

Determining the Teacher Competencies Required in Turkey in the European Union Harmonization Process

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Abstract: The aim of the research is to determine the teacher competencies Turkey needs in the European Union (EU) harmonization process. Conceptual framework was developed in the research by utilizing primarily the literature. The conceptual framework constituted the substructure of Delphi technique which is used to determine the teacher competencies. SPSS programme was used while determining the teacher competencies, calculating the arithmetic average and standard deviations of the data obtained by means of Delphi technique in research. Delphi application was completed by participation of 37 experts and at the end of the research 137 competency items that a teacher should have, were determined by being seperated into four competencies areas.

Key words: Teacher competencies • Teacher training • Delphi technique

INTRODUCTION

The Republic of Turkey applied to the European Union (EU) for full membership on 14 April 1987. Turkey is making noticeable changes in her structure, laws, institutions and the operation of the institutions with the aim of full membership to the EU. Teachers and teacher competencies doubtlessly have an important place within the framework of these changes.

Determining teacher competencies needed in Turkey in the European Union harmonization process should be considered as a subject worth studying because improvements in information, utilization of information, communication technology, economy and in society, changes in the expectations of individuals bring with them the new approaches and developments in the systems and programmes of education. New approaches and developments obliges the changes in the function of the school, tasks and responsibilities of the teacher and in the way that the information is utilized.

A study named "Teacher competencies" with regard to determining teacher competencies in Turkey was carried out by Ministry of National Education General Directorate Teacher Training and Education in 1998. In this study fields of teacher competencies were handled as general knowledge, specific field and training and education competencies in accordance with Basic Law on National Education numbered 1739. Competencies

regarding professional knowledge of teaching and that are called training and education competencies are arranged under the titles of getting to know the student, planning the education, material development, teaching, managing the teaching, teaching management, measuring and evaluating success, guidance, improving basic skills, serving students with the need of special training, educating adults, organizing extracurricular events, improving themselves, developing the school, improving the relationship between school and environment [1]. Teaching management competency and teaching competency were determined seperately and competency of developing school and the relationship between school and environment were determined seperately in competency determining study carried out by the Ministry of National Education. The fact that Ministry of National Education carried out a competency determining study shows that the subject is considered important in spite of having some aspects to be criticized.

One of the studies carried out in Turkey about teacher competencies and teacher training programmes in the EU harmonization process is studies regarding the teacher training done within the scope of Support to Basic Education Programme Project which entered into force with Financing Agreement signed on 8 February 2000. Within this scope studies including teacher training were started between the European Union Commission and Turkey in September, 2002. Studies were carried out to

determine the teacher competencies with teacher training component of Support to Basic Education Programme Project. A draft was prepared and issued at the beginning of 2005 and in 2006 competency fields that a teacher should have were issued in the form of a pamphlet. In this pamphlet competency fields were arranged as the following [2]:

- Personal and Professional Values-Professional Development
- Identifying the student
- Learning and Teaching Process,
- Monitoring and Evaluating Learning and Improvement,
- School-Family and Society Relations
- Knowledge of curriculum and content

Teacher competencies fields determined within the scope of Support to Basic Education Programme Project of Ministry of National Education are limited to the competencies regarding professional knowledge. It is seen that teaching field related competencies that should be in a teacher, national- international values, perceptual features and competencies with regard to improving themselves are not mentioned.

While examining the studies about teacher competencies it is seen that many experts handle this subject differently [3-10]. In most of the researches, features like professional knowledge, interpersonal communication skills, field knowledge, general knowledge that have been considered important all along are underlined for teachers to carry out a more efficient teaching. In the most recent ones of these researches it is underlined that teachers should be more humorous, should use the information and communication technologies, have thinking skills like creative, reflective and critical thinking. In determining teacher competencies grouped and arranged differently by different experts, selecting a method of investigation that determines the common tendencies of different experts gains importance.

The teacher competencies were examined in researches of international literature and international institutions under the titles “teacher training”, “criteria of teachership”, “features that should be in a modern teacher”, “teachers’ modern roles”, “teacher under the light of new searches”, “teachers’ role in creating the peace culture “[11-16].

