Determining the Standards of Teaching and Learning Process as a Component of Curriculum*

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Abstract

In this research, it is aimed to determine the standards of learning teaching process as a component of curriculum. On the basis of the Delphi technique, standards were determined through the opinion of two hundred and ninety-five educational sciences experts from ten universities from all regions of Turkey in this study which was performed in three rounds. As a result, ten standards and two hundred six indicators were determined in terms of educational process. These standards have been categorized as 101 items for teachers oriented, 18 items for school administration, 11 items for Education and Training Policies, 19 items for Learning Environment, 22 items for Teaching Material, 9 items for Content, 2 items for Evaluation, 5 items for Teaching Process, 8 items for Learning and 11 items for Curriculum Standards. These standards, which the expert group agreed on independently, were significantly related to both national and international standards in the literature. It will be useful to conduct researches on the extent to which these standards are met in the education process. This research is considered to be very important to be the first research on this subject in Turkey and to provide opportunity to evaluate the curriculum based on standards.


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INTRODUCTION

Standards which are determined by an authority, tradition or common understanding are models or examples that must be followed. (Richardson, 1994:16). Çağlar and Kılıç (2008:49) define standards as unity in production, measurement experiment, and meaning. The British Standards Institute refers standards as instruments (BSI, 2018) which provide trustworthy basis to the people who have same expectations about a product. Likewise, Education standards are defined as indicators that allow educational institutions to reach certain targets in various aspects and not to fall below a specific target. (NEASC, 2009 Cit. by Bakioğlu and Baltacı, 2010). In other words, training standards are also referred as criteria to evaluate the quality of education. (NRC, 1996).

Sweeny (1999) states that the education standards question the expectations of education and enable these expectations to be evaluated. Moreover; that teachers and students have the knowledge and skills they need for success in terms of standards (and the expectation of the parents from students) are crucial. In addition, education standards help teachers and students not only have the knowledge and skills they need to succeed, (Common Basic State Standards (CCSS), 2018), but also enable students to focus on the goals they need to learn (Great Schools, 2015).

Educational institutions can make their own self-evaluations with the standards, present their current situation and determine the aspects which must be developed (MEB, 2015). In this context, standards provide criteria to evaluate whether the progress towards a national target in science learning and teaching is ensured or not (National Research Council (NRC), 1996). On the other hand, they offer a common language for reforming studies.

In the literature, there is some criticism about the standard phenomenon in education. While Darling-Hammond (1999:37) states that standards cannot solve poor quality schools, stereotyped curriculum, unfair distribution of resources or social support problems of children and young people, Lachat (1994) states that the standards developed by consensus will increase the learning levels of the students by creating equal opportunities. Barton (2009), who makes an assessment for the teachers, thinks that standard-based education may bring certain limitations, it can put teacher’s creativity at risk and create imbalances in the distribution of school subjects. Doherty (2003:9), who opposes this view, claims that the standards clearly define the roles and responsibilities of educational institutions and make teachers feel more confident in implementing the curriculum. Lachat (1994) draws attention to the fact that failure of standards during the development, implementation and conclusion stages due to inattention and inequality may end up with unexpected outcomes. In addition, it is stated that the government's forming standards according to their own political policies (Pring, 1992) and manipulating standards (Carmichael, Martino, Porter-Magee and Wilson, 2010) may prevent standards to achieve their goals. Wiles (2016:27) emphasizes that standards should be seen as tools rather than goals. Malone and Nelson (2006) states that determining the values that students and teachers must have in order to be responsible, conscious and sensitive citizens should become integral parts of the standards. On the other hand, Bellour (2017) criticises this issue in terms of scope and stresses that the teaching of standards should be directed not only externally, but also internally. Erişen (2003) thinks that it is possible to eliminate the errors by determining the standards for all the elements in the education system. Göksoy (2012) conveys the views of Cavanaugh (2002) on this subject and points out that there should be standards regarding how effective and efficient implementation of teaching-learning process components (teaching methods, materials, learning process, activities, content etc.) in order to ensure quality in education. Furthermore, if we want to talk about the quality of students and teachers and to make an evaluation, there must be the universal, acceptable, valid standards (Göksoy, 2014).

Although countries such as the United States, the United Kingdom and Australia have set various standards both nationally and regionally (Departmen for Education, 2013; AITSL, 2018; CCSS, 2018; NPBEA, 2015; TESOL, 2017; CDE, 2011; Utah Effective Teaching Standards, 2011; NDESPB, 2017; NSTA, 2003), there are only standards about Secondary Education Institutions and Preschool and Primary Education Standards determined by the Ministry of National Education.
(MONE) and teacher training standards determined by Council of Higher Education in Turkey (Beltekin, Özdemir, Yılmaz, Akkalkan). The lack of research on standards in Turkey leads to the lack of standards-based assessments. Therefore, the evaluation products are generally based on objective measurements and the diagnosis of events and cases. Besides, due to the lack of standards, comparing Turkey with other countries in the world can not be possible. Acceptances in the field regarded to teaching and evaluation of standards will only be meaningful with the determination of these standards and research in the field.

METHOD

The research was conducted according to descriptive survey model. Survey models are now accepted in the literature and as Karasar (2009:77) defined it as “a research aimed at describing the situation in the past or present as it is”.

The research was conducted on the basis of Delhi technique. The aim of the Delphi technique is to provide a common consensus of selected experts on the subject. Delphi technique which is performed in three rounds, firstly aims at determining the research and selecting the experts. Once the expert group is determined, their opinions are asked through one or more questions about the subject. After the answers to the questions are examined, grouped and placed in an order, they are sent to the experts again in the second round and they are asked to examine, defend or change these answers. The new questionnaire, which is shaped according to the feedback, is sent to the experts in the third round and final questionnaire is formed (Demirel, 2011:86-88).

Population and Sample

The research population consists of the instructors who work in educational sciences department of education faculties of universities in Turkey. Purposeful sampling method was used in the sample selection. In the selection of the sample, it was aimed to select the instructors who are expert in the research subject. Initially, seven universities from seven regions of the country (Artvin Çoruh University, Gazi University, Yıldız Technical University, Çukurova University, Muğla Sıtkı Koçman University, Firat University and Dicle University) were chosen as samples for the research. However, due to the insufficiency of the number of instructors in these universities, their unwillingness to participate in the research and to give feedback for the research, Recep Tayyip Erdoğan University, Kahramanmaraş Sütçü İmam University and Erzincan Binali Yıldırım University were added to the research.

