THE EFFECT OF THE USE OF THE
THEORY OF MULTIPLE INTELLIGENCES IN
TURKISH COURSE ON 7th AND 8th GRADE
MIDDLE SCHOOL STUDENTS’ ACADEMIC
STANDING

Selcen ÇİFÇİ & Ahmet DEREKÖY

Abstract
The main aim of this research is exhibiting the problems, faced by sixth grade students in story completion, by utilizing sample studies. The research was carried out on the essays of the sixth grade students attaining to Atatürk middle school in Malatya. The data comprising the research basis were obtained from the narrative essays written by students. The introduction section of the storybook “Hişt Hişt” written by Sait Faik Abasıyanık was submitted to the students and asked for completion. A “Story Completion Evaluation Form” was prepared by the investigators and used for rating. The frequency levels of the data were determined. The results showed that the students had difficulties in combining the pieces and building relationship between the text parts. The initial episode given in the introduction section was completed without considering the place, time and the main characters of the story. It was also seen that the students failed in writing subject related and efficient solutions in story completion essays. The episodes were not completed and the results covering all sides of the story could not be presented. The conceptual connotations given in the introduction section was not noticed and did not take place in the following sections. The composing started without any plan and irrelevant explanations and advices were given in the completed stories. The students had problems in writing paragraph by presenting dissimilar subjects in a single paragraph. Since the supplied story is well-known story since the early ages of the student, the performance of students was not sufficiently plausible, even though a well-known text type, story that is learnt since an early childhood, was essayed. Consequently, the story completion results showed that the students needed education in this area.

Key words: Writing, narrative expression, story completion.

2 Assist. Prof., Usak University, e-mail: selcen73@gmail.com
3 Teacher, Ministry of National Education, e-mail: derekoy_ahmet@hotmail.com
Introduction

Intelligence is defined in the Turkish Dictionary as “One’s all of the skills as thinking, reasoning, perceiving objective realities, making judgments and concluding; morality, wisdom, astuteness, perception” (TDK, 2005: 2228). It is essential that intelligence should be detected correctly and directed by means of correct channels. The traditional intelligence approach that considers intelligence as stable, measurable, single-dimensional and that classifies students categorically and isolates from life (Gardner, 1993; Selcuk, Kayili and Okut, 2004: 11; Saban, 2004: 4) blunts students’ creativity and assumes students as successful or unsuccessful based on only their achievements in verbal and mathematical fields. In his work, “Frames of Mind: The Theory of Multiple Intelligences”, published in 1983, Howard Gardner opposed to the classification of intelligence as verbal and mathematical and discussed intelligence in 7 different dimensions as below (Gardner, 1983):

a) Logical – Mathematical  
b) Verbal – Linguistic  
c) Musical – rhythmic and harmonic  
d) Visual – spatial  
e) Intrapersonal  
f) Social – Interpersonal  
g) Bodily – Kinesthetic

Gardner stated that it wouldn’t be sufficient to define human skills with only these 7 fields of intelligences and human intelligences could be more than seven. Indeed, in his book published in 1999 under the name of “Intelligence Reframed: Multiple Intelligences for the 21st Century”, he rearranged his theory in a way that it covers the “naturalistic area” as well (Saban, 2004: 6).

According to the Theory of Multiple Intelligences that Gardner put forth, students improve their creativity which they are unable to show well in the traditional intelligence approaches, grow as individuals aiming for and motivated by success, gain the sense of responsibility and most important of all, each one of them finds the opportunity to grow in line with their own area of intelligence (Ifiazoglu, 2003: 1; Vural, 2004: 227). Theory of Multiple Intelligences also plays an important role in ensuring a dynamic academic environment as well as reducing possible discipline issues. There have been several academic studies on the Theory of Multiple Intelligences and its area of effect: (Guneysu, 2002; Kaya, 2002; Canoglu, 2004; Ayaydin, 2004; Turkuzan, 2004; Bumen, 2004; Avanoglu, 2006; Koksal, 2006; Kosar, 2006; Kusdemir Kayiran, 2007; Guney- Aytan and Gun, 2010; Demir, 2010; Kurt and Temelli, 2011). The conclusion emerging in most of these studies is that when the classroom environment is designed in a way that Howard Gardner’s Theory of Multiple Intelligences suggests, academic standing and motivation of each student will increase and students’ personal development will be supported.

