Education Quarterly Reviews

Yeşilkaya, O. C., & Töreyin, A. M. (2022). The Model Research that Compares the Multiple Intelligence Theory Implementations with the Traditional Methods Implemented in the Music Lessons of 4th And 5th Grades in Primary Schools. *Education Quarterly Reviews*, Vol.5 Special Issue 2: Current Education Research in Turkey, 485-496.

ISSN 2621-5799

DOI: 10.31014/aior.1993.05.04.638

The online version of this article can be found at:
https://www.asianinstituteofresearch.org/

Published by:
The Asian Institute of Research

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.

ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

The Asian Institute of Research
Education Quarterly Reviews
Vol.5 Special Issue 2: Current Education Research in Turkey, 2022: 485-496
ISSN 2621-5799

DOI: 10.31014/aior.1993.05.04.638

The Model Research that Compares the Multiple Intelligence Theory Implementations with the Traditional Methods Implemented in the Music Lessons of 4th And 5th Grades in Primary Schools*

Özge Çongur Yeşilkaya[1], Ayşe Meral Töreyin[2]

[1,2] Gazi Faculty of Education, Gazi University, Türkiye

Correspondence: Meral Töreyin. E-mail: atoreyin@gmail.com

Abstract
The main concern in this study is constituted by the possibility of implementing a music training model which has been developed on the basis of the Multiple Intelligence Theory in the music lessons of the 4th and 5th grades of primary schools. Core study group was formed by 150 fourth and fifth grades students from Ankara Teğmen Kalmaz Primary School and Mamak Primary School and as well as the music teachers working at these schools in 2005-2006 educational period, who were selected by means of a random method. The findings of the research are composed of the pre tests and post tests filled by the students and their teachers as well as the observation sheets used during lessons in which the data about the differences between the traditional method based lessons and the multiple intelligence based lessons have been analyzed by SPSS package program and frequency tables and graphics of the data has been designed, additionally a bilateral relations have been examined by using cross tables. As a result of the study, it has been concluded that the events that activate different intelligence fields are not implemented in the music lessons taught through traditional methods, the creativity of the students has not been improved by different assignments and projects, the teachers do not bring various music-related materials to the classroom and that they do not render the lessons enjoyable. Whereas, it has been understood that in the music lessons based on Multiple Intelligence Theory, the students in the period of concrete process comprehend the abstract concepts of the lesson more effectively by means of plays and different activities, their creativity demonstrates a progress, and that the theory constitute an aid for them in discovering their capabilities. When the model is considered through this aspect, it is clearly obvious that the theory is applicable to the musical training model, the teachers who are to apply the theory should undergo in-service training before the applications, that there might be certain defects during the application of the theory due to physical conditions of the state schools, and that therefore the music rooms and equipment in the state schools should be improved. In the light of these findings, it has been determined that the questionnaire and observation forms produced at the end of the studies could be implemented as an appropriate measure for a research that would be reflected on a general sense and could be practice by schools at various social and economic levels.

Keywords: Multiple Intelligence Theory, Primary School Music Training Lessons, Music Education in Classroom, Musical Plays

* It was produced from the first writer's doctoral thesis have done at Gazi University Institute of Educational Sciences in 2007. And a part of this article was presented orally at the 2nd International Conference on Interdisciplinary Studies in Education, Cyprus, in February 2013.

1. Introduction

In traditional methods, everything in teaching-learning process is shaped according to the teacher, most of the time in teaching-learning activities is used by the teacher and communication mostly takes place in one-way. In these methods, group teaching forms the basis whereas the students' individual differences, their interests, abilities, hopes and learning speeds are not considered enough (Alkan, 1977, pp. 140-144). It is also seen that, in this method, students' attention cannot be focused on one point for a long time, memorizing remains at the forefront, with the sequential verbal messages, the notions are confused with each other or cannot be learned completely and only the precise fields such as numerical, verbal and science are measured, but after a while all these factors cause students both to find the teaching activity boring, monotonous and to lose their interest for the lesson.

However, in modern methods, the students take an active role in the learning process. Here, the teachers' role is to guide the students to simplify their learning process, help them to take part actively in the lesson and motivate the students regularly. The reason for this is the adopted view that what the student does and what kinds of products he forms is more important than what the teacher presents (Alkan, 1977; Fidan, 1985). That the person stands in the center of the education activities brings with the fact of individualized teaching process. Individualized teaching is a method of teaching developed to support the individual differences of the students who learn in different ways and with different speed (Tomlinson, 1999).