There are many studies on teacher competencies in the international literature. Teacher competencies and

teacher training have become an important studying area of educational sciences particularly since the last quarter of 20th century. For example Heck and Williams (1984) gathered and examined the roles of the teacher in eleven topics in their book *The Complex Roles of The Teacher*. These roles are as follows [17].

- Teacher as an individual: Humanistic role
- Teacher as colleague: Supportive role
- Teacher and parents as sharers: Supplementary role
- Teacher as the one understanding the learner: Feeder role
- Teacher as facilitator of learning: Effective role
- Teacher as a researcher: Experimenter role
- Teacher as a curriculum developer: Creative role
- Teacher as an administrator: Mastermind role
- Teacher as selecting and beginner of the profession: Role of desiring to be a teacher
- Teacher as decision maker: Problem solving role
- Teacher as Professional leader: Role of dealing with hardships

Main teacher competencies were aligned in the study named Professional Standards determined by National Council for Accreditation of Teacher Education (NCATE) in the USA which is considered as at the top of world’s most developed countries. These were categorized as field knowledge, educational and professional knowledge, application competencies [18].

Equipping the teachers with the required competencies is based on two main factors as teacher training and teaching practice. Teacher training starts with pre service education, that is, training and teaching he/she gets until having professional degree. After starting service continuing learning in respect of professional improvement, cooperating with other teachers, working conditions and support of the surroundings fall within the teaching practice dimension [19].

Competencies that teachers should possess were aligned as follows in the report of the EU on teacher training (*Green Paper on Teacher Education in Europe*) [20]:

Competencies Regarding Teaching:

- Teaching
- Curriculum development
- Management
- Cooperation with other teachers

- Giving consultancy to and directing the students from what they learned to induction
- Leading innovations
- Teacher learning with correspondence school and distance education (olmali)
- Supporter of lifelong learning

Competencies Regarding Responsibilities:

- Teachership
- Head of department
- School master

Competencies Regarding Following New Approaches That Will Contribute to Subject Field:

- Sex education
- Carrying out environmental studies
- Peace education
- Using information and communication technologies

When examining teacher competencies it is seen that competencies a teacher should have shows difference from the previous periods. The period when teacher's duty is perceived as limited to 'give lesson' is over now. Teacher's knowing his field well, planning and practicing teaching, knowing his country and the world are not considered enough to be a qualified teacher. In 21st century teacher has to be an individual who learns through correspondence school and distance education, learns lifelong and who is to be competent in carrying out sex education, peace education, environmental studies and in using information and communication technologies.

When examining recent studies on teacher competencies in the literature, it is highlighted that qualifications like getting a high level academic degree should be in teachers [21].

Analysis of some researches in literature enables us to see different dimensions regarding teacher competencies. For example competency dimensions that a teacher should have are aligned as follows in research carried out by McNess, Broedfoot and Osborn (2003) who defined teachership as a multidimensional profession [22]:

- Necessary skills of curriculum
- Ability to design the education required to enable the students to learn and arrange the learning,
- Desire to renew continuously including also information increase regarding social and emotional features of teaching profession,

- Ability to communicate efficiently with the students and understand their feelings

Van Der Schaaf and the others (2003) determining teacher competencies with Delphi technique define competency as a general concept used for information, skills and attitudes required to perform a job efficiently and stress that competencies are classifiable according to sub competencies. Competencies are considered as a constituent of behaviors influenceable by other variants and intents and different incentives underlying behaviors, convertible to the behavior forming the basis of these behaviors. Teacher's primary tasks and field of knowledge he/she should have are stated accurately and clearly in research result. A matrix a component of duties and knowledge field were formed. A dimension in the matrix defines the tasks, a teacher is required to perform in teaching and the other dimension, defines the knowledge domains, a teacher is required to have while performing the tasks [23].

