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*Full Length Research Paper*

# Development of the instructional model of reading English strategies for enhancing sophomore students' learning achievements in the institute of physical education in the Northeastern region of Thailand

Prawit Whankhom, Pilanut Phusawisot and Patcharanon Sayankena

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The aim of this research is to develop and verify the effectiveness of an instructional model of reading English strategies for students of Mahasarakham Institute of Physical Education in the Northeastern region through survey. Classroom action research techniques with the two groups of sample sizes of 34 sophomore physical students as a controlling and 32 sophomore sport science students as an experimental were administered. The study used the 4-research instruments which were composed of the questionnaires on implementation of reading strategy, semi-structured interviews, reading comprehension achievement, and the 5-lesson plans. Statistically significant with the descriptive data were analyzed. According to the results of current implementation of reading strategies, average score of total reading strategy used was moderate practice. Sample group employed slightly more indirect strategy to direct strategy, among six categories of reading strategies, the most to the least current implementation of reading strategies were compensation strategies, social strategies, affective strategies, memory strategies, cognitive strategies and meta-cognitive strategies, respectively. The developing instructional model comprised of informs, model and practice. Transfer of concluding step to sum up the results and problems for practicing implementation of reading strategy, evaluate, reflect, giving feedback, and reinforcement of the implementation of reading strategy were found effective.

**Key words:** Development, English, enhancement, instructional model, physical education, qualitative and quantitative researches, sophomore students, strategy.

## INTRODUCTION

Reading is an important skill for students who learn English as a Foreign or Second Language (EFL/ ESL). The most important English language skill in learning English for students in non-spoken English context is

reading (Eskey, 1979). Students who are skillful in reading can improve their learning ability in other field of study (Anderson, 1999). As its definition, reading is a decoding process of words, sentences and text

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structures. It includes all mental processes of which readers bring into their reading. It is an interaction between the readers and the texts. Reading is a way of getting experiences (Aebersold and Field, 1997; Taverner, 1990; Urquhart and Weir, 1998). The main purposes of language instruction in higher education is that learners are able to comprehend any passages from textbook, articles, or journal which are written or printed in English and later can apply for future career or higher education (Wei, 2005).

Richard Allington and the Commission on Reading define reading as the process of constructing meaning from written texts. Skilled reading is:

**Constructive:** Learning to reason about written material using knowledge from everyday life and from disciplined fields of study.

**Fluent:** Mastery of basic processes to the point where they are automatic so that attention is freed for the analysis of meaning.

**Strategic:** Controlling one's reading in relation to one's purpose, the nature of the material and whether one comprehends.

**Motivated:** Able to sustain attention and learning that written material can be interesting and informative; and

**A lifelong pursuit:** Continuous practices, development, and refinement (Allington, 1998).

The U.S. Department of Education has stated that children are expected to *learn to read* in the primary grades, kindergarten through third, when most reading instruction is given. By fourth grade, students are expected to *read to learn*. The Department continues "Over time, learning becomes more complex, with heightened demands on students to use reading skills to analyze or to solve problems. Good reading skills are required to study geography, do math, use computers, and conduct experiments. Even motivated, hard-working students are severely hampered in their schoolwork if they cannot read well by the end of third grade." Students must become effective readers to meet the demands of literacy and learning for the 21st century. Illinois children need and deserve an aggressive approach to ensure their right to read (Johns and Lenski, 1997).

In conclusion, reading is an important skill especially to students in higher education who have to use reading as a tool to comprehend any subject content in order for them to make use of information for their future career or future study. Thai students learn English as a foreign language, consequently, reading skill is the most important to be considered.

According to research results, Thai students' reading ability is in lower level. The most important reading problems are lacking of essential vocabularies, linguistics, text structure knowledge, and limited contents backgrounds (Aegpongpaow, 2008; Jesdapornpun, 2001;

Songsiri 1999; Wongsuwan, 1992). This is related to the results of foreigner researchers who found that students learning English as a foreign or second language cannot comprehend their English passage. Most of their reading problems are improper reading texts, misunderstanding of grammar, vocabularies, and limited background knowledge on the reading passage (Aebersold and Field, 1997; Dagostina and Carrifio, 1994; Nuttall, 2000).

Comprehensive reading is an interactive process between reader's background and contents (Carrell, 1994, 1988; Carrell and Eisterhold, 1988; Clarke, 1988). Reader, who once encounters difficulties in comprehension, always employs reading strategy to get over those difficulties (Kern, 1989; Kletzien, 1991; Johnston, 1983; Paris et al., 1983). Reading strategy helps readers increase their comprehension (Carrell et al., 1989; Kern, 1989; Barnett, 1988; Kitajama, 1997). Reading strategy refers to an action or a series of action of cognitive steps readers use while reading in order to acquire, store, and retrieve new information to construct meaning from the text (Anderson, 1991; Garner, 1987; Jimenez et al., 1996). Reading strategy is one of the factors which influenced English comprehensive reading (Aebersold and Field, 1997; Ruddell and Ruddell, 1995; Urquhart and Weir, 1998). In order to attain a high level of comprehension, readers have to know what strategy to use, how to use, and why to use them (Paris et al., 1983). However, using strategy does not only depend on what to use; but also how to use, and have to use it integrally in order that readers can use reading strategies more effectively (Anderson, 1991). Reading strategy instruction is a way of helping reader to construct meaning from the texts (Dole et al., 1991; Grant, 1994). Reading strategy used should have been approved as effective reading strategies in accordance with criterions set by Dole et al. (1991). Those criterions are; strategies used must be consistent with a cognitive view of a reading process, strategies used must be appropriate to the target learners and strategies used must be proven to be teachable.

According to literature reviews, there are many research topics conducted by both Thai and non – Thai researchers on reading strategy in teaching English as second or foreign language context. For example, for non -Thai researchers, Metacognitive strategy training for English as a second language (ESL) reading (Carrell et al., 1989), Second language reading strategies instruction includes its effects on comprehension and word inference ability (Kern, 1989), reading through context: How real and perceive strategy use affects second language (L2) comprehension (Barnett, 1988), referential strategies training for second language reading comprehension in Japanese texts (Kitajama, 1997). All of these research results conclude that reading strategies play an important role in comprehending passage. Moreover, those research results suggest that the teachers should introduce reading strategy instruction into reading class

(Barnett, 1988; Carrell et al., 1989; Kern, 1989; Kitajama, 1997). The reading research trends have been changed from product oriented to process oriented focusing on the use of reading strategies various texts (Anderson, 1991; Carrell, 1989).

Interesting research topics on reading strategy in Thai context are a qualitative investigation of metacognitive strategies in Thai students' English academic reading (Aegpongpaow, 2008), reading strategies of university English as a Foreign Language (EFL) Thai readers in reading Thai and English expository texts (Wirotanan, 2002), academic English reading: Strategy – based Instruction (Boonkit, 2008). According to these research results, to help students learn and practice implementing reading strategies, teachers should lead reading strategy instruction into EFL reading class and also promote metacognitive awareness instruction. Teachers should make use of test results of reading comprehension to improve students' reading ability (Aegpongpaow, 2008; Boonkit, 2006; Wirotanan, 2002).

Many of the reading problems' students encounter throughout in many countries are related to the five components of reading (phonological and phonemic awareness, word decoding and phonics, fluency, vocabulary and comprehension). For some students, however, the problem may be the result of a combination of factors – weakness in one or more of the five components and difficulty with some form of processing. For other students, there may be a secondary complicating problem, such as attention, memory, or the challenge of learning English as a second language. Some additional sources of reading difficulties are defined below. They include processing; successful reading and writing requires that a student is able to process several types of information. Some students may have difficulty with auditory, phonological, and/or language processing. Processing difficulties may co-exist with other difficulties, such as dyslexia and attention deficit disorders; auditory processing, refer to a set of skills related to how the brain recognizes and interprets information presented orally.

This includes not just speech, but also the processing of non-speech auditory stimuli like music and environmental noise. Some people say auditory processing is "what we do with what we hear." Humans hear sounds through the ear and then sounds are changed into electrical information that is interpreted by the brain; Phonological processing, refer specifically to the processing of speech sounds (phonemes). Many poor readers have a specific weakness in phonological processing even through their other processing skills (auditory and language processing) are strong. This is often the case for students with reading disabilities.

Readers with phonological processing difficulties usually have problems decoding words; language processing includes a variety of language abilities including reading

and writing. It is a broader term than phonological processing.

The research on language processing clearly shows us how important it is for parents and early caregivers to provide stimulating environments full of interesting experiences and new vocabulary words. The daily joys of reading to and talking with babies and toddlers do much to develop later language skills.

Foreigner children with fewer language-based experiences are typically behind their classmates when they start school in terms of vocabulary and ability to process language. They with a broad language processing deficit may have problems with comprehension even when they can decode words accurately.

Children with severe language disorders will almost certainly have difficulty in reading and writing; and Memory, In order to read, children must be able to place information into their memories and retrieve it when needed. What helps children understand vocabulary and comprehend what they read is being able to efficiently move back and forth between what they see in print and what is stored in their memories. There are different types of memory, including short-term memory, working memory, and long-term memory. An important aspect of phonological processing is phonological working memory, shown to be a factor in reading comprehension, written expression, spelling, and retention of information. Long-term memory is where you store a virtually unlimited amount of information about the world. The knowledge we store in our long-term memory affects our perceptions of the world, and what influences it has in the environment.

According to those studies, the researcher, therefore, is very interested in leading strategy instruction into EFL reading class. As a way to improve EFL reading ability of Thai students, an instructional model of reading strategies is very much needed. This is one way to help students to get a better understanding in reading English printed texts in any field of study in tertiary education.

## RESEARCH OBJECTIVES

1. To identify reading strategies students of the Institute of Physical Education in the Northeastern region use in reading English.
2. To develop instructional model of reading strategies for students of the Institute of Physical Education in the Northeastern region.
3. To study the effectiveness of developed instructional model of reading strategies for students of the institute of physical education in the Northeastern region.

## RESEARCH QUESTIONS

Theoretically, reading strategies are useful to reading



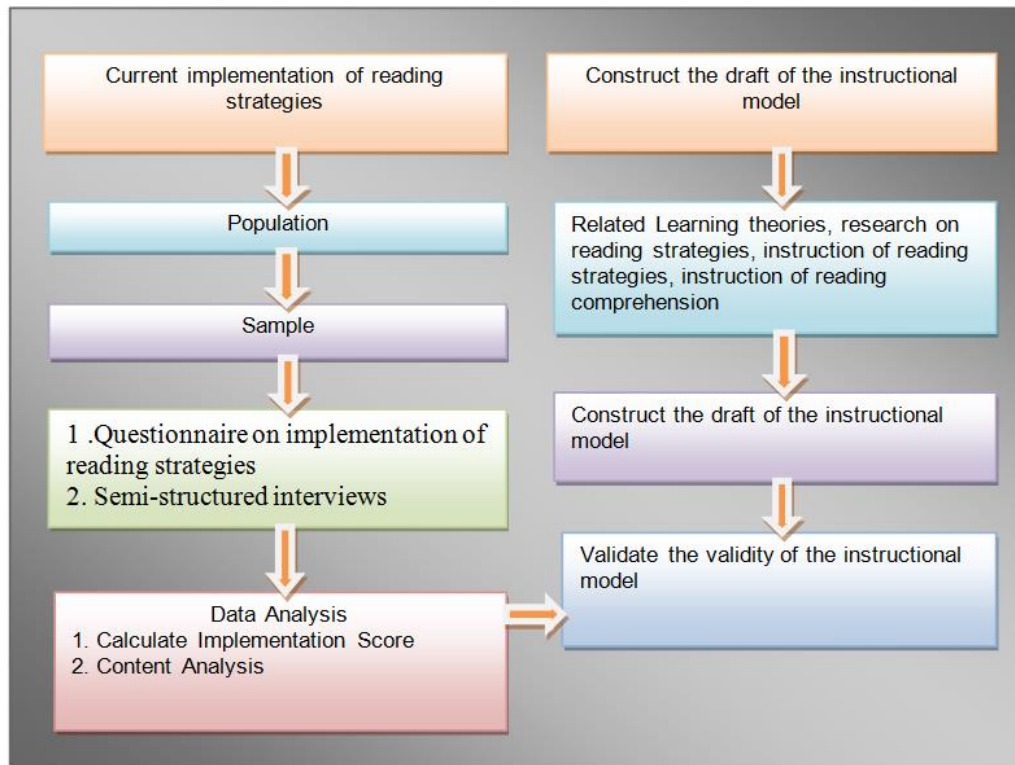


Figure 1. Research process of the first phase.

comprehension. What reading strategies do to the students of the Institute of Physical Education in the Northeastern region use in reading English? What are the key characteristics of an effective instructional model of reading strategies? And to what extent is the developed instructional model of reading strategies for students of the institute of physical education in the Northeastern region effective?

**METHODOLOGY**

The survey research, classroom action research, and pre – experimental research design; one group pretest – posttest design and qualitative data collection are employed for the first phase (Figure 1). These are the three phase of research administrative processes.

**Project phase**

There are three phases:

**Phase 1: Current implementation of reading strategies and instructional model drafting**

There are two activities in this phase; current implementation of reading strategies and construct draft of instructional model of reading strategies. Objectives are to identify reading strategies students of the institute of physical education in the Northeastern

region use in reading English and to construct draft of instructional model. Survey research, in-depth interview and document study are employed:

1. Achievement Test of Reading Comprehension (ATRD)
2. Questionnaire on Implementation of Reading Strategy (QIRD 2)

**Phase II: The development of instructional model and the verification of its effectiveness**

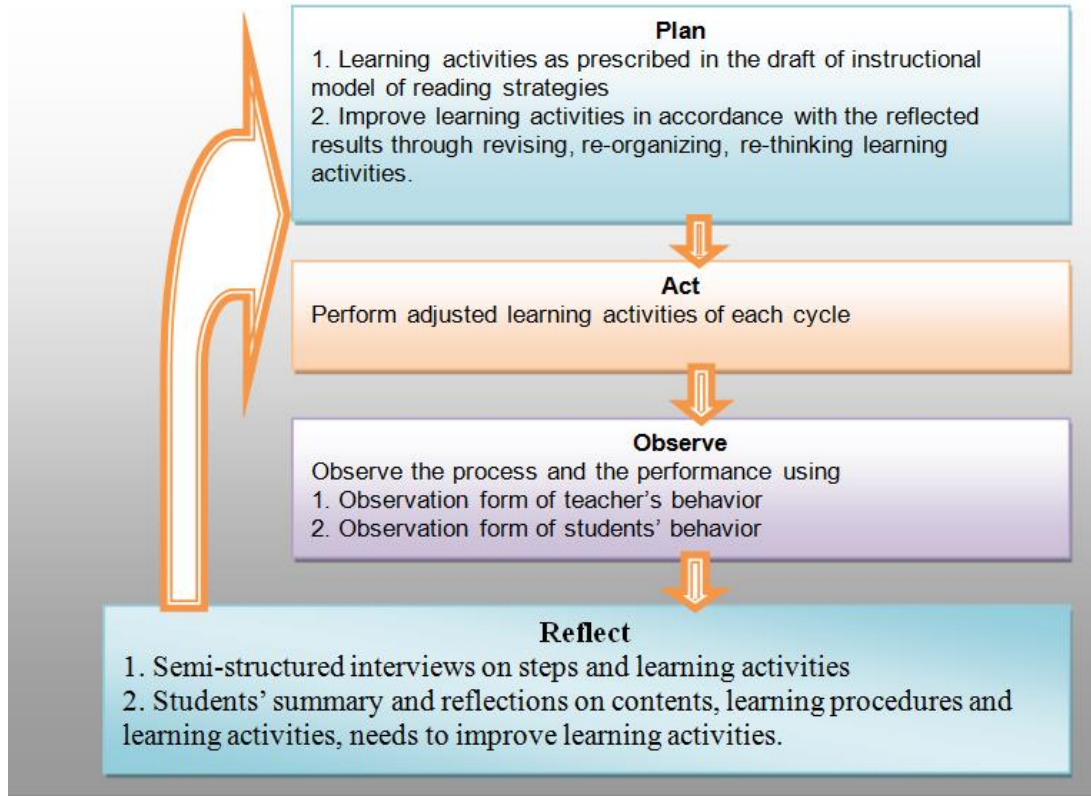
This phase is to develop instructional model of reading strategies for students of the Institute of Physical Education in the Northeastern region, and to construct and develop research tools as well. Classroom action research is employed (Figure 2).

**Phase III: The evaluation of instructional model and the confirmation of its effectiveness**

This phase is to implement instructional model of reading strategies and verify its effectiveness. Experimental research; pre – experimental research design, one group pretest – posttest design and qualitative data collection are employed.

**Population and sample size**

The study comprised of Sophomore students of the Institute of Physical Education in the Northeastern Region; Maha Sarakham, Udon Thani, Chaiyaphume, and Sri Sa Ket campuses majoring in physical education, sport science, and sports management in academic year 2013 to 2014. Sample sizes for survey research of



**Figure 2.** Research process of the second phase. Source: Chamot and O'Malley (1987).

400 fleshy and sophomore students were planned. Target group in classroom action research with a sample of 34 sophomore students of the majoring physical education in Maha Sarakham campus were used and 32- sophomore sports science and management of experimental research group in Maha Sarakham campus.

#### Variables

**Independent variables:** Learning activities in lesson plans of instructional model of reading strategies.

**Dependent variables:** Reading comprehension achievement score and the implementation of reading strategies.

#### Research instruments

The two research instruments are questionnaires on implementation of reading strategies and semi-structured interviews on the implementation of reading strategies.

#### **Instruments and equipment used to collect data**

##### Phase I:

- (1) Questionnaire on implementation of reading strategy (QIRD 1)
- (2) Semi-structured interview (SSI)
- (3) Lesson plan of learning activities

##### Phase II:

- (1) Observation form on teacher behavior.
- (2) Observation form on student behavior.
- (3) Semi-structured interview.
- (4) Learning summary and reflection (Figure 2).

##### Phase III:

- (1) Lesson plans of learning activities as prescribed in the developed instructional model of reading strategy.
- (2) Achievement test of reading comprehension.
- (3) Questionnaire on implementation of Reading strategy.

#### **Construction and development of research instruments**

To get valid and reliable questionnaires on implementation of reading strategies, many activities were employed to construct and develop the questionnaire. First, principles and theories on constructing the questionnaire (Dornyei, 2010) and reading strategies (Oxford, 1990) were studied to analyze and synthesize the intended questionnaire. Second; small group of students (about 3 to 5) were determined to face validity in order to test the acceptable understanding on the asked items whether they were well designed and then, to adjust them according to the results. Third, five experts on education and teaching English, who got doctoral degree and possessed at least three years experiences of teaching English in higher education, checked content validity and corrected with their comments. Fourth, the questionnaires in accordance with experts' suggestions were presented to the thesis

**Table 1.** Details of data collection.

Period of time	Instruments	Data Provider
Before the implementation	1. Achievement test of reading comprehension 2. Questionnaire on the implementation of reading strategies	Participants (students)
Throughout the action research	1. Observation form of teacher's behavior 2. Observation form of students' behavior	Co- researcher
The end of each lesson plan	1. Learning summary and reflection form 2. Reading comprehension formative test	Participants (students)
The end of each cycle	Semi-structured interviews	Participants (students)
After the implementation	1. Achievement test of reading comprehension 2. Questionnaire on the implementation of reading strategies	Participants (students)

advisor. To assess the quality of the questionnaire, the adapted version of the questionnaire was tried out with students who had similar characteristics to the sample group of all four campuses, 30 each, 120 in total in order to prevent the selection bias and add up the close to normal curve of distribution. Reliability of questionnaires was computed through Alpha coefficient by Cronbach method. Reliability of memory strategies, cognitive strategies, compensation strategies, meta-cognitive strategies, affective strategies and social strategies was 0.910, 0.927, 0.735, 0.910, 0.894, and 0.838, respectively. Item-total correlation technique was employed to verify discriminant power. Discriminant power of memory strategies was 0.380 to 0.687, cognitive strategies was 0.444 to 0.792, compensation strategies was 0.495, meta-cognitive strategies was 0.377 to 0.756, affective strategies was 0.226 to 0.630, and social strategies was 0.302 to 0.749. Finally, the completed versions of the questionnaires were printed and ready to collect data.

### Research procedures

1. Administer with a sample group used the questionnaires on implementation of reading strategy to a sample group who were to be interviewed.
2. Administer with a learning target group used learning activities of the draft of instructional model of reading strategies through the plan of classroom action research.
3. Administer with a sample group used the achievement test of reading comprehension, questionnaire of reading strategies before implementing the developed instructional model, a sample group learn using learning activities of the developed instructional model of reading strategies, have sample group do achievement test of reading comprehension, questionnaire of reading strategies after implementing the developed instructional model, and have sample group to be interviewed.

### Data analysis

1. Quantitative data; the results of survey research were analyzed through descriptive statistics; frequency, percentage, means, and

standard deviation meanwhile the different average score of reading achievement and reading strategies implementation between before and after using instructional model of reading strategies are analyzed through  $t$ -test (dependent).

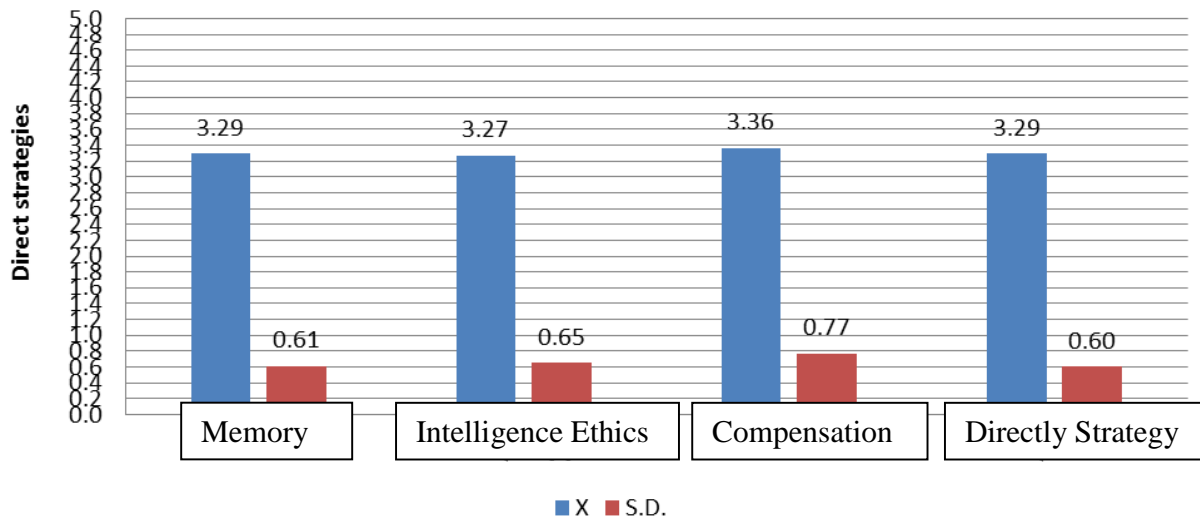
2. Qualitative data, semi-structured interview are analyzed using typology and relevancy.

## RESULTS

According to the results of current implementation of reading strategies, average score of total reading strategy was used. Table 1 shows the results for each scale, such as; moderate practice, sample group employed slightly more indirect strategy and to direct strategy. Among six categories of reading strategies, the most to the least current implementation of reading strategies were compensation strategies, social strategies, affective strategies, memory strategies, cognitive strategies and meta-cognitive strategies, respectively.

According to the results of semi-structured interview, as a whole, the sample group said that they seldom read English passages. In case of reading an English passage, they had no obvious steps in reading a passage. They always look up the meaning of almost every word of the passages from the dictionary. They loved translating English into Thai. When they could not make sense from what they were reading, they did not have ways to solve the problems. If they said they had, they used that ways unsystematically. Shortly, it did not work at all. They finally guessed the possible answer in case of doing the test or stopped reading.

