

The Effect of Intelligence and Mind Games on Secondary School Students' Writing Success

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ABSTRACT

Language, which is the main tool of communication that consists actions without understanding and explaining, has vital importance in every field of life. Mother tongue teaching is a process that enhances school-type learning in all disciplines starting from the primary education level. It is also an area that links to development of thinking skills. In this context, there is a need for applications that encourages mother tongue development and enriches higher tninking skills based on active learning in educational settings. One of the educational activities that develop high-level thinking skills is Mind-Intelligence Games. Intelligence Games are defined as activities offered for individuals to realize their own potentials, to make fast and correct decisions, to produce their own unique solutions to problems, and to renew themselves continuously. In this study, the applicability of Mind Games in writing Turkish lessons was investigated. The aim of the study is to examine the effect of the Intelligence and Mind Games selected in accordance with the content and achievements of the Turkish Lesson Curriculum on the writing process. The research was carried out by quantitative research method on two equivalent groups studying in the 7th grade of a public secondary school. Semi-experimental design with experimental and control groups was used in this research. In the experimental group, the process to be tested on the dependent variable, namely the lesson taught with the Mind Games, was applied. In the control group, a standard course was taught with the ongoing method. Intelligence and Mind Games discussed in this study were effective especially in the preparation phase of writing The data received from the two groups selected by matching were evaluated by the experts on the writing skills assessment scale. It was found that the students in the group where the lessons were taught with the Mind Games were more successful in writing than the students in the group where the classical lesson was taught. It was observed that the interest and attention of students in the experiment group increased.also

Keywords: language teaching, writing skills, mind and intelligence games

INTRODUCTION

Success in using the mother tongue affects academic success in general in school type learning that starts with the primary education process. Academic activities are based on understanding and expression. Therefore, it is aimed to develop these skills in students during teaching process. Language teaching is a field of knowledge, not knowledge. In this context, there is a need for practices based on active learning through the educational process. It is a necessity to create multi-stimulating educational environments instead of single source-based applications such as textbooks in language teaching to gain skills (Sever, Kaya and Aslan 2006). However, in Turkish teaching, a teaching approach generally connected to the textbook that limits students'learning to the selected textbooks. In the current Turkish teaching programs reading, listening, writing and speaking skills, which constitute the communication skills, are developed only on the basis of the texts and activities in the textbooks. Nowadays, it is important to raise people who can meet the needs of the age. So, the aim of education is to provide high-level skills such as communication, collaboration, creative thinking, critical thinking, problem solving, decision making and using information media and technologies. In language teaching, it is also important to acquire high-level thinking skills such as comprehension, application, analysis, synthesis, and creation as well as knowledge.

One of the applications that is based on learning by living and active learning during the education process is game based learning (McFarlane, Sparrowhawk, Heald, 2002). Intelligence and Mind Games, a game-based learning tool, is one of these applications in stimulating learning environments. It seems more rational to turn learning into a kind of game rather than giving up the game, which is an indispensable occupation for the child. The child improves personality, skill and intelligence integrity by playing games. He learns more easily and easily, without getting bored through things that interest him. "The most serious challenge of the child is the



game and the most important job is the game again" (Montaigne). Another need as much as nutrition and sleep is a game for the child's physical, mental and healthy development. (Ayan and Memiş, 2012). playing games, the emotions of the child become sharper, their skills develop, their skills increase since the game creates the most natural learning environment for the child. Play is the freedom of the child. Games are one of the most important tools of language teaching. In addition to entertaining, they are activities with goals and rules (Hadfield, 1999). Article 7 of the Declaration of the Rights of the Child, published in 1959 in connection with the United Nations Human Rights Act, states: "The child should be given full opportunity to play as well as in educational settings. Society and public authority should try to fulfill this right." Based on all this, it can be said that turning the game, into the tool of learning will be functional in terms of academic success.

CONCEPTUAL FRAMEWORK

Contemporary Approaches and Principles in Language Teaching

According to contemporary learning approaches that envisage structuring and easy recall of knowledge in mind, some principles can be mentioned in language skills and grammar teaching: Instead of memorizing, concrete examples should be used that grasp the subject; the teacher should act as a guide / guide, not dictating knowledge; understanding the text-based approach must be used in the context of information; emphasizing meaning should be focused, not form; starting out with the awareness that grammar must not be a purpose, but must be regarded as a tool; functional grammar based activities must be preferred; definitions and rules must be reached with students through an inductive approach; giving the topics in a way to provide an environment for student inferences must be followed; teaching subjects through hands-on activities to stimulate intellectual skills must be placed; giving the subject to be taught in part-whole relationship, adopting holistic approach in language teaching must be followed.