It is seen when examining the literature that teacher competencies and teacher training are an important working field for educational sciences and particularly for developing curriculum in education. Efficiency and performance of planned and programmed education is directly related with the fact that are prepared with scientific methods and with the competency level of teachers to implement the curriculum. The qualification of teachers as implementer of curricula shows parallelism with the results of the curriculum. Objectives of education can be achieved by neatly prepared instructional plans, qualified teachers to implement these curriculum and a good implementation. These three dimensions affect the result both separately and interactive with each other. Instructional plans as one of the effectors are regarded as a field to be examined in researches regarding teacher competencies.

Greatest wealth of societies is educated manpower. Societies can develop and sustain their development as long as they make use of qualified work force. Starting point of raising qualified persons is to raise qualified teachers. The answer to question 'What should be the competencies of a teacher who will take such an important responsibility?' should be searched in scientific ways. Also lack of a scientific study regarding determining teacher competencies required by the system of education in the European Union harmonization process is evident. What the teacher competencies are in the EU harmonization process is considered as a big problem in Turkey in a period when teacher's competencies, effectiveness in teaching and responsibilities increase.

Turkey seeks to be a member of the EU in order to keep updated about global news and maintain its development and reach level of development of the EU countries. Studies regarding the harmonization with the education system and standards of the EU countries, especially efforts regarding determination and development of teacher competencies should not remain limited to solely legal regulations. Determination of competencies of the contemporary teacher and training teachers with regard to these competencies should be among the matters that are required to be primarily addressed. Accreditation of teacher training programmes with the ones in developed countries depend on determining teacher competencies and training teachers equipped with the determined competencies. Requirement of standard teacher competencies for the exchange programmes in the EU countries and in-service training programmes organized by the EU increases the significance of scientific research regarding teacher competencies. The fact that there has been no scientific research regarding determination of required teacher competencies within the EU harmonization process boosts the importance of this study.

Manpower features required also change in parallel with the changes and improvements in the world. There is a need for determining the competencies of teachers primarily responsible for raising qualified individuals who will lead these changes. Determination of teacher competencies, development of measuring devices to measure determined competency level of teachers and determination of determined competency level of teachers using these measuring devices will be the source of the studies to meet the educational needs. This research can be seen as a needs analyses study for teacher training programmes as the competencies that a teacher should have are evaluated as criteria leading the aims of teacher training programmes. This research will lead the preparation and implementation of in service, employed teachers oriented training programmes including the ones raising from different sources.

Problem Statement: The aim of research is to determine the teacher competencies required by Turkey in the EU harmonization process. An answer to the question 'What are the teacher competencies required by Turkish National Education System in the EU harmonization process?' is sought according to the expert group built for Delphi technique used in accordance with this general aim.

MATERIALS AND METHODS

Information about the research model, population and sample, preparation of data collection tools, data collection and analysis is written below:

Research Model: This research was conducted in order to define teacher competencies which Turkish education system needs in the process of harmonization with the European Union and which every teacher should possess. It was carried out using relational scanning model. With this model, it is aimed that the whole present situation regarding the problem is defined.

Study Group: The study group of the research comprises of 37 lecturers who work at the universities in Turkey, who got specialized in this profession and who participated in and completed the Delphi application. While forming the study group, an invitation letter for Delphi application was sent to 109 lecturers who got specialized in the teaching profession. 41 of these accepted the invitation and the research was concluded with 37 experts who completed Delphi rounds.

Tool of Data Collection: It is suggested that the questionnaires which were prepared in accordance with the Delphi technique which is used for the purpose of deriving common opinions out of opinions of experts who are independent from and uninformed about each other, of foreseeing events and trends, planning curriculum, developing policies and setting standards, be applied to students, teachers, parents, directors and graduates. While communicating with experts participating in Delphi application which is used for the purpose of defining competencies that all the teachers should possess and that is obtained by review of field literature, "Delphi technique with real benefits" which enables one to use time effectively and which is carried out in electronic environment was used instead of the "conventional Delphi technique" which is known as paper-pencil (written) version and the most common group communication technique.