Description of quantitative data of analyzing responses for physical students' assessments is reported in Table 2. The mean correlation of each scale with the other scales were obtained for the sample in this present study as



**Figure 3.** Means and standard deviations of implementing reading strategies. Source: Chamot and O'Malley (1987).

**Table 2.** Means and standard deviation of the implementation of reading strategies for the QIRD.

Implementation reading English strategy	Mean	Standard deviation
Moderate practicing strategy	3.29	0.58
Indirect strategy	3.30	0.62
Direct strategy	3.29	0.60
Compensation strategies	3.36	0.77
Social strategies	3.34	0.70
Affective strategies	3.33	0.64
Memory strategies	3.29	0.67
meta-cognitive strategy	3.25	0.67

indices of scale factor analysis of Moderate Practicing, Indirect, Direct, Compensation, Social, Affective, Memory, and Meta-Cognitive Strategies for the implementation reading English strategy. In Table 2, the scale means ranged from 3.25 to 3.36 on the students evidence responses. Standard deviations for the 8- implementation reading English strategy ranged from 0.58 to 0.77 that it meanwhile as high level for all of the eight strategy scales (Figure 3).

In terms of the instructional model drafting, there are three main steps; preparation, instruction and conclusion. Nine learning activities are divided into each step as follows. Three learning activities of preparation step are motivation raising, making known learning objectives and, filling up background knowledge. Four learning activities of instruction step are reading strategy inform, model, practice and transfer. Two learning activities of conclusion step are teacher and students which sum up the results, problems, and difficulties in practicing implementation of

reading strategy. Teacher and students evaluate, reflect, give and take feedback, and reinforcement in practicing implementation of reading strategy.

Description of quantitative data of analyzing responses for physical students' assessments is reported in Table 2.

The mean correlation of each scale with the other scales were obtained for the sample in this present study as indices of scale factor analysis of Moderate Practicing, Indirect, Direct, Compensation, Social, Affective, Memory, and Meta-Cognitive Strategies for the implementation reading English strategy. In Table 2, the scale means ranged from 3.25 to 3.36 on the students evidence responses. Standard deviations for the 8- implementation reading English strategy ranged from 0.58 to 0.77 that it meanwhile as high level for all of the eight strategy scales.

Table 3 shows the result of three cycles of the classroom action research, 5 lesson plans of reading strategies under 3 main steps: preparation, instruction,

**Table 3.** Maximum and minimum scores, average score, standard deviation, and percentage score of the third phase cycle of the instructional model drafting for the RCAT.

Cycle	Full score	Maximum score	Minimum Score	Average score	Standard deviation	The percentage of 75 score
1	10	9	6	7.76	0.92	77.65
	10	10	7	8.62	0.88	86.18
2	10	10	5	7.62	1.45	76.18
	10	10	5	7.56	1.05	75.59
3	15	14	10	11.26	1.08	75.10

**Table 4.** Scales mean score and standard deviations for pre- and post- forms of the RCAT.

Test Form	Total score	Mean score	Standard deviation	t-test	p-Value
Pre-test	30	11.88	4.54	9.10	0.00
Post-test	30	23.22	6.97		

P < .05, N = 32.

**Table 5.** Scale mean score and standard deviations for pre- and post- forms of the RCAT.

Implementing form	Average score	Standard deviation	t-test	p-value
Pre-implementing	3.54	0.54	2.05	.048
Post-implementing	3.80	0.43		

P < .05, N = 32.

conclusion and 9 learning activities; motivation raising, making known learning objective, filling up background knowledge, reading strategies inform, model, practice, transfer, teacher and students sum up the results, problems, and difficulties in practicing implementation of reading strategy and teacher and students evaluate, reflect, give and take feedback, and reinforcement in practicing implementation of reading strategy. An achievement test of reading strategies and questionnaire on implementation of reading strategies were developed.

### Phase III

According to the effectiveness of developed instructional model of reading strategies for sophomore students of the institute of physical education in the Northeastern region, average score of reading comprehension test of posttest was statistic significantly higher than the pretest score at 0.05 levels, differently. Description of quantitative data of analyzing responses for sophomore student's assessments is reported in Table 4. Reading English strategies implementing questionnaire score after using

model was statistically significant at 0.05 levels, differently.

The pre-implementing and pre-implementing perceptions of 66 sophomore students in two groups of their reading English strategies implementing questionnaire score were measured for statistical significant with t-test analysis is reported in Table 5. It was also confirmed that pre and post implementing perception differentiated significantly ( $p < 0.05$ ) between perceptions of Reading English strategies of students in different groups.

### CONCLUSION AND DISCUSSION

Three main steps: preparation, instruction, conclusion and nine learning activities; motivation raising, making known learning objective, filling up background knowledge, reading strategies inform, model, practice, transfer, teacher and students sum up the results, problems, and difficulties in practicing implementation of reading strategy and teacher and students evaluate, reflect, give and take feedback, and reinforcement in

practicing implementation of reading strategy was developed through the comprehensive survey and intensive classroom action research as found in phase 1 and phase 2. The developed instructional model confirmed its effectiveness as the result of phase 3.

However, there were useful suggestions to apply this model successfully.

#### **At the preparation step**

Teacher should prepare students' readiness by revising their background knowledge and making a linkage of background knowledge to read passage, adjust the passage to be more proper in length or amount of word, word difficulty according to students' reading ability, interest and experiences.

#### **At the instruction STEP**

Teacher should ascertain that students are well informed on reading strategies by various methods and also promote students' information storage and retrieval ability of long term memory. Teacher should demonstrate employing a reading strategy slowly and clearly, emphasize the importance of reading strategies, monitor and evaluate the practicing of reading strategy and motivate students to monitor and evaluate their implementing reading strategies through group, pair and individual work.

#### **At the conclusion step**

Teacher should have students conclude about ways they employed in reading strategy, and also reflect their opinion on conducting reading activities, evaluate their comprehension. Teachers should also give students feedback and compliment. Having feedback, student would know their ability on implementing reading strategies which later is useful for their own reading improvement and for teacher to improve reading activities.

Teacher should have a proper knowledge, ability, and techniques to instruct reading strategies in order to set proper learning activities to promote and improve the application of reading strategies among students. For example, teacher should plan learning activities systemically, give students ample opportunities to practice, wait and help, give them compliment, encourage them to get more confident to share opinion through group discussion and pair work. Changed the roles of teacher as reading strategy demonstrator, facilitator and information giver. Teacher should also introduce ways to store and retrieve information of reading strategies, monitor, evaluate and build up self – confidence and

students' sense of being proud in implementing reading strategy in order to attain learning goal in order that student have a clear comprehension on reading process, ways to solve reading problems using reading strategy.

This is a method to help student read English comprehensively and successfully.

Through the application of the model, students should prepare their knowledge and basic reading skills, be confident to discuss and try possessing the ability to cooperatively work with the others, be good at acting as both leader and member of group and pair work. These roles and characteristics will promote the effective instruction of reading strategy.

Proper time availability is an important consideration to improve the implementation of reading strategies among students, particularly at the first stage of the model. For this, the model is aimed to promote the employing of reading strategies of individual student through group and pair work, information on reading strategies student gain must be correct and clear. This affected the problems solving of reading as one of the most effective ways that student could realize and construct their own reading strategy schema and transfer those schema to read various text through repetition and finally get the sustainable learning. Consequently, applying this kind of model should be time taking. Students should not focus only on reading achievement but should focus on the reading process. This would help students to be aware of proper reading process, participating discussion activities in group and pair works, monitor and evaluate the implementation process of reading strategies.

#### **SUGESTION AND IMPLEMENTATION**

There should be a way to develop the instructional model of reading English strategies for enhancing sophomore students' learning achievements in the Institute of Physical Education in the Northeastern region of Thailand. The report of this result is that a complete reading strategies program model should be contained to include the development of language and thinking skills as well as phonemic awareness, phonics, decoding, word recognition, comprehension, positive reading habits and attitudes, vocabulary, and a sense of the organization of texts such as stories, articles, and reports. All are essential to addressing all the components in the early stages of literacy learning. Addressing reading as one of the several aspects of literacy should be prepared. Others include listening, speaking, writing, using information from text, and responding thoughtfully and critically to text. Teacher should be built on the cultural and linguistic diversity that students bring to the classroom, and this enables all students to understand and appreciate cultural diversity.

Providing management for the reading success of all

students, including those with special needs was assessed. Materials and instruction are adapted to accommodate those students to involve all teachers, including parents, and resources in the community providing language development and models of the importance of reading. To provide teachers with the instructional and assessment tools to plan and deliver to each student the instructional activities that best support that individual's achieving a high level of reading proficiency. The planning aims to raise the achievement of all students are provided.

Therefore, it must be flexible in meeting the needs of all students. Students' learning achievements of their acknowledgements that reading, like all cognitive skills, is linked to the physical well-being of children are enhanced. That well-being starts before birth with sound prenatal care and continues with healthcare for preschoolers as well as school-aged children. The instructional model is built on a wide range of significant research and thinking related to both the theory and practice of reading instruction. Significant research and thinking includes experimental studies, descriptive studies, case studies, meta-analyses of research, and reasonable, reflective writings on theory and best practice. Development of the instructional model incorporates findings of this study related to several factors in reading, not just a limited set of skills. Beginning readers, for example, need to learn about the structure of stories and sentences as well as word structure, which mean that research study in those areas is important.

This model should be a frame to develop the instruction of listening, speaking, and writing strategies using classroom action research through the cooperative working among the stakeholders. There should be a leading of this model and the application of research methodology to investigate and verify reading strategy instruction for another field of study in tertiary student under the specific context. The model should be reexamine with larger scale of sample, time and also the extension of reading achievement evaluation to determine student reading strategy knowledge retention which was the results from the developed model. This would be useful for teachers and persons who are involved in implementing the developed model and to get the model wider impact.

### Conflict of Interests

The authors have not declared any conflicts of interest.

### REFERENCES

- Aebersold JA, Field ML (1997). *From reader to reading teacher*. Cambridge: Cambridge University Press.
- Aegpongpaow O (2008). A qualitative investigation of metacognitive strategies in Thai students' English Academic reading. Thesis of Master degree. Graduated school Srinakharinwirot University Thailand.
- Anderson NJ (1999). *Explore second language reading: Issues and Strategies*. Boston: Heinle and Heinle Publishers.
- Allington RA (1998). Teaching struggling readers: Articles from the reading teacher. Retrieved on 21 September 2015 from <http://lrs.ed.uiuc.edu/students/jblanton/read/readingdef.htm>.
- Barnett MA (1988). Reading through context: How real and perceive strategy use affects L2 comprehension. *Modern Language Journal*. 72:150-162.
- Boonkit K (2006). *Academic English Reading: Strategy – based Instruction*. Research Report. Faculty of Art, Silpakorn University Retrieved July16, 2008, from <http://www.arts.su.ac.th>
- Carrell PL (1994). Evidence for formal schema in second language comprehension. *Lang. Learn.* 34:88-112.
- Carrell PL, Eisterhold JC (1988). Schema theory and ESL reading pedagogy. In: P. Carrell, J. Devine, D. Eskey (Eds). *Interactive approaches to second language reading* (pp. 73 - 92) Cambridge University Press.
- Carrell PL, Pharis BG, Liberto JC (1989). Metacognitive strategy training for ESL reading. *TESOL Q.* 23:647-678.
- Dagostina L, Carrifio J (1994). *Evaluative reading and literacy: A cognitive view*. Massachusetts: Allyn Bacon.
- Dole JA, Duffy GG, Roehler LR, Pearson PD (1991). Moving from the old to the new : Research on reading comprehension instruction. *Rev. Educ. Res.* 61:239-264.
- Eskey DE (1979). Teaching Advance Reading : the structural problem. *English Teaching Forum*, 2(August – September), pp. 210-215.
- Garner R (1987). *Metacognition and reading comprehension*. Norwood, NJ: Ablex Publishing Corporation.
- Grant R (1994). Comprehension strategy instruction: Basic considerations for instructing at – risk college students. *J. Reading* 38:42-48.
- Jimenez RT, Garcia GE, Pearson PD (1996). The reading strategies of bilingual students who are successful English readers: opportunities and obstacles. *Read. Res. Q.* 31:90-112.
- Jesdapornpun N (2001). A study of English reading proficiency of the technical staff at Samart Comtech Company Limited,Thailand. Unpublished master's thesis, Ramkhamhaeng University, Bangkok, Thailand.
- Johns J, Lenski SD (1997). *Improving reading: A handbook of strategies*. Retrieved on 21 September 2015 from <http://lrs.ed.uiuc.edu/students/jblanton/read/readingdef.htm>.
- Kern R (1989). Second language reading strategies instruction: Its effects on comprehension and word inference ability. *Modern Language J.* 73:135-149.
- Kitajama R (1997). Referential strategies training for second language reading comprehension in Japanese texts. *Foreign Lang. Ann.* 30:84-97.
- Kletzien SB (1991). Strategies use by good and poor comprehenders reading expository text of differing levels. *Reading Res. Q.* 26:67-86.
- Nuttall C (2000). *Teaching Reading Skills in a Foreign Language*. Oxford: MacMillan Heinemann.
- Paris SG, Lipson MY, Wixson KK (1983). Becoming a strategic reader. *Contemporary Educ. Psychol.* 8:293-361.
- Ruddell BR, Ruddell MR (1995). *Teaching children to read and write: becoming an influential teacher*. Boston, MA: Allyn and Bacon.
- Songsiri S (1999). A case study of reading skills of grade 12 students. Unpublished Master's Thesis, Ramkhamhaeng University, Bangkok, Thailand.
- Taverner D (1990). *Reading within and beyond the classroom*. Milton Keynes, Philadelphia: Open University Press.
- Urquhart AH, Weir CJ (1998). *Reading in a second language: Process product and practice*. New York: Addison Wesley Longman.
- Wei Y (2005). The relationship between phonological awareness and reading ability of Thai students in English and Thai primary schools of Thailand. Curriculum & Instruction Theses and Dissertations UM Theses and Dissertations. (UMI No.3175160 ProQuest Information

and Learning: Collage Park, MD.

Wiroatanan J (2002). Reading strategies of university EFL Thai readers in reading thai and English expository texts. Ph.D. dissertation, USA: University of Pittsburgh.

Wongsuwan S (1992). The analysis of the problems concerning text reading skills of the Matayom Suksa 6 students in the demonstration schools affiliated to the Ministry of University Affairs in Thailand. Unpublished Master's Thesis, Mahidol University, Bangkok, Thailand.



*Full Length Research Paper*

# An evaluation of pre-service Turkish teachers' skills and knowledge regarding preparation of worksheets to teaching Turkish to foreigners

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The aim of this study was to evaluate pre-service Turkish teachers' skills and opinions regarding preparation of worksheets to teach Turkish to foreigners. For this purpose, the case study, which is one of the qualitative research methods, was used. A total of 50 Pre-Service Turkish Teachers at Ataturk University were selected as the study group through criterion sampling. The data for the study were collected through worksheets developed by teacher candidates and a semi-structured interview form developed to determine their opinions. The data collected was analyzed using content analysis. As a result of the study, it was determined that although there are some concerns regarding preparation of worksheets by pre-service Turkish teachers for foreigners to teach Turkish, they are at moderate level in general. In addition, it was observed that teacher candidates gained significant experience related to the preparation process of worksheets, gained skills in scientific research process and mostly presented practical learning for foreign students by considering their daily needs.

**Key words:** Turkish teaching, language teaching, material development, case study and event design.

## INTRODUCTION

The number and quality of the materials developed with the spread of teaching Turkish as a foreign language in the country and abroad are increasing day by day. The development of teaching Turkish to foreigners ensures more effective and efficient education as well as contributes to the number of those learning Turkish. However, there are major drawbacks regarding development of these materials compared to materials developed to teach various foreign languages other than Turkish. According to Sülükçü (2011), the materials developed for foreigners to teach Turkish are very limited

and it is necessary to prepare Turkish teaching materials by taking different age groups into account.

Appealing to different senses with the materials in the teaching process will provide permanent behavioral changes and multiple learning opportunities to the students. The use of written, visual and audio materials will make courses more interesting. Furthermore, teachers should know the type of the materials to be used and must be trained for preparation and use of the materials (Duman, 2013). Teachers and pre-service teachers can offer effective teaching by using

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instructional technologies and gaining the related skills, and applying these skills effectively in the classroom (Varank and Ergün, 2005; Alım, 2015).

In addition to effective use of materials by in-service teachers and pre-service teachers, the quality of these materials is also important. Fuller (2001) states that the quality of the materials, different sources and use of visual elements while learning different foreign languages contribute to the learning process significantly. According to Yılmaz and Talas (2015), the materials developed should be selected carefully and serve pre-determined purposes in order to organize the learning environment and attract the attention of students. Learning materials that are carefully selected will also determine the quality of learning.

Teaching materials used in the learning environment are important in terms of retention of learning. Among the learning materials that can be effective are worksheets developed practically and associated with everyday life including thought-provoking questions and enriched with interesting illustrations, graphics and images contribute to a more permanent learning for students (Ormancı and Şaşmaz Ören, 2010). Worksheets are one of the teaching materials used to ensure lasting behavioral changes in individuals (Kaymakçı, 2006).

Worksheets can contribute to students' learning in many ways in addition to facilitating permanent learning. Students should be well monitored, their personal perspectives should be determined and an effective communication should be established with them while organizing activities associated with integrative learning approach. Worksheets should be developed and applied in order to perform these activities (Kurt and Akdeniz, 2002; Entwistle et al., 1997). Students with differences and various abilities learn something at the same time in the teaching environment. Each student should be offered with activities help them to learn more easily in the learning process by taking their individual differences into account. Worksheets can be used to make this happen (Çiftlik, 2011). Worksheets help students to individualize the learning process and manage the learning process.

There are several definitions related to the worksheets. Demircioğlu et al. (2004) define worksheets as "important tools including the process steps guiding students, helping them to make their minds up and facilitating participation of all of them in the learning process at the same time". According to Yigit et al. (2007), "Worksheets are used to lead students to study by themselves and gain a sense of self-confidence to fulfill their responsibilities" (Kaymakçı, 2006). "Worksheets are the teaching materials including instructions to perform some behaviors related to a subject that can be used in and out of the classroom to ensure individual and active learning by applying on students during all educational steps".

The subjects in which students experience difficulties

should be taken into account while preparing the worksheets. These subjects may be introduced as more enjoyable and fun by preparing worksheets about them (Demircioğlu and Atasoy, 2006). These worksheets should include some visual, verbal and contextual features in order to have well-developed worksheets that are appropriate for the particular level of the students (Şaşmaz and Ormançı, 2012). Well-designed worksheets with these specifications can be used as an effective teaching tool (Dede, 2010).

Worksheets increase students' interest in the course contents with their colorful designs and striking features. Thus, students are motivated to take active roles in the learning process (Elvan, 2012). Well-developed worksheets can help students to manage the process by supporting them to work independently (Tuncer and Altunay, 2010). Worksheets help students learn in an effective way by making them responsible for their own learning. They lead them to meaningful learning instead of literal learning (Bayrak, 2008). In addition to this, worksheets play an important role in the diversification of the environment in the learning and teaching environments, helping teachers' concentrate on the subject and determination of learning status of students (Göçer, 2012).

In literature, there were no studies on the development of the worksheets in teaching Turkish to foreigners. Besides, there are some studies conducted on the impact of worksheets in teaching Turkish as the mother tongue. Göçer (2012) has investigated the opinions of pre-service Turkish teachers regarding worksheets. Tan (2008) has investigated the impact of worksheets on the grammar achievement of 7th grade students and Çiftlik Akçakaya (2011) has investigated the effect of worksheets on elimination of misconceptions regarding grammar education. In addition to teaching Turkish, there are studies relating to the different disciplines of education investigated by Demircioğlu et al. (2014), Özay (2010), Ormançı and Şaşmaz (2010), Demircioğlu and Kaymakçı (2011), Demircioğlu and Atasoy (2006), Elvan (2012), Şaşmaz and Ormançı (2012) and Yeşilyurt and Gül'ün (2011). Since there was no study in literature that investigated the worksheets developed to teach Turkish to foreigners and opinions of pre-service teachers regarding the preparation of these worksheets, this study was needed.

### **The purpose of the study**

This study was aimed at evaluating the pre-service Turkish teachers' skills and opinions regarding preparation of worksheets to teach Turkish to foreigners. In the study, the following research questions are tried to be answered:

1. How are the skills of pre-service Turkish teachers

regarding preparation of worksheets to be used to teach Turkish to foreigners?

2. What are the opinions of pre-service Turkish teachers regarding preparation of worksheets to be used to teach Turkish to foreigners?

## METHODOLOGY

Information about the research model, study group, data collection and analysis of the data is given.

### Research model

In the present study, the case study, which is one of the qualitative research methods, was used. In this study, the detailed investigation of worksheets developed by pre-service Turkish teachers to teach Turkish to foreigners and their opinions regarding preparation of these worksheets reflects the case study, which is one of the qualitative research methods.

### Study group

This study was conducted on a total of 50 teacher candidates majoring in Turkish Education at Ataturk University and taking the course "Teaching Turkish to Foreigners" in their fifth semester. Pre-service Turkish teachers were asked to prepare worksheets to be used to teach Turkish to foreigners. After preparing worksheets, their opinions regarding preparation process of these worksheets were also obtained. In the selection of study group, criterion sampling, which is one of the purposive sampling methods, was used. The reason for using the criteria selected sampling is because the study is conducted on pre-service Turkish teachers taking the course "Teaching Turkish to Foreigners".

### Data collection

In the study, the data of the study were collected through worksheets developed by pre-service Turkish teachers to see their worksheet preparation skills and semi-structured interview form developed to determine their opinions. Pre-service Turkish teachers taking the course "Teaching Turkish to Foreigners" have seen application examples by receiving theoretical information regarding the worksheets they would prepare in the 10th week of the course. In this way, they were informed about the points to consider, and problems that they may encounter. Teacher candidates were given 2 weeks to answer the questions about themselves and prepare the worksheets. In this period, the participants were consulted and received feedbacks at every stage of the study by the researcher. At the end of this time period, the worksheets developed on the computer were collected. The teacher candidates received feedbacks about the worksheets they had created.

After application of worksheets on pre-service teachers, they were asked to fill in the interview form about the problems they had encountered while preparing these materials, the contribution of this process to them and most importantly the aspects of the study. In the interview forms, their awareness regarding worksheets was determined. In the development process of the interview the relevant documents in the literature were investigated and the items were created accordingly. The items developed were examined by two faculty members who are specialists in the area of teaching Turkish and they expressed their opinions regarding these items.

Some modifications were made on the form in accordance with the expert opinions received. Some items in the form were changed after examining pilot interviews conducted with 5 students. The form was finalized after these modifications. Data diversity using multiple data collection tool has been used to increase the validity of the study.

### Data analysis

In this study, the qualitative data analysis methods were used to analyze the data obtained. Although the qualitative analysis of data is considered as a non-objective interpretation by making direct citations from an interview, observation or document, it is rather a complex and systematic process (Ekiz, 2009). In the present study, the content analysis, which is one of the qualitative data analysis methods, was used. "Content analysis includes techniques on different points on a line that lies between objectivity and subjectivity ends. These methods, which have multi-shaped and multifunctional aspects, have a structure that allows researchers to be more creative" (Bilgin, 2014).

Worksheets developed by pre-service Turkish teachers were classified into three levels as advanced, moderate and low levels by analyzing them in terms of form and content of the worksheets. The relevant studies in the literature were reviewed and some studies that investigated the worksheets were used while determining the evaluation criteria. Worksheets were analyzed by another person other than the researcher while they were being investigated. Two raters shared their thoughts with each other and the issues that were not in agreement were excluded from the evaluation, and collective decisions were made.