Writing Process and Stages

Mother tongue teaching is a process that affects the success of all courses in school-type learning starting with the primary education process. In this process, it is aimed to develop students' comprehension and expression skills. This general purpose is achieved through four types of activity areas called "listening", "speaking", "reading" and "writing", called linguistic skills. These areas include complementary applications. These practices for gaining skills are carried out with an understanding appropriate to the developmental characteristics of the students starting from the first grade of primary education (Sever vd., 2006).

Writing, which is one of the four skill areas, not only meets the needs of individuals to communicate but also helps theirlearning. As students' writing process improves, they need to go beyond how they have learned the information they have acquired about written expression. In addition, students control their thinking skills during writing and use their minds more effectively. Thus, the learning process becomes more effective (Raimes, 1983). In addition, students' anxiety about writing should be eliminated before the planned writing phase.

Witte and Cherry (1986) defined the teaching of writing as a three phase process. The first phase is a cover letter. The aim of this phase is to provide the experience of designing the text at an intellectual level. In pre-writing studies, the purpose of determining the content scheme is to determine the purpose and how to design the discourse, how to select and translate thoughts, how to establish the concept network, the linguistic signifiers of the concepts and the variation in the linguistic signifiers.

In the second stage, it consists of the work of producing the written text. The work of producing text in writing involves providing the student with the following experiences:

- Establishing cohesion regulations in the text
- using linguistic arrangements to demonstrate subject development,
- using linguistic pointers specific to the type of text.

The third stage in the teaching of writing is to examine the written text in terms of its conformity with the textuality criteria and to make the necessary corrections and rewrite the text. Therefore, this phase is called the rewrite phase. At this stage, the student receives feedback that will create permanent information. It questions whether it focuses on the subject, performs and controls the linguistic arrangements specific to the type of text and the narrative frameworks in which they become evident. Getting feedback is carried out primarily under the direction of the teacher. However, it is aimed for the student to internalize this process and gain experience in operating it on its own.

The regular operation of the phases of writing instruction enables the student to explain both his/her awareness of intellectual planning and the linguistic ties in the text causally (Keçik and Uzun 2001).



During preparation for writing, the aim is determined first. Activities for writing purposes and existing information are remembered. Information on the subject of writing is collected and subject limitation is made. Feelings, thoughts and events to be written are planned, the main idea is determined. Questions are prepared to improve writing. The writing is primarily drafted. When the materials to be used and the duration are determined, they are ready to write. "Before the transition to the writing study, students' prior knowledge of the writing studies to be done will directly affect the quality of the resulting product. To do this, students should first create technical knowledge and pedagogical infrastructure, and be prepared to write and practice" (Göçer, 2010). During writing introduction, development and conclusion sections are planned. Expression is strengthened by using writing methods and techniques. It is necessary to comply with the page layout, spelling, punctuation and spelling rules. The title can be determined before or during writing. It is expected to be short, impressive and compatible with the content. The article is not considered to be finished before the writings are evaluated (Yılmaz, 2013). After writing, writing should be evaluated in terms of format, spelling rules and punctuation, subject and content, language and expression. In Tompkins (1998) and Jones (2002), an effective writing process has been classified as five stages and this approach has been named as "process-based writing approach". These stages are: pre-writing preparation, drafting, reviewing and editing by writing, editing (editing), publishing and sharing. Writing is a process work and the desired product is achieved by repeating. Murray (1982) thinks that 70% of the time spent writing should be spent on this stage. In the pre-writing stage, studies should be made on choosing a topic, setting a target, determining the target audience, determining the type of writing, revealing and organizing thoughts on the topic (Akyol, 2016). As can be seen, in all of the writing process classifications in the literature, a preparation process for writing is mentioned. This study is planned with the assumption that the Intelligence and Mind Games discussed in the study will be effective especially in the preparation phase of writing.

Intelligence and Mind Games

In line with technological developments, reading and writing habits of today's youth have also changed. This change makes us think that the writing habits of the students in the classical sense should be supported by the game world in which they live. In the international literature, studies in this field are found. Today, popular culture has increased interest in what is fun, simple and fast. Accordingly, it can be said that a negative attitude towards writing, which is a gradual and demanding process, has developed. In this context, it is assumed that intelligence and mind games will increase the interest in writing especially at lower grade levels.