Of all sample, 15 (5,1%) participants are from Artvin Çoruh University, 20 (6,8%) from Recep Tayyip Erdoğan University, 92 (31,2%) from Gazi University, 28 (9%) from Yıldız Technical University, 27 (9.2%) from Çukurova University, 10 (3.4%) from Kahramanmaraş Sütçü İmam University, 43 (14.6%) from Muğla Sıtkı Koçman University, 16 (%5,4) from Erzincan Binali Yıldırım University, 27 (9.2%) from Firat University and 17 (5.8%) participants are from Dicle University. When it comes to the distribution of these instructors according to their specialties, 95 (32.2%) of them are working at Curriculum and Instruction department, 67 (22.7%) of them are at Education Administration department, 89 (30.2%) of them are at Psychological Counseling and Guidance department and 44 (14.9%) of them are working at Measurement and Evaluation department. When it comes to the titles of the participants, 46 (15,6%) of them are professors, 56 (19,0%) of them are associate professors, 83 (28,1%) of them are dr. instructors, 13 (4,4%) of them are dr. researchers, 83 (28.1%) of them are researchers, 5 (1.7%) of them are dr. lecturers and 9 (3.1%) of them are lecturers.

Data Collection Tools

The data collection tool of the research took its final form as a result of the Delphi process. Data collection tool consisting of a series of open-ended questions in the first round became a survey
in the third round. In the data collection tool, there are questions aiming at determining the demographic features of the lecturers, two open-ended questions about the opinions of the instructors about the standards of the education (teaching-learning process) and one open-ended question questioning the views of the participants for the overall research. Validity of the data collection tool was ensured through the review of three field experts. The opinions obtained through the application of data collection tool were coded by different researchers and these codes were compared.

In the second round of the study, the experts were asked to evaluate the views coded in the first round. In this round, experts have accepted some of the themes, and some have been rejected due to several reasons. Accepted or rejected opinions were turned into questionnaires and submitted to the experts’ opinions in the third round.

**Data Analysis**

The opinions obtained in the first round of the research were analyzed by using content analysis and descriptive analysis. In the content analysis, existence of certain words and concepts in a cluster of text are analyzed in terms of meanings and relations and inferences are formed about the messages in the texts (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz and Demirel, 2015:246). The views of the instructors obtained from the first round were coded by three different field experts. The opinions encoded by the experts were compared and the correspondence rates were examined in the literature. As a result of comparisons, 96% concordance was obtained. The fact that the expert opinions are simple and short can be shown as another factor which facilitates the coding process and causes the high percentage of compatibility.

In the second round, the arithmetic mean and standard deviation values of the responses to the items were calculated and the direction and the size of the change were tried to be determined. In the last round, the mean and standard deviation values of the items have been calculated and a common opinion has been tried to be obtained. It was decided whether there was a consensus on the acceptance, correction or exclusion of the standards or not by the participants through the mean values of the responses to the standards. In the evaluations made in this respect, the values in Table 1 are taken into consideration.

**Table 1. Consensus evaluation intervals**

<table>
<thead>
<tr>
<th>Intervals</th>
<th>For acceptance / rejection of items</th>
<th>For exclusion of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,00-1,80</td>
<td>Strongly Disagree</td>
<td>Absolutely Should Not Be Removed</td>
</tr>
<tr>
<td>1,81-2,60</td>
<td>Disagree</td>
<td>Should Not Be Removed</td>
</tr>
<tr>
<td>2,61-3,40</td>
<td>Indecisive</td>
<td>Indecisive</td>
</tr>
<tr>
<td>3,41-4,20</td>
<td>Agree</td>
<td>Should Be Removed</td>
</tr>
<tr>
<td>4,21-5,00</td>
<td>Totally Agree</td>
<td>Absolutely Should Be Removed</td>
</tr>
</tbody>
</table>

In Table 1, the level of opinion corresponding to the scoring of five likert type questionnaire is given. Accordingly, the items in “Agree” (3,41-4,20) and “Totally Agree” (4,21-5,00) were interpreted as an indication of the fact that the standards were accepted. Besides, for the standards proposed to be excluded from the scope of the questionnaire, the opinions of “Should Be Removed” (3,41-4,20) and “Absolutely Should Be Removed” (4,21-5,00) were used.

**FINDINGS**

After the opinions obtained in the first round of the research were coded by researchers, 10 standards and 253 indicators were determined. Table 2 shows the quantitative distributions of the standards and the indicators that appear according to the opinions obtained from the first round.
Table 2. Standards and Sub-Standards Resulting from the 1st Delphi Tour

<table>
<thead>
<tr>
<th>Standard</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards for Teacher</td>
<td>135</td>
<td>53.4</td>
</tr>
<tr>
<td>Standards for School Administration</td>
<td>19</td>
<td>7.5</td>
</tr>
<tr>
<td>Standards for Education Policies</td>
<td>11</td>
<td>4.3</td>
</tr>
<tr>
<td>Learning Environment Standards</td>
<td>20</td>
<td>7.9</td>
</tr>
<tr>
<td>Standards for Materials</td>
<td>25</td>
<td>9.9</td>
</tr>
<tr>
<td>Content Standards</td>
<td>9</td>
<td>3.6</td>
</tr>
<tr>
<td>Evaluation Standards</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Course Process Standards</td>
<td>9</td>
<td>3.6</td>
</tr>
<tr>
<td>Standards for Learning</td>
<td>8</td>
<td>3.1</td>
</tr>
<tr>
<td>Standards for Curriculum</td>
<td>12</td>
<td>4.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>253</td>
<td>100</td>
</tr>
</tbody>
</table>

Of all the standards in Table 2, 135 (53.4%) are for the Teacher, 19 (7.5%) for Administration, 11 (4.3%) for Education Policy and 20 (7.9%) for Learning, 25 (9.9%) for materials, 9 (3.6%) for content, 5 (1.9%) for evaluation, 9 (3.6%) for course process, 8 (3.1%) for Learning and 12 (4.8%) Standards for Curriculum. According to these findings, it is possible to say that the highest number of standards have been developed for teachers, and for materials subsequently.

The standards obtained from the first round have been converted into a questionnaire and aspace is provided for experts to state their opinions and recommendations. In the second round, some criticisms were made on the grounds that some of the statements express the same meaning, some are not meaningful statements and some do not conform to the standards of educational process in the first round. It has been suggested that the items in this structure should be corrected or excluded from the scope of the survey. By using the items related to standards which are suggested to be removed with reasons and the standards which are revised, questionnaire was prepared again. Then, the questionnaire was sent to the experts in the third round by e-mail and the level of participation to the changes was questioned. Table 3 shows the mean and standard deviation values for the responses given to the standards for teacher in 3rd Delphi round questionnaire.

