

Full Length Research Paper

An analysis of perceptions of classroom teachers regarding their use of alternative assessment and evaluation techniques in the Turkish course

Metin ELKATMİŞ

Kirikkale University, Faculty of Education, Kirikkale, Turkey. E-mail: metinelkatmis@hotmail.com.

Accepted 9 July, 2012

Assessment and evaluation constitutes an important dimension of education. If education is the process of creating the desired changes in an individual's behaviors, evaluation then is the process of making judgments about whether those desired changes are acquired by the individual or not. The existing curricula in Turkey were put into practice based on a new approach in the 2005 to 2006 Academic Year. Accordingly, the elementary school Turkish curriculum was renewed according to the constructivist approach. In this study, the aim is to determine the factors that influence the perceptions of classroom teachers about the alternative assessment and evaluation techniques proposed by the renewed Turkish curriculum. The research was conducted with 180 classroom teachers employed in twelve different elementary schools in a city located in Central Anatolia in the Fall Term of the 2010 to 2011 Academic Year. The data were collected through the questionnaire developed by the researcher. In conclusion, it was found that teachers' perceptions about using alternative assessment and evaluation techniques in the Turkish course are positive; and no impact (positive or negative) was observed created by the factors, which had been thought to have influence on perceptions.

Key words: Elementary school Turkish curriculum, alternative assessment and evaluation, teacher opinions.

INTRODUCTION

The change that started with the process of transition to the information society asserts itself in all areas of life. In almost all areas from science to arts, a rapid transformation is observed. Undoubtedly, education is among the areas that are influenced most by this process, which is indeed supposed to be so. Through education individuals and the society can keep up with the change.

In Turkey's education system, important steps have been taken since the restoration works of the 1980s to keep up with the developments in the world. A model was designed in 1982 by the Ministry of National Education in curriculum development. All courses were addressed in a systematic manner within the framework of this program, which included the elements of target, target behavior, conduct and evaluation. However, in numerous international and domestic studies on this model, which remained in force for a long time, it was determined that

Turkey is unable to train qualified human force. International researches such as World Bank Turkey Report (2005), PISA (2003), PIRLS (2001) and TIMSS-R (1999) point to the inadequacy of Turkey's education system. In TIMSS-R, Turkey ranked 31st in Math and 33rd in Science among 38 countries. In PIRLS, similarly, Turkey ranked 28th among 35 countries in the "Reading Skills Development Project" conducted in fourth grades. Domestic researches yielded similar results. The results of the Achievement Test, which was carried out by EARGED in 2002 on 112000 students enrolled in 573 different elementary schools from 47 cities, demonstrated that the education system needs a radical innovation (Başin, 2007).

Both the requirements of the time and the situation of the Turkish education system rendered inevitable the renewal of curricula. To this end, the new program, which brought radical changes especially in the elementary

education first stage curricula, was put into effect on a gradual basis in 2004 to 2005. With these changes, the behaviorist education philosophy in Turkey was replaced by a constructivist one. The new Turkish curriculum, prepared according to the constructivist approach, aims at improving students' mental skills. In that vein, language education in the new curriculum is based on intermingled activities that can be used by students for a lifetime such as listening, speaking, reading, writing, visual writing and visual presentation. Additionally, the curriculum aims to improve students' advanced mental skills such as making decisions through questioning, evaluating matters by looking from different angles, intertextual reading, comprehension, ordering, classifying, questioning, correlating, criticizing, analyzing and synthesizing, and evaluating (MEB, 2009).

One of the most radical changes brought about by the new curriculum is related to the assessment-evaluation element. It is stated in the curriculum that assessment and evaluation is performed in order to determine students' success in the teaching-learning process, detect their inadequacies, see the effectiveness of teaching methods, and determining the strengths and weaknesses of the curriculum (MEB, 2005). In this respect, assessment and evaluation is of as great importance as teaching and learning in the education process. It could be argued that increasing the quality of education is directly proportional to the development and healthy functioning of the assessment and evaluation system.

Assessment and evaluation is of importance in that it enables us to collect data that will provide a basis for the decisions to be taken regarding a student. Thanks to these collected data, the teaching and learning activities are revised and emphasis is put on subjects that have not been learned (Bahar et al., 2006; İman, 2001). In this respect, it plays a significant role in controlling the quality of education. The assessment and evaluation approaches brought about by the new curriculum created a series of differences.

