Eurasian Journal of Educational Research 82 (2019) 1-26



# Effect of Using Reflective Diaries in Teaching Turkish on Bilingual Students' Academic Achievement and Writing Skills<sup>1</sup>

Cansu CAN<sup>2</sup>, Ayse Nur KUTLUCA CANBULAT<sup>3</sup>

ARTICLE INFO	A B S T R A C T
Article History: Received: 28 Jul. 2018 Received in revised form: 13 Jun. 2019 Accepted: 08 Jul. 2019 DOI: 10.14689/ejer.2019.82.1	<b>Purpose:</b> This study aimed to identify the effect of using reflective diaries in 4 <sup>th</sup> grade Turkish classes on bilingual students' academic achievement and writing skills. <b>Research Methods:</b> A one-group pretest-posttest
<i>Keywords</i> academic achievement test for Turkish Course, writing skills scoring rubric, reflective materials	design was employed with a study group of 4 <sup>th</sup> graders identified according to convenience sampling method. Data were collected by utilizing the Academic Achievement Test for Turkish Course for measuring students' academic achievement in Turkish classes in addition to the Writing Skills Scoring Rubric for evaluating students' written work and writing skills. Both the test and the rubric were developed by the researcher. During the intervention phase of the research, students were asked to write their daily achievements in their reflective diaries for 13 months. Feedback and corrections were provided for these reflective diaries and the effect of reflective
Findings: Findings revealed sign	diaries on writing skills were explored. ificant relationships between students' academic

**Findings:** Findings revealed significant relationships between students' academic achievement and writing skills. There were no significant differences in students' academic achievement and writing skills in terms of gender.

**Implications for Research and Practice:** Results of the research indicate that using reflective diaries increased bilingual students' academic success and improved their writing skills irrespective of gender.

© 2019 Ani Publishing Ltd. All rights reserved

<sup>&</sup>lt;sup>1</sup>This paper was produced from the master thesis titled "The Effect of Learning Journal on the Students' Academic Achievements and Writing Skills in Turkish Education", which also was presented at EJER 2018 conference held in Antalya on May 02-05, 2018.

<sup>&</sup>lt;sup>2</sup> MoNE, Primary school teacher, e-mail: <u>cansu364@gmail.com</u>, ORCID: https://orcid.org/0000-0003-2201-7922

<sup>&</sup>lt;sup>3</sup> Corresponding author, Akdeniz University Faculty of Education Primary Education Department. /Antalya, e-mail. <u>aysenur.canbulat@gmail.com</u>, <u>tel:+905333308815</u> ORCID: https://orcid.org/0000-0003-0010-7898

# Introduction

The main purpose of language teaching is to improve individuals' skills in thinking, communication, comprehension, and expression. Achieving the purpose of language training in schools that provide formal education depends on the quality of curriculum and the effectiveness of teaching and learning process employed in the implementation of that curriculum (Hamzadayi, 2010). The Turkish Language Curriculum prepared by the Turkish Ministry of National Education (MoNE, 2015) aims to ensure that students can communicate, collaborate, make joint decisions, solve problems, read written texts correctly and fluently, get accustomed to reading by employing reading literacy skills, make a habit of writing, and develop writing skills of talented students. Additionally, it is also aimed that students can express their emotions, thoughts, wishes, dreams, ideas, and impressions on a subject using language and following the rules of written expression.

Learning and language are inseparable elements. Writing is crucial for learning especially considering that it is an important learning mechanism which enables exposure, organization and refining of ideas and feelings in addition to expressing them (Graham, 2008). The Turkish Language Curriculum (MoNE, 2015) aims to develop students' writing skills in order to ensure that students can express their feelings, thoughts, dreams, ideas, and impressions by using the possibilities of language and by complying with the rules of written expression. Additionally, it is also aimed to provide pupils with the habit of expressing themselves through writing and to develop writing skills of talented students. Previous research focused on explaining the writing process, development of writing skills and the effects of different writing practices on the writing process and the nature of the writing act which is developed in this process. (Alamargot & Fayol, 2009; Berninger, Fuller, & Whitaker, 1996; Bereiter & Scradamalia, 1987; De Beaugrande, 1984; Ellis, 1988; Fayol, 1997; Flower & Hayes 1997; Galbraith, 1999; Hayes, 2011; Margolin, 1984; Martlew, 1983; Segev-Miller, 2004; Tompkins & Jones, 2008; Van Galen, 1991).

The success of students in writing activities is related to their experiences with the writing process. However, writing activities are mostly provided by teachers included in native language classes. They are usually carried out through texts which are selected by the teachers to reflect pupils' feelings and thoughts on a given topic (Ungan, 2007). Writing activities do not always generate the desired outcome due to the shortcomings in the planning of the writing process and in the organization of the necessary information used in this process. Also, students are not provided with adequate opportunities to correct their errors due to lack of feedback provided to students about the quality of their written products. However, real actions, activities, and situations are required to develop skills rather than abstract rules and explanations (Maden, 2013).