Method

The study is experimental with a control and experimental group design.
Data Collection

Data regarding this research were collected mainly in three different ways, which can be summarized as below:

1. Turkish and foreign literature reviews were made during the phase of forming the theoretical dimensions of the study (books, thesis, articles, e-resources and sources in journals). Also, opinions of field experts of the subject were asked while forming the theoretical foundations.
2. Survey technique and achievement tests were used.
3. Data obtained from the implementation of experimental process were used.

Study Group

The study group consisted of a total of 76 students studying at the 7th and 8th grades of Muammar Yazgan Middle School in the Sivasli District of Usak in 2013 – 2014 academic years. 22 of these students (28.9%) were female and 54 were male (71.1%). The distribution of students per grades and gender is shown in Table 1.

Table-1: Students’ Distribution per grades and gender

<table>
<thead>
<tr>
<th>Grade</th>
<th>N</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>32</td>
<td>23</td>
<td>71.8</td>
<td>9</td>
<td>28.13</td>
</tr>
<tr>
<td>8th Grade</td>
<td>44</td>
<td>31</td>
<td>70.4</td>
<td>13</td>
<td>29.55</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>54</td>
<td>71.1</td>
<td>22</td>
<td>28.9</td>
</tr>
</tbody>
</table>

Implementation Process

The experimental phase of the present study took approximately 8 weeks including the tests applied and surveys. The study started on 4th November 2013 and the implementation was completed on 30th December 2013. 88 course hours of implementation was practiced within the framework of the research. 44 of these were with 7th graders where the other half was with 8th graders. These 44 hours of coursework were divided between experimental and control groups as 22 hours. Courses in both control and experimental groups were instructed by the same teacher so that the possibility that academic standing variation in between groups depends on teacher factor was controlled.

The experimental process in the study is stated below for each course.

Note: The abbreviations used in the narration of the experimental process are as follow:
- G1: 7th grade control group (7/A)
- O1: Adverbs subject pre-test
- G2: 7th grade experimental group (7/B)
The Effect of the Use of the Theory of Multiple Intelligences in Turkish Course on 7th and 8th Grade Middle School Students’ Academic

The Effect of the Use of the Theory of Multiple Intelligences in Turkish Course on 7th and 8th Grade Middle School Students’ Academic

O2: Tenses and Modals Subject Pre-test

G3: 8th Grade Control Group (8/A)

O3: Gerunds and Infinitives Subject Pre-Test

G4: 8th Grade Experimental Group (8/B)

O4: Elements of Sentence Construction Subject Pre-Test

S1: Adverbs Subject Post-Test

S2: Tenses and Modals Subject Post-Test

S3: Gerunds and Infinitives Subject Post-Test

S4: Elements of Sentence Construction Subject Post-Test

Experimental Process applied with Seventh Grades

In the first week of the study throughout a 5-class period, G2 was given “Student Personal Information Questionnaire”, “Students’ Areas of Multiple Intelligences Determination Form” and O1, which was about “adverbs” subject, at the first three classes. At the fourth class, students brought some information about adverbs subject as written material and read them aloud. Also, teachers instructed this subject verbally in a way that it developed students’ verbal/language intelligence area. At the fifth class, it was aimed at students gain the understanding about the meaning relationships adverbs have in the sentence. In line with this, students form cause and effect relationships about the subject by using their logical/mathematical intelligence areas and compared the meaning relationships adverbs form in the sentences with each other’s making use of different sentences. In the first week of the study throughout a 5-class period, G1 was given “Student Personal Information Questionnaire”, “Students’ Areas of Multiple Intelligences Determination Form” and O1, which was about “adverbs” subject, at the first three classes. In the fourth and fifth classes the same subjects were instructed by the teacher through plain narration method.