Table 3. Mean and Standard Deviation Values of the Standards for Teachers

<table>
<thead>
<tr>
<th>Standards for Teachers(X̄:SS)</th>
<th></th>
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</table>
| 1. Teacher knows the cognitive, linguistic, social, emotional and physical development areas of the students (4.30:0.76), 2. Teacher takes care of students' moral development (4.34:0.82), 3. The teacher knows the learning environment and its features (4.50:0.67), 4. Teacher creates a democratic classroom environment (4.49:0.78), 5. Teacher has technopedagogical knowledge and skills in his field (4.16:0.76), 6. Teacher cares about validity and reliability in measurement and evaluation (4.26:0.96), 7. Teacher uses knowledge of learning styles to design learning and teaching (4.14:0.93), 8. Teacher associates the subjects with real life (4.57:0.64), 9. Teacher gives interesting examples in the course (4.50:0.69), 10. Teacher benefits effectively from instructional technologies (4.19:0.94), 11. Teacher is role model for students (4.54:0.64), 12. Teacher has knowledge of learning-teaching theories (4.26:0.88), 13. Teacher uses teaching methods and techniques which make the student active (4.40:0.81), 14. Teacher has critical thinking, problem solving, decision making skills (4.36:0.73), 15. Teacher has efficient communication skills (4.50:0.71), 16. Teacher approaches the student with compassion (4.34:0.73), 17. Teacher conducts field research with questioning approaches (3.90:0.97), 18. Teacher follows the scientific studies in the field (3.96:1.08), 19. Teacher forms groups of students who are in solidarity and cooperation (4.17:0.77), 20. Teacher takes his lesson seriously (4.53:0.75), 21. Teacher is flexible (4.01:0.87), 22. Teacher is sensitive to social events and problems (4.37:0.68), 23. Teacher has a critical perspective (4.47:0.75), 24. Teacher has empathy (4.51:0.67), 25. Teacher does not discriminate (4.50:0.67), 26. Teacher pays attention to student rights (4.49:0.69), 27. Teacher takes care of the student (4.43:0.83), 28. Teacher is open to cultural mixture (4.19:0.86), 29. Teacher is patient (4.41:0.70), 30. Teacher is friendly (4.39:0.78), 31. Teacher has confidence (4.34:0.69), 32. Teacher has understanding (4.44:0.62), 33. Teacher is open to innovation (4.41:0.87), 34. Teacher takes care of physical appearance (4.26:0.80), 35. The teacher appreciates the importance of insight (3.91:0.92), 36. Teacher advises children related to the family and other social environment (4.03:0.89).

Items Recommended to be Combined, New Items (NI) (X:SS)

37. Teacher has a philosophy of lifelong learning, 38. Teacher is aware of developments in the field, 39. teacher is open to professional development, 40. Teacher has the knowledge of his field, 41. His field knowledge is up-to-date, 42. Teacher is open to self-development, NI: Teacher strives for professional development by adopting lifelong learning (4.41:0.72), 43. Teacher creates synergy in the classroom, 44. Teacher organizes the learning environment according to objectives and
achievements, 45. Teacher creates a positive class culture, NI: Teacher strives to create the appropriate classroom climate for the purpose of the course (4,29:0,83)

46. Teacher knows the advantages and disadvantages of methods and techniques, 47. Teacher has the ability to apply methods and techniques, 48. Teacher uses pre-organizers, information maps, subject schemes, 49. Teacher has knowledge about teaching strategies, methods and techniques, NI: Teacher has knowledge about teaching strategies, methods and techniques (4,24:0,97)

50. The teacher determines the method to be used according to the objectives, 51. Teacher determines the methods and techniques appropriate to the student features and objectives of the course (4,24:0,96), 52. Teacher chooses the method by considering the learning styles, 53. Teacher makes the choice of method and technique according to student age and level, NI: Teacher makes the choice of method and technique according to student age and level, (4,27:0,82)

54. Teacher uses technology interactively, 55. Teacher is a technology literate, NI: Teacher is a technology literate (4,21:0,82)

56. Teacher sets the target for the lesson, 57. Teacher organizes stimulants and content according to the target, 58. Teacher plans each stage of teaching coherently with objectives, NI: Teacher plans each stage of teaching coherently with objectives (4,34:0,89)

59. The teacher applies the prepared plan, 60. Teacher prepares a lesson plan reflecting the draft of the educational process plan, NI: Teacher prepares a lesson plan reflecting the draft of the educational process plan (4,13:0,86)

61. Teacher organizes activities to encourage the student to think, 62. Teacher brings students in high-level thinking skills, NI: Teacher helps students gain high-level thinking skills (4,33:0,84)

63. Teacher has good personality, character and morality, 64. Teacher has ethical principles, NI: Teacher has ethical and moral principles (4,30:0,62)

65. Teacher believes students will be successful, 66. Teacher believes that everyone can learn, NI: The teacher maintains the teaching with the belief that everyone can learn (4,24:0,94)

67. Teacher knows the concepts, processes and principles related to the subject, 68. Teacher has skills specific to field, NI: Teacher knows the main concepts, principles, assumptions, discussions related to his / her discipline (4,26:0,90)

69. Teacher takes the affective characteristics of the student into account, 70. The teacher organizes the lesson according to the learning areas, NI: The teacher organizes his / her lesson according to the learning areas (cognitive, affective, psychomotor (4,36:0,779)

71. Teacher enables teacher-student communication, 72. Teacher enables student-student communication, 73. Teacher uses gestures and mimics effectively, 74. Teacher has effective diction, body language and appearance, 75. Teacher eliminates communication barriers, 76. Teacher has classroom management communication skills, NI: Teacher has effective communication skills (4,44:0,68)

Items Recommended to be Rearranged, New Items (X:SS)

77. Teacher does not sit continuously, YM: Teacher manages the learning environment well (4,17:0,94)

80. Teacher knows his / her own field curriculum and the curriculum of other fields, NI: Teacher knows how interdisciplinary issues are connected to the main subject and how to teach these subjects to the individuals (4,14:0,91)

81. Teacher knows the individual differences of the students, NI: Teacher considers the individual differences of the students (4,47:0,67)

82. Teacher appreciates effort, NI: Teacher appreciates the students' learning efforts (4,47:0,60)

83. Teacher adopts the basic principles of classroom management, NI: Teacher applies the basic principles of classroom management during teaching (4,40:0,83)

85. Teacher makes evaluation to know, NI: Teacher performs activities to know students (4,39:0,68)

86. Teacher uses his voice well, NI: Teacher knows how to adjust the tone of his voice (4,36:0,69)

87. Teacher manages group dynamics, NI: Teacher organizes group work and manages the dynamics of each group (4,14:0,85)

88. Teacher uses appropriate reasoning processes, NI: Teacher uses the reasoning processes appropriate to the level of the students (4,26:0,78)

