etc.).	0	0
E.6.	Prevents political implications in the classroom.	0	0
E.7.	Has a positive attitude towards students and the school.	0	0
E.8.	Decides based on scientific principles, not based on religion or nationality.	0	0
E.9.	Is sensitive towards individuals with special educational needs.	0	0
E.10.	Stresses the moral, role-model, performing under every condition and work ethic characteristics of the profession of teaching.	0	0
E.11.	Has a positive attitude towards scientific developments.	0	0
E.12.	Develops positive contacts with people around.	1	1
E.13.	Listens to people attentively.	0	0
E.14.	Is sensitive towards environmental issues.	1	1

(If R<1,2 then there is consensus.)

In Table 7, the responses of the experts to Delphi II and Delphi III surveys did not differentiate based on consensus. In this case, the experts insisted on their replies in the Delphi II survey.

F. SK	ILLS	3	Genişlik
		Değeri R3	Değeri R2
F.1.	Has a fluent, clear, intelligible diction.	1	1
F.2.	Used body language effectively.	1	1
F.3.	Speaks clearly.	0	0
<b>F.4</b> .	Expresses emotions and thoughts effectively verbally and in writing.	0	1
F.5.	Plans for and writes usable knowledge.	0	1
F.6.	Explains unique traits objectively.	1	1
F.7.	Designs research in compliance with the scientific research steps.	1	1
<b>F.8</b> .	Has the skill to work within a group.	0	1
F.9.	Uses the time efficiently.	0	0
F.10.	Is flexible against new and difficult situations.	0	0
F.11.	Questions inflexible solutions for problems.	1	1
F.12.	Focuses on the real reasons for communication problems to solve them.	0	1
F.13.	Explains the underlying reasons for opinion and thoughts.	1	1
<b>F.14</b> .	Determines any problem.	1	1
F.15.	Defines problems.	1	0
F.16.	Comes up with hypotheses to solve a problem.	1	1
F.17.	Knows about the successful entrepreneurs in immediate and distant environment.	2	2
F.18.	Has the skill to research and interpret the results.	1	1
F.19.	Evaluates the criticism directed to him(her)self objectively.	0	0
F.20.	Updates own skills based on scientific developments.	0	0
F.21.	Spends effort to produce unique results.	1	1
F.22.	Questions self to understand why he (she) could not solve a problem when unsuccessful.	1	1
F.23.	Performs any task or operation by questioning it first.	1	1
	Orders knowledge according to importance.	1	1
	Recreates the content of significant expressions in a subject or text.	1	1
	Makes decisions to resolve sudden developments.	1	1

#### Table 8. The Amplitude Value (R) Analysis Results for Skills Standard Field for Delphi II and III Surveys

(If R<1,2 then there is consensus.)

The responses by the experts on 5 performance indicators in skills standard field demonstrated differentiation based on consensus. In the remaining 21 performance indicators, there was no differentiation.

The amplitude value for the performance indicators of "expresses emotions and thoughts effectively verbally and in writing," "plans for and writes usable knowledge," "focuses on the real reasons for communication problems to solve them," "has the skill to work within a group" and "focuses on the real reasons for communication problems to solve them" was 1 in Delphi II analysis results, but it became 0 (zero) in the Delphi III analysis results. This fact demonstrated that the experts' consensus on the related performance indicators had improved.

In "defines problems" performance indicator, while the Delphi II analysis result was 0 (zero), Delphi III analysis result became 1. This fact reflected that the consensus level among experts decreased in the related performance indicator.

In the performance indicator of "knows about the successful entrepreneurs in immediate and distant environment" (R=2) that the experts could not reach a consensus in Delphi II survey, they could not reach a consensus in Delphi III survey as well and this performance indicator was dismissed from the survey.