Individual differences considerably affect learning. Intelligence, one of the individual factors that influences learning, directs the competence in learning process. Applying an education suitable for the students' types of intelligences increases the students' success. In other words, some students have difficulty in learning when there is no teaching activity appealing to them. When such features of students are taken into consideration, education process can be effective and fertile (Bacanlı, 2000, pp. 118-128; Gözütok, 2001, p. 10).

The studies aimed at determining the features of intelligence that is of great importance in individual differences dates back to ancient times. After 1900s, some scientific studies have begun to be made, but it could not have been expressed with a certain definition (Başaran, 1992, p. 82).

The first studies on individual differences and intelligence were made by F. Galton. To Galton, individual differences among people is caused by the differences in sensory abilities. In this case, the sharper the senses of a person are, the smarter he is.

Gardner, in his book called ''Frames of Mind'' which was published in 1983, suggested that a person may have seven basic intelligence fields at least. (Later it would be eight with the addition of naturalist intelligence). According to Gardner, intelligence is the competence to form a product that has a value in one or more cultures, to handle with the problems faced in daily life and career in an efficient and fertile way. To Gardner, intelligence is the ability to solve problems in life, form new problems for the solution, find a value in culture and offer a service (Campbell et al., 1999).

To Gardner; Human being has not got just one intelligence. IQ and intelligence tests only measure verbal, logical and mathematical abilities. However, he claims that people have eight different ability fields. Gardner says that the experiences affect the intelligence. Therefore, instead of determining one's intelligence with a test result, he offers to form a profile for one's intelligence fields, considering the culturally valued behaviors in a familiar environment.

While Gardner presents the features related to intelligence theory and scientific proofs, he considerably based his studies on nero- psychology and brain researches. Every brain has a learning model that is formed by its own thinking model. If the presentation model of the topic which is supposed to be learned suits the model in the brain, a successful learning occurs. Success or failure does not show one's inadequacy of intelligence.

1.1 Multiple Intelligences Theory

The multiple intelligences theory can shortly be summarized as follows:'' The key term for multiple intelligences is the word 'multiple''. As the intelligence is versatile, intelligence brought by genetic heredity, can be developed, changed and being smart can be learned to some extent (Selcuk, 2002, p. 12).

The statement ''There is not only one or two ways of being smart'' constitutes the center of the theory. There are many ways for being smart. Recognizing the students' dominant capacities at different intelligence fields and trying to reach the students through different ways can lead all students to success. ''If there are many ways of being smart, there are also many ways of teaching" (Kagan & Kagan, 1998, p. 11).

Gardner, in his book ''Frames of Mind'', which he published in 1983, enumerates the intelligence fields that are claimed to exist in individuals as: Linguistic Intelligence, Logical-Mathematical Intelligence, Musical Intelligence, Spatial Intelligence, Bodily-Kinesthetic Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Naturalist Intelligence.

In the light of this information, in a music education model which is designed in accordance with the theory, it is thought that the students' musical abilities, capacities or their interests and attitudes for music lesson can be developed with this method. Designed lesson plans should be improved by reflecting the suitable activities of intelligence fields.

With the activities, which will support the fields of intelligence such as visual objects, materials, puzzles, games, group discussion, projects, brainstorming exercises and etc., music lessons will be different from the previous lessons implemented with traditional methods.

2. Problem Status

That traditional methods are used at 4^{th} -5^{th} grades of primary school lessons, that teachers are more active in most of the activities, the students' individual differences, interests, abilities, that their learning speed is not considered enough and that their attention cannot be focused on one point for a long time, brings the result of students' unwillingness to the lessons for the students who continue these classes.

In the music lessons of primary schools in Turkey, the issues such as making the students think and become creative in music lesson, adding variations to the music lessons by putting attention on the different intelligence traits, with the multiple intelligence theory based activities that will enable to confirm the fields at which the students are successful are needed.

For this reason, the problem sentence of the research has been determined as ''Can a music education model developed on the basis of multiple intelligences theory be implemented on the 4th and 5th grades music education lessons?

3. Goal

In this research, it is aimed to ascertain whether the music lesson teaching model developed on the basis of multiple intelligences theory (in terms of the principles ,methods, plan, program) as well as the methods and techniques used in general music education can effectively be implemented at the 4th-5th grades of music lessons in the primary school.