89. Teacher makes the student like the lesson, NI: Teacher uses a variety of teaching strategies to motivate the students to the lesson and to make them participate (4,39:0,74)

90. Teacher develops their discourse skills, NI: Teacher helps students improve their ability to express themselves (4,41:0,66)

91. Teacher makes preparation about the subject to be taught, NI: Teacher comes to the class ready (4,51:0,69)

92. Teacher takes attention, NI: Teacher draws the student's attention to the subject (4,43:0,62)

93. Teacher informs student about target, NI: Teacher explains the objectives of the course (4,49:0,62)

94. Teacher manages behaviors, NI: Teacher tries to manage students' behavior (replacing negative behaviors with desired behaviors) (4,39:0,70)

95. Teacher manages time, NI: Teacher uses time effectively (4,43:0,68)

96. Teacher enables student participation, NI: Teacher strives to ensure students’ participation in the class (4,49:0,67)

97. Teacher asks questions, NI: Teacher asks questions that lead students to think (4,56:0,57)
98. Teacher has knowledge about material preparation, NI: The teacher develops materials for the subject to be taught. (4,3,1:0.72)

99. Teacher has knowledge of assessment, NI: Teacher has knowledge of assessment and evaluation (4,34:0.96)

100. Teacher organizes learning experiences, NI: Teacher plans learning experiences according to student level (4,47:0.62)

101. Teacher implements ice-breaker or roundup activities which are used in initiating and terminating teaching, NI: Teacher performs the mainstreaming activities at the beginning of the teaching process (4,14:0.94)

102. Teacher prepares appropriate materials within students teacher collaboration, NI: Teacher prepares appropriate material for achievements and content within students teacher collaboration (4,24:0.76)

103. Teacher determines clues, feedback and reinforcements, NI: Teacher uses clues, feedback and reinforcements (4,43:0.72)

104. Teacher uses both student and teacher strategies in class management, NI: Teacher uses class management strategies inappropriate place (4,41:0.59)

105. Teacher has computer skills such as computer and mobile operating systems, office programs and content creation, NI: Teacher has basic computer skills (4,14:0.94)

106. Teacher creates a class culture based on values, NI: Teacher creates a classroom environment based on values (4,30:0.72)

107. Teacher has knowledge of features of lesson plan, NI: Teacher has the knowledge of preparing a lesson plan (4,30:0.91)

108. Teacher plans learning period effectively, NI: Teacher plans learning duration effectively (4,37:0.68)

109. Teacher intervenes the curriculum in certain situations, NI: Teacher behaves flexibly when applying the curriculum (4,20:0.80)

110. Teacher is psychologically and spiritually suitable for the profession, NI: The mental state of the teacher is suitable for the profession (4,26:0.87)

111. Teacher knows the textbooks and contents of his/her field, NI: Teacher knows domain specific textbooks and content (4,24:0.85)

112. Teacher has knowledge about various subjects of human interest, NI: The teacher has knowledge about current and public issues (4,37:0.75)

113. Teacher has an energetic look, NI: Teacher has an energetic mood (4,19:0.94)

114. Teacher has the art of public speaking which is a need for teaching, NI: Teacher has the art of public speaking which is a need for his/her profession (4,26:0.76)

115. Teacher motivates, NI: Öğretmen, öğrencilermotivasyonusalgılar (4,30:0.68)

Items Recommended to be Removed (XSS)

116. Teacher knows what he does (3,47:1.26), 117. Teacher are in the expectation of high success (3,26:1.31), 118. Teacher also develops affective skills (3,09:1.36), 119. Teacher explains in what way the course will be useful for the student (2,56:1.30), 120. Teacher provides student-teacher dynamism-energy (3,67:1.27), 121. Teacher makes interval summary (3,40:1.25), 122. Teacher makes overall summary (2,97:1.30), 123. Teacher revises the lesson (3,24:1.28), 124. Teacher recognizes and controls teaching variables (3,59:1.20), 125. Teacher uses updated methodology (3,29:1.23), 126. Teacher uses the techniques specific to culture (3,66:1.10), 127. Teacher uses the technique appropriate for feature of the era (3,54:1.16), 128. Teacher blends modern methods and techniques with classical methods and techniques (3,40:1.21), 129. Teacher stimulates students' sensory organs by means of material (3,16:1.23), 130. Teacher teaches in a classroom atmosphere where students are active in the guidance of teachers (3,40:1.26), 131. Teacher's psychological perception is high (3,71:1.05), 132. Teacher prepares and uses digital educational content (3,34:1.22), 133. Teacher has an awareness and tendency towards R & D research for education (3,66:1.13), 134. Teacher acknowledges the importance of knowledge (3,49:1.28), 135. Teacher communicates with respect and ethics (3,30:1.31).
The third round findings related to administration standards, which are another standard area of the study, are summarized in Table 4.

Table 4. Mean and Standard Deviation Values of the Standards for School Administration

<table>
<thead>
<tr>
<th>Standards for School Administration (X:SS)</th>
<th>Items Recommended to be Combined, New Items (X:SS)</th>
<th>Items Recommended to be Rearranged, New Items (X:SS)</th>
<th>Items Recommended to be Removed (X:SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School administrator’s direct students to social activities (4,00:0,82), 2. School administrators support students in terms of science, art and technology projects (4,23:0,72), 3. School administrators organize activities that enrich the student life not only in school but also outside the school (4,14:0,85)</td>
<td>4. The school administrator organizes regular and systematic activities to improve teachers’ quality, 5. School administrators strengthen in-service training and teacher education processes, NI: School administrators, organizes regular and systematic activities for teachers to improve them (4,04:0,81)</td>
<td>6. School administrators support teacher collaboration and development, NI: School administrators provide teacher cooperation (3,93:0,96)</td>
<td>10. School administrators have professional management skills (3,04:1,30), 11. School administrators act in accordance with instructional leadership in school (2,80:1,29), 12. School administrators lead the institution (2,97:1,29), 13. School administrators continuously develop projects for the institutionalization of schools, quality and standard development (3,17:1,20), 14. School administrators support counselor of the school (2,96:1,34), 18. School administrators have a democratic school management approach (2,89:1,36), 19. School administrators organize the school culture to supports formal and informal goals (2,87:1,24)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. School administrators plan activities to honor successful students, NI: School administrators organize events to honor successful students and to encourage who fail (3,97:0,92)</td>
<td>14. School administrators support counselor of the school (4,19:0,97)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. School administrators motivate students and all school stakeholders, NI: School administrators motivate their staff (4,10:0,94)</td>
<td>15. School administrators plan school budget (3,29:1,35), 16. School administrators establish accountability criteria for teachers and stakeholders (3,17:1,26), 17. School administrators incorporate teachers into management (2,96:1,34)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. School administrators monitor the use of equipment and materials in the school by teachers and students throughout the unit and increase the sensitivity of teaching in this subject, NI: School administrators draw attention to the use of materials in the school (4,09:0,87)</td>
<td>18. School administrators have a democratic school management approach (2,89:1,36), 19. School administrators organize the school culture to supports formal and informal goals (2,87:1,24)</td>
</tr>
</tbody>
</table>