**Table 9.** The Amplitude Value (R) Analysis Results for Technology Standard Field for Delphi II And III Surveys

G. TECHNOLOGY		Delphi III amplitude value	Delphi II amplitude value
		<b>R</b> 3	<b>R</b> <sub>2</sub>
G.1.	Follows up innovations in basic communications technologies.	1	1
G.2.	Uses basic communications technologies.	1	1
G.3.	Follows up innovations in education technologies.	1	1
G.4.	Uses education technologies.	1	1
G.5.	Contributes his (her) occupational progress by using information and communication technologies.	1	1
G.6.	Selects and uses the necessary technology.	0	0
G.7.	Follows up daily events (especially educational) using technological tools and selects the most appropriate content for him(her)self.	1	1
G.8.	Questions the reliability of the sources of knowledge transmitted by technological media.	1	1
G.9.	Is willing to learn how to use technological tools.	1	1
G.10.	Opens alternative communication channels (e.g. social networks).	2	2
G.11.	Could establish technological communications and uses related tools (e.g. e-mail).	1	1

(If R<1,2 then there is consensus.)

Table 9 demonstrates that the responses of the experts for the performance indicators in technology standard field in Delphi II and Delphi III surveys did not differentiate based on consensus. In the performance indicator of "Opens alternative communication channels (e.g. social networks)" (R=2) that the experts could not reach a consensus in Delphi II survey, they could not reach a consensus in Delphi III survey as well and this performance indicator was excluded from the survey.

# Discussion

In this section, findings of the study are discussed within the scope of the findings of the related studies in literature. The findings of the study were the performance indicators that reflect the cognitive and affective traits of teachers. In this context, different standard fields emerged. One of these was the personal traits standard field. The findings of the study in this field were in compliance with other studies in the literature (Das et al., 1996; Wilson & Cameron, 1996; Tezer, 1998; Pozo-Munoz et al., 2000; Çetin, 2001; Senemoğlu, 2001; Kızıltepe, 2002; Yoncalık, 2002; Aydoğdu, 2003; Tekışık, 2003; Çelikten, Şanal, & Yeni, 2005; Sarpkaya, 2005; Arnon & Reichel, 2007; Genç, 2007; Oktar & Yazçayır, 2008; Demircioğlu, Mutluer, & Demircioğlu, 2011; Çalışkan, Işık, & Saygın, 2013; Keskin, 2013). In related studies, the features of a good teacher were stressed as; patient, tolerant, humanitarian, respectful towards differences, witty, open minded, unbiased, etc.

The findings in other standard fields were in consistency with the findings of the related studies in literature (Bayrak, 2001; Halis, 2002; Gündüz & Odabaşı, 2004; Yapıcı & Yapıcı, 2004; Özabacı & Acat, 2005; Arslan & Özpınar, 2008; Ubuz & Sarı, 2009; Yörük & Tezcan, 2009; Taşkaya, 2012; Keskin, 2013; Ulusoy, 2013). Studies generally stressed that a good teacher should have a good diction, love the profession, use and be willing to use the educational technological tools, own the mother tongue, have a healthy psychology, be unbiased against the differences in students, have a positive attitude towards

the profession of teaching. In addition, studies mentioned traits such as using body language efficiently, being sensitive about social issues, being aware of self cultural values and having a habit of reading books.

Literature review demonstrates that the traits teachers should have according to many scholars were generally similar. Thus, it could be stressed that these traits should be considered with great attention when admitting students in teacher training institutions.

# Results

The results obtained in the study conducted to determine admittance standard fields and performance indicators for teacher training institutions, as a result of three rounds of Delphi technique are as follows:

As a result of the statistical data obtained at the end of the third round, the items that a consensus was not reached upon were excluded from the survey. Furthermore, in accordance with the criticism by the experts on certain items where there was a consensus, they were also excluded from the survey, or their wording was altered. In addition, participating experts suggested that 3 items in intellectual level standard field should be evaluated in a new standard field called field knowledge. Thus, these 3 items were removed from the intellectual level standard field and were included in the field knowledge standard field. As a result 8 standards fields and 56 performance indicators were determined related to the teacher candidates for teacher training institutions.

In the study, 10 performance indicators were emerged in <u>personal traits</u> standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Stays away from prejudices.
- ✓ Uses a respectful language during in-classroom or outside the classroom discussions.
- ✓ Accepts that each individual has unique characteristics.
- ✓ Presents innovative ideas and designs innovative products.
- ✓ Is aware of his (her) strong and weak characteristics.
- ✓ Speaks comfortably in front of others.
- ✓ Prefers the culture of consensus over conflict.
- ✓ Enjoys teaching people.
- ✓ Behaviors are in line with universal values.
- ✓ Perceives individual and social differences as a source of richness.