Since data is collected through an electronic data base in Delphi technique with real benefits, this prevents time loss and contributes to creation of an environment in which experts do not get affected from each other. The Delphi technique, in which group communication based on people's effectiveness within the group is structured as is suggested by Linstone and Turoff (2000), materialized in four stages. The first stage covers

searching the subject discussed. The second one involves processes regarding taking group opinions on the subject. The third stage covers separation of uncompromised opinions. The forth stage includes checking and evaluation of collected information and obtaining feedback. In the research, the categorized features regarding teacher competencies was opened to written debate of the expert group created in accordance with the above-mentioned stages.

Analysis of the Data and Findings: In Delphi technique, which is debated in writing by the experts, the researcher sent an invitation letter to 109 lecturers who has studies on teacher training, who provides thesis consultation service on teacher training or who has worked in a project on teacher competencies.

With replies of 41 experts accepting this invitation, first round of Delphi application was carried out. In the first Delphi application, an open-ended question was asked following the explanations about Delphi technique and primary teacher competency studies in the field literature. All the opinions mentioned by all of the panel members in the first Delphi application in reply to the question "What do you think are the teacher competencies needed by our education system and all teachers should have in the harmonization period of Turkey with the European Union?" were listed item by item and was gathered as subtitles.

The second septet Likert-type Delphi Questionnaire which was prepared based on the opinions collected in the first round and which comprised of 179 items, was concluded after panel members mentioned their thoughts with regard to their agreement on the items' importance level and these were analyzed. A database along with an electronic environment in which the questions can easily be answered for this questionnaire were created. During the preparation of the second Delphi Questionnaire, overlapping opinions were separated and the coming opinions were grouped. It was concluded after 37 panel members expressed their opinions with regard to items' importance level and these were analyzed.

In the third round of Delphi technique, the statistics (arithmetic average and standard deviation) which were presented with regard to each item according to the responses given in the second round, were evaluated and the items were responded to again. During the analysis of third round results, the items with a standard deviation above 1 and arithmetic average below 6 were removed.

As a result of the analysis of third round data and removal of items with a standard deviation above 1 and

arithmetic average below 6, 142 competency items were obtained. The forth round was concluded after 142 items were sent to experts, their opinions and suggestions were asked and the coming feedback was evaluated. Following the removal and combination of overlapping opinions in line with the opinions and comments obtained in the forth round, 137 competency items were defined.

At the end of the forth round, 137 items were defined as competencies teachers should possess and the conclusions were declared to all members of Delphi.

FINDINGS AND INTERPRETATIONS

In this chapter of the research determining teacher competencies in the EU harmonization process data obtained with Delphi technique are analyzed and interpreted.

Data are collected in electronic environment with Delphi technique. Delphi technique was implemented in four rounds as explained in method chapter. In the first round it sent invitation letters to 109 lecturers and it sorted answers of 41 experts who accepted the invitation to question "What do you think are the teacher competencies the system of education needs and required to be in every teacher in Turkey's EU harmonization process?" item by item. Cyclical opinions were sorted out among the aligned opinions and advanced to second round by grouping in accordance with incoming opinions and second round was completed with expression of thoughts by 37 panel members according to agreeing with items' significance level and analysis of these. Third round was started after answering items again by evaluating arithmetic average and standard deviations regarding each item according to given answers in second round. Items with a standard deviation above 1 and arithmetic average below 6 were removed.

In the fourth round 137 competency items were determined by removing and combining of cyclical items in accordance with incoming opinions and interpretations. Teacher competencies determined with Delphi application are sorted below.

COMPETENCIES REGARDING THE PROFESSIONAL KNOWLEDGE

A- Professional Competencies Regarding Getting to Know Student and Enabling the Improvement of Students

1. Acquaintance with Improvement Characteristics
2. Taking the concern and needs into consideration

3. Appreciating the student
4. Doing and showing what he says and keeping his promise (being a model)
5. Being instructive, constructive and creative (Guiding the student)
6. Being supportive
7. Respecting students' personalities and formativeness
8. Listening to the student
9. Encouragement and incentive
10. Behaving emphatically
11. Being cheery
12. Helping students improve themselves
13. Assuring student
14. Attaching importance to learning styles of students
15. Ensuring self control in students
16. Developing internal motivation in students