Codes and categories were created from data obtained in the form of interviews. One more person other than the researcher made coding on the data to ensure the reliability of the codes and categories created. For the comparison of the codes created by encoders, the reliability calculation formula put forward by Miles and Huberman (1994) was used. The inter-researcher agreement rate was found to range between 85 and 89%, respectively. The codes on which there was no agreement were discussed by encoder and an agreement was reached. Some opinions of teacher candidates were given in order to support the codes obtained from interview forms. No changes were made in the expressions of teacher candidates. The reliability of the interview data was also tried to be ensured by these processes made during the data analysis.

## RESULTS

In this section, the findings are presented in the tables in accordance with the research questions.

### The findings related to the worksheet preparation skills of pre-service Turkish teachers

The distribution of the topics included in the worksheets developed by Pre-Service Turkish Teachers is given in Table 1.

Considering Table 1, the topics included in the worksheets developed by pre-service Turkish teachers are discoveries, grammar, cultural elements, individual differences, daily life, the media, health and nutrition, the world of literature, nature and the animal world, emotions

**Table 1.** The distribution of the topics included in the worksheets.

<b>The distribution of the topics</b>	<b>f</b>	<b>%</b>
Discoveries	1	2
Grammar	5	10
Cultural elements	12	24
Individual differences	3	6
Daily life	16	32
The media	1	2
Health and nutrition	5	10
The world of literature	2	4
Nature and the animal world	2	4
Emotions and dreams	3	6
Total	50	100

**Table 2.** The formal qualification of worksheets.

<b>The formal qualification</b>	<b>Level</b>	<b>f</b>	<b>%</b>
The appropriateness of expressions	High	12	24
	Moderately	23	46
	Lower	15	30
Clarity and understandability of the Instructions	High	14	28
	Moderately	22	44
	Lower	14	28
Appropriateness of the page designs	High	10	20
	Moderately	22	44
	Lower	18	36
The use of appropriate visuals	High	23	46
	Moderately	15	30
	Lower	12	24
The use of appropriate font/font size	High	14	28
	Moderately	16	32
	Lower	20	40
Compliance of the audio-visual elements	High	8	16
	Moderately	3	6
	Lower	39	78

and dreams. The most widely discussed topic among all of them is daily life (f: 16). It can be suggested these worksheets are mostly developed to meet daily needs of the students. The formal qualification of worksheets developed by Pre-Service Turkish teachers is given in Table 2.

In Table 2, there are six categories related to formal qualification of worksheets developed by Pre-Service

Turkish Teachers. In the worksheets, the appropriateness of expressions (f: 23), clarity and understandability of the instructions (f: 22), appropriateness of the page designs (f: 22) were found to be moderately sufficient; while the use of appropriate visuals (f: 23) is found to be highly sufficient and font/font size (f: 20) and compliance of the audio-visual elements are found to be adequate in much lower levels. According to these results, the materials

**Table 3.** Content qualification of the worksheets.

Content competence	Level	f	%
Appropriate length of the pages	High	5	10
	Moderately	25	50
	Lower	20	40
Including different types of questions	High	13	26
	Moderately	19	38
	Lower	18	36
Including appropriate questions	High	9	18
	Moderately	22	44
	Lower	19	38
Inclusion of adequate level of language skills	High	5	10
	Moderately	4	8
	Lower	41	82
Participation of the students	High	9	18
	Moderately	34	68
	Lower	7	14
Providing new information	High	12	24
	Moderately	28	56
	Lower	10	20
Easy implementation	High	18	36
	Moderately	26	52
	Lower	6	12
Compliance with the students' levels	High	15	30
	Moderately	12	24
	Lower	23	46

used seem to be visually rich and varied with the use of appropriate visual materials that have a high level of sufficiency. However, most of the worksheets have different font types and sizes, the font sizes selected in the worksheets are either larger or smaller than normal and most of the worksheets don't include any video or audio recordings. Therefore, the worksheets developed by Pre-Service Turkish Teachers are considered to be poor in terms of audio visual aspects.

The findings related to content qualification of the worksheets developed by Pre-Service Turkish Teachers are given in Table 3. In Table 3, there are eight categories about content qualification of the worksheets developed by pre-service Turkish teachers. In the worksheets, the items regarding appropriate length of the pages (f: 25), including different types of questions (f: 19), including appropriate questions (f: 22), participation of the students

(f: 34), providing new information (f: 28) and easy implementation (f: 26) are found to be moderately sufficient; while the items related to inclusion of adequate level of language skills (f: 41) and compliance with the student levels (f: 23) seem to be adequate in much lower levels. Considering the items related to inclusion of adequate level of language skills, there were reading and writing activities in general, whereas the reading and speaking activities were skipped over. With regard to the items compliance with the students' levels, more complex and high level worksheets were developed.

### **Findings related to the opinions of pre-service Turkish teachers**

The opinions of pre-service Turkish teachers regarding

**Table 4.** The contribution of worksheets developed by pre-service Turkish teachers to themselves.

<b>Contributions of developing worksheets</b>	<b>f</b>	<b>%</b>	<b>Opinions of pre-service Turkish teachers</b>
Gaining the experience of preparing textbooks	15	30	Obviously, I think I spent a great effort to complete this task, found a chance to examples given to us, gained experience to teach Turkish to foreigners in the future semesters and I also believe that I gained the ability to prepare a small scale textbook in teaching Turkish to foreigners (P1)
The chance of implementing theoretical	19	38	It was very good to implement the information we have learnt theoretically in a new field while writing a new book (P3)
Awareness in teaching Turkish language	4	8	We have learned how to think systematically, be organized and be aware of others' learning level (P23)
Being guided in teaching Turkish language	3	6	This task is a guide for me if I choose to study in this area in the future (P13)
Developing computer use skills	3	6	I have studied the book of Turkish language teaching to foreigners. I improved my Word (Office Program) using skills. I get an idea about how I teach what I want to teach (P20)
Gaining higher level of thinking skills	2	4	It contributed to creative thinking but took a lot of time (P24)
Learning the sources that can be used in teaching turkish language	3	6	We have learned the sources that we can use while doing our assignment. We have reviewed the book used in education (P39)
Developing basic language skills	1	2	I developed by skills in relation to computer and four basic skills (P42).
<b>Total</b>	<b>50</b>	<b>100</b>	<b>-</b>

contribution of worksheets developed by them to themselves are given in Table 4. In Table 4, the opinions of teacher candidates regarding the contributions of these worksheets to themselves are given. Considering the information given in Table 4, pre-service Turkish teachers have 8 different views regarding contributions of the worksheets developed by them. These views are gaining the experience of preparing textbooks (f: 15), the chance of implementing theoretical information (f: 19), awareness in teaching Turkish language (f: 4), being guided in teaching Turkish language (f: 3), developing computer use skills (f: 3), gaining higher level of thinking skills (f: 2), learning the sources that can be used in teaching Turkish language (f: 3) and developing basic language skills (f: 1). According to these views, the worksheets developed by the teacher candidates allowed them to put what they learn into practice and provided them the experience of preparing textbooks. Accordingly, pre-service Turkish teachers have gained some practical skills that are important in the field of teaching Turkish to foreigners. The views of pre-service Turkish teachers in regard to difficulties they faced while developing the worksheets are presented in Table 5.

In Table 5, the views of pre-service Turkish teachers with regard to difficulties they have faced while developing the worksheets are presented. Considering the views given in Table 5, teacher candidates have 11 different views regarding the difficulties they faced while developing the worksheets. These views are creating different and unique work (f: 21), developing worksheets appropriate to the students' levels (for 13), developing fun worksheets (f: 1), organizing activities for the higher level thinking skills (f 1), skill of computer use (f: 5), lack of access to adequate sources (for 4), spending too much time (f: 3), inability to decide what to prepare (f: 4), preparing different questions (f: 1), selecting sample sentences (f: 1) and appropriate photo selection (f: 2). According to the views of teacher candidates, they have mostly experienced difficulties to develop different and unique worksheets and developing worksheets that are appropriate for the language level, respectively. Pre-service Turkish teachers stated that they spent a lot of time on this assignment which is based on research and hard-working skills and these issues challenged them the most. The views of pre-service Turkish teachers with regard to outstanding features of the worksheets are

**Table 5.** Difficulties encountered while developing the worksheets.

Difficulties encountered	f	%	Opinions of pre-service teacher
Creating different and unique work	21	37,5	We wanted to prepare different activities from the activities given in the book; however, we have difficulties since we were not very experienced in developing new activities (P23).
Developing worksheets appropriate to the students' levels	13	23,2	I was very hesitant. It was very hard for me to prepare the appropriate level (P18).
Developing fun worksheets	1	1,7	The text we choose should be fun, instructive and had to be appropriate to the event. This was very hard for me (P2).
Organizing activities for the higher level thinking skills	1	1,7	I have spent great effort to create a unique work that can develop high-order thinking skills This was the challenging part of the task (P4).
Skill of computer use	5	8,9	I have difficulties about the use of computer and organizing the assignment (P48).
Lack of access to adequate sources	4	7,1	It was difficult to find sources (P11).
Spending too much time	3	5,3	It took a lot of time to review many sources (P13).
Inability to decide what to prepare	4	7,1	It was challenging to decide what kind of activity I was going to develop and decide which activity would be more efficient (P46).
Preparing different questions	1	1,7	It was so hard especially to prepare questions after the text. It was also challenging to prepare a video. I spent almost 1 week to find the video (P30).
Selecting sample sentences	1	1,7	It was hard to create sample sentences (P34).
Appropriate photo selection	2	3,5	It was difficult to match the subjects with pictures (P44).
Total	56	100	-

presented in Table 6.

In Table 6, the views of pre-service Turkish teachers with regard to outstanding features of the worksheets developed by them are presented. Considering the views given in Table 6, teacher candidates have 11 different views regarding the outstanding features of the worksheets developed by them. These views are having fun while learning (f: 5), developing worksheets appropriate to the level of students (f: 7) and towards higher order thinking skills (f: 2), reflecting Turkish culture (f: 4), including different and unique activities (f: 6), developing worksheets in accordance with achievements of European Language Portfolio (f: 1) and towards practical learning (f: 10), providing Turkish language education in the texts (f: 3), teaching with examples (f: 2), using effective visuals (f: 3) and aiming proper education of language skills (f: 3). Accordingly, the most important feature of the worksheets developed by pre-service Turkish teachers is developing towards practical learning.

It can be stated that it was aimed to develop practical learning skills of the students with these worksheets.

## CONCLUSION

The study aimed at evaluating the pre-service Turkish teachers' skills and opinions regarding preparation of worksheets to teach Turkish language to foreigners. These worksheets were mostly developed in relation to daily life and cultural elements. Thus, it was pre-determined that these worksheets should include daily life activities and cultural elements aimed to facilitate the daily lives of those learning Turkish language. In a study conducted by Şaşmaz and Ormancı (2012), it was reported that the worksheets developed by classroom teacher candidates are effective on daily lives. Demircioğlu et al. (2014) stated that including examples from daily lives in the worksheets facilitates the learning

**Table 6.** The outstanding feature of the worksheets developed.

The outstanding feature	f	%	Views of the pre-service teacher
Having fun while learning	5	10,8	The most important feature of the worksheets is the student will have fun while learning. A lot of information is combined with activities within the scope of games (P1)
Developing worksheets appropriate to the level of students	7	15,2	The most important feature of these worksheets is that they don't appeal to everyone, but a certain group indicated (P15)
Towards higher order thinking skills	2	4,3	High-level cognitive skills such as creative thinking and problem solving (P14)
Reflecting Turkish culture	4	8,6	I have tried to reflect Turkish culture as much as possible with the materials I have prepared (P7)
Including different and unique activities	6	13	Unique events, appropriate level of activities, and lots of different activities (P10)
Developing worksheets in accordance with achievements of European language portfolio	1	2,1	Developing towards achievements of the European Language Portfolio (P10)
Towards practical learning	10	21,7	I think it would be useful for a foreigner to practice in learning Turkish language (P18)
Providing Turkish language education in the texts	3	6,5	Aiming to teach Turkish language by having reading practices on a text (P25)
Teaching with examples	2	4,3	It was already aimed to have worksheets towards teaching Turkish to foreigners with examples (P28)
Using effective visuals	3	6,5	The most important feature of the worksheets I prepared is presenting information with activities, applications and visuals (P40)
Aiming proper education of language skills	3	6,5	I have included all skills and they seem sufficient since I have prepared separate texts for each topic (P45)
Total	46	100	-

process of the students.

Considering the formal qualification of the worksheets developed, the appropriateness of expressions, clarity and understandability of the instructions, appropriateness of the page designs are found to be moderately sufficient; while the use of appropriate visuals is found to be highly sufficient and font/font size, and compliance of the audio-visual elements are found to be adequate in much lower levels. Worksheets developed by pre-service Turkish teachers have moderate level of sufficiency in terms of formal qualifications, and the use of audio visual elements said to be insufficient. Considering the content competence of the worksheets, the items regarding appropriate length of the pages, including different types of questions, including appropriate questions, participation

of the students, providing new information and easy implementation are found to be moderately sufficient; while the items related to inclusion of adequate level of language skills and compliance with the students' levels seem to be modestly adequate.

Therefore, it can be said that the worksheets developed by pre-service Turkish teachers have moderate level of sufficiency in terms of content competence, and they experienced difficulties while creating worksheets appropriate to the level of students. Although there are some studies such as Göçer (2012), Tan (2008), Çiftlik (2011), Tarim and Akdeniz (2007), Özdemir (2006) and Dede (2010) with regard to the use of worksheets in the literature, a case study aiming to develop worksheets is conducted by only Şaşmaz and Ormancı (2012).



According to their study, the worksheets developed by classroom teacher candidates for Science and Technology course are moderately sufficient.

Considering the opinions of teacher candidates regarding contribution of these worksheets to themselves, it was stated that these worksheets gave the chance of implementing theoretical knowledge they have acquired. According to this data, it can be said that pre-service Turkish teachers gained some practical skills in the field of teaching Turkish language to foreigners. In the study of Şaşmaz and Ormancı (2012), it was stated that these practices help teacher candidates learn how to develop worksheets and gain the ability to develop such works.

Considering the views of pre-service Turkish teachers in regard with difficulties they have faced while developing the worksheets, they have experienced difficulties to develop different and unique worksheets at most. Pre-service Turkish teachers may think that they spend too much time to acquire these skills that can be improved based on research and these issues were the most challenging ones for them. Bozdoğan (2007) suggests that since teachers know their students, they create the most appropriate worksheets for their students.

Considering the views of pre-service Turkish teachers with regard to outstanding features of the worksheets developed by them, it can be said that they prepared these worksheets towards practical learning. It can be stated that it was aimed at developing practical learning skills of the students with these worksheets. Several teacher candidates stated that they have tried to develop fun and interesting worksheets. According to the study of Dede (2010), the visuals in the worksheets help in drawing attention of students and motivating them. Demircioğlu et al. (2014) stated that worksheets attract the attention of students.

Gaining the ability to create and use in other courses may contribute to pre-service Turkish teachers in terms of learning by doing. Teacher candidates may be informed about the uses of worksheets in order to increase the prevalence of use of worksheets in the learning environments.

## Conflict of Interests

The author has not declared any conflicts of interest.

## REFERENCES

- Alım M (2015). Coğrafya Öğretmeni Adaylarının Öğretim Teknolojileri ve Materyal Tasarımı/Geliştirme Dersinde Elde Ettikleri Kazanımlar, *Doğu Coğrafya Dergisi*, 20(33):1-10.
- Bayrak N (2008). Yapılandırmacı Öğrenme Yaklaşımının Beş Aşamalı Modeline Uygun Olarak Geliştirilen Ders Yazılımı ve Çalışma Yapraklarının Öğrencilerin Başarısına, Öğrenilen Bilgilerin Kalıcılığına ve Öğrencilerin Fen Bilgisi Dersine Yönelik Tutumlarına Etkisinin İncelenmesi, Master's Thesis, Atatürk University, Erzurum.
- Bilgin N (2014). Sosyal Bilimlerde İçerik Analizi: Teknikler ve Örnek Çalışmalar, Siyasal Kitabevi, Ankara.
- Bozdoğan A (2007). Fen Bilgisi Öğretiminde Çalışma Yaprakları ile Öğretimin Öğrencilerin Fen Bilgisi Tutumuna ve Mantıksal Düşünme Becerilerine Etkisi, Master's Thesis, Çukurova University, Adana.
- Çiftlik Akçakaya T (2011). Dil Bilgisi Öğretimine İlişkin Kavram Yanılgılarını Gidermede Çalışma Yapraklarının Etkililiği: Kelime Türleri Örneği, Master's Thesis, Sakarya University, Sakarya.
- Dede N (2010). Atom Konusunda Geliştirilen Çalışma Yapraklarının Öğrenci Başarısı Üzerine Etkisi, *E-Journal of New World Sciences Academy Education Sciences*, 5(1):210-227.
- Demircioğlu H, Atasoy Ş (2006). Çalışma Yapraklarının Geliştirilmesine Yönelik Bir Model Önerisi, *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi* 19:71-79.
- Demircioğlu H, Demircioğlu G, Ayas A (2004). Kavram Yanılgılarının Çalışma Yapraklarıyla Giderilmesine Yönelik Bir Çalışma, *Milli Eğitim Dergisi* 163:121-131.
- Demircioğlu H, Demircioğlu G, Yedigaroğlu M (2014). Çalışma Yapraklarının Öğrencilerin Yükseltgenme Ve İndirgenme Kavramlarını Anlamaları Üzerine Etkisi, *Eğitim ve Öğretim Araştırmaları Dergisi* 3(2):243-256.
- Demircioğlu İH, Kaymakçı S (2011). Tarih Öğretmenlerinin Çalışma Yaprakları Hakkındaki Görüşlerinin Değerlendirilmesi, *Türk Eğitim Bilimleri Dergisi* 9(1):169-200.
- Duman GB (2013). Türkçenin Yabancı Dil Olarak Öğretiminde Materyal Geliştirme Ve Materyallerin Etkin Kullanımı, *Ana Dili Eğitimi Dergisi* 1(2):1-8.
- Ekiz D (2009). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
- Elvan Ö (2012). Sosyal Bilgiler Öğretiminde Çalışma Yaprakları Kullanılmasının Kavram Yanılgılarını Gidermeye Etkisi, Master's Thesis, Ahi Evran University, Kırşehir.
- Fuller GE (2001). Yabancı Dil Nasıl Öğrenilir? Avesta Basın Yayın, İstanbul.
- Göçer A (2012). Türkçe Öğretiminde Çalışma Yapraklarının Kullanılmasına Yönelik Aday Öğretmen Görüşlerinin Değerlendirilmesi, *Karadeniz Araştırmaları* 32:155-170.
- Kaymakçı S (2006). Tarih Öğretmenlerinin Çalışma Yaprakları Hakkındaki Görüşleri, Master's Thesis, Karadeniz Teknik University, Trabzon.
- Kurt S, Akdeniz AR (2002). Fizik Öğretiminde Enerji Konusunda Geliştirilen Çalışma Yapraklarının Uygulanması, V. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi Bildiriler Kitabı, METU, Ankara.
- Miles MB, Huberman MA (1994). *Qualitative Data Analysis*, Sage Publication, London.
- Ormancı Ü, Şaşmaz Ören F (2010). Çalışma Yapraklarının Yararları, Sınırlılıkları ve Kullanımına İlişkin Sınıf Öğretmeni Adaylarının Görüşleri, Paper presented in International Conference on New Trends in Education and Their Implications in Antalya-Turkey, November 11 to 13, 2010.
- Özay Köse E (2010). Dokunma, İltis ve Koklama Duyuları ile İlgili Çalışma Yapraklarının Öğrenci Başarısı Üzerine Etkisi, *TÜBAV Bilim Dergisi* 3(1):117-127.
- Özdemir Ö (2006). İlköğretim 8. Sınıf Türün Devamlılığını Sağlayan Canlılık Olayı (Üreme) Konusunun Çalışma Yaprakları ile Öğretiminin Öğrenci Erişimine ve Kalıcılığa Etkisi, Master's Thesis, Dokuz Eylül University, İzmir.
- Sülükçü Y (2011). Yabancılarla Türkçe Öğretiminde (Temel Seviye A1) Bilgisayar Destekli Materyal Geliştirme ve Bunun Öğrenci Başarısına Etkisi, Doctoral Dissertation, Selçuk University, Konya.
- Şaşmaz Ören F, Ormancı Ü (2012). Öğretmen Adaylarının Çalışma Yapağı Geliştirme ve Kullanma Uygulaması ile Bu Uygulamaya Yönelik Görüşlerinin Değerlendirilmesi, *Kuram ve Uygulamada Eğitim Bilimleri* 12(1):241-270.
- Tan E (2008). İlköğretim 7. Sınıf Dil Bilgisi Öğretiminde Zarflar Konusuyla İlgili Yapılandırmacı Yaklaşımına Göre Hazırlanmış Çalışma Yapraklarının Öğrenci Başarısına Etkisi, Master's Thesis, Atatürk University, Erzurum.
- Tarım K, Akdeniz F (2007). The Effects of Cooperative Learning on Turkish Elementary Students' Mathematics Achievement and Attitude

- Towards Mathematics Using TAI and STAD Methods, *Educ. Stud. Math.* 67(1):77-91.
- Tuncer T, Altunay B (2010). Doğrudan Öğretim Modeli'nde Kavram Öğretimi, Kök Yayıncılık, Ankara.
- Yeşilyurt S, Gül Ş (2011). Yapılandırmacı Öğrenme Yaklaşımına Dayalı Hazırlanan Çalışma Yaprağının Öğrenci Başarısına Etkisi (Pilot Uygulama), *Uludağ Üniversitesi Eğitim Fakültesi Dergisi* 24(1):247-261.
- Yılmaz F, Talas Y (2015). Yabancı Dil Olarak Türkçe Öğretiminde Materyal Olarak Animasyon Kullanımı ve Önemi, *International Journal of Languages' Education And Teaching*, 3(1):114-127.
- Yigit N etc. (2007). Öğretim Teknolojileri ve Materyal Geliştirme, Akademi Kitabevi, Trabzon.

*Full Length Research Paper*

# Capturing pre-service social studies teachers' perceptions about the concept of election through metaphor analysis

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**The aim of this study is to analyze the perception of pre-service social studies teachers (PSSTs) about the concept of election via metaphors. A study group of this work consisted of 61 PSSTs from Niğde University, Faculty of Education, Social Studies Teaching Department. Implementation and data collection was done in 2014 to 2015 academic year. Thoughts of PSSTs about the concept of the election were analyzed by metaphorical analysis and content analysis. The PSSTs produced 42 metaphors and from an analysis of these metaphors, 8 categories were identified: election as a source of preference, election as a source of fallacy/time wasting, election as a source of diversity, election as a source of rivalry/race, election as a source of impact, election as a source of uncertainty, election as a source of tranquility, and election as a source of expectation.**

**Key words:** Social studies, pre-service social studies teachers, election, and metaphor.

## INTRODUCTION

One of the ways to govern people is the periodical and free elections. The source of governing the country is the people who are called citizens. Thus, citizens need mechanisms so that they can explain their preferences and wills. The first of these mechanisms is the concept of election (Erdoğan, 2013, p. 287). In a modern democracy, the large scale needs are: (1) elected governors, (2) free, fair and frequent elections, (3) freedom of expression, (4) alternative source for information, (5) corporate autonomy, and (6) inclusion of citizens (Dahl, 2001, p. 89). The concept of election is highlighted in the first two statements of Dahl's first two points.