X: Mean, SS: Standard Deviation, NI: New Item

Considering the findings in Table 4, items 1st and 3rd were accepted as standards by unanimous vote on the “Agree” level and the 2nd item was accepted as standard by unanimous vote on the “Totally Agree” level. Articles 4th and 5th are gathered under one item by unanimous vote on “Agree” level. The 6th, 7th, 8th and 9th items were rearranged at the level of “Agree”. Since there was no consensus on the 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th and 19th items were presented to the expert opinion with the suggestion to be removed, but the items were not excluded from the scope of the survey. At the end of this round, 18 indicators standards were determined for the school administration.

In the study, the third round findings related to the standards for education policies, which are another standard areas, are summarized in Table 5.

Table 5. Mean and Standard Deviation Values of the Standards for Education and Training Policies

<table>
<thead>
<tr>
<th>Standards for Education and Training Policies (X:SS)</th>
<th>Items Recommended to be Combined, New Items (X:SS)</th>
<th>Items Recommended to be Rearranged, New Items (X:SS)</th>
<th>Items Recommended to be Removed (X:SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher must have a teaching profession education (4,69:0,59), 2. Teacher must have master’s degree graduate (3,56:1,15), 3. For teacher employment, professional willingness should be tested (4,19:0,97), 4. The teacher should be tested in terms of mental health (4,41:0,80), 5. Each teacher should be employed in his / her own field (4,50:0,87), 6. Education policies should be flexible (3,80:1,00), 7. All schools must have access to the same materials (4,16:1,00)</td>
<td>8. Prospective teachers should do internship for 2 years at theoretical and for 2 years at practice schools, NI: Practice should be given more emphasis in teacher education (4,41:0,85)</td>
<td>9. In-service training (at least 3 activities per year) should be provided for teachers, NI: Local in-service trainings should be provided for teachers in accordance with the needs (4,23:0,77)</td>
<td>10. Financial problems should be solved by government (3,30:1,38), 11. Basic policies and standards in class management should be determined in a way that they will contribute to the students’ and teachers’ development in terms of attitudes</td>
</tr>
</tbody>
</table>

X: Mean, SS: Standard Deviation, NI: New Item
and skills. (3.26:1.35)  

X: Mean, SS: Standard Deviation, NI: New Item

When the findings for Table 5 were examined, items 2, 3, 6 and 7 were accepted as standards with consensus over “Agree” level and the items 1, 4 and 5 were accepted with “Totally Agree” level. Items 8, 9 have been rearranged with consensus over “Totally Agree”. Since there was no consensus on the 10th and 11th items submitted to the opinion of the participants with the suggestion to be removed, it was not excluded from the scope of the questionnaire. At the end of this round, 11 indicators were determined related to the standard area of education policies.

In the study, the third round findings related to learning environment standards, which are another standard area, are summarized in Table 6.

Table 6. Mean and Standard Deviation Values for 3rd Round Learning Environment Standards

<table>
<thead>
<tr>
<th>Learning Environment Standards (X:SS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The learning environment should be organized according to regional differences which facilitate the implementation of the curriculum in the classroom (4.11:0.78), 2. Learning environment should be suitable for learning through experience (4.43:0.62), 3. The learning environment should be designed in accordance with the general readiness of students (4.37:0.65), 4. Classrooms must have ergonomic and age-appropriate seating (4.47:0.71), 5. Classes should be placed on floors according to age of the students (4.21:0.87), 6. Each class must include the chalk board, ink board, and electronic board together (3.37:1.12), 7. School corridors must have exhibition spaces (4.26:0.71), 8. Each school must have technology-integrated classes (4.30:0.68), 9. Each school should have a multi-purpose laboratory (4.34:0.63), 10. Every school should have a multi-purpose hall (4.46:0.62), 11. Each school should have an art room (4.30:0.70), 12. Each school should have a multi-purpose field for students to cultivate (4.17:0.84).</td>
<td></td>
</tr>
</tbody>
</table>

Items Recommended to be Rearranged, New Items (X:SS)  

13. The learning environment should be reassuring, ethical and stimulating, NI: The learning environment should be reassuring (4.43:0.88).  
14. The learning environment should be appropriate for the number of students, age, development level, NI: The learning environment should be prepared in accordance with the number of students, age and development aspect (4.47:0.71)  
15. Learning environment should be healthy and comfortable in terms of heat, sound insulation, hygiene, light, moisture etc., NI: Learning environment should be healthy and comfortable in terms of temperature, light, humidity, insulation and cleaning (4.61:0.54)  
16. Floor must be easy to clean and non-slippery, NI: Interior places of school should be easy to clean and non-slippery (4.44:0.80)  
17. There must be a high platform in front of the board for hanger, cupboard, lectern and teacher, NI: Every class must include basic tools for teaching (4.10:1.11)  
18. There should be a library and a museum, NI: Each school must have a library (4.40:0.78)  
19. There should be a canteen, gym and garden suitable both for studying and having fun, NI: Each school should have spaces for studying and having fun (4.34:0.77)  
20. Class size should not exceed 32, NI: Class size should not exceed 20 (4.10:0.86)  

X: Mean, SS: Standard Deviation, NI: New Item

According to the findings of Table 6, items 1 and 12 were accepted as standards with consensus over “Agree” level, and the items 2, 3, 4, 5, 7, 8, 9, 10 and 11 were accepted over “Totally Agree” level. Although the item 6 was agreed with consensus in the previous round, it was removed from the scope of the survey with consensus over “Undecided” level. Items 17 and 20 were rearranged with consensus over “Agree” level. In addition, 13, 14, 15, 16, 18, 19 items were rearranged with consensus over “Totally Agree” level. At the end of this round, 19 indicators related to the standard for the learning environment were determined. In the study, the third round findings related to the equipment and material standards, which is another standard area, are summarized in Table 7.