Conventional methods used to concentrate more on the output in evaluating student success and thus on multiple-choice or short-answer tests as well as written and verbal exams. The constructivist learning approach, on the other hand, brought a process-oriented approach instead of focusing on the end of the process. In this respect, it requires numerous and various assessment and evaluation instruments. The curriculum emphasizes on alternative evaluation techniques. In the program, which underlines that multiple methods can be employed together and multiple evaluation is made, the use of observation forms, individual evaluation forms, student outcome folder, observation, interview, verbal and written expression, attitude scales and working papers is recommended. Of course, such a radical change brings certain difficulties for teachers, who are the practitioners of the curriculum. It is evident that it would be difficult to

leave aside the established habits at once. Numerous studies support this idea and demonstrate that teachers experience various difficulties in using alternative assessment and evaluation techniques.

For example, in the study carried out by Gözütok et al. (2005), it was determined that teachers regard themselves as more inadequate in using new assessment and evaluation techniques than the other dimensions of the scale. According to Yaşar et al. (2005), on the other hand, teachers need training in using alternative assessment and evaluation techniques. In addition, teachers reported that they experience problems stemming from high numbers of students in classes, lack of time, lack of material, disinterestedness of students and parents, curriculum's structure, and having important deficiencies in knowledge, skill and attitude (Gelbal and Kelecioğlu, 2007; Sağlam-Arslan et al., 2009; Anil and Acar, 2008; Kuran and Kanatli, 2009; Tatar and Başmaz, 2009).

However, most of the aforementioned studies are those aimed either at the renewed assessment and evaluation approach and the problems it brings in general, or at determining the methods and techniques that classroom teachers employ in assessment and evaluation. No study was found in the literature aimed at determining the factors influencing the perceptions of classroom teachers regarding the alternative assessment and evaluation techniques they use in Turkish courses. Departing from this, it was seen necessary to conduct a study on the factors that are thought to have impact upon teachers' perceptions about the use of assessment and evaluation techniques in the Turkish course.

In this respect, opinions of teachers, who are the executors of curricula, are of great importance. They are the ones who observe the practical dimension of how the existing education approach functions. In this respect, they are given a great burden and responsibility. Curricula might be perfect on paper and teachers might be given very good resources. However, what cannot be ignored in the practice is the decisive functions of the environment, the culture, and most important, the teacher. Thus, opinions of classroom teachers on the new assessment and evaluation understanding are of importance for the evaluation and improvement of the curriculum.

This study was carried out to determine the factors that might influence the opinions of classroom teachers on the alternative assessment and evaluation understanding proposed by the renewed Turkish (1 to 5) curriculum. To this end, teachers' perceptions and various variables were determined in this research. The sub-problems formulated in this direction are as follows:

Problem sentence

What is the level of the perceptions of classroom teachers

regarding the use of alternative assessment and evaluation techniques in the Turkish course and what are the factors influencing these perceptions?

Sub-problems

1. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of educational background?
2. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of field of education?
3. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of length of professional service?
4. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of gender?
5. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of grade level they teach?
6. Do the perceptions of classroom teachers regarding the use of alternative assessment and evaluation techniques in the Turkish course differ with respect to the variable of having participated in relevant training?

MATERIALS AND METHODS

The “descriptive statistics” method was employed in the research. The research universe consisted of classroom teachers employed in elementary schools in the center of a Central Anatolian city. The sample, on the other hand, was composed of 180 classroom teachers employed in 12 elementary schools in the city center. The schools in the sample were determined randomly.

Data collection instrument

The research data were collected using the data collection instrument developed by the researcher. The questionnaire items were formulated after analyzing the Elementary School Turkish and Math (1 to 5) Curriculum and the literature. A pilot study was carried out after taking the opinions of 40 classroom teachers. Then, the questionnaire was given its final form. The research had four dimensions: classroom teachers' evaluations about the assessment and evaluation techniques employed in the Turkish course, preparing plans, executing plans and assessing the process.

Findings related to the validity and reliability of the scale

It was decided to carry out factor analysis in order to determine the validity of the scale. KMO and Barlett's tests were performed initially to decide whether the scale is suitable for factor analysis or not. For this, KMO test's result should be at least 0.50 and the Barlett's test of sphericity should be statistically significant (Jeong, 2004). In this

research, KMO test result was found to be 0.73, and the Barlett's test of sphericity was found to be statistically significant ($P < 0.01$), which suggested that the scale is suitable for factor analysis.