In the first class of the second week of the study, G2 students were asked to draw a table on their notebooks that would explain the main themes of the adverbs subject. When students completed their drawings, the teacher checked the tables. Following this activity, the teacher drew a table on the board that explained the main themes of the adverb subject and thus instructed in a way that it supported the students’ visual/spatial intelligence area. In the second class, in a way to support students’ bodily-kinesthetic intelligence, the same subject was instructed in silent movie way, where students in pairs tried to explain some short sentences including adverbs to the other paired students by using gestures and body movements. After the sentences were founds, students stated the adverb and the type of the adverb, which were told to them. In the third class, in a way to support students’ musical-rhythmic and harmonic intelligence, students were asked to compose a piece that would tell about adverbs subject. The pieces composed were sung in the classroom and the rest of the classroom repeated these compositions. In the fourth class, in a way to support students’ intrapersonal intelligence, each student was asked to study the subject and prepare questions about it. The questions prepared were put into the paper bag on the teacher desk. Each student randomly picked one question out of the bag and told the answer of it. In the last class, in a way to support students’ social/interpersonal intelligence, the students in the

International Journal of Language Academy
Volume 4/4 Winter 2016 p. 140/154
classroom were divided into four groups and each student was given a different type of adverb. Later, student who got the same type of adverb in different groups got together in expertise groups and examined that type of adverb with all of its aspects. At the last stage, students in expertise groups turned back to their initial groups and explained the other children in that group about the type of adverb they had examined. Thus, it was ensured that students contributed positively to each other’s learning. At the second week of the study, the same subjects were told to G1 with plain narration method by the teacher for same number of classes.

At the first class of the third week in the study, the teacher took G2 outside and gave examples from nature regarding the subject adverbs. The teacher also asked students to give related examples and instructed the class in a way that it supports students naturalistic intellectuality. At the second class, students were given S1 regarding the subject adverbs and hence the first subject was completed. At the third class, G2 was given O1 with regards to “Tenses and Modals” subject. At the fourth class, students brought some information about “Tenses and Modals” from written materials and read them in the class. Also, the subject was told by the teacher in a way that it triggers students verbal / language intelligence areas. At the fifth class, it was aimed at gaining students the meaning relationships that tenses and modals form in a sentence. In line with this, students develop cause and effect relationships by using their logical/ mathematical intelligence areas and compared the meaning relationships that tens and modals form in a sentence with each other by making use o different sentences. In the second week of the study, the same subjects were told to G1 with plain narration method by the teacher for same number of classes.

The fourth week of the study covered the dates between 25th and 29th November. The central examinations conducted by Turkish Ministry of Education took place on 28th and 29th November so schools were closed for instruction on those days. In line with this, G2 had only 3 – hour classes during that week while G1 could have only 1 class. At the first class G2 students were asked to make a table that would tell about the main aspects of the tenses and modals subject and when students completed their drawings the teacher checked them. When this activity was over, the teacher drew a table that would explain the main aspects of the subject tenses and modals and instructed the class in a way that it triggers students’ visual and spatial intelligence area. At the second class, in a way to support students’ bodily- kinesthetic intelligence, the same subject was instructed in silent movie way. For this purpose, the students tried to explain some short sentences including tenses and modals to the other paired students by using gestures and body movements. After the sentences were founds, students stated the modals and tenses in the sentences. In the third class, in a way to support students’ musical – rhythmic and harmonic intelligence, students were asked to compose a piece that would tell about tenses and modals subject. The pieces composed were sung in the classroom and the rest of the classroom repeated these compositions. In the fourth week of the study, G1 was told about a part of the tenses and modals subject with plain narration method by the teacher for one – hour class.