Intelligence and Mind Games are one of the educational activities that contribute to the child's physical, psychomotor, emotional, social, linguistic and cognitive development. "These are the activities that are offered to individuals so that they can realize their own potentials, make fast and correct decisions, produce solutions specific to them in the face of problems and renew themselves continuously" (Devecioğlu, Karadağ,2014). According to another definition, "Using Intelligence Games is a training method that increases motivation, develops attention power, employs the mind, increases the speed of learning, improves the ability to predict, and provides strategy use" (Koç, 2008).

Intelligence and Mind Games are effective ,n enhancing students' problem solving, reasoning, self-regulation, communication, three-dimensional thinking. It helps to develop such skills in students, as well as types of intelligence such as linguistic, mathematical, visual, and social intelligence. As can be seen, Mind Games can be used in all areas of intelligence. In addition, it is stated that it addresses verbal and logical areas, as well as developing creative and critical thinking. For this reason, it is thought that teachers can use Intelligence and Mind Games as a technique in lessons in order to develop intelligence types in the light of Multiple Intelligence Theory(TTKB, 2013).. All these features increase the importance of Intelligence and Mind Games, so learning becomes more attractive.

Intelligence Games consists of six different categories: Reasoning, transaction games, verbal games, geometric-mechanical games, memory games, strategy games, intelligence questions (TTKB, 2013). Anagram, Word Hunt, Finding Hidden Words, Word Derivation, Direction Finding, Dixit, Tik Tak Boom, Word Completion, Word Ladder, Story Cubes are examples that can be adapted to Turkish lessons.

"It is seen that traditional, that is, knowledge-based rote learning is common in schools. Whereas, 21st century learners; Along with high-level thinking skills such as creative thinking, critical thinking, problem solving, skills such as communication skills, skills to use information and communication technologies are waiting." (Kay, 2010).



It is observed that there is a need for applications and studies that will develop high-level thinking skills and activate students in writing education in addition to information in order to raise people who can meet the needs of the age.

Although there are studies examining the effects of Intelligence and Mind Games in different fields, there are no researches in Turkish teaching. Our study was developed considering the similarities between the aims of Turkish teaching and the physical, emotional, social, linguistic and cognitive development areas that Mind Games aims to develop.

The study can be seen as important in terms of enabling the Turkish lesson that enriched with various applications approaches, methods and techniques. In addition, it can be said that an application that will contribute to the development of cognitive and linguistic skills, which is one of the important achievements of the Turkish course, is important in terms of bringing it to the field.

PURPOSE

The aim of the research is to examine the effects of Intelligence and Mind games, selected in accordance with the course content and outcomes, on the writing skill of students within the context of the Turkish course.

METHOD

Research Pattern

This research is designed as a quantitative study based on the assumption of the applicability of Intelligence and Mind Games in Turkish lessons. The Static-Group Comparison Design, which is one of the experimental designs (half experimental), was used in the study. In this pattern, while applying to one group, no application was conducted on another group. At the end of the application, the last measurements of the two groups are compared. Assignments to groups are not random, there are ready-made groups. One of these groups is determined as the control and the other as the experimental group (Büyüköztürk et al., 2013; Fraenkel & Wallen, 2009, p. 266).

The working group of the application formed two groups at the same grade level. In the experimental group, the process to test the effect on the dependent variable (course with the Mind Games) was carried out, while in the control group a standard course was taught using the traditional method.

Experimental and Control Groups in the Study		
Experimental Group (25 students)	Control Group (25 students)	
Classroom with a Mind Games	Classroom with a course	

Sample

The sample of the study was 7th grade level students in a public middle school in Ankarafrom two sections that is taught by same teacher.

Data Collection Tools and Analysis

The Writing Skills Evaluation Scale, developed by Hamzadayı (2019), was used as a data collection tool to measure the difference in writing success between the Experimental and Control groups.

Compositions printed to test student achievement were evaluated in accordance with the criteria in this scale by 3 field experts. In the analysis of the qualitative data obtained SPSS 20.0 program were used and the findings t-test analysis were conducted.