There were 7 performance indicators in <u>interest</u> standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Decides to choose teaching profession voluntarily.
- ✓ Reads books regularly.
- ✓ Follows the daily events related to education and the profession of teaching.
- ✓ Reads different types of works (Literature, Scientific Journals, Sociology, etc.).
- ✓ Is sensitive about social issues.
- ✓ Participates in social activities (arts, sports, etc.).
- ✓ Is interested in learning.

In the standard field of <u>health</u>, "has no psychological problem that deeply affects daily life" performance indicator emerged. In addition, there were 3 performance indicators in <u>field knowledge</u> standard field. These were:

- ✓ Has basic information on learning and developmental psychology
- ✓ Relates his (her) field and other fields within the inter-disciplinary context
- ✓ Has basic knowledge in his (her) own field.

At the end of the study, 8 performance indicators were emerged in <u>intellectual level</u> standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Knows Turkish grammar.
- ✓ Has sufficient level of general culture.
- ✓ Knows about the features of self-culture.
- Understands the effects of cultural differences on education and utilizes this understanding in daily life.
- ✓ Has information about daily events (social, political, economical, educational, technological, etc.).
- ✓ Has knowledge on basic principles in social sciences related disciplines (philosophy, sociology, psychology, etc.).
- ✓ Explains the current and future concepts in the profession of teaching such as status, role and responsibility.
- ✓ Explains the importance of life-long learning.

There were 8 performance indicators in <u>attitude</u> standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Makes sacrifices to better perform his (her) occupation.
- ✓ Does not discriminate students based on any issue (religion, language, race, belief, socioeconomic level, gender, etc.).
- ✓ Enjoys talking about subjects such as education and learning.
- ✓ Prevents ideological implications in the classroom.
- ✓ Decides based on scientific principles, not based on religion or nationality.
- ✓ Is sensitive towards individuals with special educational needs.
- ✓ Develops positive contacts with people around.
- ✓ Listens to people attentively.

There were 9 performance indicators in skills standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Has a fluent, clear, intelligible diction.
- ✓ Used body language effectively.
- ✓ Speaks clearly.
- ✓ Expresses emotions and thoughts effectively verbally and in writing.
- ✓ Plans for and writes usable knowledge.
- ✓ Has the skill to work within a group.
- ✓ Questions inflexible solutions for problems.
- ✓ Focuses on the real reasons for communication problems to solve them.
- ✓ Updates own skills based on scientific developments.
- ✓ Uses the inquiry process in actions.

There were ten performance indicators in technology standard field. Performance indicators determined by the experts in this field are as follows:

- ✓ Follows up innovations in basic communications technologies.
- ✓ Uses basic communications technologies.
- ✓ Follows up innovations in education technologies.
- ✓ Uses education technologies.
- ✓ Contributes his (her) occupational progress by using information and communication technologies.
- ✓ Selects and uses the necessary technology.
- ✓ Follows up daily events (especially educational) using technological tools and selects the most appropriate content for him(her)self.
- ✓ Questions the reliability of the sources of knowledge transmitted by technological media.
- ✓ Is willing to learn how to use technological tools.
- ✓ Could establish technological communications and uses related tools (e.g. e-mail).

# Suggestions

This section contains various suggestions for the application and future research in the light of the results of the study.