At the first class of the fifth week in the study, students were asked to study the tenses and modals subject and prepare questions about it individually in a way to support their intrapersonal intelligence area. The questions prepared were thrown into a bag on teacher’s table and they were mixed. When this process was over, each student picked one question from the bag and told the answer of the question. In the second class, in order to support the social/interpersonal intelligence area, the class was divided into four groups randomly and each student in the groups was given a different type of modal. Later, students who got the same type of modal in different groups got together in expertise groups and examined that type of modal with all of its aspects. At the last stage,
students in expertise groups turned back to their initial groups and explained the other children in that group about the type of modal they had examined. Thus, it was ensured that students contributed positively to each other’s learning. In the third class, the teacher took G2 outside and gave examples from nature regarding the subject “tenses and modals”. The teacher also asked students to give related examples and instructed the class in a way that it supports students naturalistic intellectuality. In the fourth class, G2 was given S2 regarding the subject “tenses and modals” and thus the second subject was completed. At the fifth week of the study, G1 was told the remaining part of the subject “tenses and modals” from the previous week by the teacher with plain narration method for 5 class hours and at the first class of the sixth week G1 was given S2 and the second subject was completed.

After completing each subject with control and experiment groups and 21 days later, both groups were given the post-tests again as the permanency tests.

**Experimental Process applied with Eight Grades**

In the first week of the study throughout a 5-class period, G4 was given “Student Personal Information Questionnaire”, “Students’ Areas of Multiple Intelligences Determination Form” and O3, which was about “gerunds and infinitives” subject, at the first three classes. At the fourth class, students brought some information about “gerunds and infinitives” subject as written material and read them aloud. Also, teachers instructed this subject verbally in a way that it developed students’ verbal/ language intelligence area. At the fifth class, it was aimed at students gain the understanding about the meaning relationships gerunds and infinitives have in the sentence. In line with this, students form cause and effect relationships about the subject by using their logical / mathematical intelligence areas and compared the meaning relationships gerunds and infinitives form in the sentences with each other’s making use of different sentences. In the first week of the study throughout a 5-class period, G3 was given “Student Personal Information Questionnaire”, “Students’ Areas of Multiple Intelligences Determination Form” and O3, which was about “gerunds and infinitives” subject, at the first three classes. In the fourth and fifth classes the same subjects were instructed by the teacher through plain narration method.

In the first class of the second week of the study, G4 students were asked to draw a table on their notebooks that would explain the main themes of the “gerunds and infinitives” subject. When students completed their drawings, the teacher checked the tables. Following this activity, the teacher drew a table on the board that explained the main themes of the “gerunds and infinitives” subject and thus instructed in a way that it supported the students’ visual / spatial intelligence area. In the second class, in a way to support students’ bodily- kinesthetic intelligence, the same subject was instructed in silent movie way, where students in pairs tried to explain some short sentences including “gerunds and infinitives” to the other paired students by using gestures and body movements. After the sentences were founds, students stated the “gerunds and infinitives” which were told to them. In the third class, in a way to support students’ musical – rhythmic and harmonic intelligence, students were asked to compose a piece that would tell about “gerunds and infinitives” subject. The pieces composed were sung in the classroom and the rest of the classroom repeated these compositions. In the fourth class, in a way to support students’ intrapersonal intelligence, each student was asked to study the subject and prepare questions about it. The questions prepared were put into the paper bag on the teacher desk. Each student randomly picked one question out of the bag and told the answer of it. In the last class, in a way to support students’ social /interpersonal intelligence, the students in the classroom were divided into four groups and each student was given a different type of “gerunds and infinitives”. Later, student
who got the same type of “gerunds and infinitives” in different groups got together in expertise groups and examined that type of “gerunds and infinitives” with all of its aspects. At the last stage, students in expertise groups turned back to their initial groups and explained the other children in that group about the type of “gerunds and infinitives” they had examined. Thus, it was ensured that students contributed positively to each other’s learning. At the second week of the study, the same subjects were told to G3 with plain narration method by the teacher for same number of classes.