Election can be defined as a preference for voting,

choosing someone from the society to carry on the public affairs by the citizens (Karaman, 2011, p. 9). Voting is essential in democracies to define the delegates who will act in the name of citizens. Partaking in the election of the representatives is ensured as widely by the citizens as it can be (Gözübüyük, 2003, p. 25). In this concept, protecting democratic values is related to every individual who takes part in elections.

When taken into consideration, education can be seen as the major role in making sense, gaining, and sustaining the democratic values. It is crucial from democracy viewpoint to provide for individuals to gain democratic values through education and active role taking in social

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events (Nelson, 2001, p. 30). In this concept, social studies aim to develop some attitudes and values in the citizens who are bound to democratic life (Öztürk, 2009, p. 10).

Metaphors, as literal structures, are reflections of an age, a culture, a setting. Metaphors tell us about the actions and thoughts of those who use them (Draaisma, 2014, p. 21). Our daily conceptual system is mainly metaphorical since we think with them and take action with them (like the concept of election). Our perception, the way we find out our way, and communication style is constructed with these metaphors. Everything belonging to mankind happens within this creational power. It is crucial to understand this creative power, because studying metaphors means that you have to understand who you are and what kind of society you belong to (Lakoff and Johnson, 2015, p. 13).

In educational discourse, the basic function of metaphors is being understood. Thus, it is a way to disclose the thoughts about learning and teaching (Woon and Ho, 2005). Researching with metaphors in educational situations creates a bond between the thought and action, because metaphors reflected by individuals in the texts give coherent tips about their thoughts (Cameron, 2003, p. 51). On the other hand, teachers and pre-service teachers have the ability to make sense out of the world, so they can be thought of as sense-makers. Metaphor analysis is a proper way to reveal the situations of especially pre-service teachers about meaning and sense (Black, 2013, p. 28).

A representational summary of how the data was accumulated and supported teachers' and pre-service teachers' meaning-making and sense-making is defined as: multiple forms of data representation; conversation and storytelling; drawing and metaphor; journal writing; recounting dilemmas and life history (Black, 2013, p. 28).

In literature, many studies can be encountered on the metaphorical perceptions of pre-service teachers about definite subjects. For this study, studies that examined perceptions of pre-service teachers that related to concept of election (democracy, ethics, value, diversity, tolerance, women, social participation, and education) (Köseoğlu, 2015; Taşgın and Köse, 2015; Aladağ and Kuzgun, 2015; Mutluer, 2015; Uslu, 2015; Guven, 2014; Güder and Yıldırım, 2014; Sözer and Özkan, 2014; Seyhan, 2014; Gültekin, 2013; Nalçacı and Bektaş, 2012; Sarı and Sadık, 2011; Brown et al., 2005). No studies have been found during literature research that aims to metaphorically analyze the subject of pre-service social studies teachers' (PSSTs') perceptions. Thus, it can be said that this study will positively affect the literature.

One of the concrete indicators of a democratic life is the election. People can feel like a part of the democratic society via elections. Social studies lesson involves the concepts of election and democracy, so it is important to examine the perceptions of "election" concept of pre-service teachers who are going to teach these subjects.

The reason why metaphorical analysis is chosen to

examine the pre-service teachers' perceptions is that metaphorical analysis is regarded as an effective method of literature.

The main aim of this study is to analyze the PSSTs' perception of the concept of "election" (based on the thesis that via metaphors feelings and thoughts can be captured). With this purpose, these questions are asked to find an answer:

- (1) What are metaphors used by PSSTs to explain the concept of the election?
- (2) Under which categories do the metaphors created by PSSTs can be labeled regarding their common traits?

## METHODOLOGY

### Research design

This research used phenomenological design within the frame of qualitative research. The phenomenological design focuses on facts that are recognized, but about which cannot have a detailed and thorough comprehension. Phenomenology creates the base for research that aims to uncover the facts which we cannot comprehend thoroughly. Facts can be encountered as events, experiences, perceptions, indications, concepts and situations as we experience on the earth. The phenomenological design aims to reveal the experiences, perceptions and loaded meanings by the individuals (Yıldırım and Şimşek, 2008, p. 72).

### Study group

Easily accessible situational sampling of qualitative research is chosen while defining the study group. In easily accessible situational sampling, researcher chooses a situation that is easy and close (Yıldırım and Şimşek, 2008, p. 113). This provides an opportunity for collecting rich and thorough data about the situations on purposeful sampling (Yıldırım and Şimşek, 2008, p. 107). Accordingly, the study group of this research consists of 61 PSSTs, who are educated in an educational faculty of a state university, social studies teaching department. Data collection and application of the project took place in 2014-2015 academic year. The study group consists of 30 female and 31 male students.

### Data collection

In order to reveal their perception of the concept of election, PSSTs are asked to complete the sentences starting as "Election is like ....., because.....". Then, PSSTs are asked to use only one metaphor and explain the reason why they prefer this metaphor. Fifteen minutes are given to the PSSTs to write their own metaphors about the election. Essays written by the students themselves are the data collection tools for this research.

### Data analysis

Analysis of documents that were reproduced by PSSTs in the study group about the concept of the election are done by the content analysis method and the results are interpreted by creating tables. Collected data are subjected to content analysis and tables as digitized qualitative frequency technique are presented, and then percentage distribution is provided. Participants are named as f (female), m (male) and f1, f2, m1, m2. Data analysis is done at five

levels: (1) naming level, (2) classification level, (3). developing category level, (4) Providing validity and reliability level, (5) transferring the data to digital platform Level (Yıldırım and Şimşek, 2008).

#### **Naming level**

In this level, a tentative list is made according to the metaphors created by participants. In this concept, whether participants clearly mention the metaphor or not is considered. Metaphors used by every participant are simply coded in this level (that is, "marriage", "game", "chastity"). And pages that do not include any metaphor or left blank are discarded.

#### **Classification level**

In this level, every metaphor has dissected the techniques of "metaphor analysis" and "content analysis" and analyzed by their resemblance and common parts with other metaphors. For this purpose, metaphors written by the students are read one by one and analyzed as subject, source, and the relation between the metaphor's source and subject. Rather than providing a metaphorical image, some participants provided personal thoughts about the election in general. Again, some participants did not provide the reasoning though they wrote the metaphors. These papers which did not include any metaphorical source or reasoning are not included in the classification. Excluded papers can be placed in two or more categories; illogical ones, and ones that do not present any idea. In this concept, 12 papers were eliminated.

#### **Developing category level**

At this level, metaphors created by the participants are examined about the common traits. While doing this, 8 cognitive categories are created by associating around certain themes, 49 metaphors are distributed into 8 cognitive categories which are created by the participants.

#### **Providing validity and reliability level**

The validity of this research is done in two steps: (1) The data analysis process is explained in detail; (2) Metaphors that are written by PSSTs are used as the primary source of data for processing the findings and interpreting. To create the dependability of the research, 3 different expert opinions are taken into consideration in order to clarify whether the metaphors classified in 8 cognitive categories are well represented within these categories. First-hand citations guarantee that participants are not recognizable. Experts are asked to match the 8 cognitive categories and their features in a different list of 42 metaphors are listed alphabetically. Matchings of the experts and matching of the researcher are checked. In order to calculate the reliability of comparison, the formula of Miles and Huberman's (1994, p. 64) (reliability = agreement / agreement + disagreement) is used. The expert who is consulted about reliability, placed only 3 metaphors into different categories. Thus, reliability is found as  $= (39/39+3) \times 100 = 93\%$ . It can be said that the desired percentage of harmony should be at least 90% between the researchers and the experts, 93% show that the desired level of reliability is accomplished. The metaphors which are the subjects of dissidence are a dustbin, chastity, and contagious disease.

#### **Transferring data to computer environment**

After defining 42 metaphors and developing 8 cognitive categories,

whole data is transferred to the computer environment. Upon this process, frequency (f) and percentage (%) of the 42 metaphors and 8 categories are calculated.

## **FINDINGS**

The findings on the metaphorical perceptions of PSSTs are the following.

As shown in Table 1, 42 metaphors created the concept of "election" by PSSTs. These metaphors are: "Spouse", "Marriage", "Open buffet", "Disorder", "Game", "Painkiller", "Horse race", "Peace dove", "Boxing match", "Contagious disease", "Coquetry", "Dustbin", "Dancer", "Earthquake", "Big wheel", "Musical instrument", "Male", "Football", "Rainbow", "Heath", "Sun", "Illness", "Milestone in one's life", "Gamble", "Tale", "Math problem", "Chastity", "Ungrateful person", "Freedom", "Seller's Stall", "Marketing", "Color", "Wind", "Chess", "Serial Killer", "Passion", "Homicide", "Theatre play", "Lie detector", "Art of lying", "Star", "Prescription Glasses".

These metaphors which are created by the participants about the concept of "election" are, then subcategorized. The subcategories are: election as a source of preference, election as a source of fallacy/time wasting, election as a source of diversity, election as a source of rivalry/race, election as a source of impact, election as a source of uncertainty, election as a source of tranquility, election as a source of expectation.

In Table 2, frequency and percentages of these categories are shown about the metaphors on the concept of election.

When Table 2 is examined, it can be seen that PSSTs see the concept of "election" under the categories of election as a source of preference (20.41%) and election as a source of fallacy/time wasting (20.41%). Other categories are respectively "election as a source of diversity" (16.33%), "election as a source of rivalry/race" (16.33%), "election as a source of impact" (10.20%), "election as a source of uncertainty" (8.16%), "election as a source of tranquility" (4.08%), "election as a source of expectation" (4.08%).

PSSTs qualified the concept of "election" under the category of "election as a source of preference" (20.41%) with spouse (3), marriage (3), heart, and milestone in one's life, freedom, and passion. The reasons behind the given metaphors are as follows:

*The election is like a "spouse", because when choosing a spouse, the main purpose is to have a life full of happiness, tranquility and prosperity. In elections, we choose the one who will govern us. We want them to govern us with justice. If we are governed as we expected, we will be happy (m36). We choose someone who is the best, the most beautiful, the most appropriate and the soul mate. In election, we want the perfect one for our country (m11). If we do not make a correct choice, the consequences can be dreadful. We have to make the correct choice.*

**Table 1.** Metaphors created about the concept of election.

No	Metaphor	f	%	No	Metaphor	f	%	No	Metaphor	f	%
1	Spouse	3	6.12	16	Musical instrument	1	2.04	31	Marketing	1	2.04
2	Marriage	3	6.12	17	Male	1	2.04	32	Color	1	2.04
3	Open buffet	2	4.08	18	Football	1	2.04	33	Wind	1	2.04
4	Disorder	2	4.08	19	Rainbow	1	2.04	34	Chess	1	2.04
5	Game	2	4.08	20	Heart	1	2.04	35	Serial killer	1	2.04
6	Pain killer	1	2.04	21	Sun	1	2.04	36	Passion	1	2.04
7	Horse race	1	2.04	22	Illness	1	2.04	37	Homicide	1	2.04
8	Peace dove	1	2.04	23	Milestone in one's life	1	2.04	38	Theatre play	1	2.04
9	Boxing match	1	2.04	24	Gamble	1	2.04	39	Lie detector	1	2.04
10	Contagious disease	1	2.04	25	Tale	1	2.04	40	Art of lying	1	2.04
11	Coquetry	1	2.04	26	Math problem	1	2.04	41	Star	1	2.04
12	Dustbin	1	2.04	27	Chastity	1	2.04	42	Prescription glasses	1	2.04
13	Dancer	1	2.04	28	Ungrateful person	1	2.04				
14	Earthquake	1	2.04	29	Freedom	1	2.04				
15	Big Wheel	1	2.04	30	Seller's stall	1	2.04				

**Table 2.** Categorical distributions of metaphors about the concept of election.

Categories	f	%	Metaphors
Election as a source of preference	10	20.41	Spouse (3), Marriage (3), Heart, Milestone in One's Life, Freedom, Passion
Election as a source of fallacy/time wasting	10	20.41	Painkiller, Coquetry, Dancer, Big Wheel, Male, Tale, Wind, Theatre Play, Lie Detector, Art of Lying
Election as a source of diversity	8	16.33	Open Buffet (2), Disorder (2), Rainbow, Seller's Stall, Color, Dustbin
Election as a source of rivalry /race	8	16.33	Game (2), Horse Race, Boxing Match, Earthquake, Football, Serial Killer, Chess
Election as a source of impact	5	10.20	Contagious Disease, Musical Instrument, Illness, Marketing, Star
Election as a source of uncertainty	4	8.16	Gamble, Ungrateful person, Homicide, Prescription Glasses
Election as a source of tranquility	2	4.08	Peace dove, Chastity
Election as a source of expectation	2	4.08	Sun, Math Problem

*Election is like marriage because we tend to choose the best, most beautiful, most suitable and soul mate as a spouse. And in election, we want the best person in the country (m11). It's like choosing one desire no matter what they are*

*(m8). If you have a rightful and rational marriage, you will be the one who wins. This situation is same for the election: if you do the right things you will have something better for you (f40). Election is like the heart because at the election*

*you vote for your heart's desire. You liked it and wanted a life with it. That's why election is about our choices. Your heart Election is like a contagious disease because it can easily be transmitted (f31).*

*restricts your election (m33).*

*Election is like a milestone in one's life because even the smallest decisions have an effect on your future. It is not important to choose and vote, but evaluate these (f47).*

*Election is like freedom, because we are free to vote for anyone. If we desire, we are free not to attend voting. Like this, our voting is free to vote for any political party and many other things (m1).*

*The election is like passion because election reveals the inner self and thought patterns of individuals. Passions are secret lovers (f43).*

These results can be related to Turkish socio-culture. In Turkish socio-culture, choosing the right spouse is a crucial decision. This is a very important thing that affects their lives.

PSSTs qualified the concept of "election" under the category of "election as a source of fallacy/time wasting" (20.41%) with painkiller, coquetry, dancer, big wheel, male, tale, wind, theatre play, lie detector, art of lying. The reasons behind the given metaphors are as follows:

*Election is like a painkiller because applying the promises presented in election are not always implemented and they are tentative as painkillers (m3)*

*Election is like coquetry because during the election you lie a lot. When the election is over, politicians get lost (m9).*

*Election is like a big wheel because politics is the art of lying in which you turn daytime to nighttime and vice versa (m6).*

*Election is like a male because politicians are only interested in you till they got what they want. Like the men who acts in a different way till his mission is accomplished. We have a saying for this: fake it till you make it (f6).*

*Election is like a tale because it's a chain reaction that ends with elderly putting us to sleep. At the end, all of it gets ties (f14).*

*Election is like the wind, because, like a summer breeze, everyone promises good things, but when the election is over it gets back the same way it was. Like the effect of a cool breeze on a hot summer day (f29).*

*Election is like a lie detector because the lies that have been said during an election is processed. At the end, it can be seen that they were all lies. In the lie detector, you input a promise and output is a lie (f17).*

*Election is like the art of lying because leaders of political parties make numerous promises during the election process. The one who can tell the perfect believer lies gets the power. Honest men cannot hold on to politics (m25).*

PSSTs qualified the concept of "election" under the category of "election as a source of diversity (16.33%) with open buffet (2), disorder (2), rainbow, seller's stall,

color, and dustbin. The reasons behind the given metaphors are as follows:

*Election is like an open buffet because you choose the ones that you desire among many options (m41).*

*Election is like an open buffet because somebody puts some alternatives in front of you and you cannot say I want these or those. You simply have to choose what you are being offered (m22).*

*Election is like disorder because one cannot say what is going on and it is a process of making comments. One cannot use their rights to vote by their own thoughts, but with pressure and profits (f34). Election is like disorder because everyone speaks at once. There is not a valid situation, nonsense, fight and announcements, initial meetings (m42).*

*Election is like a rainbow, because as a rainbow has different colors, an election has different points of view (f23). Election is like a seller's stall because front line is better while back line is bitter (f4). Election is like the color because the election is something that consists of different thoughts. Every color stands for a different political thought. Everybody chooses their favorite color (f32). Election is like a dustbin because you have to do it voluntarily or involuntarily (f27).*

PSSTs qualified the concept of "election" under the category of "election as a source of rivalry/race (16.33%) with game (2), horse race, boxing match, earthquake, football, serial killer, and chess. The reasons behind the given metaphors are as follows:

*Election is like a game because it is not real, but just a pair for show-off. And many have different games to get out of the box as the winner (f46). Election is like a game because actions said by politicians and the sayings, their interactions, ambition of winning all exist. They are always trying to win the game. Somebody loses and somebody wins (f49).*

*Election is like a horse race because the fastest horse wins. Being fast is not enough all by itself, your opponents also have to be bad and they have to help you to win by being bad (m2).*

*Election is like a boxing match because some political parties stand still while others just broke down. I got this metaphor because the rivalry is utmost (m35).*

*Election is like an earthquake because some political parties fall into pieces while others stand. In the earthquake, the ones with hardpan stand still while the rest collapses (f16).*

*Election is like football because every party is in a race as a league. As in the transferring season, they try to include new and powerful politicians to their parties. These parties will be first as in the league (m10).*

*Election is like a serial killer because everybody digs for someone else. They try to eliminate each other. There aren't any rules about the elimination (m7).*

*Election is like chess, because if you play the right pawn at the right time you will win; if you do not, you will not (f7).*

PSSTs qualified the concept of "election" under the category of "election as a source of impact (10.20%) with contagious disease, musical instrument, illness, marketing, and star. The reasons behind the given metaphors are as follows:

*Election is like a musical instrument because you are being encouraged to vote by using music (f15).*

*Election is like an illness because people decide who to take over the country. The illness affects the body and becomes the director (m13).*

*Election is like marketing because every political movement tries to sell the promises during the election. Those who can influence people even though they cannot sell very well, gets the profit. But propaganda is not enough by itself. Rooted ideas will not change anything, but those which are new can be the sole determiners. Anything can happen till you get to the voting booth and vote (m24).*

*Election is like a star because the brightest one enlightens the world (m21).*

PSSTs qualified the concept of "election" under the category of "election as a source of uncertainty (8.16%) with gamble, ungrateful person, homicide, and prescription glasses. The reasons behind the given metaphors are as follows:

*Election is like a gamble because you have to make a choice. And the result is not immediate, but you have to wait and see. This is why it is like a gamble (f26).*

*Election is like an ungrateful person because you cannot see what will happen in the elections. An election can be ungrateful: you think that you made a bad choice or a good choice, but the result can be very different. This means that it can be ungrateful to you (f5).*

*Election is like homicide, because only then you can clearly see who is the best and who is the worst (m38).*

*Election is like prescription glasses because things that cannot be seen clearly or at all before the election can be seen thoroughly (f49).*

PSSTs qualified the concept of "election" under the category of "election as a source of tranquility (4.08%) with peace dove, and chastity. The reasons behind the given metaphors are as follows:

*Election is like peace dove because the result of an election can be a peace dove as the best politician is chosen, the best is made for the happiness of all members of the society (f37).*

*Election is like chastity, because you have to be honest with the ballot box, and should not play a trick while counting the votes (m19).*

PSSTs qualified the concept of "election" under the category of "election as a source of expectation (4.08%) with sun and math problem. The reasons behind the given metaphors are as follows:

*Election is like the sun, because with election you can differentiate good and bad, even a little. What is desired by the country becomes clear and actions will be taken in order to create democracy (f48).*

*Election is like a math problem, because when you cross check the results you have the same results (m28).*

## DISCUSSION

Some definite findings are obtained from the research that aims to investigate the perceptions of PSSTs on the concept of "election" via metaphor analysis. It is seen that PSSTs created 42 metaphors which are then placed under 8 different categories. These categories from most to least are: election as a source of preference, election as a source of fallacy/time wasting, election as a source of diversity, election as a source of rivalry/race, election as a source of impact, election as a source of uncertainty, election as a source of tranquility, election as a source of expectation.

The findings of the first category, "election as a source of preference" includes these metaphors created by PSSTs: spouse, marriage, heart, milestone in one's life, freedom, and passion. It can be said that these metaphors are created by PSSTs, because personal preferences come first and the election has a solid place in their lives.

The findings of the second category, "election as a source of fallacy/time wasting" includes these metaphors created by PSSTs: painkiller, coquetry, dancer, big wheel, male, tale, wind, theatre play, lie detector, and art of lying. It can be said that these metaphors are created by PSSTs, because PSSTs have an insecure way of approach to the concept of election.

The findings of the third category, "election as a source of diversity" includes these metaphors created by PSSTs: open buffet, disorder, rainbow, seller's stall, color, and dustbin. It can be said that these metaphors are created by PSSTs, because election includes many features of everyday and political life at the same time.

The findings of the fourth category, "election as a source of rivalry/race" includes these metaphors created by PSSTs: horse race, boxing match, earthquake, football, serial killer, and chess. It can be said that these metaphors are created by PSSTs, because they loaded the meaning of outdistancing and getting ahead for the individuals by their preferences.

The findings of the fifth category, "election as a source of impact" includes these metaphors created by PSSTs: contagious disease, musical instrument, illness, marketing, and star. It can be said that these metaphors are created PSSTs, because election can affect people in every aspect of natural and nonmaterial ways.



The findings of the sixth category, "election as a source of uncertainty" includes these metaphors created by PSSTs: gamble, ungrateful person, homicide, and prescription glasses. It can be said that these metaphors are created by PSSTs, because of the insularity brought by not knowing what will happen after the election.

The findings of the seventh category, "election as a source of tranquility" includes these metaphors created by PSSTs: peace dove, and chastity. It can be said that these metaphors are created by PSSTs, because when the right choices are made, the peaceful and trustful environment can be provided.

The findings of the eighth category, "election as a source of expectation" includes these metaphors created by PSSTs: Sun and Math Problem. It can be said that these metaphors are created by PSSTs, because every other election that is being held can create a new expectation.

Turkish socio-culture affected the thinking ways of PSSTs. Outstanding findings of the discussion are these: election as a source of fallacy/time wasting (sample metaphor: painkiller). In Turkish society, people make decisions in the elections, but their decisions may not help with the solutions. Turkish education and teacher training policies offer temporary solutions to problems. In every 4 to 5 years, policies on education change. Turkish policy-makers prefer temporary solutions to permanent solutions. In a society which has temporary solutions, it is meaningful that PSSTs use the metaphor of painkiller for the election concept. Election as a source of diversity (sample metaphor: rainbow): Turkey has a great variety of citizens, especially with the refugee situation. Throughout history, Turkey has had a great socio-cultural diversity and population. This diversity became crucial upon the refugee situation. In a society which has great diversity solutions, it is meaningful that PSSTs use the metaphor of the rainbow for the election concept. Election as a source of rivalry/race (sample metaphor: horse race): every level of Turkish education has a great rivalry. During the process of preparation for the examinations, rivalry reaches its limit and students of every level are affected by it. In a society with high rivalry rate, it is meaningful that PSSTs use the metaphor of the horse race for the election concept. Election as a source of uncertainty (sample metaphor: gamble): Turkish society lives in a very cosmopolitan geography. Economic, social, and geopolitical developments are rapid. Conditions in the Middle East affect Turkish society directly. Taking these mentioned facts into consideration, uncertainty dominates the society. This uncertainty reflects on education. In a society which has a high rate of uncertainty, it is meaningful that PSSTs use the metaphor of a gamble for the election concept.

## CONCLUSION AND RECOMMENDATIONS

This pioneering research is conducted via the

metaphorical analysis of PSSTs on the concept of election. Metaphors created by PSSTs can be seen as a crucial data source for understanding their perception of the election, the reason for their choice of metaphors, and explaining the preferences they do. Knowing the perception of PSSTs on the concept of the election will also contribute to knowing the perception of the democracy culture. Thus, same research can be conducted with different groups (different teaching branches, students, teachers, and principals), because the election is a critical and crucial concept that people encounter in everyday life, between the levels of education and politically socializing process.

## Conflict of interests

The author has not declared any conflict of interests.