# Suggestions on the Practice

- Cognitive and attentive traits of the candidates should be considered together when admitting students in teacher training institutions. The current selection and placement exams, namely the LYS and YGS, evaluate the cognitive traits, while disregarding attentive traits mostly. It is considered that the findings of this study; the standard fields and performance indicators could fit the bill to satisfy this requirement. Thus, the findings of the study could be utilized in the student selection process for teacher training institutions.
- 2) The results of this study were expressed as the performance indicators that teacher candidates should possess. Thus, it is important that the teacher candidate individual should possess these traits qualitatively. When the performance indicators were examined, it could be considered that teacher candidates could have gained these performance indicators via the "Anatolian Teacher High Schools" that were closed. Thus, it was considered that, instead of closing down the Anatolian Teacher High Schools, their programs could have been reevaluated and they could have been developed/updated to enable the students to gain these traits.
- 3) When it is considered that the existing university entry exams only measure cognitive level traits, it could be stated that they are insufficient alone in measuring attentive level traits for teacher training institutions. Teacher training institutions should consider certain specifications for teacher candidates (such as personal traits, interest, health, knowledge in the field, intellectual level, attitude, skills and technology) as an alternative process during admittance in addition to the central examination application.
- 4) By using the performance indicators, it could be determined whether the teacher candidates have these indicators and to which extend they conform to these indicators. Thus the strengths and weaknesses of the candidates could be determined. Programs to develop/complete the weak traits of the candidates could be implemented in the teacher training institution.
- 5) In the present study, when determining the acceptance standards for teacher training institutions, faculty members were selected as the study group. Similar future studies could extend their study groups to include teachers, educational administrators, etc. as stakeholders.

#### References

Açıkgöz, K. Ü. (2004). Etkili öğrenme ve öğretme. İzmir: Eğitim Dünyası.

- Adıgüzel, A. (2005). Avrupa Birliğine uyum sürecinde öğretmen niteliklerinde yeni bir boyut: bilgi okuryazarlığı. *Milli Eğitim.* 167, 355-364.
- Adıgüzel, A. (2008). Eğitim fakültelerinde öğretmen eğitimi program standartlarının gerçekleşme düzeyi (Unpublished doctoral dissertation). Anadolu University, Institute of Educational Sciences, Eskişehir.
- Arnon, S., & Reichel, N. (2007). Who is the ideal teacher? Am I? Similarity and difference in perception of students of education regarding the qualities of a good teacher and of their own qualities as teachers. *Teachers And Teaching: Theory And Practice*, *13*(5), 441-464.
- Arslan, S., & Özpınar, İ. (2008). Öğretmen nitelikleri: İlköğretim programlarının beklentileri ve eğitim fakültelerinin kazandırdıkları. Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi (EFMED), 2(1), 38-63.
- Aydoğdu, M. (2003). *Ergenlerin öğretmen ve ideal öğretmen algılarının incelenmesi* (Unpublished master's thesis). Ankara University, Institute of Educational Sciences, Ankara.
- Baskin, M. K., Ross, S. M., & Smith, D. L. (1996). Selecting successful teachers: The predictive validity of the urban teacher selection interview. *The Teacher Educator*, 32, 1-21.
- Bayrak, C. (2001). Öğretmenlik mesleğine giriş. Ankara: PegemA Yayınları.
- Beswick, R. (1990). *Evaluating educational programs: ERIC Digest Series Number EA* 54. Retrieved from ERIC databases (ED324766).
- Bıkmaz, F. H., & Güler, D. S. (2002). Velilerin sınıf öğretmenlerinden beklentileri ve sınıf öğretmenlerinin bu beklentilere uygunluğu. *Kuram ve Uygulamada Eğitim Bilimleri*, 2(2), 445-472.
- Bilen, M. (1996). Plandan uygulamaya öğretim (4th ed.). Ankara: Özel Yayınları.
- Çakmak, M. (2009). Prospective teacher' thoughts on characteristics of an "effective teacher". *Education and Science*, 34(153), 74-82.
- Çalışkan, M., Işık, A. N., & Saygın, Y. (2013). Öğretmen adaylarının ideal öğretmen algıları. *Elementary Education Online*, 12(2), 575-584.
- Çelikten, M., Şanal, M., & Yeni, Y. (2005). Öğretmenlik mesleği ve özellikleri. Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 19(2), 207-237.
- Çermik, H., Doğan, B., & Şahin, A. (2010). Sınıf öğretmenliği öğretmen adaylarının öğretmenlik mesleğini tercih sebepleri. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 28, 201-212.
- Çetin, B. (2012). İlköğretim öğretmen adaylarının profillerinin çeşitli değişkenler açısından incelenmesi. *İlköğretim Online*, *11*(3), 596-610.
- Çetin, Ş. (2001). İdeal öğretmen üzerine bir araştırma. *Millî Eğitim Dergisi*. 149. Retrieved March 14, 2013, http://oyegm.meb.gov.tr
- Das, M., El-Sabban, F., & Bener, A. (1996). Student and faculty perceptions of the characteristics of an ideal teacher in a classroom setting. *Medical Teacher*, *18*(2), 141-146.
- Demircioğlu, İ. H., Mutluer, C., & Demircioğlu, E. (2011). Sosyal bilgiler öğretmen adaylarının demokratik öğretmen nitelikleri hakkındaki görüşleri. *Kastamonu Eğitim Dergisi*, 19(2), 577-586.
- Demirel, Ö. (2006). Eğitimde program geliştirme (9th ed.). Ankara: PegemA Yayıncılık.
- Ercoşkun, M. H., & Nalçacı, A. (2009). Sınıf öğretmeni adaylarının ÖSS, akademik ve KPSS başarılarının çeşitli değişkenler açısından incelenmesi. *Kastamonu Eğitim Dergisi*, 17(2), 479-486.
- Erdemir, N. (2010). Fizik öğretmeni adaylarının bölümü tercih nedenleri ve mekanik konularında akademik başarı düzeylerine etkisi. *Erzincan Eğitim Fakültesi Dergisi*, 12(1), 1-14.