B- Professional Competencies Regarding Learning-Teaching Process

17. Planning the lesson
18. Arranging the learning environments
19. Diversifying teaching by considering personal differences
20. Using the time efficiently
21. Managing behavior and class
22. Dealing with undesired behaviors in class
23. Managing the emotions in the class
24. Keeping class climate positive
25. Determining the rules of class with students and monitoring the application of these rules
26. Reflective thinking
27. Creative thinking
28. Critical thinking
29. Problem solving
30. Behaving tolerantly
31. Using learning-teaching strategy, method, technique, tactics properly, efficiently and correctly in learning-teaching environment
32. Being incentive (setting student in motion for him to show high level of performance)
33. Being equipped for information and communication technologies
34. Using body language efficiently
35. Having research formation and understanding
36. Being examiner and interrogator
37. Being patient
38. Teaching the learning
39. Being democratic
40. Enabling student to reach information

41. Dynamizing students in learning process
42. Drawing students' attention to the subject
43. Being self confident
44. Making a proper introduction to subject
45. Determining misplaced concepts in students
46. Giving comprehensible explanations and instructions
47. Using his tone effectively
48. Associating the subject with life
49. Asking effectively
50. Having positive self concept and realizing positive self concept in students
51. Being open to suggestions and benefiting from them when necessary
52. Encouraging to read
53. Giving feedback
54. Using corrections
55. Creating source variety
56. Expressing himself well
57. Being energetic and enthusiastic
58. Watching that teaching materials are expedient and increase sensibility of aesthetics

C- Professional Competencies Regarding Monitoring and Evaluating Learning and Improvement

59. Determining measurement and evaluation methods and techniques
60. Measuring student's learning of the subject using different measurement techniques
61. Interpreting data by analyzing them, ensuring feedback on student's development and learning
62. Reviewing teaching-learning process according to results
63. Avoiding using marks as a threat
64. Examining the examination, homework papers and worksheets in detail and marking the mistakes, distributing papers to students in the class and making students correct the mistakes themselves
65. Monitoring the student's progress

D- Professional Competencies Regarding School, Family, Colleagues and Society Relations

66. Knowing the environment
67. Benefiting from opportunities of environment
68. Considering school as a culture center
69. Knowing the family and being neutral in relations with the families
70. Participation of family and cooperation with family
71. Communicating positively and efficiently with mother, father, student's guardian, other individuals inside and outside of school

E- Professional Competencies Regarding the Programme and Content

72. Information on aims and principles of Turkish National Education
73. Information on and implementation skill for specific field teaching programme
74. Monitoring and evaluation of specific field teaching programme
75. Expressing objectives and objective behaviors (attainments) clearly
76. Using the environmental opportunities in making programme succeed

COMPETENCIES REGARDING FIELD KNOWLEDGE

77. Knowing basic concepts and generalizations (principles) in his field
78. Synthesizing interdisciplinary knowledge and skills
79. Following improvements in science and in his own field
80. Participating in scientific studies carried out in his field
81. Searching the source of information and requesting proof

COMPETENCIES REGARDING IMPROVING HIMSELF

82. Performing self evaluation (Evaluating his own performance)
83. Following and contributing professional improvements
84. Following professional laws, fulfilling his tasks and responsibilities
85. Being the one learning life long and improving oneself (Learning the learning)
86. Being open to changes and innovations
87. Monitoring innovations, complying with innovations and changes
88. Being open to cooperation, team work
89. Loving reading
90. Researching (Action Research)
91. Improving his own personal vision
92. Endeavoring to increase quality and performance in his school
93. Preparing for lesson by continuously asking the question "How can we make this better?"
94. Utilizing self improvement opportunities
95. Cooperating with experts when necessary

96. Admitting his mistakes, giving chance to the ones who made mistakes
97. Claim his rights on subjects related to personal rights (assignment, appointment, promotion, transfer etc)
98. Using technology for his professional and personal improvement
99. Addiction to research and query
100. Attending places that enable his professional improvement (Attending professional organizations and taking responsibility)
101. Being sensitive to problems of his profession and contributing to resolution