## REFERENCES

- Aladağ S, Kuzgun MP (2015). Sınıf öğretmeni adaylarının değer kavramına ilişkin metaforik algıları. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi* 29(2):163-194.
- Black A (2013). Picturing experience: metaphor as method, data and educational resource. W. Midgley, K. Trimmer, A. Davies (Eds.). *Metaphors for, in and of Education Research*. UK: Cambridge Scholar Publishing.
- Brown PU, Parsons SC, Worley V (2005). Pre-service teachers write about diversity: a metaphor analysis. *Scholar-Practitioner Quart.* 3(1):87-102.
- Cameron L (2003). *Metaphor in educational discourse*. London: Continuum Publishing.
- Dahl RA (2001). *Demokrasi üstüne* (Çev. Kadioğlu, B.). Ankara: Phoenix Yayınevi.
- Draaisma D (2014). Bellek metaforları zihinle ilgili fikirlerin tarihi. (Çev. Koca, G.). İstanbul: Metis Yayınları.
- Erdoğan M (2013). *Anayasal demokrasi*. Ankara: Siyasal Kitabevi.
- Gözbüyük Ş (2003). *Anayasa hukuku*. Ankara: Turhan Kitabevi.
- Güven A (2014). Examination of the metaphors generated by the pre-service history teachers regarding the concept democracy. *Int. J. Acad. Res. Part B*, 6(3):136-142.
- Güder SY, Yıldırım A (2014). Okulöncesi öğretmeni adaylarının demokrasiye ilişkin metaforları. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 7(16):152-170.
- Gültekin M (2013). İlköğretim öğretmen adaylarının eğitim programına yükledikleri metaforlar. *Eğitim ve Bilim*, 38(169):126-141.
- Karaman D (2011). *Seçim hukuku ve uygulaması*. Ankara: Seçkin Yayıncılık
- Köseoğlu A (2015). Öğretmen adaylarının ahlak kavramına ilişkin metafor kullanımları. *Eğitim ve Öğretim Araştırmaları Dergisi* 4(3):219-225.
- Lakoff G, Johnson M (2015). *Metaforlar: Hayat, anlam ve dil* (Çev. Demir, G. Y.). İstanbul: İthaki Yayınları.
- Miles MB, Huberman AM (1994). *An expanded source book qualitative data analysis*. Thousand Oaks, California: Sage Publications.
- Mutluer C (2015). Sosyal bilgiler öğretmen adaylarının hoşgörü kavramına ilişkin metaforik algıları. *Tarih Okulu Dergisi* 8(22):575-595.
- Nağcı A, Bektaş F (2012). Öğretmen adaylarının okul kavramına ilişkin algıları. *Ahi Evren Üniversitesi Kırşehir Eğitim Fakültesi Dergisi* 13(1):239-258.
- Nelson JL (2001). *Defining social studies*. W. B. Stanley (Ed.). *Critical Issues in Social Studies Research for the 21st Century*. Connecticut: Information Age Publishing.
- Öztürk C (2003). *Sosyal bilgiler: toplumsal yaşama disiplinlerarası bir*

- bakış. C. Öztürk (Ed.). Sosyal Bilgiler Öğretimi Demokratik Vatandaşlık Eğitimi. Ankara: Pegem Akademi.
- Sarı M, Sadık F (2011). Öğretmen adaylarının demokrasi algıları. Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi 1(2):67-82.
- Seyhan O (2014). Sosyal katılım kavramına ilişkin sosyal bilgiler öğretmen adaylarının metafor durumları. Researcher: Social Science Studies 2(2):34-43.
- Sözer MA, Özkan R (2014). Öğretmen adaylarının kadın olgusuna ilişkin algılarının belirlenmesi. Uşak Üniversitesi Sosyal Bilimler Dergisi, 7(1):264-278.
- Taşgın A, Köse E (2015). Sınıf öğretmeni adaylarının hedef ve değerlendirme kavramlarına ilişkin metaforları. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi 30(3):116-130.
- Uslu S (2015). Metaphorical perceptions of pre-service social studies teachers towards the concept of social studies teacher. Educational Research and Reviews, 10(7):804-810. <DOI: 10.5897/ERR2015.2121>
- Woon J, Ho Y (2005). Metaphorical construction of self in teachers' narratives. Lang. Educ. 19(5):359-379.
- Yıldırım A, Şimşek H (2008). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayınları.

*Full Length Research Paper*

# Observation of multimedia-assisted instruction in the listening skills of students with mild mental deficiency

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This study was carried out with 2 students with mild mental deficiency, one in 5<sup>th</sup> grade and the other in 6<sup>th</sup> grade of Turgut Özal Secondary School in Bulanık County of Muş Province. It was done during the spring semester of the 2014-2015 school year in order to observe the effect of multimedia-assisted instruction on listening skills of mainstreamed students with mild mental deficiency. The courses were taught in the information and communication technologies classroom outside the course hours with permissions from the parents and school administration. The study was designed as a case study, a qualitative research model. The lessons were videotaped to obtain data. The parents were interviewed in order to determine the state of the students after class. The data collected using semi-structured interviews was evaluated through content analysis. The study was conducted using the multimedia-assisted instruction method to discuss a total of four listening texts, with one text per week. The texts were prepared according to the multimedia-assisted instruction method. The students listened to the texts, accompanied by relevant visuals projected on a screen with background music. Tools such as animations, videos, music, etc. that reflect the central theme of the texts were prepared to be shown before and after the texts. As a result of classroom observations and interviews held with the parents, it was concluded that multimedia-assisted instruction was effective on the listening skills of mainstreamed students with mild mental deficiency. The animations, videos and cartoons that the students watched made them enjoy the lesson and become active participants in the listening process.

**Key words:** Multimedia, listening comprehension education, mainstreaming.

## INTRODUCTION

Mother tongue is the first language that an individual learns in his/her family or the society in which he/she grows up. It is a language that one learns without formal education and compulsion or without considerable efforts. Individuals learn and use most of the rules of their mother tongue before reaching school age. This occurs with a more organized education once they reach school age.

What is important in mother tongue education is how and for what purpose activities will be planned. It is argued that it will be hard to achieve the expected results when teaching activities are not planned according to the level of students (Erdem and Çelik, 2011). Teachers should make sure that they perform their duties perfectly in activating prior knowledge, organizing and implementing,

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and finally, evaluating that knowledge (Temizkan, 2013).

### Listening comprehension education

Studies show that listening is among the leading skills most frequently used in classroom education. The listening skill has great importance in Turkish Language education. Listening is not just hearing what is being said. Listening depends on the individual's preference. It is composed of sounds that the individual perceives selectively and intentionally. Hence, listening is a process in which the individual makes a conscious effort to understand the sounds that are being heard (Özbay, 2009). The individual hears many things, but only listens to and comprehends what he/she likes.

The listening skill is listed alongside the reading skill within the comprehension skills for the Turkish Language course. The listening skill is the ability to comprehend completely a message that one conveys by speaking or reading aloud (Özbay, 2006). The listening skill is an ability which requires an active effort to comprehend a message completely (Melanlıoğlu, 2013).

Although the recent Turkish course education curriculum places more emphasis on the use of new methods and techniques, teachers generally continue to use the narration technique (Melanlıoğlu, 2012). In order to transform students from passive listeners to active listeners, visual and audio tools should be used in educational listening activities at schools. Multimedia-based instruction can increase the teacher's efficiency and activate the students in the learning environment, ensuring a high quality learning experience for the students (Akkoyunlu, 1998). This situation is considered to be more important and necessary for mainstreamed students with mild mental disability. This can be achieved through multimedia-assisted instruction methods and tools that can be used in the Turkish Language lesson and listening activities. It is believed that through these tools, that is videos, visuals, audio materials, etc., the texts to be taught will be more appealing, effective and meaningful for mainstreamed students with mild mental deficiency. Instructional materials meet the personal needs of students and if there are any mainstreamed students with mild mental deficiency in the classroom, instructional materials can be more effective in the learning environment (Kargin, 2010). It is stated that while using multimedia-assisted instruction, students' attention spans are longer and the material is better learnt and learnt more quickly because the learning environment addresses more senses (Merrill, Hammons, Vincent, Reynolds, Christensen and Tolman, 2004). In a constructivist learning system, technology makes an undeniable contribution to making students more active in the learning process (İşman et al., 2002). The use of technological tools in education offers a positive contribution to the success of students (Musarurwa,

2011). It is emphasized that the use of tablet PCs in the learning environment brings great advantages to students and teachers both, and improves students' attention and interest (Koile and Singer, 2006).

### Multimedia

In terms of education, multimedia means the transfer and more frequent use of printed, visual, audio, video and similar tools in the learning environment in a harmonious manner.

*The definitions made for multimedia can be listed as follows: Multimedia is the simultaneous presentation of computer-based information via multiple tools (texts, graphic images, motion graphics, animations, hypermedia, photographs, videos and sounds) (Kahn, 2008). According to Vaughan (2004: 1), multimedia is any combination of text, image, audio, animation and video delivered by computer. According to Simkins et. al (2002: 11), multimedia is to integrate media such as texts, graphics, videos, animations and sounds in order to provide information. Simply defined, a computer-based multimedia system is a technology group which makes it possible to create, store, communicate, and when necessary, re-access various pieces of information in different formats such as text, graphic, photograph, motion video, animation, audio and music (Quoted by Akbaba, 2009, p. 49).*

Studies show that, time being constant, individuals are capable of remembering 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they see and hear, 70% of what they say, and 90% of what they do and say. It can be said that if activities prepared by using instructional technology address more senses, the attention, motivation and success of the students will be higher (Akkoyunlu and Yilmaz, 2005). Multimedia-assisted instruction increases the success levels of students (Harwood and McMahan, 1997). The use of multimedia-assisted instruction and tools in education requires active learning, which has a positive effect on students (Collins, 1991). Use of information and communication technologies in education enables to uncover students' potentials (Peltenburg et al., 2010).

The texts used in the Turkish Language course that is taught using the teacher-centered instruction method and the texts used in multimedia-assisted teaching of the Turkish Language course are different from each other. Every text may not be suitable for the multimedia learning environment. Thus, the design of the texts is as important and necessary as their selection in multimedia-assisted teaching of the Turkish Language course. Selection and design of multimedia tools can even become more important if these tools are to be used for students with mental deficiencies. The tools-materials to be used in the

learning environment should support the learning skills of students (Jacobsen et al., 2002; Wood, 2006). The design of the multimedia-assisted learning environment and its tools vary according to designers and personal characteristics of the target group (Müler and Storey, 1993; Theng et al., 1997; Chen, 2002). Appropriate instructional materials should be selected to eliminate deficiencies of students with different developmental characteristics (McKnight et al., 1990; Thomas and Rebecca, 1994). The learning environment should be organized according to personal characteristics of students and should be supported with suitable tools (Krason and Jaszczyszyn, 2006).

### **Mental deficiency**

Special Education Services Regulation of the Ministry of National Education defines individuals with mental deficiency as individuals who exhibit a score of two standard deviations below the mean in terms of mental deficiency and have deficiencies in conceptual, social and similar skills observed before the age of 18, and are in need of special education (Ministry of National Education {MEB}, 2006). Individuals with mild mental deficiency are defined as individuals whose mental development progresses are in the same order as their peers, but who have slower and less developed learning skills than their peers (Mastropieri and Scruggs, 2004; Eripek, 2005) and with underdeveloped comprehension skills (Ulukaya, 2009).

Individuals with mild mental deficiency receive education in the same environment as other students in order to preserve their ties with the society and their peers. These students are educated under the mainstreaming curriculum which is different from the curriculum applied to other students. Mainstreaming in our country is employed at primary and secondary schools in accordance with the 4<sup>th</sup> article of the Children in Need of Special Education Law numbered 2916 and dated 1983 (Balaban et al., 2009). Mainstreaming is a type of education which allows students with special education needs to establish psychosocial relationships (Macmillan, 1982), offers students with mild mental deficiency the same education as their peers with no deficiency in regular classrooms (Tüfekçioğlu, 1997; Sarı, 2002; Lewis and Doorlag, 2004; Balaban et. al, 2009), is designed to educate individuals with specific needs different than those of their peers, and is carried out in environments that enable these individuals to receive education with fewer obstacles (Lewis and Doorlag, 1987; Olson et al., 1999). The aim in mainstreaming is not only to ensure that students with mild mental deficiency receive education in regular classrooms. This education is carefully planned and is based on a sound foundation (Macmillan and Morrison, 1984; Blair, 1985; Deborah and Smith, 1992; Sucuoğlu, 2006). Mainstreaming is an

education method that fosters tolerance in the learning environment (Soodak and McCarthy, 2006). In the education of individuals with mild mental deficiency, students with mild mental deficiency and students with normal development are taught by the same teacher in the same learning environment (Batu and Kırcaali-lftar, 2005). For this reason, the aim of mainstreaming is not just to ensure knowledge acquisition in the academic context. The aim should be to develop individuals in all aspects (Salderay, 2008; Acedo, 2013).

In order to succeed in mainstreaming, opportunities must be given to students with mild mental deficiency and normal students so that they interact with and tolerate one another (Atıcı, 2014). There are numerous factors that affect the education of individuals with mild mental deficiency. One of these factors may be the multimedia-assisted teaching environment and tools that take into account personal differences and address all the senses of students. The multimedia-assisted teaching environment considers the experiences of students. Designed according to the levels of students, this is a current and personal environment that activates and engages the students (Akay et al., 2014).

A student subject to mainstreaming should benefit from all educational opportunities. The education environment suitable to the individual should be prepared taking all the characteristics of the individual into account and the individual should experience the feeling of success. To this end, the multimedia-assisted instruction method can be used for it is a method that addresses all senses of the individual. In mainstreaming, the education environment should be prepared and practical activities should be designed taking into account the needs of students (Tomlinson, 2005; Shaw, 2011). Through this method, a student with mild mental deficiency can listen to a text without getting bored and better comprehend what he/she listens to with the help of visual, audio and similar tools. The education environment and tools should be prepared by taking into account the characteristics of individuals with special educational needs (Kırcaali-lftar, 1998; Bauer and Kroeger, 2004; Şahbaz and Kalay, 2010). Employing technological materials and tools in the education of individuals with mild mental deficiency and creating a multimedia-assisted learning environment for them can contribute to their learning skills and motive them to participate in the lesson.

### **Aim and importance of the study**

One of the primary objectives of mainstreaming is to offer necessary education to students with mild mental deficiency and prepare them to social life. This becomes even more important for the Turkish Language courses in which the language is taught. For the listening skill, one of the basic language skills, multimedia-assisted instruction is an important method as it addresses all

senses of students subject to mainstreaming. It can contribute to the development of students' listening skills by addressing not only their hearing sense but also other senses. Problems originating from weaknesses of mainstreamed students with mild mental deficiency can be prevented by preparing listening activities including visuals, audio, animations, cartoons, and similar aids.

Multimedia-assisted instruction can be utilized to main attention of students subject to mainstreaming. The purpose of this study is to discuss and analyze in-class and out-of-class conditions of students subject to mainstreaming observed during the teaching of texts using the multimedia-assisted instruction method.

Multimedia-assisted instruction is believed to contribute to teachers in developing listening activities for the Turkish Language course, and to those who prepare mainstreaming curricula as well as to the relevant literature, with implications as to use of multimedia-assisted instruction in the education of students with mild mental deficiency.

## METHOD

This study was designed as a case study, a qualitative research model. The qualitative research method enables to study an existing case in more detail. Case studies provide the opportunity to examine multiple aspects of individuals in their own environments without any impact on the natural environment of any class or group. In the case study model, the aim is to discuss and interpret as a whole those environments or situations which the study focuses on (Yıldırım and Şimşek, 2006). The case study methodology enables to find detailed information on the subject being studied and to discuss the subject in all aspects. The person conducting the study is the primary source for the collection and analysis of data and drawing conclusions from that data (Merriam, 1998).

### Data collection tools

#### *Participant observation*

Investigation and interpretation of individuals' behaviors and attitudes require the use of the observation technique, a qualitative research method because the observation technique is used to collect data about a person, group of persons, an environment, a situation, and tools. It differs from other techniques in that the information is obtained directly (Karasar, 1998). If a researcher wants to obtain detailed and valid information about behaviors that take place in a particular environment and under a particular condition, he/she uses the observation technique (Yıldırım and Şimşek, 2000). In participant observation, the observer is among the individuals observed, but the individuals do not know that the observer is among them (Karasar, 2005). The observation technique will be scientifically meaningful only if it is planned, recorded and verified in terms of validity and reliability in line with the purpose of the research (Judd, 1991, quoted by Balcı, 2005). The observed behaviors are recorded, and then analyzed and interpreted.

Two students with mild mental deficiency were observed simultaneously in the information and communication technologies classroom of the school for a total of 8 course hours with two course hours and one text per week. The lessons were videotaped

without the knowledge of the students, but with the permission and knowledge of their parents and school administration. The data obtained was entered in the "Teacher Observation Form" prepared by the observer. "Windows media player" was used for the analysis of the video recordings. The data was analyzed and interpreted through the data analysis form prepared for this study.

### *Interview*

The interview technique can be classified as structured, semi-structured and unstructured interviews. The semi-structured interview technique is a method in which data is collected using questions prepared in advance (Karasar, 1998). The semi-structured interview technique was used as a data collection technique in this study. The interviews were conducted once a week on the day following the lesson at a time convenient for the family. The information given about the students during the interviews was noted.

### *Study group*

The study was carried out with 2 students with mild mental deficiency, one in 5<sup>th</sup> grade and the other in 6<sup>th</sup> grade of Turgut Özal Secondary School in Bulanık County of Muş province.

### *Characteristics of the study group*

The first student was coded with the letter "P", the first letter of his/her name. P is 11 years old and is still in 5<sup>th</sup> grade. The Individualized Curriculum for P prepared by Muş Counseling and Research Center and the counseling service of Turgut Özal Secondary School for the 2014-2015 school year provides the following educational diagnosis and assessment for P: The student has been attending the full-time mainstreaming program since the 2<sup>nd</sup> grade. P cognitively and physically reacts to audio and visual stimuli, and makes eye contact. P imitates voices and movements. P partially fulfills self-care skills. P's knowledge of concept is at an elementary level. P's writing skill is not yet at an adequate level. Academically, P has difficulty in comprehending instructions describing two or more actions during the Turkish Language lessons. P's reading skill is not at an adequate level. P is behind his/her peers in terms of receptive and expressive language skills. P can partially tell the protagonist, place, and time of a tale or story he/she listens to. Socially, P has acquired playing skills and can participate in group games. P's ability to comply with social rules and effective communicating skills are behind those of his/her peers. P is unwilling to talk.

P is living with his/her family. P has an extended family. P is in the same grade as his/her elder brother. P's family shows no particular interest to his/her condition or how P is doing at school. This attracted the attention of both the researcher and the school counselor, and efforts were spent, but no improvement could be made in that respect. Though rarely, P's grandfather visits the school. P does not have a room of his/her own at home. They are 8 siblings. There is no computer at home. According what his/her family tells, he/she usually watches cartoons and likes to be with his/her elder sister. P's toilet training is at the same level as his/her peers, and is normal.

The second student was coded with the letter "F", the first letter of his/her name. F is 12 years old and is still in 6<sup>th</sup> grade. The Individualized Curriculum for F prepared by Muş Counseling and Research Center and the counseling service of Turgut Özal Secondary School for the 2014-2015 school year provides the following educational diagnosis and assessment for F: The student has been attending full-time mainstreaming program since the 2<sup>nd</sup>

grade. F cognitively and physically reacts to audio and visual stimuli, and makes eye contact. F imitates voices and movements. F partially fulfills self-care skills. F's knowledge of concepts is at an elementary level. F's writing skill is not yet at an adequate level. Academically, F cannot comprehend instructions describing two or more actions during the Turkish Language lessons. F's reading skill is developing at a certain level. F is behind his/her peers in terms of receptive and expressive language skills. F can partially tell the protagonist, place, and time of a tale or story he/she listens to. Socially, F has acquired playing skills and can participate in group games. F's ability to comply with social rules and effective communicating skills are behind those of his/her peers. F is unwilling to talk. F has a speech impediment. The family has investigated treatment options and they state that F will need a surgical operation in the tongue and palate in the future.

F is living with his/her family. F has a nucleus family. F is attending the same school as his/her elder brother. F's family is interested and conscious in every respect. They received assistance at home from an expert last year. F's father visits the school and talks to teachers frequently. F stays in the same room as his/her elder brother. F has another sibling attending the kindergarten. They have a computer at home and F watches cartoons on the computer. F feels the need to go to the toilet frequently in the classroom and also at home according to what his/her family says. The researcher knows the fact that F is easily bored in class.

According to the Educational Diagnosis and Assessment performed by the Counseling and Research Center, both students attend full-time mainstreaming program on condition that necessary measures are taken within the framework of the Circular Nr. 2008/60 of the Directorate-General of The Ministry of Education for Special Education Guidance and Counseling Services.

The Individualized Turkish Language Education Curriculum was utilized in this study. The study was carried out in the information and communication technologies classroom of Turgut Özal Secondary School where the researcher teaches and both students take Turkish Language lessons. Only the researcher and the students were present in the classroom during the study. As the researcher had not encountered any problem during a reading activity carried out in the past with the two students outside the course hours in the same classroom, the validity and reliability committee approved the participation of the two students in the study together, taking also into account the possibility of interaction between the students during the lessons.

#### **Validity and reliability committee**

The validity and reliability of all phases of the research process were verified by a validity and reliability committee consisting of two Associate Professors in Turkish language education, a computer teacher, and a counselor responsible for the personal curricula of the participating students and monitoring their development. The research process was monitored by this committee and the committee's approval was obtained in all the phases of the process. The process was completed by using efforts to guarantee the validity and reliability of the study in the manner described above.

#### **Collection of data**

In order to take any piece of information into account as data, that piece of information must be recorded (Arıkan, 2004). As multiple data collection techniques and tools were needed for the study, literature reviews, observations, interview techniques and the tools required by these were used. The study was started by preparing 4 listening texts which were designed by the researcher according to the multimedia-assisted instruction approach.

Printed and visual materials such as scripts, photographs, pictures, economics, animations, videos, films, etc., consistent with the theme of the texts, and instrumental music believed to be appropriate to the emotional dimension of the theme, were transferred to digital media. The multimedia environment was prepared with harmonious use of printed, visual and audio tools, and resources were classified according to their contents. The study took its final shape after the activities prepared were approved by the validity and reliability committee.

#### **Data analysis**

The data in the study were analyzed through content analysis. Content analysis is a technique in which contents of texts are analyzed in order to obtain results about certain dimensions of unknown situations and behaviors by examining known situations and behaviors (Kaymakçı, 2010). Some tools are utilized in the data collection phase of qualitative studies. Using tools such as a camera, a tape recorder, etc. during the observation phase, the researcher records his/her observations about the environment. The observation made via tools gives detailed information about the environment and also records the elements which might have been overlooked by the researcher (Baş and Akturan, 2008).

Those parts of the videotaped observation data that had direct connection to the study were put down in writing and were organized and classified along with the interview data; common codes were identified by the researcher and a Turkish teacher using an independent encoder and were presented to the validity and reliability committee. In line with the recommendations of the validity and reliability committee, some codes were combined and were presented again to the committee for approval, and thereafter, the study took its final shape.

#### **FINDINGS**

Four listening texts were prepared for the study in accordance with the multimedia-assisted instruction method, and were presented to and approved by the validity and reliability committee. A brief description of the texts and how they were presented are given below.

1. Summary of the Quarter Apple text: Hophop the rabbit asks the crow for help as it cannot reach the apple on the tree. The crow agrees to help and causes the apple to fall, but the apple gets stuck in the quills of the hedgehog. The hedgehog now says that the apple belongs to it. But the rabbit still wants the apple and they quarrel. The crow joins the quarrel and says that it should take the apple. Tonton the Bear witnesses the quarrel and offers to act as a referee. Tonton the Bear suggests them to divide the apple into three equal pieces. They decide to share the apple in a brotherly manner, but dividing it into four equal pieces in response to the fair solution offered by Tonton the Bear.