- Erişti, B. (2004). Avrupa Kalite Yönetimi Vakfı mükemmellik modelinin eğitim fakülteleri için uyarlaması (Unpublished doctoral dissertation). Anadolu University, Institute of Educational Sciences, Eskişehir.
- Eskicumalı, A. (2002). Eğitim, öğretim ve öğretmenlik mesleği. Y. Özden (Ed.), Öğretmenlik mesleğine giriş. Ankara: PegemA Yayıncılık.
- Genç, S. Z. (2007). Öğrenci algılarına göre ideal bir öğretim elemanında bulunması gereken özellikler. *Milli Eğitim, 173,* 210-218.
- George, P., & Kathryne, M. S. (1996). *An examination of admission criteria to programs of teacher education*. Retrieved from ERIC databases (ED401278).
- Guyton, E., & Farokhi, E. (1987). Relationships among academic performance, basic skills, subject matter knowledge and teaching skills of teacher education graduates. *Journalaf Teacher Education*, 38, 37-42.
- Günay, D., & Gür, B. S. (2009). *Dünyada üniversiteye giriş sistemleri ve ÖSS*. Türkiye'nin 2023 Vizyonunda Üniversiteye Giriş Sistemi Kongresi, Atılım University, Ankara.
- Gündüz, Ş., & Odabaşı, F. (2004). Bilgi çağında öğretmen adaylarının eğitiminde öğretim teknolojileri ve materyal geliştirme dersinin önemi. *The Turkish Online Journal of Educational Technology*, 3(1), 43-48.
- Gürbüz, H., & Sülün, A. (2004). Türkiye'de biyoloji öğretmenleri ve biyoloji öğretmen adaylarının nitelikleri. *Milli Eğitim Dergisi*, 161.
- Haberman, M. (1987). *Recruiting and selecting teachers for urban schools*. Reston, VA: Association of Teacher Educators.
- Halis, İ. (2002). Demokratik sınıf ortamı için profesyonel sınıf yönetimi (2nd ed.). Konya: Mikro Yayınları.
- Hotaman, D. (2011). Eğitim fakülteleri kendi öğrencilerini seçebilir mi. *Kuramsal Eğitimbilim*, 4(1), 126-136.
- Jacobowitz, T., Delorenzo, L., & Adirim, M. (2000). *Incorporating concerns for diversity and social justice in admissions decisions*. Retrieved from ERIC databases (ED477735).
- Kaya, Y. K. (1984). İnsan yetiştirme düzenimiz (4th ed.). Ankara: Hacettepe Üniversitesi Sosyal ve İdari Bilimler Döner Sermaye İşletmesi.
- Keskin Y. (2013). Mesleki yeterliklerin kazanılma sürecinde öğretmen adaylarının görüşlerinin değerlendirilmesi. *Turkish Studies*, 8(3), 319-339.
- Kızıltepe, Z. (2002). İyi ve etkili öğretmen. Eğitim ve Bilim, 27(126), 10-14.
- Mikitovics, A., & Crehan, D. K. (2002). Pre-professional skills test scores as college of education admission criteria. *The Journal of Educational Research*, 95(4), 215-223.
- Ok, A. (1991). *The determination of admission standards for teacher training program: A delphi study* (Unpublished doctoral dissertation). Middle East Technical University, Institute of Social Science, Ankara.
- Oktar, İ., & Yazçayır, N. (2008). Öğrencilere göre etkili öğretmen özellikleri. Milli Eğitim, 80, 8-23.
- Oktay, A., & Unutkan, Ö. P. (2008, March 22). Çağdaş bir okul veya kurum olma sürecinde öğretmenlik. Psychology Symposium, Kültür University, Faculty of Arts and Sciences, Department of Psychology, İstanbul.
- Olstad, R. G. Beal, J. L., & Marrett, A. V. (1987). Predictive validity of GPA, CAT and NTE science specialty tests on scores of a performance based student teaching evaluation instrument (Teacher Education Research Center Report No. 87-1). Seattle, WA: University of Washington.
- Özabacı, N., & Acat, B. (2005). Öğretmen adaylarının kendi özellikleri ile ideal öğretmen özelliklerine dönük algılarının karşılaştırılması. *Kuram ve Uygulamada Eğitim Yönetimi*, 42, 211-236.
- Özsoy, G., Özsoy, S., Özkara, Y., & Memiş, D. A. (2010). Öğretmen adaylarının öğretmenlik mesleğini tercih etmelerinde etkili olan faktörler. *İlköğretim Online*, 9(3), 910-921, 2010.