At the first class of the third week in the study, the teacher took G4 outside and gave examples from nature regarding the subject “gerunds and infinitives”. The teacher also asked students to give related examples and instructed the class in a way that it supports students naturalistic intellectuality. At the second class, students were given S3 regarding the subject “gerunds and infinitives” and hence the first subject was completed. At the third class, G4 was given O4 with regards to “Elements of Sentence Construction” subject. At the fourth class, students brought some information about “Elements of Sentence Construction” from written materials and read them in the class. Also, the subject was told by the teacher in a way that it triggers students verbal / language intelligence areas. At the fifth class, it was aimed at gaining students the meaning relationships that Elements of Sentence Construction form in a sentence. In line with this, students develop cause and effect relationships by using their logical/ mathematical intelligence areas and compared the meaning relationships that Elements of Sentence Construction form in a sentence with each other by making use of different sentences. In the second week of the study, the same subjects were told to G3 with plain narration method by the teacher for same number of classes.

The fourth week of the study covered the dates between 25th and 29th November. The central examinations conducted by Turkish Ministry of Education took place on 28th and 29th November so schools were closed for instruction on those days. In line with this, G4 had only 5 – hour classes during that week while G3 could have 3 classes. At the first class G4 students were asked to make a table that would tell about the main aspects of the Elements of Sentence Construction subject and when students completed their drawings the teacher checked them. When this activity was over, the teacher drew a table that would explain the main aspects of the subject Elements of Sentence Construction and instructed the class in a way that it triggers students’ visual and spatial intelligence area. At the second class, in a way to support students’ bodily- kinesthetic intelligence, the same subject was instructed in silent movie way. For this purpose, the students tried to explain some short sentences including Elements of Sentence Construction to the other paired students by using gestures and body movements. After the sentences were founds, students stated the Elements of Sentence Construction in the sentences. In the third class, in a way to support students’ musical – rhythmic and harmonic intelligence, students were asked to compose a piece that would tell about Elements of Sentence Construction. The pieces composed were sung in the classroom and the rest of the classroom repeated these compositions. In the fourth week of the study, G3 was told about a part of the Elements of Sentence Construction subject with plain narration method by the teacher for a three – hour class.

At the first class of the fifth week in the study, the teacher took G3 outside and gave examples from nature regarding the subject “Elements of Sentence Construction”. The teacher also asked students to give related examples and instructed the class in a way that it supports students naturalistic intellectuality. In the second class, G4 was given S4 with regards to the subject “Elements of Sentence Construction” and thus the second subject was completed. At the fifth week of the study, G3 was told the remaining part of the subject “Elements of Sentence Construction” from the previous week by the teacher.
The Effect of the Use of the Theory of Multiple Intelligences in Turkish Course on 7th and 8th Grade Middle School Students’ Academic

with plain narration method for 3 class hours and in the fourth class G₃ was given S₄ and the second subject was completed.

After completing each subject with control and experiment groups and 21 days later, both groups were given the post-tests again as the permanency tests.

Data Analysis

Data collected within the scope of the present study were recorded on a computer individually and analyzed by using SPSS 17.0 (Statistical Package for Social Sciences) software. Level of significance was considered as .05 in interpreting the results obtained.

Finding

Whether there is a significant difference between experiment groups where grammar subjects in Turkish class were instructed by using the Theory of Multiple Intelligences and control groups where the same subjects were instructed by using traditional education methods in terms of academic standing was examined by forming the below problem statements:

1) Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for adverbs subject?
2) Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for tenses and modals subject?
3) Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for gerunds and infinitives subject?
4) Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for elements of sentence construction subject?

Findings with regards to the first sub-problem:

Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for adverbs subject?

Table-2: Group Statistics regarding the Subject “Adverbs”

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation (ss)</th>
<th>Std. Mean Error</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVERBS SUBJECT PRE-TEST SCORE</td>
<td>Control 7</td>
<td>16</td>
<td>55,6250</td>
<td>13,27592</td>
<td>3,31898</td>
<td>.650</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>Exper. 7</td>
<td>16</td>
<td>52,8125</td>
<td>11,10086</td>
<td>2,77522</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As it can be seen from the above table, before instructing the “Adverbs” subject, no significant difference was found in the score averages of the “Adverbs Subject Pre-Test” between control and experiment groups of seventh graders (t: .650, p: .521). These findings are considered positive for our study because it was assumed that the readiness level of control and experiment groups were the same prior to the instruction. The above findings support this assumption.