Pre-Listening: Before the tests the students watched a 9-min animation film entitled *Sharing Is Caring*. The students were encouraged to talk about sharing. Listening Phase: The students listened to the text, accompanied by visuals and background music. After listening to the text a second time, the students were encouraged to talk about the content of the text and visuals. Post-Listening: After

listening to the text, for a better understanding of the text, the students watched a 7-minute clip from the cartoon entitled *Pepe*, whose theme was also *Sharing Is Caring*, and a 3-minute animation entitled *Hunger and Solidarity*. Afterwards, the students were encouraged to talk about the main idea of the text and comment on the characters of the text.

2. Summary of the Turkish Grand National Assembly text: The events before the opening of the Grand National Assembly and the state of the assembly that was opened under the leadership of Mustafa Kemal were briefly explained. The students were then told how 23 April, the opening date of the Grand National Assembly, was proclaimed an official holiday and celebrated as the Children's Day every year.

Pre-Listening Activities: Before the text, the students watched a 12-min clip from the documentary entitled *The War of Independence* in order to ensure that the students have an idea about the general situation before the opening of the Grand National Assembly. The students were asked to state their opinions about the documentary and were encouraged to speak. Listening phase: The students listened to the text, accompanied by appropriate visuals and background music. This was repeated twice and the students were encouraged to talk about the text and visuals. Post-Listening: The students watched a 15-min clip from the cartoon entitled *Pepe*, whose theme was also 23 April. The students then tried to find the main idea of the text. The students were encouraged to talk about Atatürk and 23 April celebrations.

3. Summary of the *Earth in Space* text: The text gives information about our planet Earth with an emphasis on its location in the universe. The solar system and the number of planets in the solar system were discussed, and the appearance of the earth as seen from space was explained. The balance of the earth and its other features were briefly mentioned, and the obscurity of the universe was emphasized. The suitability of the earth for life was discussed.

Pre-Listening Activities: Visuals showing the earth as seen from space were presented, and the students were encouraged to talk about the visuals. After watching a 6-min video about space, the earth, and the sun, the students were asked to speak once again. Listening phase: The students listened to the text, accompanied by appropriate visuals and background music. This was repeated twice and the students were encouraged to talk about the text. Post-Listening: After making the students talk about the text, the students watched a 10-min clip from the *A House in the Sky* episode of the cartoon entitled *Caillou*. The students were helped to understand what they listened to in the text. After that video, certain questions were asked to the students about the texts and the students were encouraged to talk about the text.

4. Summary of the *Meaning of Traffic Signs* text: The text

explains the traffic conditions for pedestrians and drivers by asking questions to the students. The text emphasizes that traffic lights and vehicle signals protect us from dangers and are a common language for people. It also stresses the importance of using that common language properly.

Pre-Listening Activities: The students watched an 8-min animation about traffic signs and rules in order to prepare them for the text and were encouraged to talk about traffic signs based on the animation. Listening Phase: The students listened to the text, accompanied by visuals of traffic signs and symbols used frequently in daily life projected on a screen with instrumental music in the background. While listening to the text a second time, the students were asked to talk about the content of the text. Post-Listening: The students watched a 10-minute cartoon entitled *Pepe*, whose theme was also traffic rules and signs, and were asked to make comments. The students tried to find the main idea of the text. By relating the topic to daily life, the students were asked to make comments and were caused to participate in the lesson.

After the lessons were completed, observations of the teacher in the classroom and observations of the parents outside the classroom were used to collect data. Based on the data collected, common codes were found. The findings achieved in respect of each student and the texts are given under the following headings.

### ***Engaging the attention of the participants***

Observations for the student named P: P listened very carefully to the 1<sup>st</sup> listening text "*Quarter Apple*" supported with visuals and instrumental music, after watching the animation about sharing. When the picture of a child eating apples was projected on the screen, P asked, "Why did he not share the apples?" Interestingly, P also stated that an old lady in a picture who was holding out something to her neighbor from the window could fall off the window. This showed that the student maintained his/her attention. It also showed that contrary to the situation observed during lessons taught in the regular classroom, multimedia-assisted instruction helped to hold the students' attention. In the classroom, however, the class starts to carry out the activities while they are listening to the text, and the teacher reads the text a second time and explains it for P.

Before listening to the 2<sup>nd</sup> text about the "*Turkish Grand National Assembly*", a clip from a documentary about the war of independence was shown in order to prepare the students for the listening text. P listened to this lesson with more attention and excitement than the previous lesson and asked questions. P said he/she saw the same picture in which Atatürk and children are portrayed also during the Social Sciences course. This shows that his/her attention was not diverted.

Before listening to the 3<sup>rd</sup> text "*Earth in Space*", the students watched videos about space and the earth.



Then, the students listened to the text, accompanied by appropriate visuals projected on a screen with instrumental music in the background. After listening to the text, they watched clips from the cartoon entitled *Caillou* about space, planets, the earth, etc. P was more eager in this lesson than he/she was in the other two lessons, and answered the question 'How many planets are there' without hesitation. This proved that P listened to the text carefully. P followed the lesson very carefully and was not bored because the topic was very interesting.

Before listening to the 4<sup>th</sup> text "Meaning of Traffic Signs", the students were shown an animation about traffic signs and rules. Then, the students listened to the text, accompanied by visuals of some traffic signs and symbols used frequently in daily life projected on a screen with instrumental music in the background. After the listening to the text, they watched a cartoon about the same topic. P followed the lesson without getting bored and distraction. This is one of the most important aims of the lesson, which may suggest that multimedia-assisted instruction can be useful to maintain a longer attention span.

Observations for the student named F: The 1<sup>st</sup> Text: F immediately stood up from his/her seat and wanted to press the buttons before playing the videos during the pre-text phase. F was known for getting bored during the Turkish Language lessons taught in the regular classroom, getting distracted easily and asking for permission to go to the toilet. F asked for permission to go to the toilet also in this lesson just as he/she did during the regular Turkish Language lessons. Interestingly, however, F did not express this need while he/she was listening to the text and watching the videos. This showed that multimedia-assisted instruction can prevent F from getting bored during class and delay the need to use the toilet.

The 2<sup>nd</sup> text: F was allowed to turn on the computer. F answered most of the questions about Atatürk in the documentary, and said Atatürk saved us just like P did. Among the visuals shown, the photograph showing Atatürk on the battlefield was the one P liked most. This showed that F's attention was not diverted. While watching the cartoon entitled *Pepe*, F said he/she had already watched it and talked about some scenes even before watching those scenes. It was observed that F was not bored much in this lesson and kept a high level of concentration.

The 3<sup>rd</sup> text: F's motivation and attention to the lesson were observed to be higher than that observed in other lessons. F had not listened to the text when the text was before covered during the regular Turkish Language lesson. However, during multimedia-assisted teaching of the same text, F listened to the text without getting bored. F watched the videos about space and the earth without getting bored and without standing up from his/her seat.

The 4<sup>th</sup> text: F listened to the text and the activities related to text carefully and talked about the trip that F had taken to the city of İzmir with his/her family. These

observations show that multimedia-assisted instruction can be effective on a student like F who easily gets bored and distracted in class.

### ***Active participation of the students in the lesson***

Observations for the student named P: The 1<sup>st</sup> text "Quarter Apple"; P made comments easily in class without getting bored. Even though P strayed from the context of the lesson from time to time, communication continued in the form of questions and answers. When P was asked what he/she P liked most, he/she said it was a baby sharing toys with her sibling. However, during the Turkish Language lessons in the regular classroom, P was rarely observed to participate in the lesson.

The 2<sup>nd</sup> text: During the discussion about the lesson, arrestingly P said that Atatürk saved us. When P was asked who founded the Grand National Assembly, he/she answered that it was Atatürk, and when P was asked why Atatürk was sad, he/she answered that the enemy wanted to occupy our country. These answers showed that P could comprehend what he/she listened to. P made a very good connection between the cartoon *Pepe* and the text, and said we should also carry out entertaining activities in the holidays. This showed that P's participation in the lesson gradually increased. The answer P gave to the question what he/she liked best was the cartoon *Pepe*.

The 3<sup>rd</sup> text: P wanted to turn on the computer. P used the word 'space' very frequently. The fact that P frequently asked questions in this lesson showed once again that multimedia-assisted instruction was effective on P. On the other hand, P is known for getting bored during the Turkish Language lessons, particularly when listening texts are taught, and does not understand the lesson.

The 4<sup>th</sup> text: P showed active participation in the lesson. P could tell the meaning of traffic signs, referring also to the video. P said signs were not for cars only and people should also abide by the signs. This suggests that multimedia-assisted instruction was an important factor in P's participation in the lesson.

Observations for the student named F: The 1<sup>st</sup> text: F fiddled with the computer and wanted to press the buttons. While watching the sharing scenes of the siblings in the video, F said that he/she liked sharing, too. In response to the question why we share, F talked about sharing pencils.

The 2<sup>nd</sup> text: Among the visuals shown, F liked the photograph showing Atatürk on the battlefield most. While watching the *Pepe* cartoon, F said he/she had already watched it and talked about some scenes even before watching them. The answer F gave to the question what he/she liked best was again the *Pepe* cartoon.

The 3<sup>rd</sup> text: F asked questions about the visuals also in this lesson. F said heat and light were provided by the sun and it would always be night if the sun did not exist.

The answer F gave to the question what F liked best was the Caillou cartoon. F willingly talked about the cartoon.

The 4<sup>th</sup> text: During the lesson, F talked about the trip he/she had taken to the city of İzmir with his/her family. F asked questions about the car that did not stop at a red light. When F was asked why the rules should be followed, he/she said we would otherwise have an accident and die. The fact that F said pedestrians should walk on pavements showed that F actively listened to the lesson. This shows that multimedia-assisted instruction contributes, to some extent, to F's active participation in the lesson.

### ***Facilitation of education***

Observations for the student named P: The 1<sup>st</sup> text: After listening to the text, P told the main idea of the text when he/she was given clues (by projecting visuals about sharing on the screen). This rarely occurred during the regular Turkish Language lessons. During the Turkish Language lessons taught in the regular classroom, it was observed that P could not talk before other students talked. However, during the lesson in which the multimedia-assisted instruction method was employed, P could easily make comments. The answer P gave to the question what he/she liked most was the visual of a baby sharing toys with her sibling.

The 2<sup>nd</sup> text: P's statement that the reason of Atatürk's sadness was the invasion of our country by the enemy showed that he/she could comprehend what he/she listened to. P made a very good connection between the Pepe cartoon and the text, and said we should also carry out entertaining activities in the holidays. The answer P gave to the question what he/she liked best was the Pepe cartoon. This showed that P tried to comprehend the lesson when the multimedia-assisted instruction method was used.

The 3<sup>rd</sup> text: P' statement that the earth was the only place where life exists showed that he/she grasped the purpose of the lesson. While answering the questions, P was as if he/she memorized the video describing how the sun emits heat and light. However, P is known for getting bored during the regular Turkish Language lessons, particularly when listening texts are taught, and does not understand the lesson. When P was asked what he/she liked most, he/she said that he/she liked them all. This shows that multimedia-assisted instruction can have a positive effect on P's learning skill.

The 4<sup>th</sup> text: P said that signs were not for cars only and people must also abide by them. P could perfectly tell the colors and meanings of traffic lights. P was impressed by the animation he/she watched and got very angry at the man in the car. P criticized the man's violation of the rules. When P was asked what he/she liked most, he/she said it was the animation they watched. This showed that multimedia-assisted instruction can lead

P to examine the events in his/her own way and to arrive at conclusions from events.

Observations for the student named F: The 1<sup>st</sup> text: While watching the sharing scenes of the siblings in the video, F said he/she liked sharing, too. By comparing himself/ herself to the character, F showed that he/she could attain the goals of the lesson. When he was asked the question why we share, he/she/said we should lend our pencil to those who have none, which shows that he/she could grasp the main idea of the text. The fact that F wanted to fiddle with the computer at every stage of the lesson showed that this was his/her way to participate in the lesson.

The 2<sup>nd</sup> text: F could answer most of the questions about Atatürk in the documentary he/she watched and said Atatürk saved us just like P did. When he was asked about the meaning of 23 April, he/she said it was a day that Atatürk told us to celebrate. This shows that F can draw conclusions from what he/she listened. When he/she was asked what he/she liked most, he/she said it was the Pepe cartoon.

The 3<sup>rd</sup> text: In the regular classroom, F did not listen to the text during the Turkish Language. However, during the multimedia-assisted teaching, F listened to the text without getting bored and made comments about the visuals while listening. While F was watching the video about the sun, he/she found it interesting that everything revolved around the sun.

The 4<sup>th</sup> text: F explained what traffic signs were in the general sense and was able to tell the cause of the accident in the animation he/she watched. When he/she was asked why we must follow the rules, he/she said: "otherwise we have an accident and die". The fact that F said pedestrians must walk on pavements showed that he/she can understand the lesson. This suggests that multimedia-assisted instruction can be effective on a student like F who easily gets bored and distracted in class, and contribute to the comprehension of a text listened.

### ***Participants' ability to share what they learn***

Observations for the student named P: The 1<sup>st</sup> text: In the interview held with the family, the family said P did not talk much about the lesson. P just said they should also buy a computer. When they asked P the reason, P said "so that we can watch cartoons any time we want". In addition, P told his/her elder brother, who was also in the same grade, that they used a computer to learn the lesson. When his/her brother asked P what they learned, P answered that they learned about sharing. This showed that P could share what he/she learned in class with others.

The 2<sup>nd</sup> text: In the interview held with the family, the family said P told his/her elder sister that they watched a film about Atatürk when he/she got home. The fact that P

said it was Atatürk who saved us shows that P covered a considerable distance in comprehending the text. In addition, P said he/she watched the Pepe cartoon and used a computer to learn the lesson. P said he/she started the Pepe cartoon on the computer, and insisted that they should buy a computer. It is understood that P showed more excitement at home than the previous week.

The 3<sup>rd</sup> text: In the interview held with the family, the family said P told things about the sun to his/her grandfather, and wanted his/her sister to look up at the sky, calling her outside. This was one of the important objectives of the lesson. P's saying that the earth is a planet and using the concept of space at home even though he/she did not explain it suggest that P can cover a considerable distance in comprehending the lesson and may be the evidence of continued positive effect of multimedia-assisted instruction at home. The fact that P told about the video about space and wanted to look up at the sky before going to bed in the evening showed that multimedia-assisted instruction kept P's motivation still alive.

The 4<sup>th</sup> text: In the interview held with the family, the family said P first asked them why they had no traffic lights on their road. The fact that P told about the accident in the video to his/her elder sister along with the cause of the accident suggests that the aims of the lesson were achieved. Furthermore, the fact that P asked the colors and meanings of traffic lights to his/her elder brother indicated P's desire to share. All these suggest that multimedia-assisted instruction contributed positively to P's sharing what he/she learned.

Observations for the student named F: The 1<sup>st</sup> text: In the interview held with the family, the family said F asked his/her father to share his phone on the way home. It was interesting for the family to see that F talked to his/her father about the animation while his father was turning on his computer, wanted him to watch the same animation, frequently asked his/her father to open videos about sharing, and did not show any desire to watch cartoons that day, and said he loved the lesson with the computer more.

The 2<sup>nd</sup> text: In the interview held with the family, the family said they were surprised when F asked questions about Atatürk to his/her father and talked about the documentary because it was a very rare situation for them. The family also said that F expressed a desire to go 23 April celebrations with his/her father and showed Pepe and his family as an example.

The 3<sup>rd</sup> text: In the interview held with the family, the family said that F asked his/her mother how big the earth was as soon as he/she got home, and asked his/her mother to go outside to look at the sun, asked his/her father to the same, and that day, he/she asked questions about the sun and the earth to everyone at home and looked up at the sky.

The 4<sup>th</sup> text: In the interview held with the family, the

family said that F told his/her father that he/she wanted to get in the car so that they could stop at a red light. When his/her father asked why, he/she told him that he would have an accident if he did not stop at a red light and everyone should follow the traffic rules. He/she said a car might hit them if they stood on the road, and roads were for cars only. When his/her father asked where people should walk, F answered that they should walk on the pavement. This shows that F can comprehend the text that he/she listened to and watched via the multimedia-assisted instruction method and can share what he/she learned with other people.

## DISCUSSION, CONCLUSION AND SUGGESTIONS

The following conclusions can be drawn from the findings obtained as a result of observations during the lessons taught using the multimedia-assisted instruction method and the interviews held. Animations, videos, cartoons and similar activities carried out before and after listening to the texts during lessons taught using the multimedia-assisted instruction approach have a positive effect on participants' concentration and motivation, making the class more enjoyable. It is believed that this instructional approach can be useful for students with mild mental deficiency experiencing motivation and concentration problems during listening activities. When the body of literature is reviewed, studies with similar results can be found. In a study Pişkin (1995) concluded that individuals with mental disabilities can focus better on the lesson when visuals and audio materials are presented using a computer during the lesson. In a study carried out by utilizing PowerPoint presentation software, Melvin and Horton (1996) found that students' interest in the lesson improved. Boster et al. (2002) concluded that CDs, cassettes, and video clips used by the teacher in the classroom improved students' interest in the lesson. In their study, Hersh et al. (2003) concluded that use of technology in the classroom eliminates the deficiencies of individuals with special needs which originate from their personal differences, and enhances their interest in the lesson. Cnets (2006) stated that the materials and tools used in the classroom make a positive effect on students' concentration. In his study, Martin (2006) concluded that the use of technology and technological products in the education of individuals with special educational needs can be beneficial to these students and raise their interest in the education environment. Aruk (2008) concluded that the use of information technologies in the e-education of individuals with mental deficiencies has utmost importance and raises their interest in the lesson. It may be suggested that the use of tools and materials that address more than one sense of participants during lessons taught via the multimedia-assisted instruction method makes participants feel more confident during the lessons and facilitates achievement of the aims of the

lesson. Thus, it can be concluded that multimedia-assisted instruction facilitates the learning skills of students with mild mental deficiency. Another outcome of this study is that students with mild mental deficiency who learn the lesson easily participate actively in the lesson and react to visual and audio stimuli. This may be explained by the fact that multimedia-assisted instruction gives students with mild mental deficiency the opportunity to participate in the lesson. Another outcome of this study is that students with mild mental deficiency who have the opportunity to learn easily what they are taught during the lesson and to participate actively in the lesson can share what they have learned with others. It may thus be argued that multimedia-assisted instruction provides students with mild mental deficiency the opportunity to share what they have learned with others.

When the body of literature is reviewed, studies with similar conclusions can be encountered. Balliel (2014) analyzed the effect of the webquest-assisted teaching approach on students with mild mental deficiency and concluded that it is an instructional method that leads to positive results. Coşkun and Erdin (2014), in their study, stated that listening comprehension skills of mainstreamed students with mild mental deficiency are better with audiovisual materials than with audio materials only. Türkyılmaz (2010) suggested that the use of visual elements in educational listening activities can be more effective on students in achieving the aims of the lesson. Döngel (2009) concluded that individuals with mental deficiencies require more efforts, methods, techniques and time than normal individuals in order to focus their attention on a given subject. Atik et al. (2008) concluded that materials developed using the PowerPoint software, predominantly composed of visuals, help students with mental deficiency to materialize and understand the words, the sentences and the text. In his study, Ozan (2008) concluded that multimedia must be designed effectively, and messages and information to be conveyed must be communicated to the target population in different and interesting ways for learning to be more active. Kablan (2011) suggested that the attention-grabbing nature of the material prepared using the PowerPoint software can enhance participation of students in the lesson. In their study, Demirel et al. (2001) concluded that the use of various tools in the education environment can increase students' motivation, facilitate learning and participation in the lesson.

Being a method that addresses not only the sense of hearing but also other senses, multimedia-assisted instruction can be used for improving listening skills of mainstreamed students with mild mental deficiency. Problems arising from weaknesses of mainstreamed students with mild mental deficiency can be eliminated by using visual materials, audio materials, animations, cartoons, etc. during listening activities.

Based on these conclusions, the following suggestions can be made: 1) A similar observation study can be conducted for other basic language skills of mainstreamed

students with mild mental deficiency. 2) The effect of multimedia-assisted instruction on improvement of communication skills of students with mild mental deficiency can be examined. 3) This method can be implemented with more efficient and effective activities by subjecting teachers to in-service training on multimedia-assisted instruction. 4) A similar study can be conducted for students with mental deficiency who are in need of special education and who attend schools where special education is provided. 5) A study that addresses views and suggestions of teachers on the use of multimedia-assisted instruction in the education of mainstreamed students with mild mental deficiency can be conducted. 6) A study that addresses views and suggestions of parents on the use of multimedia-assisted instruction in the education of mainstreamed students with mild mental deficiency can be conducted.

### Conflict of Interests

The author has not declared any conflicts of interest.

### REFERENCES

- Acedo C (2013). URL:[http://www.ibe.unesco.org/fileadmin/user\\_upload/Policy\\_Dialogue/48th\\_ICE/Press\\_Kit/Interview\\_Clementina\\_Eng13Nov.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Policy_Dialogue/48th_ICE/Press_Kit/Interview_Clementina_Eng13Nov.pdf). Retrieved November 15, 2015.
- Akay E, Uzuner Y, Girgin Ü (2014). Kaynaştırmadaki işitme yetersizliğe olan gayretleri, öğrencilerle gerçekleştirilen destek eğitim odası uygulamasındaki sorunlar ve çözüm. Eğitimde Nitel Araştırmalar Dergisi-ENAD, J. Q. Res. Educ. 2(2):42-66.
- Akbaba B (2009). Atatürk ilkeleri ve inkılâp tarihi öğretiminde çoklu ortam kullanımının akademik başarı ve tutumlara etkisi. Yayınlanmamış doktora tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Akkoyunlu B, Yılmaz M (2005). Türetimci çoklu öğrenme kuramı. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, (28):9-18.
- Akkoyunlu B (1998). Eğitimde Yeni Teknolojiler. Eskişehir: AÖF Yayınları.
- Arıkan R (2004). Araştırma teknikleri ve rapor hazırlama. Ankara: Asil Yayın Dağıtım.
- Aruk İ (2008). Bilişim teknolojilerinin zihinsel yetersizliğe olanların e-öğretiminde kullanılması ve örnek bir uygulama geliştirilmesi. Yayınlanmamış yüksek lisans tezi, Trakya Üniversitesi, Edirne.
- Atıcı R (2014). Kaynaştırma öğrencilerinin okul hayatında yaşadığı zorluklar, Turkish studies – international periodical for the languages, literature and history of Turkish or Turkic 9(5):279-291.
- Atik ÇA, Tekinarslan E (2008). Powerpoint programında hazırlanan okuma yetersizliği olan materyalinin 12-13 yaşlarında kaynaştırma programına devam eden hafif düzeyde zihinsel öğrencilerin okuduğunu anlama becerilerine etkisi. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi. 8(2):107-124.
- Balaban M, Yılmaz Ö, Yıldızbaş F (2009). Okul öncesi eğitimde kaynaştırma eğitimi uygulamalarına ilişkin öğretmen görüşlerinin incelenmesi. I. International Congress of Turkey Education Researches, Oral Representation, 1-3 May, Çanakkale.
- Balçı A (2005). Sosyal bilimlerde araştırma. Ankara: PegemA Yayıncılık.
- Balliel D (2014). Webquest destekli öğrenme yaklaşımının özel eğitim öğrencilerine etkisi. Eğitim ve Öğretim Araştırmaları Dergisi J. Res. Educ. Teach. 3(4):46-50.
- Baş T, Akturan U (2008). Nitel araştırma yöntemleri nvivo 7.0 ile nitel veri analizi. Ankara: Seçkin Yayıncılık.