Table 7. Mean and Standard Deviation Values of 3rd Round Equipment and Material Standards

<table>
<thead>
<tr>
<th>Equipment and Material Standards (X:SS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. They must be functional (4.37:0.75), 2. Every student should have easy access to them (4.39:0.72), 3. They must be suitable for content (4.36:0.75), 4. They must be visual and auditory (4.27:0.77), 5. They must provide interaction (4.27:0.82), 6. They must be rearrangeable (4.26:0.80), 7. They must comply with students’ interests and needs (4.37:0.74), 8. They must be flexible, responsive and useful (4.20:0.85), 9. They must have user's manual (4.30:0.66), 10. They must be capable of turning abstract things into concrete form (4.36:0.58), 11. They must be prepared by considering learning styles (4.27:0.77), 12. They must be prepared by considering individual speed and individual differences (4.31:0.83), 13.</td>
<td></td>
</tr>
</tbody>
</table>

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They must be prepared for reinforcements (3.84:0.95), 14. They must be approved in terms of health (4.50:0.75).

Items Recommended to be Rearranged, New Items (X:SS)

15. They must be updated technologically and scientifically, NI: They must be scientific (4.04:0.96)
16. They must be suitable for developing students’ creativity, NI: They must help students develop senior skills (4.34:0.69)
17. They must be useful for everyone, NI: They must be designed to be used easily (4.29:0.84)
18. They must be manual to provide effective learning, NI: They must support effective learning (4.30:0.76)
19. They should support research and exploration, NI: They must be able to stimulate student's research and discovery feelings (4.34:0.80)
20. They must develop technological skills, NI: They must help students develop technological skills (4.09:0.84)
21. They must develop communication skills, NI: They must help students improve communication skills (4.23:0.74)

Items Recommended to be Removed (X:SS)

22. They must comply with the curriculum (3.30:1.31), 23. They must be clear, understandable (3.46:1.26), 24. They must be two and three dimensional (3.56:1.14), 25. They must be qualified to feed the brain, the body, the heart and should produce a product (3.51:1.23)

According to the findings of Table 7, items 8 and 13 were accepted as standard with consensus over “Agree” level, and the items 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 and 14 were accepted over “Totally Agree” level. Items 16, 17, 18, 19, 21 were rearranged with consensus over “Totally Agree” level and items 15 and 20 were rearranged with consensus on “Agree” level. Items 23, 24, and 25 which were submitted to the opinion of the participants with the suggestion to be removed were excluded from the scope of the survey with consensus. Since there was no consensus on the 22nd item, it was not excluded from the survey. At the end of this round, 22 indicators for the equipment and material standards were determined. In the study, the third round findings related to the content standards are summarized in Table 8.

### Table 8. Mean and Standard Deviation Values of Content Standards

<table>
<thead>
<tr>
<th>Content Standards</th>
<th>X</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content must be up to date.</td>
<td>4.51</td>
<td>0.69</td>
</tr>
<tr>
<td>2. Content must be visually qualified.</td>
<td>4.33</td>
<td>0.73</td>
</tr>
<tr>
<td>3. Content must be appropriate for the learners’ level.</td>
<td>4.47</td>
<td>0.69</td>
</tr>
<tr>
<td>4. Content must be supported with reference books.</td>
<td>4.31</td>
<td>0.78</td>
</tr>
<tr>
<td>5. Content must be adapted to the student's development and environment.</td>
<td>4.33</td>
<td>0.90</td>
</tr>
<tr>
<td>6. Content must be useful in real life.</td>
<td>4.33</td>
<td>0.78</td>
</tr>
<tr>
<td>7. Content must be eligible for objectives.</td>
<td>4.44</td>
<td>0.78</td>
</tr>
<tr>
<td>8. Content must be appropriate for students’ features</td>
<td>4.49</td>
<td>0.71</td>
</tr>
<tr>
<td>9. The content should conform with the curriculum</td>
<td>3.31</td>
<td>1.35</td>
</tr>
</tbody>
</table>

When the findings for Table 8 are examined, the 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th items were accepted as standards with consensus over “Totally Agree” level. Since there was no consensus on the 9th item submitted to the opinion of the participants with the suggestion to be removed, it was not excluded from the scope of the survey. At the end of this round, 9 indicators for the content standards were determined. The third round findings related to the evaluation standards, are summarized in Table 9.

### Table 9. Mean and Standard Deviation Values for the 3rd Round of Evaluation Standards

<table>
<thead>
<tr>
<th>Items Recommended to be Combined</th>
<th>New Item</th>
<th>X</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Measurement and evaluation should be applied based on the process.</td>
<td>Formation, rearing, recognition and displacement evaluations should be used in appropriate situations</td>
<td>4.21</td>
<td>0.90</td>
</tr>
<tr>
<td>2. Measurement and evaluation should be repeated periodically.</td>
<td>Alternative measurement techniques and traditional measuring techniques should be used together</td>
<td>4.34</td>
<td>0.77</td>
</tr>
<tr>
<td>3. Measurement and evaluation should be used for formation and rearing.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As it is seen in Table 9, items 1, 2, 3, 4 and 5 are gathered under one item with consensus over “Totally Agree” level. At the end of this round, 2 indicators were determined as evaluation standards. The third round findings related to the standards for teaching processing are summarized in Table 10.

Table 10. Mean and Standard Deviation Values of the Standards for the Teaching Process

<table>
<thead>
<tr>
<th>Standards for the Teaching Process</th>
<th>( \overline{X} ), SS</th>
<th>NI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Different course timing should be applied according to grade / school level (4,16:0,73)</td>
<td>2. Breaks should be changed according to the grade level (4,07:0,90)</td>
<td>3. Course duration should be determined in accordance with the course content (3,87:1,04)</td>
</tr>
<tr>
<td>Items Recommended to be Removed (( \overline{X} ), SS)</td>
<td>8. Course duration must be planned according to the indicator chart (3,36:1,27), 9. There should be at least 10 minutes break after lesson (3,54:1,27)</td>
<td>X: Mean, SS: Standard Deviation, NI: New Item</td>
</tr>
</tbody>
</table>

When the findings for Table 10 are examined, 1st, 2nd and 3rd items were accepted with consensus over “Agree” level. Since there was no consensus, the 4th item was excluded from the scope of the survey with “Undecided” level with the participation. Items 5, 6, 7 were gathered under the same item with consensus over “Agree” level. The 9th item submitted to the opinion of the participants with the suggestion to be removed was excluded from the scope of the survey with the consensus on “Should be Removed” level. Since there was no consensus on the 8th item, it was not excluded from the survey. At the end of this round, 5 indicators were determined as standards of teaching process.

The third round of findings related to learning standards is summarized in Table 11.