As a result of the factor analysis, after eliminating those items that did not belong to any factor or that fell below the threshold value of 0.45 (Items 1, 2, 4, 9, 13, 16, 17, 19, 22, 36, 39, 40, 42, 47), the scale was considered with 33 items and the factor common variance was observed to be between 0.52 and 0.83. When the scree plot about the factor analysis and the factor loading rotated after principal components analysis were reviewed, it was concluded that the scale had nine factors in this study. In total, the scale's factor dimensions explain 73.47% of the entire scale. Thus, it was concluded that the scale has a high validity.

For the scale's reliability, Cronbach's Alpha coefficients were calculated and the Cronbach's Alpha value for the entire scale was found to be 0.89; which suggests that the scale is reliable.

Analysis of findings

Before proceeding to analyze the data collected, the scales were given a sequence number. Evaluations were carried out over 180 scales. In the analysis of the data, the positive items in the scale were given points as follows: “Never” 1, “Rarely” 2, “Sometimes” 3, “Usually” 4, and “Always” 5. The minimum possible score is 33, while the highest is 165. After the analyses, the findings obtained for the problem sentence were evaluated based on the following intervals: 1.00 to 1.79 Never; 1.80 to 2.49 Rarely; 2.50 to 3.39 Sometimes; 3.40 to 4.19 Usually; and 4.20 to 5.00 Always.

Findings related to the sub-problems were analyzed through Mann-Whitney U test, Kruskal Wallis test independent t-test, and one-way variance analysis (ANOVA).

FINDINGS

Findings related to the problems sentence

The teachers' perception of assessment and evaluation in the Turkish course mean score is 3.82. This score falls within the interval “Usually”. Therefore, it could be argued that they have positive perceptions about the assessment and evaluation in the Turkish course.

Findings related to the first sub-problem sentence

Teachers' competence levels in assessment and evaluation in the Turkish course [$\chi^2_{(2)} = 3.603, p > 0.05$] do not differ with respect to the variable of educational background (Table 1).

Findings related to the second sub-problem sentence

Teachers' competence levels in assessment and evaluation in the Turkish course [$t_{(168)} = 1.944, p > 0.05$] do not differ with respect to their fields of education (Table 2).

Findings related to the third sub-problem sentence

Teachers' competence levels in assessment and

Table 1. Kruskal Wallis test table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to the variable of educational background.

Sequence	Educational background	n	Sequence mean	sd	χ^2	p
1	Associate degree	39	80.10			
2	College	135	92.20	2	3.603	0.165
3	Post-graduate	6	119.83			

P>0.05.

Table 2. Independent t-test table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to the variable of field of education.

Field of education	n	\bar{X}	s	t	p
Classroom teaching	104	3.74	0.59		
Other	66	3.91	0.47	1.944	0.054

P>0.05.

Table 3. Kruskal Wallis test table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to the variable of length of professional service.

Length of professional service	n	Sequence mean	sd	χ^2	p
1-5 Years	10	79.15			
6-10 Years	16	85.63			
11-16 Years	76	100.43	3	4.877	0.181
17 Years and more	78	83.28			

P>0.05.

Table 4. Independent t-test table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to the variable of gender.

Gender	n	\bar{X}	s	t	p
Male	78	3.88	0.48		
Female	102	3.77	0.60	1.328	0.186

P>0.05.

evaluation in the Turkish course [$\chi^2_{(3)} = 4.877$, $p > 0.05$] do not differ with respect to the lengths of their professional service (Table 3).

Findings related to the fourth sub-problem sentence

Teachers' competence levels in assessment and evaluation in the Turkish course [$t_{(178)} = 1.328$, $p > 0.05$] do not differ with respect to the variable of gender (Table 4).

Findings related to the fifth sub-problem sentence

Teachers' competence levels in assessment and evaluation in the Turkish course [$F_{(4-175)} = 2.251$, $p > 0.05$]

do not differ with respect to the variable of grade levels they teach (Table 5).

Findings related to the sixth sub-problem sentence

Table 6 shows that a majority of the teachers have received training in alternative assessment and evaluation techniques. Accordingly, teachers' competence levels in assessment and evaluation in the Turkish course ($U = 1208.500$, $p > 0.05$) do not differ with respect to the variable of having received training.

DISCUSSION AND CONCLUSION

It was determined in the research that the teachers'

Table 5. One-way variance analysis (ANOVA) table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to variable of grade level they teach.

Group	Sum of squares	sd	Mean square	F	P
Between groups	2.699	4	0.675		
Within groups	52.453	175	0.300	2.251	0.065
Total	55.153	179			

P>0.05.