4. Method

This research carried out for the implementation of multiple intelligences in primary schools' 4th-5th grades music lessons, is a qualitative study. This research is, an applied research in terms of its aims, an action research in terms of qualitative research pattern, a natural environment structured field research in terms of the environment that the research has been implemented. In the research, test model has been used as model. With this research, the data on whether the music education model developed on the basis of multiple intelligences can be implemented on the 4th-5th grades of primary schools, the views of the teachers for the implementation of the music lesson

based on the theory, the difficulties that occur during the lesson and the advantages and disadvantages of the system for the musıc lessons are collected through observation, document analysis, video recording and questionnaire.

4.1 Data Collection Tools

In this research, some parts of the data related to topic and the solution of the problems and the preparation of implementation materials have been acquired through literature review method and translation of English sources, and for the implementation of the research, questionnaire and observation forms have been used as data collection tools. Procedures have been carried in the following order: First, the teachers who participated in the research were given a two day seminar work related to the implementation of the music lesson based on the multiple intelligences theory; then, two questionnaires were given at the beginning and at the end of the application to determine the views of the teachers about the implementation. Four topics decided by the researcher and music teachers were practiced in eight lesson hours in the classes determined through random method.

Before and after the implementation, a pre- test and a post -test, two questionnaires in total were used to determine the thoughts of students related to the previous music lessons and the lessons implemented based on the theory. All the studies in the classroom were recorded on the observation forms and the students' and the teachers' development steps in implementation process were observed.

4.2 The Analysis of the Data

In pre- test, 72 students at Teğmen Kalmaz Primary School and 57 students at Mamak Primary School participated. In the post-test, 74 students' questionnaires from Teğmen Kalmaz Primary School, and 67 students' questionnaires from Mamak Primary School were evaluated. As the greatest part of the acquired data consist of open-ended questions ,all open-ended questions' thematic coding were done through content analysis and a data entry template was formed in SPSS program under main topics. Frequency tables and graphics were formed and mutual were analyzed using transverse tables. In each of two schools, throughout the four lessons, eight observation forms were filled in for every teacher.

5. Findings and Comments

Findings and comments for the questionnaire given to the students before the implementation of multiple intelligences theory to music lessons

Table 1: Distributions of the opinions for the question "Which of the following activities do you do in music lessons?"

Activity	F	%
We play the flute	128	15,7%
We learn musical notes	122	15,0%
We learn songs	112	13,7%
We learn the topics belonging to music lesson	102	12,5%
We listen to music	74	9,1%
We learn different kinds of music	59	7,2%
We do rhythm training	57	7,0%
We do musical drama	55	6,7%
We play games	52	6,4%
We use percussions	22	2,7%
We produce instruments from waste materials	2	0,2%
Other	30	3,7%
Total	815	100,0%

Table 2: Distributions of the opinions for the question "What activities do you like most in the music lessons?"

The most liked activity	F	%
Playing an instrument and singing	73	56,6%
Listening to an instrument being played	21	16,3%
Solfeggio and note training	12	9,3%
Competition and musical games and activities	9	7,0%
Dance and drama training	3	2,3%
Other	5	3,9%
No answer	6	4,7%
Total	129	100,0%

Table 3: Distributions of the opinions for the question "What are the activities you don't like to do in music lessons?"

Activities that the students don't like	f	%
There isn't any activity that I don't like	65	50,4%
Solfeggio note and rhythm training	16	12,4%
Playing the flute	12	9,3%
Oral exams	8	6,2%
The teachers' studying the definite sts and ignoring the others	3	2,3%
Dancing	2	1,6%
The songs that I can't play	2	1,6%
Leading in the new topic and reading the topics belonging to music lesson	2	1,6%
Writing	2	1,6%
My friends' playing games in the lesson	1	0,8%
My teachers' getting angry to me	1	0,8%
Other	3	2,3%
No answer	12	9,3%
Total	129	100,0%

Table 4: Distributions of the opinions for the question "What are your reasons for not liking the activities?"

The reason for not liking the activity	F	%
I can't do it well	15	11,6%
I find it boring and tasteless	13	10,1%
I don't feel myself comfortable	4	3,1%
I am afraid of making mistakes	3	2,3%
Other	6	4,7%
There isn't any activities that I don't like	65	50,4%
No answer	23	17,8%
Total	129	100,0%

Table 5: Distributions of the opinions for the question "What are your reasons for not attending the lesson?"