After instructing the subject “Adverbs”, a significant difference was obtained in favor of the experiment group in the score averages of “Adverbs Subject Post-Test” (t: -2.347, p: .026). As it can be understood from the above table, there is an even partial positive effect of classes instructed with plain narration method with the control group on students’ academic standing. However, it is seen that the effect of grammar subjects in Turkish class that were instructed with a Theory of Multiple Intelligences support was much more positive on students’ academic standing.

The test applied on the experiment and control groups as the post-test was administered three weeks after the instruction of “adverbs” subject as the permanency test. A significant difference in favor of experiment group was obtained from the score averages of “Adverbs Subject Permanency Test” (t: -4.520, p: .000). These findings show that instructing the grammar subjects in the Turkish class with a Theory of Multiple Intelligence support was more effective on the permanency of students’ learnings.

Assessing the above table as a whole, it can be said that there was no significant difference between the control and experiment groups with regards to the subject in terms of preliminary knowledge before the “Adverbs” subject was instructed and that the use of Theory of Multiple Intelligences on grammar subjects in Turkish classes had positive effects on students’ academic standing as well as the permanency of the knowledge gained.

**Findings with regards to the second sub-problem:**

Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for tenses and modals subject?
Table-3: Group Statistics regarding the Subject “Tenses and Modals”

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation (s)</th>
<th>Std. Mean Error</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TENSES AND MODALS PRE-TEST SCORE</td>
<td>Control 7</td>
<td>16</td>
<td>56.5625</td>
<td>9.07722</td>
<td>2.26930</td>
<td>.581</td>
<td>.566</td>
</tr>
<tr>
<td></td>
<td>Exper. 7</td>
<td>16</td>
<td>55.0000</td>
<td>5.77350</td>
<td>1.44338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TENSES AND MODALS POST-TEST SCORE</td>
<td>Control 7</td>
<td>16</td>
<td>67.1875</td>
<td>8.75000</td>
<td>2.18750</td>
<td>-3.845</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Exper. 7</td>
<td>16</td>
<td>78.1250</td>
<td>7.27438</td>
<td>1.81860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TENSES AND MODALS PERMANANCY TEST SCORE</td>
<td>Control 7</td>
<td>16</td>
<td>58.4375</td>
<td>8.10735</td>
<td>2.02684</td>
<td>-6.868</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Exper. 7</td>
<td>16</td>
<td>76.8750</td>
<td>7.04154</td>
<td>1.76039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it can be seen from the above table, before instructing the “Tenses and Modals” subject, no significant difference was found in the score averages of the “Tenses and Modals Subject Pre-Test” between control and experiment groups of eight graders (t: .581, p: .566). These findings are considered positive for our study because it was assumed that the readiness level of control and experiment groups were the same prior to the instruction. The above findings support this assumption.

After instructing the subject “Tenses and Modals”, a significant difference was obtained in favor of the experiment group in the score averages of “Tenses and Modals Subject Post-Test” (t: -3.845, p: .001). As it can be understood from the above table, there is an even partial positive effect of classes instructed with plain narration method with the control group on students’ academic standing. However, it is seen that the effect of grammar subjects in Turkish class that were instructed with a Theory of Multiple Intelligences support was much more positive on students’ academic standing.

The test applied on the experiment and control groups as the post-test was administered three weeks after the instruction of “tenses and modals” subject as the permanency test. A significant difference in favor of experiment group was obtained from the score averages of “Tenses and Modals Subject Permanency Test” (t: -6.868, p: .000). These findings show
that instructing the grammar subjects in the Turkish class with a Theory of Multiple Intelligence support was more effective on the permanency of students’ learnings.