Table 11. Mean and Standard Deviation Values of the 3rd Round Standards for Learning

| Items Recommended to be Rearranged, New Items (\( \overline{X} \), SS) | 1. Learners should be physically and cognitively healthy, motivated, curious, questioning, and he/she should focus on problem-solving, NI: Student must be curious about learning (3,84:1,05) | 2. Learners must focus on reaching the goal, NI: Students must have a specific aim (3,79:1,01) | 3. They must have awareness of things which are taught, NI: Students must be aware of what is taught (3,73:1,04) | 4. They must be in compliance with general moral values, NI: Student must comply with the general moral values (3,87:0,90) | 5. They must have motivation for the course, NI: Student must manage personal motivation (3,71:1,00) | Items Recommended to be Removed (\( \overline{X} \), SS) | 6. Students must have input behaviors (3,23:1,24), 7. Students must be able to explain basic concepts (3,04:1,22), 8. Students must be able to explain the relationship between concepts (3,13:1,23) | X: Mean, SS: Standard Deviation, NI: New Item |

When we look at the mean values of Standard for Learning in Table 11, items 1, 2, 3, 4 and 5 were rearranged with consensus over “Agree” level. Since there was no consensus on the 6th, 7th and 8th items, they were not excluded from the survey. At the end of this round, 8 indicators were determined in the standard for learning. The third round of findings related to the standards for the curriculum is summarized in Table 12.

Table 12. Mean and Standard Deviation Values of Curriculum-Oriented Standards

| Curriculum-Oriented Standards (\( \overline{X} \), SS) | 1. Curricula must be based on Turkish culture (3,90:0,95), 2. Curricula must take values into account (4,31:0,74), 3. Curricula must be appropriate to the student level (4,46:0,71), 4. Curricula must focus on skills (4,23:0,79), 5. Curricula must be up to date (4,39:0,74), 6. Curricula must be applicable (4,46:0,71), 7. Curricula must encourage students to search (4,43:0,74), 8. Curricula must take the student to the center of teaching learning process (4,33:0,82), 9. Curricula must pay attention to individual differences (4,37:0,75), 10. Curricula must include comprehensive instructions for the method and techniques (4,20:0,90), 11. Method and acquisition relationship must be established in curricula (4,24:0,81). |
Items Recommended to be Removed (X; SS)

12. It is the curriculum that pay attention the moral development of the student most (3.41; 1.16)

X: Mean, SS: Standard Deviation

When we look at the findings for Table 12, items 1 and 10 have been adopted at “Agree” level and items 2, 3, 4, 5, 6, 7, 8, 9 and 11 have been adopted with consensus over “Totally Agree” level. Item 12 which was submitted to the opinion of the participants with the suggestion to be removed was excluded from the scope of the questionnaire with consensus at “Should Be Removed” level. At the end of this round, 11 indicators were determined for the standard of curriculum.

CONCLUSION AND DISCUSSION

As a result of this research, ten standard areas and 206 indicators related to the education process have been determined. It can be concluded that the experts have developed standards mostly for teachers. The indicators obtained are similar to the standards set in the context of qualified teacher status in the UK. The standards set in the context of qualified teacher status in the UK include indicators such as teacher's ability to keep the field knowledge up-to-date, competence in planning, implementation and evaluation activities, teaching skills, and doing research in the field (Department for Education, 2013). Similar to these surveys, in several States in America such as, Colorado, North Dakota and Utah, standards regarding teacher knowledge, sensitivity to student development and learning, teaching skills, teaching leadership, and personal characteristics (Utah Effective Teaching Standards, 2011; CDE, 2011; NDESPB) (2017) has been developed. Apart from these, the standards for the teacher determined in this research overlap with the standards for the teacher determined in different researches (European Commission, 2009; Department for Education, 2013; Utah Effective Teaching Standards, 2011; CDE, 2011; NDESPB, 2017; Kahramanoğlu, 2014).

In his research, Kahramanoğlu (2014) has determined standards for trainees' personality traits, their interest in the profession and the field, their suitability to the profession, their knowledge of the field, their general knowledge of culture, their attitudes and skills related to the profession. That the most indicators were determined in this dimension within the scope of the research may have been influenced by the fact that the experts think that the most effective factor is the teacher in the learning-teaching process and that the quality of learning process depends on the task and responsibility of the teacher. Indicators developed for the importance of teachers are compatible with many other research findings (Sarıtaş, 2013; Das, El-Sabban and Bener, 1996; Pozo-Munoz, Rebolloso-Pacheco and Fernandez-Ramirez, 2000; Yanpar-Yelken, Çelikkaleli and Çapri, 2007). On the other hand, some indicators of teacher standards set by the Council of Europe and the European Commission (European Commission, 2009) differ from the indicators of this research. Unlike this research, the standards set by the Council of Europe and the European Commission include some indicators such as teaching students national feelings, encouraging them to respect and understanding intercultural culture, identifying common cultural values among students, being sensitive to the ethics of knowledge, and working effectively with partners and stakeholders in education.

In this study, eighteen indicators have been determined regarding the standard for School Administration. These include statements about school development, student development, staff development, and leadership characteristics of the principles. It can be observed that these standards for school administration coincide with standards set for principles in the UK (Departmen for Education, 2016). Furthermore, the characteristics of the school principle which are highlighted in some studies (Can, 1998; Şişman, 2004; Bozkurt and Aslanargun, 2015; Akalın-Akdağ, 2009; Özdemir and Sezgin, 2002; Yanpar-Yelken et all., 2007) support the standards set in this study. Unlike this research, the ethical attitude of the school principle, the principle's coordination with other schools and the conduct of an outward-oriented school administration, and providing opportunity to enable students to communicate effectively with the students in other schools are also noteworthy (Departmen for Education, 2016b).
Eleven indicators for education policies have been determined within the scope of the research. These indicators determined within the research are mostly related to teacher employment. These indicators are similar to the teacher employment policies of countries such as USA, South Korea, Ireland and Singapore (Saracaloğlu and Ceylan, 2016). When entering the faculties of education in the USA, in addition to secondary school achievement score and placement examinations, some criterias such as interviews, reference letters, personality and behavioral tests are taken into consideration. In Ireland, universities determine their students through personal applications and interviews. In Singapore and South Korea, the faculties of education accept students based on the quotas determined by the government and teaching vocational courses and practices are carried out for two years. (Saracaloğlu and Ceylan, 2016).

As another standard area, nineteen indicators have been determined for the learning environment. These indicators are related to the physical features of the learning environment, suitability to student characteristics, and appropriateness for teaching. Celep (2014:16-18) states that the number of students, heat, light, color preferences in the classrooms, seating, noise, cleanliness and the location of classroom tools are the physical variables of the learning environment and all these factor affect the quality of leaning–teaching process. Özden (2012: 47-48) approaches the issue in the form of an interaction story, by emphasizing that the world view affects the structure and the structure affects the human behaviors, he also states the importance of classroom arrangements. Shapiro (2006), Karamustafaoğlu and Kandaz (2006) and Güler and Bıkmaz (2002) use similar expressions to the indicators determined in this study with their opinions that school gardens should be organized effectively. On the other hand, Yanpar-Yelken et al. (2007) set standards regarding the availability of computers and equipment, unlimited internet access and information technology room at schools. These findings are also consistent with the learning environment standards determined in the study. Similar determinations were made by Boegehold (1977:146), Ural and Ramazan (2007: 45) and Shapiro (2006). These indicators of the subject of many researches (Karamustafaoğlu and Kandaz, 2006; Güler and Bıkmaz, 2002; Tuncer, Bal, Öztüt and Köse, 2012) and according to their findings, Turkey is insufficient in terms of these indicators.