The reasons for not attending the lesson	F	%
I don't like the lesson and I find it boring	10	40,0%
I can't do it well	8	32,0%
I don't feel comfortable	5	20,0%
I am afraid of making mistakes	1	4,0%
Other	1	4,0%
Total	25	100,0%

Table 6: Distributions of the opinions for the question "Do you do different homework and group work in music lessons?"

We do different activities in music lessons	F	%
No	73	57,0%
Yes	55	43,0%

Total	128	100,0%

Table 7: Distributions of the opinions for the question "What are the different activities done in music lessons?"

Different homework and group working activities done in music lessons	f	%
Singing and playing instrument activities	21	38,2%
Dance and musical games	9	16,4%
Rhythm and note training	5	9,1%
Group searching	1	1,8%
Other	3	5,5%
No answer	16	29,1%
Total	55	100,0%

Table 8: Distributions of the opinions for the question "What does music lesson mean to you?"

The meaning of the music lesson for the sts	F	%
It is a lesson that I like and have fun	35	27,1%
Playing instruments and singing	26	20,2%
Information and learning	19	14,7%
It is a lesson that comforts me and makes me feel good	14	10,9%
It is a lesson that I don't like	9	7,0%
It is a lesson that expresses my feelings	6	4,7%
Notes	4	3,1%
Other	4	3,1%
No answer	12	9,3%
Total	129	100,0%

Table 9: Distributions of the opinions for the question "What benefits may the music lesson you take bring to you in the future?"

What benefits may the music lesson they take bring?	f	%
I may make music in the future	33	25,6%
My music ability and taste will develop	28	21,7%
I find it beneficial	16	12,4%
I find it useless	13	10,1%
It will contribute to my personal development	6	4,7%
Other	5	3,9%
No answer	28	21,7%
Total	129	100,0%

When the data presented above (table 1-9) are analyzed, it is found that of the students who have participated in the research,99,2% play flute, 94,6% learn '' notes'', 86,8% have learned singing, 79,1% have learned the topics belonging to music lesson. It is also found that of the students who have participated in the research, 56,6% like singing and playing an instrument the most,16,3% likes listening to an instrument , 9,3% like solfeggio and note training, 7% like competitions and musical games whereas 12,4% do not like solfeggio, note and rhythm training, 9,3% do not like flute training and 6,2% do not like verbal exams. The rates for the reasons why the participant students don't like the activities are such: 11,6% of the students cannot do well in the activities,10,1% of them find the activities boring and tasteless, 3,1% of them feel uncomfortable, 2,3% of them are afraid of making mistakes. It is also shown in the research that 82,9% of the participant students have attended the music lessons,17,1% of the them haven't attended the lessons. Of the students who state to have actively attended the lesson, 48,6% have played instruments, 28% have done solfeggio note and rhythm training,17,8% have sung and listened,8,4% have done dramatization and spontaneous dance training, Of the students who state not to have attended the lesson, 45,5% do not like the lesson and find it boring,36,4% cannot do well in the lesson,22,7% feel uncomfortable,4,5% are afraid of making mistakes,4,5% have other reasons for not actively attending the lessons. Of the participant student,57%tells no different homework and group working has been made during the music

lesson,43% tell the opposite .Of the answers of the group that have done different homework and group working,38,2% singing and playing an instrument,16,4% dance and musical games,9,1% is rhythm and note training,1,8% is group working. Students express the meaning of the music lesson as:27.1% of the students who say that music lesson is a lesson that I like and have fun,20.2% says it is a lesson that I sing and play instruments in,14,7% says it is a lesson of information and learning,10,9% says it is a lesson that comforts them and make them feel good,7% says it is a lesson that they do not like,4,7% says it is a lesson that expresses their feelings,3,1% says it is a lesson of musical notes. It is found from the answers to the question ''What benefits may the music lesson bring to you? that of the students who answered the question,25,6% say ''I may make music in the future'',21,7% say ''my music ability and taste will develop'',12,4% find the music lesson beneficial,4,7% say it will contribute on their personal development,10,1% find it useless,3,9% find it beneficial in other ways,21,7% haven't answered the question.

5.1 Findings and comments for the questionnaire given to the students after the implementation of multiple intelligence theory to music lessons

Table 10: Distributions of the opinions for the question "What were the positive factors perceived different from the previous music lesson?"