Application Process

The application stages can be summarized as follows:

With both groups, firstly, the study of "poetry and unknown words" was conducted on the theme of National Culture, which is the subject of the writing study. The main difference in the content of the educational situations prepared for the Experimental and Control Groups is the play of the "Tik Tak Boom" game in the experimental group. With this game, the student's ability to make quick decisions by using the word in a certain period of time has been transferred, a context has been created for the word or group of words, and a beginning has been provided for the transition to the writing process.



The experimental group is also divided into groups within itself, with the aim of developing students' team spirit, solidarity and teamwork skills.

Tik Tak Boom game cards have been made suitable for writing education. For this purpose, the cards that make up the material for the production of sentences are arranged by the researcher. It was tried to make learning permanent by using the visual elements and applying the activity in the form of play in the learning of the concepts on the theme in the experimental group.

After the TTB game, other activities in the Turkish textbook were also held. With these activities, the request and information infrastructure that will contribute to writing has been established.

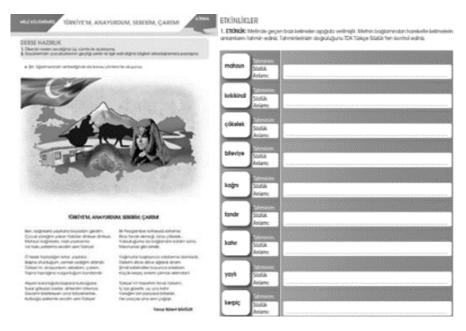
Later, the game "Let Us Tell Story Cubes" was started. In order to increase the interaction between students, 5 separate groups of 5 people each were createdand each student contributed to form a plot with a common decision, With this game, they were asked to create a story with creative expression by transforming the images on the upper surface of nine cubes into sentences that related to the theme. These two studies are intended to have a cognitive and affective preparation feature for the composition that they were asked to write.

1. ACTIVITY: Firstlythe meaning of unknown words in poetry was estimated and then dictionary meaning is written.

In Experimental and Control Groups:

Preparation questions for the lesson were answered.

The poem named "Turkey, my homeland, my reason, my remedy" was read as a choir.



"Tik Tak Boom" "Mind Game was played in Experiment Group.

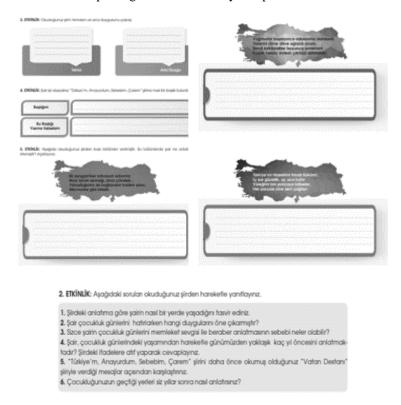
While playing the game, the Turkish lesson is taught; that is, adhered to the theme, text and activities.





The purpose of the game;

- To teach words, to repeat the words he/she learned before, to make meaningful sentences with words and to prepare for written expression,
- -To provide students with the skills of quick thinking, decision making, visual perception and team spirit. Activities continued in both groups.
- 2. ACTIVITY: Six text questions were answered.
- 3. ACTIVITY: The theme and main feeling of the poem are written.
- 4. ACTIVITY: Writing a title has been done.
- 5. ACTIVITY: In the sections of the poem given in the activity the poet's intent and its' sense is written.



To the Experiment Group; "TELL ME! "The Mind Game was played.

Students created a story with story cubes, adhering to the theme, subject, text and words. The students shared their ideas, dreams and communicated effectively with their group in this game. They united their imaginations and created creative stories in their group work.





At the end of the application, writing activities aiming to measure the success of writing were realized in both groups. Student writings were evaluated by 3 field experts considering the criteria of success in writing.

ACTIVITY

The subject of writing is as follows:

"We have seen in the past in poetry of Turkey. We talked about the National Culture items. Today, we live and keep some of our cultural elements alive. Imagine we were in 2070. How do you think Turkey, where is our national cultural elements of our lives? Write a text using the words you just learned. (Letter, travel article, essay, diary, etc.)"

RESULTS

According to the Writing Skills Evaluation Scale, the results of independent t-test analysis comparing writing sucses of control and experimental groups are presented in Table 1.

Table 1. Group N X \mathbf{S} sdt p **Experimental** 25 61.76 5.98 48 3.803 .000 Control 25 51.48 12.11

As seen in Table 1, according to the results of the data obtained from the writing skills evaluation scale, a significant difference was found between the writing success of the experimental and control groups in favor of the experimental group.