Table 6. Mann-Whitney U test table demonstrating the differentiation of teachers' competence levels in assessment and evaluation in the Turkish course with respect to the variable of having participated in training.

Participation in training	n	Sequence mean	Sequence total	U	p
Yes	164	89.87	14738.50		
No	16	96.97	1551.50	1208.500	0.603

P>0.05.

perceptions about the alternative assessment and evaluation techniques employed in the Turkish course are positive and at a good level. In the literature, there are studies that suggest that teachers' levels of knowing and using alternative assessment and evaluation techniques are positive (Kabaş, 2007; Çalik, 2007; Pullu, 2008) but certain problems are encountered in practice (Acat and Demir, 2007; Güven and Eskiürk, 2007; Gömleksiz and Kan, 2007; Tüfekçioğlu and Turgut, 2008; Kuran and Kanatli, 2009). On the other hand, this find contradicts with findings of some other researches (Bulut, 2006; Gelbal and Kelecioğlu, 2007; Özdağ et al., 2007; Kuran and Kanatli, 2009).

The following findings were obtained about the factors that had been thought to have impact on teachers' perceptions regarding the use of alternative assessment and evaluation techniques in the Turkish course; It was found that educational background does not have influence on teachers' perceptions. However, according to Güneş (2007), education institute graduates have more competence in alternative assessment and evaluation techniques compared to graduates of other faculties. This is a very interesting finding: Professional knowledge and skills are expected to rise as education level goes up. However, it was found in the aforementioned study that institutes that offer two-year education are in a better state than faculties that offer four-year study. The difference between the two studies might have stemmed from the fact that the change in assessment and evaluation that the renewed curriculum had brought about have been embraced and implemented by all teachers.

The field of education was also found to have no impact on teachers' perceptions. This is indeed a pleasing finding for those classroom teachers who have graduated from departments other than classroom

teaching. Classroom teacher is the main actor who plays a crucial role in the critical process in which the academic foundations of an individual's life are laid. In this respect, it is not an ordinary job that everybody can perform. For political reasons, graduates of different high schools and faculties have been appointed to these positions in different periods. This, in turn, has had an effect deteriorating the reputation of the job. From these perspectives, the finding can be interpreted in two ways: First, teachers do not have difficulty in transferring their knowledge regarding the general teaching formation taught in Faculties of Education into classroom teaching; second, teachers who have been trained in other branches espouse and successfully perform classroom teaching; as the most difficult part of teaching is assessment and evaluation. In order to observe a teacher's qualities and professional competence, it is necessary to look at her success in assessment and evaluation. This finding is in parallel with that of the study carried out by Okur and Azar (2011).

The general opinion is that teachers cannot abandon their habits easily as they become more senior. In this study, most of the participant teachers have professional experiences of between 11 and 17 years. However, no significant difference was found between less and more experienced teachers' perceptions about using alternative assessment and evaluation techniques in the Turkish course. On the other hand, other studies suggest that teachers with professional experience of fewer years are more inclined to alternative assessment and evaluation techniques than teachers with experience of more than ten years (Sulak, 2005; Pullu, 2008; Kuran and Kanatli, 2009). This finding can be explained through the long time that has passed after the renewal of the curricula and teachers' capacity to adapt to them. In addition, it could also be explained with the fact that the

teaching methods proposed by the constructivist approach require alternative assessment and evaluation techniques. The most positive side of the finding is that teachers are not experiencing professional fatigue. There exist studies including teacher opinions suggesting that alternative assessment and evaluation techniques require much time and energy to be devoted (Güven and Eskitürk, 2007; Acat and Demir, 2007). On the other hand, the findings of the studies carried out by Okur and Azar (2011) and Güneş (2007) are not in parallel with this finding. According to them, classroom teachers' competence in using alternative assessment and evaluation techniques increases as they get more experienced.

It was also found in this study that teachers' genders do not have impact on their perceptions about using alternative assessment and evaluation techniques in the Turkish course. This finding is in parallel with that of Adiyaman's study (2005) on Turkish teachers' competence in using assessment and evaluation techniques in fourth, sixth and eighth grades. On the other hand, Güneş (2007) and Okur and Azar (2011) found a result in the favor of female teachers in using alternative assessment and evaluation techniques, whereas Kuran and Kanatli (2009) obtained a finding in the favor of males.