The positive factors different from the previous lessons	**f**	**%**	**Total**
Activities were very different and entertaining	120	12,7%	141
It was a fun to work with my friends	118	12,5%	141
The lesson were like a game	116	12,3%	141
I have learned by having fun	112	11,9%	141
Preparing Project was fun	99	10,5%	141
I haven't understand how the lesson hour passed	88	9,3%	141
We did different assignments	84	8,9%	141
The questions of the teacher were quite interesting	70	7,4%	141
The teacher designed the class differently	66	7%	141
There hasn't been any difference that I can define as'' positive''	26	2,8%	141
I couldn't see any difference	24	2,5%	141
I have no idea	20	2,1%	141
Total	943	100,0%	141

Table 11: Distributions of the opinions for the question "What were the negative factors seen different from the previous music lesson?"

The negative factors different from the previous lessons	**f**	**%**
I haven't seen any difference that ı can define as ''negative''	87	22,5%
My turn hasn't come during the activities	46	11,9%
I have had difficulty in understanding the worksheets	36	9,3%
I have had difficulty in understanding the activities	34	8,8%
I have felt ashamed of performing in the classroom	34	8,8%
I couldn't write different and creative stories	33	8,5%
I haven't taken any responsibility while working with the group	28	7,2%
I have had difficulty in answering the worksheets	27	7%
I took all the responsibility while working with the group	23	5,9%
I have no idea	39	10,1%
Total	387	100,0%

Table 12: Distributions of the opinions for the question "What are your opinions regarding whether or not it was different from the previous music lessons?"

Opinions about whether or not it was different from the previous music lessons	f	%
Yes, I think it was different.	71	50,4%
No, I don't think it was different	18	12,8%
No answer	52	36,9%

Total	141	100,0%

Table 13: Distributions of the opinions for the question "What were the tasks and responsibilities you have taken?"

The tasks and responsibilities taken	f	%
I have been in charge in group works and projects	25	16,6%
I have taken part in the games related to notes	16	10,6%
I played an instrument	15	9,9%
I haven't taken any responsibility	12	7,9%
Singing	6	4%
I have taken part in dance, poem and drama activities	4	2,6%
I have taken the responsibility of designing a game	3	2%
Other	9	6%
No answer	61	40,4%
Total	151	100,0%

Table 14: Distributions of the opinions for the question "What are your positive opinions about the materials the teacher have brought into the class?"

The positive opinions about the materials that the teacher brought into the class	**f**	**%**
Lessons have become more entertaining	67	47,5%
I am learning while playing	15	10,6%
I learn the lesson better	14	9,9%
They were very interesting and creative materials	12	8,5%
I have learned how to learn the music lesson	4	2,8%
Other	9	6,4%
No answer	20	14,2%
Total	141	100,0%

Table 15: Distributions of the opinions for the question "What are your negative opinions about the materials the teacher have brought into the class?"

The negative opinions about the materials that the teacher brought into the class	f	%
I have no negative idea	103	73%
I have found it unnecessary and boring	12	8,5%
I couldn't take my turn due to limited materials	8	5,7%
No answer	13	9,2%
Other	5	3,5%
Total	141	100,0%

Table 16: Distributions of opinions for the question "What have you learned from the individual activities done in the classroom?"

Individual Activities	**f**	**%**
My music competence and ability have developed	75	47,8%
I have discovered myself and the things that I can do	18	11,5%
My interest for music has increased	16	10,2%
I have had fun and become happy	12	7,6%
I have gained self-esteem	10	6,4%
I have gained moral courage and ability to speak	9	5,7%
I haven't learned much	6	3,8%
I have gained the ability to work with group	2	1,3%
Other	2	1,3%
No answer	7	4,4%
Total	157	100,0%

Table 17: Distributions of opinions for the question "How do you feel in the course of the lesson?"

The psychology of the students in the course of the lesson	**F**	**%**
Happy	115	18,1%
Delighted	107	16,8%
Willing to learn	106	16,7%
Excited	91	14,3%
Curious	82	12,9%
Active in the lesson	70	11%
Other	26	4,1%
Stressed	14	2,2%
Uncomfortable	8	1,3%
Bored	8	1,3%
Remained out of the group	5	0,8%
Unhappy	4	0,6%
Total	636	100,0%

Table 18: Distributions of the opinions for the question "What would you change if you were told to change the music lessons?"