- Batu ES, Kircaali İftar G (2005). "Kaynaştırma". Ankara: Kök Yayıncılık.
- Bauer AM, Kroeger S (2004). The mainstreaming classroom strategies for effective instruction (2nd ed.).NJ: Pearson/Merrill Prentice Hall.
- Blair RE (1985) "Some Issues for School Boards" Mainstreaming, Canadian Education Association ISBN: 0-920315-06-2
- Boster FJ, Meyer GS, Roberto AJ, Inge CC (2002). A report on the effect of the unitedstreaming application on educational performance, Retrieved November 15, 2015, from <http://www.ncrel.org/sdrs/areas/issues/methods/tech/te800.htm#researchresult>.
- Cnets (2006). Technology foundation standards for students, Retrieved November 15, 2015, from [http://cnets.iste.org/students/s\\_stands.html](http://cnets.iste.org/students/s_stands.html)
- Coşkun İ, Erdi G (2014). Hafif düzeyde zihin yetersizliği olan kaynaştırma öğrencilerinin dinlediğini anlama becerilerinin incelenmesi. Akademik Bakış Dergisi Uluslararası Hakemli Sosyal Bilimler E-Dergisi (41)
- Collins A (1991). The role of computer technology in restructuring schools. Phi Delta Kappan 73(1):28-36.
- Deborah FR, Smith BJ (1992). Attitude barriers and strategies for preschool mainstreaming, Policy and Practice in Early Childhood Special Education Series
- Demirel Ö, Seferoğlu S, Yağcı E (2001). Öğretim teknolojileri ve materyal geliştirme. Ankara: PegemA Yayıncılık.
- Döngel M (2009). Hafif düzeyde zihin yetersizliğe olan öğrencilere yazma becerilerinin kazandırılmasında kullanılan öğretim yöntemi ve tekniklerine ilişkin öğretmen görüşlerinin değerlendirilmesi. Yayımlanmamış yüksek lisans tezi, Selçuk Üniversitesi, Konya.
- Erdem İ, Çelik M (2011). Dil bilgisi öğretim yöntemi üzerine değerlendirmeler. Turkish Studies - International Periodical For The Languages, Literature And History Of Turkish Or Turkic. 6(1):1057-1069.
- Eripek S (2005). Zeka geriliği. Ankara : Kök Yayıncılık
- Harwood WS, McMahon MM (1997). Effects of integrated video media on student achievement and attitudes in high school chemistry. J. Res. Sci. Teach. 34(6)617-631.
- Hersh CW, Meng-Fen L, Georgette MM (2003). A meta-analysis of the effectiveness of teaching and learning with technology on student outcomes, Retrieved November 15, 2015, <http://www.ncrel.org/tech/effects2/abstract.htm>
- İşman A, Baytekin Ç, Balkan F, Horzum B, Kıyıcı M (2002). Fen Bilgisi eğitimi ve yapısalci yaklaşım. The Turkish Online J. Educ. Technol. 1(1):41-47.
- Jacobsen DA, Eggen P, Kauchak D (2002). Methods for teaching (6th ed). Upper Saddle River, NJ: Merrill-Prentice Hall.
- Kablan Z (2001). Power Point sunu programıyla hazırlanan Türkçe ilkökuma yazma öğretim materyali hakkındaki öğretmen görüşleri.Yayımlanmamış yüksek lisans tezi , Yıldız Teknik Üniversitesi Sosyal Bilimler Enstitüsü. İstanbul.
- Karasar N (2005). Bilimsel araştırma yöntemi. Ankara: Nobel Yayın Dağıtım.
- Karasar N (1998). Bilimsel araştırma yöntemi (8. Basım). Ankara: Nobel Yayın Dağıtım.
- Kargın T (2010). Öğretimin uyarlanması. B. Sucuoğlu ve T. Kargın, (Ed.), İlköğretim'de kaynaştırma uygulamaları. Ankara: Kök Yayınları.
- Kaymakçı S (2010). Sosyal bilgiler öğretiminde çalışma yapılarının kullanımının öğrencilerin akademik başarılarına ve dersle karşı tutumlarına etkisi. Yayımlanmamış doktora tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Kircaali-İftar G (1998). Özel gereksinimli bireyler ve özel eğitim. Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi Yayınları.
- Koile K, Singer D (2006). Development of a tablet-pc-based system to increase instructor-student classroom interactions and student learning. In: D. Berque, J. Prey, & R. Reed (Eds.), The Impact of Pen-based Technology on Education: Vignettes, Evaluations, and Future Directions. West Lafayette, IN: Purdue University Press.
- Krason K, Jaszczyszyn E (2006). Early education and Mainstreaming in Poland, Early Child Development and Care c: 176(6):621-630.
- Lewis R, Doorlag D (2004). Teaching special students in general education classroom, Netang, N.J. U.S.A.
- Lewis RB, Doorlag DH (1987). Teaching Special Students in the Mainstream. Columbus: Merrill Publishing Company.
- Martin SS (2006). Special education, technology, and teacher education. ForeSITE, 1(1). [site.aace.org/pubs/foresite/SpecialEducation.pdf](http://www.site.aace.org/pubs/foresite/SpecialEducation.pdf) Retrieved November 15, 2015.
- Mastropieri MA, Scruggs TE (2004). The mainstreaming classroom strategies for effective instruction (2nd ed.).J: Pearson/Merrill Prentice Hall.
- MEB (2006). Özel eğitim hizmetleri yönetmeliği, 31.05.2006 tarih ve 26184 Sayılı Resmî Gazete.
- Melanlioğlu D (2012). Dinleme becerisine yönelik ölçme değerlendirme çalışmalarında üstbiliş stratejilerinin kullanımı. Turkish studies - international periodical for the languages, literature and history of Turkish or Turkic 7(1):1583-1595
- Melanlioğlu D (2013). Ortaokul öğrencileri için dinleme kaygısı ölçeğinin geçerlik ve güvenilirlik çalışması. Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi Türkçenin Eğitimi Öğretimi Özel Sayısı, 6(11):1308-9196
- Melvin P, Horton J (1996). Using technology to enhance teacher preparation. ERIC, Document, ED395929.
- Merriam SB (1998). Qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass Publishers.
- Merrill PF, Hammons K, Vincent BR, Reynolds PL, Christensen L, Tolman MN (2004) Computers in education. Allyn and Bacon. USA.
- Musarurwa C (2011). Teaching with and learning through ICTs in zimbabwe's teacher education colleges, US-China Educ. Rev. 7:952-959.
- Olson J, Murphy CL, Olson DP (1999). Reading parents and teachers for the Mainstreaming of children with disabilities. A Step-By-Step Process, Young Children, 3:18-19-22.
- Ozan Ö (2008). Eğitim amaçlı çoklu ortam uygulamalarına ilişkin bir değerlendirme aracı. 8th International Education Technol. Conference 2:906-912.
- Özbay M (2009). Bir dil becerisi olarak dinleme eğitimi. Ankara: Öncü Kitap..
- Özbay M (2006). Türkçe özel öğretim yöntemleri II. Ankara: Öncü Kitap.
- Peltenburg M, Van den Heuvel-Panhuizen M, Robitzsch (2010). ICT-based dynamic assessment to reveal special education students' potential in mathematics. Res. Papers Educ. 25(3):319-334.
- Pişkin Ü (1995). 5-8 yaş grubu otistik çocukların kavram eğitimlerinde bilgisayar ile eğitmen yönlendirmesinin etkilerinin incelenmesi. Yayımlanmamış doktora tezi. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü. Ankara.
- Salderay (2008). Türkiye'deki zihin engelliler iş okullarında görsel sanatlar dersinin öğrencilerin beceri, davranış ve meslek edinimindeki katkısına yönelik öğretmen görüşleri. Yayımlanmamış doktora tezi. Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Sarı H (2002). Özel eğitime muhtaç öğrencilerin eğitimleriyle ilgili öneriler. Ankara: Pegem A Yayınları.
- Soodak LC, McCarthy MR (2006). Classroom management in mainstreaming settings. Evertson, Handbook of classroom management: Research, practice and contemporary issues. (Eds: C. M. Evertson & C. S. Weinstein). Lawrence Erlbaum Associates, Inc. pp. 3-15.
- Sucuoğlu B (2006). Eğitimde kaynaştırma modeli. İlköğretim Eğitimi Dergisi. Sayı:4, 6-10, Ankara: Kök Yayıncılık.
- Şahbaz Ü, Kalay G (2010). Okulöncesi eğitimi öğretmen adaylarının kaynaştırmaya ilişkin görüşlerinin belirlenmesi. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 19:116-135.
- Shaw RA (2011). Employing universal design for learning. New Directions for Student Services 134:21-33.
- Temizkan M (2013). İlköğretim 6-8. sınıf Türkçe öğretmen kılavuz kitaplarındaki yazma yöntemleri üzerine bir inceleme (MEB. yayınları örneği). Dil ve Edebiyat Eğitimi Dergisi 2(5):95-124.
- Theng YL, Rigny C, Thimbleby H, Jones M (1997). HyperAT: HCI and Web Authoring. Proceedings of People and Computers XII, Bristol pp. 359-378.
- Tomlinson CA (2005). Grading and differentiation: Paradox or good practice? Theory into Practice 44:262-269.
- Thomas AF, Rebecca AC (1994). Adopting textbooks and other instructional materials. Remedial and Special Educ. 5(6):333-347.
- Tüfekçioğlu Ü (1997). İşitme engelli çocukların okul öncesi dönemde kaynaştırma ortamında eğitimleri. Milli Eğitim Kültür-Sanat Dergisi, Sayı: 136:58-61.
- Türkyılmaz M (2010). Bir ders aracı olarak dinleme metinlerinin

anlamaya etkisi: "Eskici" metni örnekleminde deneysel bir çalışma. Uludağ Üniversitesi Eğitim Fakültesi Dergisi 23(1):207-220.

Ulukaya E (2009). Eğitilebilir zihinsel engelli çocuklara beceri kazandırmada karşılaşılan sorunların incelenmesi. Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bölümleri Enstitüsü, Dekoratif Ürünler Eğitim ABD. Ankara.

Wood JW (2006). Teaching students in mainstreaming settings adapting and accommodating instruction (5thed.) NJ: Pearson Education Inc.

Yıldırım A, Şimşek H (2000). Sosyal bilimlerde nitel araştırma. Ankara: Seçkin Yayıncılık.

Yıldırım A, Şimşek H (2006). Sosyal bilimlerde nitel araştırma teknikleri, (genişletilmiş 6. baskı), Ankara: Seçkin Yayıncılık.

*Full Length Research Paper*

# The analysis on sport attitudes of students at high school education in Turkey

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The research objective is to determine different variables on sport attitudes of the 1st, 2nd, 3rd, and 4th grade high school students throughout Turkey. Data were collected using face to face survey method with students studying in 21 provinces within seven different geographical regions of Turkey. 5862 randomized students are selected throughout Turkey for this research. Frequency analysis, reliability analysis, factor analysis, nonparametric Mann-Whitney and Kruskal-Wallis comparison tests were conducted to determine the sport attitudes of students. Reliability analysis is made regarding the questions on the sportive attitude scale and Cronbach's alpha coefficient is calculated as 0.923. With respect to research results of sport habits of students at high school in secondary education level throughout Turkey, it is determined that students who are studying in higher grades, have medium-income family and whose mother's educational status is relatively on a higher level, are more positive towards sport participation.

**Key words:** Turkey, high school, student, sport, health, physical activity, attitude. Kindergarten, teacher, spare time, sporting habit.

## INTRODUCTION

Attitude, cognitive, emotional and behavioral system, might be described as a notion consisting of individual's perpetual or temporary assumptions of the world. It may also include individual's expectations on other persons, their values and perspectives, their emotions and beliefs on what is right or wrong and what to seek and avoid (Karahana and Kuru, 2015). Individual's attitude on any event or fact comprises cognitive, affective and behavioral factors (Usta et al., 2014).

Arising from opinion and attitude among individuals and society regarding sport or participation in sport might take shape with factors like life style, education and

perspective on life. Accurate perception of physical, cognitive, mental and social benefits of sport will maintain the improvement of sport attitudes.

While sport provides opportunity for the eminence of countries, it also represents an obvious call for cultural, social and economic aspects (Nicholson et al., 2011). However, perceiving this call will be ensured by generalizing mass sport activities and adopting sport attitude in society. Generalization of sport in society and exhibiting a positive sport attitude is closely related to transferring sport to children and adolescents as a cultural element and enabling them adopt regular sport

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habit.

Nowadays, sport is a significant factor in upbringing qualified persons who have completed their physical, social and emotional development and also it can be considerably deemed as supporter of socializing process for children and adolescents (Koçak et al., 2013; Pherson, 1981). Participating in sport influences social and emotional development in addition to healthy development of young generation (Marquis and Baker, 2015). Participating in regular physical activity significantly contributes to cognitive functions development together with supporting healthy aging process for children, adolescents and also adults (Booth et al., 2000; Weuve et al., 2004).

Sport is an area in which individual gains a competitive manner, working discipline and ambition of struggle, learns cooperation despite all diversities persons gather within the same rules and compete individually or as teams (Şahan, 2008; Şebin et al., 2007). Such factors as competition, entertainment, rivalry and developing rivalry motivate participating in this area (Koivula, 2009). Participating in sport has substantial functions in terms of strengthening the entire society, enhancing communication, cooperation, solidarity and social ties in society (NSW Sport and Recreation, 2007); developing social networks and maintaining them beyond its physical and health-related benefits (Allender et al., 2006). Likewise, sport is closely related to especially social integration and suppression of social problems (Vermeulen and Verweel, 2006); improvement of health and social progress (Sherlock et al., 2010); supporting psychosocial and emotional soundness (Stepteo and Butler, 1996) and enhancing civil participation and social communication (Edwards, 2013).

Social, cultural and educational acquisitions gained with sports also influence the social lives of individuals. Therefore, it is essential for children and youth to be involved in sports, develop a positive attitude about sports in order to build a healthy society. Furthermore, the attitudes and behaviors of the school environment and the physical training teachers are the milestones of this process. Bringing healthy and qualified individuals into society through sports is also a dynamic of social development. Within this context, the correlation coefficient between social well-being and participation in sports or positive attitude towards sports is relatively high.

In this manner, the research objective is to determine different variables (parents' education level, income and students' graduate level) on sport attitudes of the 1st, 2nd, 3rd, and 4th grade students at high school in secondary education level throughout Turkey.

## MATERIALS AND METHOD

The research objective is to determine different variables (parents' education level, income and students' graduate level) on sport

attitudes of the 1st, 2nd, 3rd, and 4th grade students at high school in secondary education level throughout Turkey. For this purpose, data is acquired using face to face survey method with students studying in 21 provinces within seven different geographical regions of Turkey.

Turkey is a country that is parted to seven different geographical regions. Therefore, the scale of this research involves 21 provinces that have been randomly selected from seven different geographic regions, in order to represent the country in general with research findings. The survey used is "Sport Attitudes of College Students" scale which was developed by Funda Koçak in 2014 (Koçak, 2014).

Five point likert type scale with 19 questions has been used in this research. The responses in the scale are graded from 1 to 5. The grading is as following: 1: Absolutely Disagree, 2: Disagree, 3: Undecided, 4: Agree, 5: Absolutely Agree. Reliability analysis is made by Koçak (2014) and cronbach's alpha coefficient was calculated as 0,823. In this research, reliability analysis is made regarding the questions on the sportive attitude scale. Cronbach's alpha coefficient is calculated as 0.923. 5862 randomized students are participated in this research from the provinces included in the research. Also within the scope of research, the relations between the factors obtained from sportive attitude scale and students' demographic features are analyzed. Frequency analysis, reliability analysis, factor analysis and nonparametric comparison tests are conducted to determine the sport attitudes of students. Frequency analysis, reliability analysis, factor analysis and nonparametric Mann-Whitney and Kruskal-Wallis comparison tests are conducted to determine the sport attitudes of students.

## FINDINGS

Results of frequency analysis obtained regarding the demographic features of research participants are shown in detail in Table 1. The variances of gender, age, grade and number of family members, income and parents' educational status of the participants are considered. Sample adequacies for factor analysis and sphericity test results are shown in Table 2. According to test results, Kaiser Meyer statistic coefficient has been calculated as 0.953 and this result shows that chosen sample is adequate. Whether there is a meaningful correlation between variances is analyzed with Bartlett sphericity test. Hypotheses regarding sphericity test are as below:

Ho: There is no meaningful correlation between survey questions.

Hi: There is a meaningful correlation between two questions at least.

It is identified that, a meaningful correlation exists between at least two variances according to hypothesis test result regarding sphericity test ( $p < 0.05$ ). Eigen value statistics calculated for factor analysis and variance description ratio are shown in Table 3. Two factors of which eigenvalue is bigger than 1 are chosen according to Kaiser Scale. Considering the obtained two factors, variance description ratio is approximately 45%. The total variability of chosen two factors are described as 45% in consequence of factor analysis. Rotated components matrix results with relation to factor analysis are shown in Table 4. Three questions with low factor load are



**Table 1.** Demographic frequency analysis.

Variable	Group	Frequency	Valid percentage (%)
Age	14	39	.7
	15	1254	21.4
	16	1536	26.2
	17	1497	25.5
	18	1217	20.8
	19	245	4.2
	20	70	1.2
	21	4	.1
Gender	Male	2854	48.7
	Female	3008	51.3
Classroom	1	1506	25.7
	2	1603	27.3
	3	1503	25.6
	4	1250	21.3
Number of persons in family	1	1	.0
	2	4	.1
	3	216	3.7
	4	1090	18.6
	5	1780	30.4
	6	1244	21.2
	7	657	11.2
	8	604	10.3
	9	204	3.5
	10	29	.5
	11	29	.5
	12	4	.1
Income	0-499	113	1.9
	500-999	406	6.9
	1000-1499	567	9.7
	1500-1999	923	15.7
	2000-2499	1449	24.7
	2500 and more	2403	41.0
Education of the father	Primary education	724	12.4
	Secondary education	2288	39.0
	College	1592	27.2
	Undergraduate	1046	17.8
	Graduate	179	3.1
	PhD	33	.6
Education of the mother	Primary education	2125	36.3
	Secondary education	1983	33.8
	College	697	11.9
	Undergraduate	939	16.0
	Graduate	113	1.9
	PhD	5	.1

**Table 2.** Sample size adequacy and correlation test statistics.

<b>Kaiser-Meyer-Olkin statistic</b>		<b>0.953</b>
	Chi-square statistic	37842.466
Bartlett's test of sphericity statistics	Df	171
	Sig.	0.000

**Table 3.** Eigen values and the percentage of explained variances.

Item	Eigen value	Variance percentage (%)	Cumulative variance percentage (%)
i1	7.220	38.001	38.001
i2	1.342	7.064	45.065
i3	0.973	5.122	50.187
i4	0.877	4.617	54.803
i5	0.761	4.004	58.807
i6	0.718	3.780	62.587
i7	0.698	3.676	66.264
i8	0.645	3.395	69.659
i9	0.630	3.316	72.975
i10	0.600	3.159	76.134
i11	0.585	3.081	79.216
i12	0.558	2.936	82.151
i13	0.538	2.831	84.982
i14	0.515	2.710	87.693
i15	0.509	2.678	90.370
i16	0.479	2.523	92.893
i17	0.456	2.399	95.292
i18	0.449	2.363	97.655
i19	0.446	2.345	100.000

excluded from the analysis. According to rotated components matrix results, the first factor has 10 questions and the second factor has 9 questions. As factor loads are over 0.50, survey questions are listed under relevant factors.

### Average comparison tests

Average score values of survey questions clustered under two factors are received by using factor structures obtained as a result of factor analysis. In this manner, two different factors are converted to variances. Factors are denominated according to questions clustered under factors. The first factor is denominated as physical and mental attitude and the second factor is denominated as a social and psychological attitude. Test of normality is implemented for factor scores and it is determined that factor scores do not comply with normal distribution according to test statistics ( $p < 0.05$ ). Mann-Whitney and Kruskal-Wallis tests are implemented as factor scores do not comply with normal distribution. Variances of grade, gender, income and parents' education status are used

for average comparison tests. Social-psychological attitude and physical-mental attitude factor scores are used as dependent variables. Hypothesizes for average comparisons are as below:

**Ho:** There is no meaningful difference between demographic variance groups according to factor scores.

**Hi:** There is a meaningful difference between at least two groups of demographic variance according to factor scores.

Multiple comparison tests are implemented for variances that statistically have meaningful difference, and differential groups are analyzed.

According to the results of Kruskal-Wallis test implemented for grade variance, there is a meaningful difference between at least two groups for physical-mental attitude factor ( $p < 0.05$ ). The results of multiple comparison test for grade group is shown in Table 5. A meaningful difference is not found for social-psychological attitude factor ( $p < 0.05$ ). According to multiple comparison test results, 4th grade students have

**Table 4.** Rotated component matrix of the items.

Item	Component	
	1	2
i18	0.683	-
l11	0.656	-
i17	0.631	-
l10	0.630	-
i19	0.630	-
i15	0.624	-
l12	0.602	-
i16	0.593	-
i14	0.584	-
i13	0.550	-
i3	-	0.686
i5	-	0.646
i6	-	0.641
i7	-	0.634
i4	-	0.620
i2	-	0.613
i1	-	0.613
i8	-	0.595
i9	-	.0537

**Table 5.** Multiple comparisons with classroom variable for physical-mental attitude factor.

Group	Test statistic	Sig.
4-2	70,895	1.000
4-1	74,550	1.000
4-3	222,817	0,003
2-1	3,655	1.000
2-3	-151,921	0,074
1-3	-148,267	0,097

higher physical-mental attitude score in comparison to 3rd grade students ( $p<0.05$ ). According to Mann-Whitney test implemented for gender variance, there is no meaningful difference between gender groups for both factors ( $p>0.05$ ).

According to the result of Kruskal-Wallis test implemented for income variance, there is a meaningful difference between at least two groups for both factors ( $p<0.05$ ). The result of multiple comparison tests for income groups are shown in Table 6 to 7. It is determined according to multiple comparison test results that, individuals with income in the range of 1500 to 1999 TL have higher physical-mental attitude score in comparison to individuals with income in the range of 0-499 and 500-999 TL ( $p<0.05$ ). According to the result of Kruskal-Wallis test implemented for father's education status variance,

there is no meaningful difference between gender groups for both factors ( $p>0.05$ ).

According to the result of Kruskal-Wallis test implemented for mother's education status variance, there is a meaningful difference between at least two groups for both factors ( $p<0.05$ ). The result of multiple comparison tests for income groups are shown in Table 8 to 9. It is determined according to multiple comparison test results that, individuals whose mother's education status is at the level of master degree have higher social-psychological attitude score in comparison to individuals whose mother's education status is at the level of elementary school and bachelor's degree ( $p<0.05$ ). The individuals whose mother's education status is at the level of master degree have higher physical-mental attitude score in comparison to individuals whose mother's education status is at the level of secondary education ( $p<0.05$ ).

## DISCUSSION

With respect to this research results, the research in which sport attitudes or in other words sport habits of students at high school in secondary education level throughout Turkey are assessed and two factors have been obtained as a result of the factor analysis: socio-psychological and physical-mental factors. Relations between the factors and demographical features have been examined with average comparison tests. Considering the results of average comparison test, it has been understood that senior students have more positive views on sports in terms of physical-mental attitude than junior students have.

When the level of income is examined, individuals with family income in the range of 1500 to 1999 TL think more positively on sport physical-mentally in comparison to the individuals with income in the range of 0 to 499 and 500-999 TL. The individuals whose mother's education status is at the level of master degree have more positive perspective on sport in terms of social-psychological attitude in comparison to individuals whose mother's education status is at the level of elementary school and bachelor's degree. It has been identified that gender factor which is dominant and determinant concerning participation in sport has not caused a significant difference within this research.