Twenty-two indicators for equipment and material standard have been determined in the study. These indicators are related to whether the equipment and materials are appropriate to the student, functional, health-appropriate, suitable for content, scientific and appropriate to the curriculum. Boegehold (1977: 146) states that materials must be are safe and durable, open to the differences in learning styles, suitable for individual use of children, naturally produced, effective, multidimensional, often created by teachers, children and the community, encouraging individual and group use and suitable for the child's cultural environment. In this study, it can be realized that the tools and equipment criteria and the indicators are consistent. The research findings of Karamustafaoğlu and Kandaz (2006) and McNairy (1985) draw attention to the importance of these indicators. It is important to use of materials in effective teaching (McNairy, 1985; Şimşek, 2009:25; Taşpınar, 2005:175). However, the functionality of these materials is also important (Boegehold, 1977:146). It is still known that there is insufficiency of materials in some schools in Turkey (Karamustafaoğlu and Kandaz, 2006).

In this research, nine indicators have been determined that the content should be up-to-date, visually qualified, consistent with the objectives, suitable for students’ traits and equipped with information that can be used in the field. It can be seen that the qualifications of the content which are determined by Varış (1996:116), Küçükahmet, (2011:20) and Beane (1995:621), coincide with the content standards determined in the research. Varış (1996:116) states that the innovations in the disciplines should be followed and added to the curriculum, Küçükahmet, (2011:20) states that the objective-content relationship should be up-to-date, accurate and useful and that the information should be consistent with each other and Beane (1995:621) states that the subject-theme relationship should be questioned.

In the research, two indicators related to the standard at evaluation were determined. According to the findings of the research, standards have been determined that assessment should be
applied not only to gain a final product but also to recognize and improve the student. Hotaman (2010) states that instead of classical measurement and evaluation techniques which are result-oriented, it is vital to give priority to process and performance evaluation techniques which will provide the opportunity to recognize and evaluate the student and provide a democratic education and this statement supports the research findings. When the standards related to the course are examined, it is seen that there are some statements about the duration of the course and breaks. Some researches conducted (Osmanoğlu and Yaşa, 2018; Sezgin and Duran, 2010) support these findings. Fidan (2012:110) stated that each student is responsible for their own learning, and according to Alkan (2011:100) it is important to determine the quality of students and these claims match with learning standards determined by Bacanlı (2018:197) and Kılıç (2002) and with the standards of this research.

In addition to all these standard areas, eight indicators related to the standards for learning have been determined. It has been observed that these indicators determined for learning consist of cognitive and affective characteristics such as students' interest in learning, having a specific purpose, self-management, explaining the basic concepts and having student input behaviors. Fidan (2012:110) emphasizes that no one can realize the learning for another and also states that the student is responsible for his / her own learning. Similarly, Bacanlı (2018:197) describes factors such as readiness specific to humankind, maturation, motivation and attention as learning factors that affect learning. In addition, Kılıç (2002) states that general readiness and anxiety, readiness to learn, age, intelligence, physiological status and transferring of previous learning are some of the learner factors. Alkan (2011:100) emphasizes that the aim of the teaching system is to take the student from an initial behavior and to the target behavior, and after determining the goals to be achieved in the system, the quality of the student should be determined. Fidan (2012:102) also states that knowing the pre-knowledge and attitudes of the individual who starts the learning-teaching process will affect the teaching. These views support the learning indicators determined in the research.

The number of indicators developed for the curriculum is eleven. In this research, when the standards determined for the curriculum are analyzed, it can be said that a curriculum structure generally focuses on the student, adopts the individual as basic principle and gives importance to culture and values. Confirming these indicators, Boegehold (1977: 146) states that curriculum should be organized in a way that will enable individuals to develop in a mutual respect in a helpful atmosphere and provide situations to make students actively participate in experimentation, exploration and make them work with other children, making in a learning community. Yanpar-Yelken et al. (2007) stated that the curriculum should be practical. In support of these views, Hotaman (2010) focuses on a democratic curriculum and the education based on such a program must be student-oriented, allow the students to express themselves, enable students to gain democratic attitudes and values, allow them to share and solidarity and provide equal opportunities.

By reflecting the expert opinion that some standards should exist in education, findings of this research are supported by some studies in the literature. In general, it is known that students with high socioeconomic status are provided more opportunities and investments at schools while in regions where poor families live have insufficient support (Arıkan, 2016; Stevens, 1993; Meyers and Rogers, 2014; Banicky, 2000; Eryaman, 2007). While Arıkan (2016) states that equalizing learning opportunities will increase success of students, it is stated by the National Education Standards and Improvement Committee (NESIC) that by providing standardization of learning opportunities, all students will be provided with resources, implementation and all necessary conditions and fairness; therefore, equality in education will be provided (Dougherty, 1996). These views have emphasized the importance of standards-based teaching once again. The established standards can shed light on the unfair conditions in the school and the system that limit the equal access of students to a high quality education. (University of California (UCLA/IDEA, 2019). In addition, these standards can provide criteria that can measure both individual and system progress and may help to save resources and time (National Committee of Standards and Testing (NCEST, 1992:4). Banicky (2000) emphasizes that there is an agreement on the necessity in the standardization of curriculum, teaching quality, time, resources and school physical conditions. Schwartz (1995) states that to provide equal opportunities to
the students, standards should be shaped in terms of curriculum, time, teacher competencies, school facilities and resources, school environment and culture and assisted services.

Within the scope of the research, it can be seen that these standards and indicators agreed by the expert group independently from each other largely correspond to the national and international literature. Two conclusions can be reached from this result. The first of all, there is an acceptance of a standards-based understanding of education in the literature of education. The experts do not reject a standards-based structure in education and they set numerous standards and indicators on this subject. Secondly, it can be realized that the standards and indicators determined in this research are compatible with the literature studying other sample and universe. From this point on, what needs to be done is to evaluate the current situation in terms of these standards. As a result of these evaluations, a diagnostic study can be carried to find out which standards exist and which level they are. Besides, it can be discussed what can be done for missing or inadequate indicators. These standards and indicators, which are encountered in many countries around the world, can also be used in international comparisons.

REFERENCES