Yet another finding was that the grade levels at which teachers teach do not have impact on their perceptions about using alternative assessment and evaluation techniques. In the literature, no study exists that directly focuses on the impact of grade levels on assessment and evaluation.

In addition, it was found that teachers' previous training in assessment and evaluation do not have influence on their perceptions about using alternative assessment and evaluation techniques in the Turkish course, which is a finding in parallel with that of the study conducted by Kuran and Kanatli (2009). Activities such as courses, seminars and in-service trainings aims to provide their participants with knowledge update as well as a certain consciousness and sensitivity. Earlier studies suggest that those teachers who have taken part in such activities have more positive attitudes towards the assessment and evaluation process (Orbeyi and Güven, 2008; Pullu, 2008). However, two studies in the literature did not find any correlation between participation in these activities and assessment and evaluation. This might have stemmed from the content of courses, that is, those specific courses did not create any change in teachers' cognitive, sensitive and behavioral characteristics. This, then, requires a revision in these activities' effectiveness. Moreover, it can be explained with the idea that the curriculum has been implemented for a sufficiently long time, and thus, no factors remained that could differentiate between teachers' perception levels.

This study was conducted in order to determine the factors that were thought to have impact on classroom

teachers' perceptions about using alternative assessment and evaluation techniques in the Turkish course.

SUGGESTIONS

Studies should be carried out to increase the competence of classroom teachers in the Turkish course and alternative assessment and evaluation techniques. To this end, firstly, teachers' knowledge repertoires might be updated through in-service trainings. The trainings to be given should not only be in parallel with teachers' needs but also be designed in the form of comprehensive work specific to each course. Having command of special methods and techniques relevant to one's specialty will have a positive impact on teachers' perceptions and behaviors. Besides, technical support can be provided to teachers who need it by making expert positions in assessment and evaluation available in schools.

Studies similar to this one can be carried out for other courses by adding different variables to the factors, explored here, which are thought to have impact upon classroom teachers' perceptions about using alternative assessment and evaluation techniques in the Turkish course.

REFERENCES

- Acat B, Demir E (2007). Opinions of Classroom Teachers on the Assessment Processes in Elementary Education Curricula. 16th National Education Sciences Congress (5-7 September). Tokat: Gaziosmanpaşa University Faculty of Education.
- Adiyaman Y (2005). Assessment and Evaluation Levels of Turkish Teachers in Elementary School 4th, 6th and 8th Grades. Afyon: Afyon Koca Tepe University (Unpublished Master's Thesis).
- Anil D, Acar M (2008). Opinions of Classroom Teachers on the Problems They Encounter during the Assessment and Evaluation Process. *Yüzüncü Yıl Univ. J. Faculty Educ.* 2(5):44-61.
- Bahar M, Nartgün Z, Durmuş S, Bıçak B (2006). Traditional-Alternative Assessment and Evaluation. Ankara: Pegem A Publishing.
- Bulut İ (2006). Evaluation of the Practical Effectiveness of the New Elementary Education Primary Stage Curricula. Elazığ: Firat University (Unpublished Master's Thesis).
- Çalık S (2007). A Research on the Opinions of Classroom Teachers on the Assessment and Evaluation Process in the Renewed Elementary Education Curricula. 16th National Education Sciences Congress (5-7 September). Tokat: Gaziosmanpaşa University, Faculty of Education.
- Gelbal S, Kelecioğlu H (2007). Teachers' Self-Efficacy Beliefs regarding the Assessment and Evaluation Methods and the Problems They Encounter. *Hacettepe Univ. J. Faculty Educ.* 33:135-145.
- Gömlüksiz MN, Kan AÜ (2007). Opinions of Classroom Teacher Candidates on Their Levels of Knowledge of the Assessment and Evaluation Methods in the New Elementary Education Curriculum (Cases of Firat, Dicle and Kilis Yedi Aralık Universities). 1st National Elementary Education Congress (15-17 November 2007). Ankara: Hacettepe University Faculty of Education.
- Gözütok D, Akgün ÖE, Karacaoğlu ÖC (2005). Evaluation of Elementary Education Curricula in terms of Teacher Competence. *Reflections in Education VIII: Symposium for Assessing New Elementary Education Curricula*. Kayseri: Sim Publishing, pp. 17-40.
- Güneş A (2007). Classroom Teachers' Self-Perceptions of Assessment and Evaluation Skills. İstanbul: Marmara University (Unpublished Master's Thesis).