The things that the students' would do in music lessons	**f**	**%**
I wouldn' t change it	53	37,1%
I would add more games to the lesson	18	12,6%
I would do different activities instead of just teaching notes	6	4,2%
I would use different materials other than the flute	3	2,1%
I would prolong the lesson	2	1,4%
I would give the worksheets that have the lyrics on instead of making the sts write the lyrics	2	1,4%
I would remove writing, verbal exams and homework	2	1,4%
I would remove the music lesson from the program	2	1,4%
Other	5	3,5%
No answer	50	35%
Total	143	100,0%

When the data presented in the tables (Table 10-18) are analyzed, it is found that of the students participated in the research,85,1% find the activities very different and entertaining,83,7% find working with friends entertaining,82,3% see the lesson as a game,79,4% learn by having fun,70,2% find the writing projects entertaining,17% haven't seen any difference,14,2% have no idea,61,7% haven't seen any difference which can be labeled as negative,32,6% say their turn hasn't come during the activity,25,5% have had difficulty in understanding the worksheets,24,1% have difficulty in understanding the activities,24,1% are ashamed of performing in the class,23,4% can't write different and creative stories,27,7% have no idea,50,4% think the lesson is different from the previous music lessons,12,8% think there is no difference between the two lessons,36,9% haven't answered the question,17,7% take charge in projects and group working,11,3% take charge in the games related to musical notes,10,6% play instruments,6,4% take another duties,8,5% don't take any charge,47,5% think that the materials that the teacher has brought in the classroom have made the lesson more entertaining,10,6% learns while playing,9,9% have learned the lesson better, 8,5% think that the materials are too creative and interesting,2,8% have learned how to learn the music lesson,6,4% have other opinions,14,2% haven't answered the question,73% haven't got any negative idea about the materials that the teacher has brought in the classrrom,8,5% find it unnecessary and boring, 3,5% have other opinions,5,7% say their turn hasn't come due to limited materials,9,2%haven't answered the question,53,2% think that their music competence has improved,12,8% have discovered themselves and the things they can do,11,3%' s interest for music has increased, and it is determined in the implemented lessons based upon the theory, of the students who participated in research,81,6% feel happy,75% feel delighted,75,2% are willing to learn,64,5% feel excited,58% are curious and 49,6% have regularly attended the class.

6. Results and Suggestions

6.1 Results Related to the Systems of Music Lesson Teaching

1) In the music lessons that are taught through traditional methods, different teaching activities are not included except for the note teaching, flute training, song teaching and topic teaching from music books, and among the activities that the students like most; there are playing an instrument, note learning, singing and some activities such as dance, drama, competition and musical games are not given enough attention.
2)In the music lessons that are taught through traditional methods, students are not directed through projects and group work activities, and their creativity is not developed, however the projects and group work activities done in the lessons based on the theory, spares the lesson from monotony and add variety to it.
3) Since there is too much crowd in the classes, some students could not take their turn during the activities and most students were negatively affected by this situation. In the lessons based on the multiple intelligences theory, the number of the materials should be increased with the reference to the classroom size.
4) In the traditional methods, different materials and activities are not used, but in the theory -based lessons, the materials brought in the classroom enhance the students' creativity and motivation and their learning through the materials.
5) Students learn and attend the lesson as if it were a game.
6) Abstract notions and principles are taught more efficiently to the students who are at the concrete operational stage through the hands-on materials.

6.2 The Results Related to the Students Comments

1)The communication and the interaction that occur during the lessons implemented on the basis of multiple intelligences theory, have positive impacts on students in terms of learning cooperation, filling in the gaps by learning from peer, developing the creativity and enhancing the competition.
2) Activities done with this age group who are at concrete operational stage include abstract expressions especially on note and rhythm teaching and they are not taught through hands-on games.
3) Although there are clear differences between the game preferences of the male and female students, these differences are not observed in the activities done.
4) Students find the multiple intelligence theory- based lessons very different and entertaining, and in group work activities they like both working together and being accepted as an individual in the group.
5) In case the teacher is not a good guide to the students during the group work activities in the theory based lessons, some students take charge in the activities whereas the others do not share the responsibilities and work inactively in the group.
6) It is seen that in traditional methods students feel unhappy, unable and insecure when they are forced to do the activities they are unwilling to, but in the lessons based on the theory, students consider the lesson as a game, their self-esteem develops, their ability for cooperation increases, their music interest and competence scale up ,and they develop moral courage.
7) In the multiple intelligence theory-based music lessons, the fact that the students are generally happy, willing to learn, curious during the lesson, excited while coming to the class, and active in the lesson shows that the theory turns the lesson into a more attractive and nice shape compared with the traditional methods.