Observations in the application process:

Positive observations were obtained in the students in terms of their ability to act in accordance with the instructions.

It has been observed that the application provides important gains both in terms of the sub-skills required by the teaching of writing and high-level skills to be acquired in the writing process.

It was observed that students of this age group, who are familiar with computer games, quickly adapt to the games in practice.

The main issues that we observed that mind games can improve were:

- Willingness to write, motivation
- Improved readiness
- Realizing that writing is a process
- Integrating writing and speaking skills in a holistic way
- Improved communication skills
- Strengthening collaborative work when there is group work



- Responsibility to the group and discovering its own potential
- Following the instructions
- Fast thinking and decision making
- To be able to manage time

CONCLUSION

In this research, the effect of Mind and Intelligence Games on success in writing skill was examined. The study was conducted as a semi-experimental study with experimental and control groups. It is mentioned in the literature that writing is a three-step process. The ones suitable for the Turkish lesson and the level of secondary school students were selected from the Mind-Intelligence Games. In practice, two games suitable for the themes, subjects, texts and activities were used related to teaching language skills. In order to measure the success of writing, students were asked to create a composition. After evaluating the written texts, data analysis related to the measurements were made. In the statistical analysis of the data a significant difference between the writing skills of the two groups were found. The results of the data on the success of the writing skill of the group in which the Mind Games were played were higher than the group in which the standard course was taught.

The games were used in the first stage of writing education given to the experimental group, called "pre-writing" or "preparation for writing". It was found that there was a significant difference between the writing success of the control group and the writing success of the experimental group. This result confirms the opinions of the teachers in Demirel and Yılmaz (2015)'s study.

In addition to creating skills to write the subject of the research, observations about the development of speaking skills were also conducted. During the games played on story cubes and word cards before writing, the sentences were first produced orally. In this respect, it can be said that the application also contributes to speaking skills.

In addition to the results of the data, observations and student views on learning with mind games were significantly positive during the implementation process. In writing education lesson taught using Mind Games, a democratic environment has been created in the classroom. Each student attended the lesson voluntarily and learned with fun.

With this study, it was ensured that Mind Games were integrated with writing education learning outcomes and course contents within the context of mother tongue teaching. The benefits of these games in the educational context were pointed out.

RECOMMENDATIONS

It was observed that mind and intelligence games had a role in students' positive attitude towards writing. Based on this observation and assuming that it will increase the interest in writing especially at lower grade levels, it can be suggested to develop and implement the study for these grade levels.

This study is thought to lead new studies on other mind and intelligence games. More efficient results can be obtained in conditions where the choice of theme, time and acquisition can be determined by researchers.

In this study, it was concluded that mind games have a significant role in developing writing skills in traditional classroom setting. In order to measure whether these games will advance the success of writing in digital writing activities, a digital environment should be designed and the development of the study should be planned.

Moreover digital storytelling could be considered as a tool in preparatory stage for applications also which is already widely used in educational settings. Taking into account the ability to improve the writing skills of mind games, especially in terms of contributing to the pre-writing preparation phase, digital story telling had a potential. This study will be continued with an experimental study on application of digital story telling in this subject.

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ANNEX 1. WRITTEN EXPRESSION EVALUATION SCALE

Student's Name and Surname:

1: Very poor 2: Inadequate 3: Partially sufficient 4: Adequate 5:	5: Very sufficient				
SKILLS	1	2	3	4	5
FORMAT					
1. Leave appropriate spaces on the edges of the paper, between paragraphs and lines					
2. Using proper and legible writing					
CREATING CONTENT	<u> </u>		<u> </u>		<u> </u>
3. Size the subject sufficiently					
4. Supporting thought and emotion with helpful thoughts and feelings					
5. Reaching the main thought to be given in the article					
6.Start with an appropriate entry statement					
7. The conclusion statement to be binding and impressive					
CONTENT EDIT	ı				
8. Title to be related to the subject					
9. Explanation of the subject in logical consistency and integrity					
10. Processing one emotion and thought in each paragraph					
11. Not making repetitions in the text					
WORD CHOICE					
12. Using words in place and in the right sense					
13.Not using words that can have the same meaning in the sentence					
GRAMMAR	ı				
14. Follow the writing rules					
15. Using punctuation marks in the right place					
16. Conformity of sentence institutions with grammar rules					
TOTAL					
THE OVERALL TOTAL					