Assessing the above table as a whole, it can be said that there was no significant difference between the control and experiment groups with regards to the subject in terms of preliminary knowledge before the “Tenses and Modals” subject was instructed and that the use of Theory of Multiple Intelligences on grammar subjects in Turkish classes had positive effects on students’ academic standing as well as the permanency of the knowledge gained.

Findings with regards to the third sub-problem:

Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for gerunds and infinitives subject?

Table-4: Group Statistics regarding the Subject “Gerunds and Infinitives”

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group</th>
<th>N</th>
<th>Mean $\bar{x}$</th>
<th>Std. Deviation (ss)</th>
<th>Std. Mean Error</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERUNDS AND INF. SUBJECT</td>
<td>Control</td>
<td>22</td>
<td>50.0000</td>
<td>12.90994</td>
<td>2.75241</td>
<td>.344</td>
<td>.733</td>
</tr>
<tr>
<td>PRE-TEST SCORE</td>
<td>Exper.</td>
<td>22</td>
<td>48.8636</td>
<td>8.58179</td>
<td>1.82964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GERUNDS AND INF. SUBJECT</td>
<td>Control</td>
<td>22</td>
<td>60.6818</td>
<td>12.17877</td>
<td>2.59652</td>
<td>-3.143</td>
<td>.003</td>
</tr>
<tr>
<td>POST-TEST SCORE</td>
<td>Exper.</td>
<td>22</td>
<td>71.1364</td>
<td>9.75068</td>
<td>2.07885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GERUNDS AND INF. SUBJECT</td>
<td>Control</td>
<td>22</td>
<td>51.5909</td>
<td>12.38147</td>
<td>2.63974</td>
<td>-5.449</td>
<td>.000</td>
</tr>
<tr>
<td>PERMANANCY TEST SCORE</td>
<td>Exper.</td>
<td>22</td>
<td>69.7727</td>
<td>9.57144</td>
<td>2.04064</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it can be seen from the above table, before instructing the “Gerunds and Infinitives” subject, no significant difference was found in the score averages of the “Gerunds and Infinitives Subject Pre-Test” between control and experiment groups of eight graders (t: .344, p: .733). These findings are considered positive for our study because it was assumed that the readiness level of control and experiment groups were the same prior to the instruction. The above findings support this assumption.

After instructing the subject “Gerunds and Infinitives”, a significant difference was obtained in favor of the experiment group in the score averages of “Elements of Sentence

International Journal of Language Academy
Volume 4/4 Winter 2016 p. 140/154
Subject Post-Test” (t: -3.143, p: .003). As it can be understood from the above table, there is an even partial positive effect of classes instructed with plain narration method with the control group on students’ academic standing. However, it is seen that the effect of grammar subjects in Turkish class that were instructed with a Theory of Multiple Intelligences support was much more positive on students’ academic standing.

The test applied on the experiment and control groups as the post-test was administered three weeks after the instruction of “gerunds and infinitives” subject as the permanency test. A significant difference in favor of experiment group was obtained from the score averages of “Gerunds and Infinitives Subject Permanency Test” (t: -5.449, p: .000). These findings show that instructing the grammar subjects in the Turkish class with a Theory of Multiple Intelligence support was more effective on the permanency of students’ learnings.

Assessing the above table as a whole, it can be said that there was no significant difference between the control and experiment groups with regards to the subject in terms of preliminary knowledge before the “Gerunds and Infinitives” subject was instructed and that the use of Theory of Multiple Intelligences on grammar subjects in Turkish classes had positive effects on students’ academic standing as well as the permanency of the knowledge gained.

Findings with regards to the fourth sub-problem:
Is there a significant difference among pre-test, post-test and permanency test scores of control and experiment groups for elements of sentence construction subject?