COMPETENCIES REGARDING NATIONAL AND INTERNATIONAL VALUES

102. Loving his country, nation, student and encouraging student
103. Being honest
104. Being healthy physically and mentally
105. Not making concessions and having principles
106. Being equipped on general and basic subjects
107. Being analytical
108. Using the mother tongue efficiently (diction, narrative art and written expression)
109. Writing neatly
110. Being artistically- and aesthetically-conscious
111. Liking nature and being environmentally-conscious
112. Having a developed sense of responsibility
113. Liking people
114. Knowing Turkish culture and embracing it
115. Knowing features of the society
116. Owning the national values
117. Embracing universal values
118. Setting an example to the people around
119. Being equipped with skills (computer, internet, etc) which a modern person is supposed to have.
120. Being informed about latest developments
121. Loving the profession you perform
122. Setting an example to his/her students and the society with his/her behaviors and personality
123. Being at peace with her/his self
124. Embracing the principles and revolutions of Atatürk. Being secular and democratic
125. Evaluating issues, events and phenomena rationally.
126. Being careful about the job and attendance
127. Being open-minded
128. Possessing some social and societal values and making students embrace these values
129. Concerning him/herself with what goes on in his/her home country and the world.

130. Being a confidant
131. Being a conceiver
132. Being a facilitator
133. Having a strong character and personality
134. Being organized
135. Being the one who applies the skills of problem solving
136. Behaving in accordance with the ethical principles of the profession
137. Having no complexes

The results have been declared to all experts. The data obtained was used in order to determine teacher competencies required in Turkey and to prepare questionnaire and observation forms.

CONCLUSIONS

1.137 qualification items were defined (Annex 10) with Delphi technique which is discussed by experts in writing and which is used for the purpose of deriving common opinions out of opinions of experts who are independent from or unaware of each other, foreseeing incidents and trends, planning programmes, developing policies and setting standards. The competencies were divided into four competency categories which are: "Competencies Regarding Professional Knowledge", "Competencies Regarding Field Knowledge", "Competencies Regarding Improving Oneself", "Competencies Regarding National and International Values".

Competencies Regarding Professional Knowledge were addressed in five separate categories. These are determined as: "Professional Competencies Regarding Getting to Know the Students and Enabling Their Improvement", "Professional Competencies Regarding the Process of Learning-Teaching", "Professional Competencies Regarding Monitoring and Evaluating Learning and Improvement".

2. Likert-type quinary scales were developed basing on the determined Competencies. They included two questionnaire forms, each consisting of 137 items and an observation form of 53 items

Suggestions: Suggestions were put forward for the new researches which will be carried out in accordance with the results obtained as a result of the research and for regulations which can be made in the field with the hope that they will be benefited from in developing pre-service and in-service teacher training programmes.

Suggestions offered in the light of research findings regarding teacher training are as follows:

- It should be determined whether the curriculum implemented in the Faculty of Education provide the above-mentioned competencies. The teacher training curriculum should be improved in such a way that they will provide these competencies.
- A "Prospective Teacher Candidate Selection and Evaluation Scale" should be developed in order to determine prerequisite competencies benefiting from the defined teacher competency scale. This scale should be used in the selection of students for teacher training institutions.
- It should be determined using the scales developed whether the teachers working within the scope of Turkish Education System have the competencies which are deemed necessary for all teachers and which have been defined through this research. Their level of self-perceptions regarding these competencies should also be determined. In the areas where a teacher proves to be inefficient, in-service training programmes should be prepared.
- Incentive measures should be taken by the Ministry of National Education in order to help teachers increase their level of competency.
- The present regulations with regard to inspection of teachers and evaluation of competency and performance should be reviewed.
- The Ministry of National Education should take the competencies defined in the research into consideration during selection and appointment of teachers. Tests should be conducted as to whether the teachers to be appointed are qualified or not.
- Researches that display teacher competencies and their perception of competency by making use of the competencies defined in the research and the scales based on these competencies.

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