According to the results of this research, senior students have more positive views on sports attitude than junior students. Sport which is a basic supporter of education life must be popularized and promoted with the purpose of raising healthy generations. Insufficient physical activity that has become a universal disorder is the fourth most common cause of death (Kohl et al., 2012). Insufficient level of physical activity, especially obesity is a disorder that has fatal results like cardiovascular disease and diabetes. Therefore, children and young people should be encouraged to participate in

**Table 6.** Multiple comparisons with income variable for physical-mental attitude factor.

Group	Test statistic	Sig.
0-499 - 500-999 TL	-231,606	1.000
0-499 - 1000-1499 TL	-298,058	1.000
0-499 - 2500 TL and more	-346,880	0,495
0-499 - 2000-2499 TL	-357,106	0,458
0-499 - 1500-1999 TL	-531,153	0,024
500-999 - 1000-1499 TL	-66,453	1.000
500-999 - 2500 TL and more	-115,274	1.000
500-999 - 2000-2499 TL	-125,500	1.000
500-999 - 1500-1999 TL	-299,548	0,044
1000-1499 - 2500 TL and more	-48,821	1.000
1000-1499 - 2000-2499 TL	-59,047	1.000
1000-1499 - 1500-1999 TL	-233,095	0,146
2500 TL and more - 2000-2499 TL	10,226	1.000
2500 TL and more - 1500-1999 TL	184,274	0,073
2000-2499 - 1500-1999 TL	174,048	0,217

**Table 7.** Multiple comparisons with income variable for social-physical attitude factor.

Group	Test statistic	Sig.
0-499 - 500-999 TL	-267,197	1.000
0-499 - 1000-1499 TL	-340,572	0,757
0-499 - 2500 TL and more	-390,676	0,245
0-499 - 2000-2499 TL	-408,948	0,199
0-499 - 1500-1999 TL	-517,754	0,032
500-999 - 1000-1499	-73,376	1.000
500-999 - 2500 TL and more	-123,479	1.000
500-999 - 2000-2499 TL	-141,751	1.000
500-999 - 1500-1999 TL	-250,557	0,192
1000-1499 - 2500 TL and more	-50,103	1.000
1000-1499 - 2000-2499 TL	-68,376	1.000
1000-1499 - 1500-1999 TL	-177,182	0,743
2500 TL and more - 2000-2499 TL	18,272	1.000
2500 TL and more - 1500-1999 TL	127,078	0,785
2000-2499 TL - 1500-1999 TL	108,806	1.000

physical activities and sports with the aim of being healthy generations (Melekoğlu, 2015). Even in developed countries of western societies, physical activity level is low. Nowadays, 31% of population at the age of 15 and older ones are inactive (Hallal et al., 2012).

Developing new strategies are inevitable in order to increase participation in physical activities for a healthy society (Eime et al., 2015). Branch teachers, particularly physical education teachers and school management have responsibility for the purpose of increasing children and young people's participation in sports. Drake et al. (2015) states that sports events to be held in schools are

significantly efficient and important in terms of developing social health and he underlines that more students should be aimed to participate in sport activities held in schools (Drake et al., 2015).

Only organizing activities is not enough for developing sport attitudes of students. Sport environment, area and equipment should also be provided and they should be accessible with the aim of conducting these activities healthfully. Otherwise, developed strategies will be useless. In a research conducted by Kotan et al., 44,6% of students have stated that there are not enough equipment for the attended branches; 54,6 % of students

**Table 8.** Multiple comparisons with mother education variable for physical-mental attitude factor.

Group	Test statistic	Sig.
PhD - Graduate	123,392	1.000
PhD – Secondary Ed.	347,308	1.000
PhD – Primary Ed.	358,822	1.000
PhD – Undergraduate	372,106	1.000
PhD – College	572,795	1.000
Graduate - Secondary Ed.	223,916	1.000
Graduate - Primary Ed.	235,430	1.000
Graduate - Undergraduate	248,714	1.000
Graduate - College	449,403	0,135
Secondary Ed. - Primary Ed.	11,514	1.000
Secondary Ed. – Undergraduate	-24,798	1.000
Secondary Ed. - College	-225,486	0,037
Primary Ed. – Undergraduate	-13,284	1.000
Primary Ed. - College	-213,973	0,056
Undergraduate – College	200,689	0,264

**Table 9.** Multiple comparisons with mother education variable for social-physical attitude factor.

Group	Test statistic	Sig.
PhD – undergraduate	186,028	1.000
PhD – primary Ed.	201,237	1.000
PhD – secondary Ed.	281,874	1.000
PhD - graduate	315,256	1.000
PhD – college	442,410	1.000
Undergraduate – primary Ed.	15,209	1.000
Undergraduate – secondary Ed.	95,846	1.000
Undergraduate - graduate	-129,228	1.000
Undergraduate – college	256,383	0,036
Primary Ed. - secondary Ed.	-80,637	1.000
Primary Ed. - graduate	-114,018	1.000
Primary Ed. - college	-241,173	0,016
Secondary Ed. - graduate	-33,381	1.000
Secondary Ed. - college	-160,536	0,466
Graduate – college	127,155	1.000

have expressed that they cannot use available equipment whenever they want; 50,2% have mentioned that there are not fields suitable for the attended branches (Kotan et al., 2009).

There are also social, mental, emotional and cognitive benefits of sport activities. For example, sense of belonging to a group and social identification are very dominant in lives of young people in high school. Sport activities at schools play a very important role for satisfying these dominant senses. Regarding this social mission of the sports, marsh remarks that participation in sport is a supporting conception when someone identifies

him/herself within school (Marsh, 1993). This process beginning with the school identification should be perceived and evaluated as a proceeding flow of life enabling adolescents to take part as beneficial individuals in society. In a research about concrete results of sport activities held within schools, it has been stated that social skills of children participating in regular sports activities are high and their behavioral problems are low (Marquis and Baker, 2015).

The individuals who are learning to be a part of a group individually and are developing their social skills will take the first step to be a part of social unity and solidarity,

social adaptation. Likewise, participating in sport contributes to the progress of socializing as it mediates the strengthening of social integrity. While Yetim (2005) remarks that sport has a mission of establishing cohesion and peace among persons, societies and nations, Erkal et al. (1998) remarks that sport also bears the subsidiary qualification for individuals' social statuses. Concerning this, Şahan (2008) states that one of the most significant impact of sport on social life is being an important factor in the integration of society.

Ertop et al. (2012) considered this matter from a different perspective, he emphasized on sense of healthy life and he remarks that students' regular sport habit significantly affects their self-realization, stress management, their feeding and exercise behaviors. Besides he emphasizes that healthy life style perception of students who are engaged in sport is better than the students who don't. In a similar vein, Korkmaz and Deniz (2013) state that individuals whose physical activity level is increasing, lead healthier and high quality life.

When research results are evaluated, individuals with family income in the range of 1500 to 1999 TL think more positively on sport physically-mentally in comparison to individuals with income in the range of 0 to 499 and 500 to 999 TL. Namely, it will be appropriate to state that sport attitudes are affected positively in parallel with the increase of income level.

Socio-economic status of the family is a factor that impacts the level of physical activity for adolescents. It can be said that adolescent students whose family has low socio-economic status level are sedentary or less active compared to equals and participating in sport increases in case of increase in family income (Santos et al., 2004; Kızılkaya, 2009).

In a study of Kotan (2007) which is on the reasons of discontinuing sport, financial difficulties have less effect upon discontinuing sport among the students who participate in sports regularly with the increase of family income level. In a research conducted by Şahin et al. (2009), it is understood that majority of the students are from middle and low income, meeting their basic needs with limited means due to their economic status and therefore their participation in some recreational activities remains limited.

Physical training and sport activities within the system of education, is a factor contributing to the improvement of individuals in terms of education. When assessed from this point of view, Dinç et al. (2011) who considers family income and sport attitude relation from a different perspective, remarks that the students who have regular sport habit with the increase in family income, are also good at their courses. Likewise, in a research conducted by Öncü (2007), with the increase in family income, the views on extending gym class period and need of dealing with each student privately by teachers gain importance.

Family income is one of the basic indicators directly affecting physical, social, mental and cognitive

development of family members. Economic status is occasionally a stimulant or a restrictive factor for the reinforcement of personal development and for intensely use of tools for that. Thus, families' economic self-sufficiency is directly associated with sport attitudes of children and adolescents.

General consent in research results and in the body of literature is towards sport attitudes and participating in sport is rising together with increase in family income level. However, in the research conducted by Dalkılıç (2011), it is understood that there is not a meaningful relation between family income level and participation in sport, children from families with any level of income group participate in sport activities within the bounds of means (Dalkılıç, 2011). Education is the leading factor within the most important instruments for a society's development and progress. Societies with high education level, solemnly evaluates timing, location factors and economic means and opportunities to reinforce cultural, social, artistic and sportive development. In this manner, the relation between education and sport is a process to consider. The beginning of this process is based upon the educational status of family. Parents might contribute to personal development of children as role models in the sense of positive or negative manner.

When assessed within the scope of research, one of the variances influencing sport attitude is mother's educational status. The individuals whose mother's education status is at the level of master degree have more positive perspective on sport in terms of social-psychological attitude in comparison to individuals whose mother's education status is at the level of elementary school and bachelor's degree.

There is a meaningful relation between parents' educational status and their children's participation in sport. Accordingly, it can be said that mothers' education status of bachelor's degree and higher educational status is particularly effective on children's participation in sport. (Akcan and Bulgu, 2012).

In a research conducted by Hünük et al. (2013), it is obvious that social support perceived from their mother is effective on the participation in sport for female students whose physical activity level is high. It can be said that parents interested in sport, encourages their children for participating in sport and educational status of the parents is effective on encouraging for sport (Amman et al., 2000). Besides, parents' educational status not only influences their children's tendency on sport, branching out within sport also differentiates with the increase in educational status (Yücel et al. 2015).

Family as being the smallest unit of society becomes prominent as an environmental factor for children to gain the habit of evaluating their leisure times (Tercan, 2015). Starting to participate in sport at early ages with the support of family members, constructs a value in society and it contributes to social benefit (Bulgu, 2013). No doubt that mother's educational status has high

importance like fathers' within this process. It can be stated that parents need to support and maintain this support for their children's participation in sport to be active, and they should establish positive and interesting sport environment for their children (Eime et al., 2015). Besides, if parents have negative attitude regarding their children's participation in sport for various reasons, consciousness raising activities should be conducted for parents to change these attitudes, and these activities should be generalized (Güven and Öncü, 2006).

Gender and society dilemma disrupts women's social activity process occasionally. In fact, it can be said that this dilemma needs to be abolished with regard to ensure girls in secondary education level taking part in society as substantial and qualified individuals and a perception should be established for the benefit of girls. As for female students expressing themselves clearly and taking part in social life as a powerful woman signifies social wealth. Participation in sport or female students' sport attitudes should be on the same level with male students or even on a higher level of participation to establish this wealth.

Research results are on the level of meeting the earlier mentioned expectation, and no meaningful difference is determined with regard to gender variance of male and female students' sport attitudes. The importance of this generated result appears as a counter result in terms of the revealed findings in the body of literature. Likewise, generally the level of participation in sport for males can be seen as higher than females in the earlier researches.

It is asserted in the study conducted by Hoase et al. (2004) with 23 college students in various geographies of the world that the level of participation in physical activities for male students (73%) is higher than female students (64%).

As stated earlier, it is seen in many scientific studies conducted both in Turkey and in other countries that sport attitudes or the level of participation in sport for males is higher than females (Telford et al., 2015; Yüksel, 2014; Alemdağ, 2013; Alricsson et al., 2006; Tel and Köksalan, 2008; Bahar, 2008; Booth et al., 2000; Dwyer et al., 2006; Aslan et al., 2007).

## CONCLUSION

With the research results, sport attitudes or in other words sport habits of students at high school in secondary education level throughout Turkey are assessed. It is determined that students who are studying in higher grades, have medium-income family and whose mother's educational status is relatively on a higher level, are more positive towards sport participation. Thus, it has been revealed that the family education levels, increased education periods and the income groups are determining factors in the attitudes of children towards sports.

Sport is the leading actor within the most efficient instruments for a social well-being and prosperity along

with its health-related benefits. Development of society and its progress has substantial functions in terms of strengthening the entire society, enhancing communication, cooperation, solidarity and social ties in society (NSW Sport and Recreation, 2007); developing social networks and maintaining them beyond its physical and health-related benefits. Therefore, it can be said that society, school and families need to take joint action to develop sport attitudes of students in educational institutions. Besides, the need for parents' being a role model for children and leading them in sport activities for children development regardless of their economic conditions should be emphasized. In this regard, educational process should be supported with sport and steps should be taken toward reinforcing the relation between education and sport.

## Conflict of interests

The author has not declared any conflicts of interest.

## REFERENCES

- Akcan F, Bulgu N (2012). Spora yönelik sosyalizasyon süreci: Lise öğrencilerine yönelik bir uygulama, Hacettepe J. Sport Sci. 23(4):195-206.
- Alemdağ S (2013). Öğretmen Adaylarında Fiziksel Aktiviteye Katılımın Sosyal Görünüş Kaygısı ve Sosyal Öz-Yeterlilik İlişkisinin İncelenmesi. Ph.D. Thesis. Institute of Educational Sciences. Trabzon: Karadeniz Teknik University.
- Allender S, Cowburn G, Foster C (2006). Understanding participation in sport and physical activity among children and adults: A review of qualitative studies, Health. Educ. Res. 21(6):826-935.
- Alricsson M, Lanstad BJ, Romild U, Werner S (2006). Self-related health, physical activity and complaints Swedish High School students, Sci. World J. 6:816-826.
- Amman MT, İkizler HC, Karagözoğlu C (2000). Sporda Sosyal Bilimler. İstanbul: Alfa Yayınevi.
- Aslan UB, Livanelioğlu A, Aslan Ş (2007). Fiziksel aktivite düzeyinin üniversite öğrencilerinde iki farklı yöntemle değerlendirilmesi, Fizyoterapi Rehabilitasyon, 18(1):11-19.
- Bahar HH (2008). Cinsiyet ve branşa göre eğitim fakültesi öğrencilerinin serbest zaman etkinlikleri (Erzincan Eğitim Fakültesi Örneği), Erzincan Faculty. Educ. J. 10(2):117-140.
- Booth ML, Owen N, Bauman A, Clavisi O, Leslie E (2000). Social cognitive and perceived environment influence associated with physical education in older Australians, Preventive Medicine, 31(1):15-22.
- Booth ML, Owen N, Bauman A, Clavisi O, Leslie E (2000). Social cognitive and perceived environment influence associated with physical education in older Australians, Prev. Med. 31(1):15-22.
- Bulgu N (2013). Spora katılımda toplumsal fayda: Kazakistan Ahmet yesevi üniversitesi öğrencileri örneği, Hacettepe University Türkiyat Araştırmaları J. 18:25-45.
- Dalkılıç M (2011). İlköğretim Öğrencilerinin Sportif Faaliyetlere Katılım Düzeyi ve İletişim Becerileri Arasındaki İlişkilerin İncelenmesi. Master's Thesis. Institute of Social Science. Karaman: Karamanoğlu Mehmet Bey University.
- Diñç ZF, Uluöz E, Sevimli D (2011). Ailelerin çocuklarını spor ve fiziksel aktiviteye yönlendirmelerine ilişkin görüşleri, E-J.New World Sci. Acad. 6(2):93-102.
- Drake KM, Longacre MR, MacKenzie T, Titus LJ, Beach ML, Rundel AG, Dalton MA (2015). High school sports programs differentially impact participation by sex, J. Sport. Health Sci. 4:282-288.

- Dwyer JS, Allison KR, Goldenberg ER, Frein AS, Yoshida KK, Boutilier MA (2006). Adolescent girls perceived barriers to participation in physical activity, *Adolesc.* 41(161):75-89.
- Edwards MB (2013). The role of sport in community capacity building: An examination of sport for development research and practice, *Sport Manag. Rev.* 235: 1-14.
- Eime RM, Sawyer N, Harvey JT, Casey MM, Westerbeek H, Payne WR (2015). Integrating public health and sport management: Sport participation trends 2001-2010, *Sport Manag. Rev.* 18:207-217.
- Erkal M, Güven Ö, Ayan D (1998). *Sosyolojik Açıdan Spor*, İstanbul: Der Yayınları.
- Ertop NG, Yılmaz A, Erdem Y (2012). Üniversite öğrencilerinin sağlıklı yaşam biçimleri, *Kırıkkale University Faculty. Med. J.* 14(2): 1-7.
- Güven Ö, Öncü E (2006). Beden eğitimi ve spora katılımı aile faktörü, *Aile ve Toplum Journal*, 3(10): 81-90.
- Hallal PC, Andersen LB, Bull FC, Guthold R, Haskell W, Ekelund U (2012). Global physical activity levels: Surveillance progress pitfalls and prospects, *Lancet*, 380:247-257.
- Hoase A, Stepteo A, Saallis JF, Wardle J (2004). Leisure time physical activity in university students from 23 countries: Associations with health beliefs, risk awareness and national economic development, *Preventive Medicine*, 39:182-190.
- Hünük D, Özdemir RA, Yıldırım G, Aşçı H (2013). 6-8. sınıf öğrencilerinin fiziksel aktiviteye katılımında algıladıkları sosyal desteğin rolü, *Edu. Sci.* 38(170):3-18.
- Karahan BG, Kuru E (2015). Development of physical education attitude scale for students with physically, visually and hearing disabilities, *CBU J. Physical Edu. Sport Sci.* 10(1):36-46.
- Kızılkaya A (2009). *Lise Öğrencilerinin Spora Katılımında Ailelerin Etkisi*. Master's Thesis. Institute of Health Science. Mersin: Mersin University.
- Koçak F (2014). Üniversite öğrencilerinin spora yönelik tutumları: bir ölçek geliştirme çalışması, *SPORMETRE*, 12(1): 59-69.
- Koçak F, Tuncel F, Tuncel S (2013). Sporda sürdürülebilirliğin boyutlarının belirlenmesi, *Ankara University Faculty of Sports Sci. J.* 11(2):113-129.
- Kohl WH, Craig CL, Lambert EW, Inove S, Alkandari JR, Leetongin G, Kahlmeier S (2012). The pandemic of physical inactivity: Global action for public health, *Lancet* 380:294-305.
- Koivula N (2009). Sport participation: Differences in motivation and actual participation due to gender typing, *J. Sport Behavior*. 22(3):360-380.
- Korkmaz NH, Deniz M (2013). Yetişkinlerin fiziksel aktivite düzeyi ile sosyo-ekonomik düzeyleri arasındaki ilişkinin incelenmesi. *E-J. New World Sci. Acad. Sport Sci.* 8(3):46-56.
- Kotan Ç (2007). *İlköğretim Okullarında Okuyan Sporcu Öğrencilerin Spor Yapmalarında Okul ve Aile Faktörünün Etkisi (Sakarya İli Örneği)*. Master's Thesis. Institute of Social Science. Sakarya: Sakarya University.
- Kotan Ç, Hergüner G, Yaman Ç (2009). İlköğretim okullarında okuyan sporcu öğrencilerin spor yapmalarında okul ve aile faktörünün etkisi (Sakarya ili örneği), *Niğde University Phys. Educ. Sports Sci. J.* 3(1):49-58.
- Marquis WA, Baker BL (2015). Sport participation of children with or without developmental delay: Prediction from child and family factors, *Res. Dev. Disabil.* 37:45-54.
- Marsh HW (1993). The effects of participation in sport during the last two years of high school, *Soc. Sport J.* 10(1):18-43.
- Melekoğlu T (2015). The effects of sport participation in strength parameters in primary students, *Soc. Behav. Sci.* 186: 1013-1018.
- Nicholson M, Hoye R, Houlihan B (2011). Introduction. Inside: Participation In Sport: International Policy Perspective. (Edt: Nicholson M, Hoye R, Houlihan B). New York: Routledge.
- NSW Sport and Recreation (2007). Sport and physical activity in New Wales. Available at: [www.dsr.nsw.gov.au/assets/pubs/industry/sportandphysicalactivity.pdf](http://www.dsr.nsw.gov.au/assets/pubs/industry/sportandphysicalactivity.pdf) f. (Accessed: 16 January 2015).
- Öncü E (2007). *Ana-Babaların Çocuklarının Beden Eğitimi Dersine Katılımına Yönelik Tutumları ve Beklentileri*. Ph.D. Thesis. Institute of Health Science. Ankara: Gazi University.
- Pherson MC (1981). Socialization into and Through Sport Involvement. Inside: Handbook of Social Science of Sport. (Edt: Lüschen GRF, Sage GH, Sfeir L). Champaign: Stipes Publishing.
- Santos MP, Esculcas C, Mota J (2004). The relationship between socioeconomic status and adolescents' organized and non-organized physical activities, *Pediatr. Exerc. Sci.* 16:210-218.
- Sherlock E, O'Donnell JS, White B, Bloke C (2010). Physical activity levels and participation in sport Irish people with haemophilia, *Haemophilia*. 16(1):202-209.
- Stepteo AS, Butler N (1996). Sport participation and emotional wellbeing in adolescents, *Lancet* 347(9018):1789-1792.
- Şahan H (2008). Üniversite öğrencilerinin sosyalleşme sürecinde sportif aktivitelerin rolü, *Karamanoğlu Mehmet Bey University İİBF J.* 10(15):260-278.
- Şahin CK, Akten S, Erol UE (2009). Eğirdir meslek yüksekokulu öğrencilerinin rekreasyon faaliyetlerine katılımlarının belirlenmesi üzerine bir çalışma, *Artvin Çoruh University Faculty. For. J.* 10(1):62-71.
- Şebiri K, Serarlan Z, Katkat D, Tozoğlu E, Kızılet A (2007). Spor yapan üniversite öğrencilerinin spora başlama ve spor yapma nedenlerine ilişkin görüşleri, *Atatürk University BESB J.* 9(1):43-63.
- Tel M, Köksalan M (2008). Öğretim üyelerinin spor etkinliklerinin sosyolojik olarak incelenmesi (Doğu Anadolu örneği), *Fırat University Soc. Sci. J.* 18(1):261-278.
- Telford RM, Telford RD, Cochrane T, Cunningham RB, Olive LS, Davey R (2015). The influence of sport club participation on physical activity, fitness and body fat during childhood and adolescence: The look longitudinal study, *J. Sci. Med. Sport, Article. Press.* doi:10.1016/j.jsams.2015.04.008
- Tercan E (2015). An examination of leisure participation family assessment and life satisfaction in university students, *Soc. Behav.Sci.* 186:58-63.
- Usta HG, Şimşek AS, Uğurlu CT (2014). Absenteeism behavior among university students: Causes and attitude levels, *J. High. Educ. Sci.* 4(3):182-190.
- Vermeulen J, Verweel P (2006). Participation in sport: bonding and bridging as identity work, *Sport in Society: Cult. Commer. Media, Polit.* 12(9):1206-1219.
- Weuve J, Kong HS, Manson JE, Breteler MMB, Ware JH, Grodstein F (2004). Physical education: Including, walking and cognitive function in older women, *J. Am. Med. Association.* 292(12): 1454-1461.
- Yetim A (2005). *Sosyoloji ve Spor*, İstanbul: Morpa Yayınları.
- Yücel AS, Kılıç B, Korkmaz M, Göral K (2015). Spor yapan çocukların spor tercihleri ve bunu etkileyen bazı faktörlerin incelenmesi, *Int. Refereed Acad. J. Sport* 5(14):20-54.
- Yüksel M (2014). Cinsiyet ve spor. *J. Hist. Sch.* 19:663-684.



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