Table-5: Group Statistics regarding the Subject “Elements of Sentence Construction”.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group</th>
<th>N</th>
<th>Mean ( \bar{X} )</th>
<th>Std. Deviation (ss)</th>
<th>Std. Mean Error</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEMENTS OF SENTENCE CONSTRUCTION SUBJECT PRE-TEST SCORE</td>
<td>Control 8</td>
<td>22</td>
<td>49.3182</td>
<td>9.29611</td>
<td>1.98194</td>
<td>.346</td>
<td>.731</td>
</tr>
<tr>
<td></td>
<td>Exper. 8</td>
<td>22</td>
<td>48.4091</td>
<td>8.07500</td>
<td>1.72160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELEMENTS OF SENTENCE CONSTRUCTION SUBJECT POST-TEST SCORE</td>
<td>Control 8</td>
<td>22</td>
<td>60.0000</td>
<td>8.99735</td>
<td>1.91824</td>
<td>-4.572</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Exper. 8</td>
<td>22</td>
<td>71.5909</td>
<td>7.77456</td>
<td>1.65754</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As it can be seen from the above table, before instructing the “Elements of Sentence Construction” subject, no significant difference was found in the score averages of the “Elements of Sentence Subject Pre-Test” between control and experiment groups (t: .346, p: .731). These findings are considered positive for our study because it was assumed that the readiness level of control and experiment groups were the same prior to the instruction. The above findings support this assumption.

After instructing the subject “Elements of Sentence Construction”, a significant difference was obtained in favor of the experiment group in the score averages of “Elements of Sentence Subject Post-Test” (t: -4.572, p: .000). As it can be understood from the above table, there is an even partial positive effect of classes instructed with plain narration method with the control group on students’ academic standing. However, it is seen that the effect of grammar subjects in Turkish class that were instructed with a Theory of Multiple Intelligences support was much more positive on students’ academic standing.

The post-test applied with the experiment and control groups was reapplied as the permanency test 3 weeks after the subject “Elements of Sentence Construction” was instructed. A significant difference in favor of experiment group was obtained from “Permanency Test on the Elements of Sentence Construction” subject score averages (t: -7.717, p: .000). These findings demonstrate that instructing the grammar subjects in Turkish course based on a Theory of Multiple Intelligences supported method is more effective on ensuring permanency in student’s acquired knowledge.

The above table can be interpreted as follows: There was no significant difference between the experimental and control groups in terms of their prior knowledge regarding “elements of sentence construction” subject before it was instructed. The use of Theory of Multiple Intelligences in the grammar subjects in Turkish course made positive effects on students’ academic standing and the permanency of the knowledge acquired.

Discussion and Conclusion

As a result of the radical changes made on curriculum in our education system in 2004-2005 academic years, constructivist educational approach has been adopted. In line with this approach, student-centered educational approach has become one of the main foundations of our education system instead of a teacher-centered approach. Along with this, some theories, methods and techniques have begun to appear in our curriculum such as Theory of Multiple Intelligences, Collaborative Learning Method, and Station Technique.

Each student arriving at the school environment shows differences in terms of their level of readiness, their intelligences and fields of interests, their families’ economic status and level of education etc. Instructing without considering these differences and by thinking as if each student were the same as one another prevents students’ real academic achievement to appear and causes students not to benefit from their hidden potential as much as they should. In order to prevent such negativities or remove them, teachers’ designing their instructions based on the Theory of Multiple Intelligences, developed and
introduced to the field of education by Howard Gardner, and their considering the basic foundations of the theory would be really helpful.

Two basic results were obtained in the experimental study conducted.

1. The use of the Theory of Multiple Intelligences in grammar instruction has positively increased students’ level of achievement.

The use of the Theory of Multiple Intelligences in grammar instruction has significantly increased the level of achievement in terms of permanency. When the control group was given the permanency test after 21 days, the level of achievement regressed back almost to the levels of pre-test. Despite this, very little regression has been observed in the permanency test in experiment groups who were instructed with the Theory of Multiple Intelligences. Accordingly, knowledge acquired at courses taught based on the Theory of Multiple Intelligences has preserved its level of permanency.

REFERENCES