- Güven B, Eskitürk M (2007). Methods and Techniques Employed by Classroom Teachers in Assessment and Evaluation. 16th National Education Sciences Congress (5-7 September). Tokat: Gaziosmanpaşa University Faculty of Education.
- İman A (2001). Assessment and Evaluation in the Turkish Education System: General Concepts, Practices, Problems, Solution proposals and A New Model. Adapazarı: Değişim Publishing.
- Jeong J (2004). Analysis Of The Factors And The Roles Of Hrd In Organizational Learning Styles As Identified By Key Informants At Selected Corporations In The Republic Of Korea. Unpublished PhD Thesis. The USA: Texas A&M University. Major Subject: Educational Human Resource Development.
- Kaba O (2007). The Level of Application of Portfolio Assessment Method in the Elementary Education Primary Stage (The Case of Sakarya). Sakarya: Sakarya University (Unpublished Master's Thesis).
- Kuran K, Kanatlı F (2009). Evaluation of Opinions of Classroom Teachers on Alternative Assessment and Evaluation Techniques. Mustafa Kemal Univ. J. Inst. Soc. Sci. 12(6):209-234.
- MEB (2005). Elementary School Mathematics Course (1-5) Curriculum. Ankara: Printing House of the Department of State Books.
- MEB (2009). Elementary School Turkish Course Curriculum and Guide. Ankara: Printing House of the Department of State Books.
- Okur M, Azar A (2011). Teacher Opinions on the Alternative Assessment and Evaluation Techniques Used in Science and Technology Course. Kastamonu J. Educ. 2(19):387-400.
- Orbeyi S, Güven B (2008). Teacher Opinions on the Evaluation Dimension of the New Elementary Education Mathematics Curriculum. Theory Pract. Educ. 4(1):133-147.
- Özdağ A, Tanişlı D, Köse NY, Kılıç Ç (2007). Opinions of Elementary Education Classroom Teachers on the Evaluation Instruments and Methods They Use in Classrooms. 6th National Symposium of Classroom Teaching Education (27-29 April 2007). Eskişehir: Anadolu University Faculty of Education.
- PISA (2003). Learning for Tomorrow's World. First Results of PISA 2003. OECD Publication. [Online]: <http://www.oecd.org>.
- PIRLS (2001). International Report: IEA's Study of Reading Literacy Achievement in Primary School, [Online]: <http://timss.bc.edu>.
- Pullu S (2008). Opinions and Practices of Classroom Teachers on Elementary Education Assessment and Evaluation. Elazığ: Firat University. (Unpublished Master's Thesis).
- Sağlam-Arslan A, Devocioğlu-Kaymakçı Y, Arslan S (2009). Problems Encountered in Alternative Assessment and Evaluation Techniques: The Case of Science and Technology Teachers. Ondokuz Mayıs Univ. J. Fac. Educ. 28:1-12.
- Şahin İ (2007). Evaluation of the New Elementary Education Primary Stage Turkish Curriculum. [Online]: <http://ilkogretim-online.org.tr>. İlköğretim Online 6(2):84-304.
- Sulak S (2005). Opinions of Elementary School 4th and 5th Grade Teachers on the Assessment and Evaluation of the Cognitive Behaviors in the Social Sciences Course and Analysis of the Techniques They Employ. Selçuk University (Unpublished Master's Thesis).
- Tatar N, Başmaz ÖF (2009). Opinions of Elementary Education Classroom Teachers on Alternative Evaluation Approaches-II. Kastamonu J. Educ. 3(17):781-798.
- TIMSS (1999). International Mathematics Report, Findings From IEA's Repeat of the Third International Mathematics and Science Study at the Eight Grade, [Online]: <http://timss.bc.edu>.
- Tüfekçioğlu N, Turgut S (2008). Classroom Teachers' Perceptions of The Renewed Elementary Education Curriculum Assessment and Evaluation Practices and the Problems They Encounter. 7th National Symposium of Classroom Teaching (2-3-4 May 2008). Çanakkale: Onsekiz Mart University Faculty of Education.
- World Bank (2005). Turkey Education Sector Study. Report Number 32450-TU. World Bank Publication. [Online]: <http://www.worldbank.org>.
- Yaşar B, Gültekin M, Türkan B, Yıldız N, Girmen P (2005). Determining the Readiness Levels and Education Needs of Classroom Teachers regarding the Application of the New Elementary Education Curricula (The Case of Eskişehir). Reflections in Education VIII: Symposium of Assessing New Elementary Education Curricula. Kayseri: Sim Publishing, pp. 329-342.