- Özsoy, S., & Ünal, I. L. (Ed.). (2010). Türkiye'de eğitim bilimleri ve öğretmen yetiştirme: Bir yol ayrımı öyküsü. Eğitim Bilimleri Felsefesine Doğru. Ankara: Tan Kitabevi Yayınları.
- Pozo-Munoz, C., Rebolloso-Pacheco, E., & Fernandez-Ramirez, B. (2000). The "ideal teacher" implications for student evaluation of teacher effectiveness. *Assessment & Evaluation in Higher Education*, 25(3), 253-263.
- Quinn, P. (1986). Utilization-focused evaluation. Newbury Park, CA: Sage Publications.
- Riggs, I. M., & Riggs, M. L. (1990, Subat). A test of the validity of selected predictors of student success in a teacher education program. Retrieved from ERIC databases (ED324324).
- Russel, J. S., Persing, D. L., Dunn, J. A., & Rankin, R. J. (1990). Focusing on the selection process: A field study of the measures that influence admission decisions. *Educational and Psychological Measurement*, 50, 901-913.
- Sackman, H. (1975). Delphi critique: Expert opinion. Lexington, MA: Lexington Books.
- Sağlam, M., & Adıgüzel, A. (2009). Eğitim fakültelerinde öğretmen eğitimi program standartlarının gerçekleşme düzeyi. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 23, 303-314.
- Sağlam, M., & Kürüm, D. (2005). Türkiye ve Avrupa Birliği ülkelerinde öğretmen eğitiminde yapısal düzenlemeler ve öğretmen adaylarının secimi. *Milli Eğitim Dergisi, 33*(167). Retrieved August, 12, 2013, from http://dhgm.meb.gov.tr/yayimlar/dergiler/Milli\_Egitim\_Dergisi/167/index3-kurum.htm
- Salzman, S. A. (1991). *Selecting the qualified: Predictors of student teacher performance*. Retrieved from ERIC databases (ED330672).
- Sarpkaya, R. (2005). Bir meslek olarak öğretmenlik. M. Gürsel & M. Hesapçıoğlu (Eds.), Öğretmenlik mesleğine giriş (2nd ed.). Konya: Eğitim Kitabevi.
- Senemoğlu, N. (2001, January 11-13). Öğrenci görüşlerine göre öğretmen yeterlikleri. *Eğitimde Yansımalar: VI*. Ankara: Öğretmen H. Hüseyin Tekışık Eğitim Araştırma ve Geliştirme Vakfı.
- Sheehtman, Z., & Godfried, L. (1993). Assessing the performance and personel traits of teacher education students by a group assessment procedure: A study of concurrent and consruct validity. *Journal of Teacher Education*, 44(2), 130-138.
- Sherman, B. R., & Blaackman, R. T. (1975). Personal characteristics and teaching effectiveness og college faculty. *Journal of Educational Psychology*, 67, 124-131.
- Şahin, A. E. (2001). Eğitim araştırmalarında delphi tekniğinin kullanımı. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 20, 215-220.
- Şara, P., & Kocabaş, A. (2012). Sınıf öğretmeni adaylarının sınıf öğretmenliğini tercih nedenleri ve aldıkları eğitimle ilgili görüşleri. *Turkish International Journal of Special Education and Guidance & Counceling*, 1(2), 8-17.
- Taşkaya, S. M. (2012). Nitelikli bir öğretmende bulunması gereken özelliklerin öğretmen adaylarının görüşlerine göre incelenmesi. *Institute of Social Science Dergisi*, 2(33), 283-298.
- Tekışık, H. H. (2003). Öğretmenin kişisel yeterlikleri. In *Eğitime Yansımalar: VII Çağdaş Eğitim* Sistemlerinde Öğretmen Yetiştirme Sempozyumu Kitabı (p. 169). Ankara: Tekışık Yayıncılık.
- Telli, S., Brok, P., & Çakıroğlu, J. (2008). Teachers' and students' perceptions of the ideal teacher. *Education and Science*, 33(149), 118-129.
- Tezer, F. (1998). *İdeal öğretmenin kişilik özellikleri* (Unpublished master's thesis). Marmara University, Institute of Social Science, İstanbul.
- Ubuz, B., & Sarı, S. (2008). Sınıf öğretmeni adaylarının öğretmenlik mesleğini seçme nedenleri. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi,* 24, 113-119.
- Ubuz, B., & Sarı, S. (2009). Sınıf öğretmeni adaylarının iyi öğretmen olma ile ilgili görüşleri. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, (28), 53-61.