6.3 The Results Concerning the Harmony with the Music Education Program

1) The topics that build up the music teaching program, implemented in the course of the research, need to be reconstructed, and that the repetition of the topics in every year at every stage brings monotony to the teaching of the lesson.
2) Music education should be reconstructed with a modern approach that encourages students to search and considers functionality, realism and individual differences.

6.4 Suggestions

On the basis of the data collected in this study, the following suggestions can be made:

* In relation with the implementation of the theory in music lesson, it is advised that a teacher guide which introduces the theory should be prepared; an in service training program which music teachers will attend and realize the implementations of the theory on music lessons should be designed; and the teachers should come together at the seminars under the control of expert teachers for the implementation of the theory and they should get support related to the implementations they have done and they should share information with the other teachers.
* It is recommended that the expert teachers who give music education based on multiple intelligence theory should implement the activities and produce projects at certain times on music lessons and taking the consultant role on themselves they should help the teachers who implement the theory, for the probable mistakes and malfunctions,
* A different music lesson plan format should be upgraded extending the musical and rhythmic fields of the multiple intelligences plans belonging to the music lessons,
* The school management, family, and the teacher who will implement the lesson and the students should be informed and educated about the topic and common decisions should be taken before the multiple intelligence based music education model implementations.
* The theory should be reconstructed by being dealt differently in every region according to the conditions and features of the city,
* Considering the fact that creative thinking needs classrooms that include rich environmental conditions, the schools which will implement the theory, should have a good physical structure, classroom design, technical equipment, material development units, enough instruments, CD, DVD, recorder etc. to be able to implement the theory,
* The classroom sizes should be at the number of 25 at most for the implementation the theory efficiently (to be able to work on every student in the activities and get a favorable result)
* A training related to music lesson teaching method based on the multiple intelligence theory should be given to the primary school teachers who studies at primary school teaching department,
* The activity based music books should be formed in accordance with the topics in an activity based format and at every stage these activities should be differentiated and the course books should be designed under four categories such as teachers' book, students' book, the sample worksheet book, material sets (games, example activities, CDs, DVDs) and also these material samples which will be prepared should be made available to the teachers and they should be developed by material development units,
* The issue of the music education model based on the theory should be taken as a lesson in the departments of music education of the universities and some studies should be made for developing the content and that expert teachers should be educated on the topic,
* Some qualitative researches that include the opinions of the teachers and the students should be made about the fact that whether the questionnare and observation forms that has been formed at the end of the research can be used as an appropriate scale for a research which will be projected to general and about the fact that whether the questionnare and the observation forms can be implemented in the schools and the cities at different social-economic class.

References

Alkan, C. (1977). *Educational technology theories and methods*. Yargıcoğlu.
Bacanlı, H. (2000). *Educational psychology*. Alkım.
Campbell, D., Campbell, B., & Dickinson, D. (1999). *Teaching and learning through multiple intelligences* (2nd ed.). Allyn & Bacon.
Fidan, N. (1986). *Teaching and learning in schools*. Kadıoğlu Press.
Gardner, H. (1983). *Frames of mind* (1st ed.). (E. Kılıç, Trans.). Alfa Press and Printing.
Gardner, H. (2006). *Educated mind*. (1st ed.). (Ö. Akbas, Trans.). Yaylacık Press.
Gözütok, D. (2001). *The multiple intelligence theory implementations in Başkent University Ayşe Abla College schools.* Political.
Kagan, S., & Kagan, M. (1998). *Multiple intelligences*. The complete MI Book. Kagancooperati ve Learning. Pub.
Selçuk, Z. (2002). The multiple intelligence implementations. Nobel Press.

Toker, F. et al. (1968). *Intelligence theories*. Ministery of education, Board of education and discipline research and evaluation office

Tomlinson, C. (1999). *The differentiated classroom: Responding to the needs of all learners*. Association for Supervision and Curriculum Development.

Vural, B. (2005). *Student centered education and the multiple intelligences* (1st ed.). Bilge PRess.