- Ulusoy, M. (2013). Sınıf öğretmeni adaylarının ideal öğretmen ve mesleki yeterliklerle ilgili değerlendirmeleri. *Uşak Üniversitesi Sosyal Bilimler Dergisi*, 6(4), 324-341.
- Uras, M., & Kunt, M. (2005, 28-30 Eylül). Öğretmen adaylarının öğretmenlik mesleğinden beklentileri ve beklentilerinin karşılanmasını umma düzeyleri. Paper presented at XIV. Eğitim Bilimleri Kongresi, Pamukkale University, Faculty of Education, Denizli.
- Ünal, S., & Ada, S. (2000). *Sınıf yönetimi*. İstanbul: M. O. Teknik Eğitim Fakültesi Döner Sermaye İşletmesi Matbaa Birimi.
- Üstüner, M., Demirtaş, H., & Cömert, M. (2009). The attitudes of prospective teachers towards the profession of teaching. *Education and Science*, *34*(151), 140-155.
- Vaughn, M., Everhart, B., Sharpe, T., & Schimmel, C. (2000). Incorporating a multisource sssessment approach in a teacher education program. *Education*, 121(2), 339-347.
- Wilson, S., & Cameron, R. (1996). Student teacher perceptions of effective teaching: A developmental perspective. *Journal of Education for Teaching*, 22(2), 181-195.
- Yapıcı, Ş., & Yapıcı, M. (2004). Ruh sağlığı yerinde insan. Bilim, Eğitim ve Düşünce Dergisi, 4(2).
- Yoncalık, O. (2002). Orta öğretimde okuyan sporcu öğrencilerin ideal öğretmen profilini algılama biçimleri (*Kırıkkale il örneği*) (Unpublished master's thesis). Kırıkkale University, Graduate School of Health Sciences, Kırıkkale.
- YÖK. (2007). Öğretmen yetiştirme ve eğitim fakülteleri (1982-2007). Ankara: Yükseköğretim Kurumu.
- Yörük, D., & Tezcan, H. (2009). Öğrenci görüşlerine göre etkili öğretmenin özellikleri. *Milli Eğitim*, (183), 219-227.