Writing skill is a crucial linguistic ability for expression and may become difficult even for Turkish students who are native speakers, simply because writing skills are not acquired naturally like speaking skills but learned through training (Ozdemir, 2016). Acquiring writing skills can be even more difficult for students if the skill is to be acquired through a language other than their native tongue. On the other hand, the educational system is responsible for accurate teaching of the national language to all individuals to prevent societal problems caused by inadequate use of language (Sari, 2001). Many studies were conducted in Turkey on various samples to explore the effect of various factors affecting writing skills. However, a study focusing on ways of improving the writing skills of primary school students whose native languages are not Turkish has not yet been conducted.

The literature review demonstrates that materials which enable students to reflect their thoughts and feelings in writing and which help develop their writing skills are compatible with the constructivist approach. These materials are being used in the teaching and learning processes.

Reflective writing materials are tools that allow students to reflect what they learn (Haigh, 2001) and enable them to become aware of themselves and their learning (Thorpe, 2004). In previous studies, researchers referred to these materials by various expressions such as reflective notebooks, reflective diaries, student diaries, science diaries/journals, and study journals (Abali, Ozturk, & Sahin, 2014; Demirci, 2016; Er & Sasmaz Oren, 2015; Guvenc, 2011a; Guvenc, 2011b; Israel, 2007; Langer, 2002; Park, 2003; Stephens & Winterbottom, 2010; Yildirim, 2012). Reflective writing materials are the records that reflect what students accomplish and learn at classes (Haigh, 2000; Nesbit et al., 2004; Uslu, 2009; Wallin & Adawi, 2018, Wormeli, 2004).

Previous research demonstrate that reflective diaries increase student interest towards lessons, enable students to express their perceptions about the learning processes and their own achievements, contribute to the development of sense of responsibility and higher levels of recall, facilitate permanent learning, increase academic achievement, enable self-assessment and develop their writing skills in addition to the benefits for teachers who have the opportunity to monitor student development (Akkuzulu, 2011; Aymen Peker, Tas, Apaydın, & Akman, 2014; Ajello, 2000; Arslan & Ilgin, 2011; Audet, Hickman, & Dobrynina, 1996; Cardak, 2010; Cavus, 2015; Cavus & Ozden, 2012; Demirci, 2016; Duman, 2004; Eker & Arsal, 2014; Eker & Coskun, 2012; Erduran Avci, 2008; Ersozlu & Kazu, 2011; Francis, 1995; Guvenc, 2010; Hasanoglu Tektas, 2004; Karaca, Armagan, & Bektas, 2015; Nesbit et al., 2004; O'Connell, & Dyment; Park, 2003; Polat & Uslu, 2012; Spalding & Wilson,2002; Tekin Aytas, & Ugurel, 2016; Unrau, 2008; Uslu, 2009; Uline, Wilson & Cordry,2004).

While students write in their diaries, they can become aware of their learning and their motivation to learn can be positively affected (Duman, 2004). Hence, the academic success of the student may increase (Eker & Arsal, 2014). Reflective diaries are important tools for students to realize that they are learning. They also provide feedback in regards to the impact of teaching activities provided by teachers (Nesbit et al., 2004). As students continue to keep reflective diaries, they will be able to see their mistakes and have the opportunity to correct them by the help of feedback provided on the diaries (Polat & Uslu, 2012).

The outcomes provided by reflective diaries overlap with the outcomes foreseen for Turkish writing since reflective diaries allow students to structure their learning process by having them reflect on what they have learned during classes (Arslan & Ilgin, 2011). Reflective diaries, utilized by students to express in their own words what they have learned during the class and immediately after classes, are used in developing students' writing skills. Reflective writing diaries provide students with opportunities to take responsibility for their learning in generating knowledge and ensuring permanent learning rather than solely being the receivers of information. Therefore, this study examined the effect of reflective materials on bilingual students' academic achievement and writing skills. It is believed that this study will contribute to the literature and help classroom teachers and Turkish teachers in teaching writing skills to students with native languages other than Turkish.

This study aimed to identify the effect of using reflective diaries in 4th grade Turkish classes on bilingual students' academic achievement and writing skills. In this framework, answers were sought to the questions listed below:

Does the use of reflective diaries in 4<sup>th</sup>-grade Turkish classes affect bilingual students' academic achievement and writing skills?

In regards to Turkish instruction provided by using reflective diaries;

- 1. "What is the relationship between pre- and post- achievement test scores and pre- and post- writing skill scores of bilingual 4<sup>th</sup> graders?"
- 2. Is there a significant relationship between achievement test pretest and posttest results of bilingual 4<sup>th</sup> graders?
- 3. Is there a significant relationship between writing skills pretest and posttest results of bilingual 4<sup>th</sup> graders?
- 4. Are the achievement test pretest and posttest results and writing skills pretest and posttest results of bilingual 4<sup>th</sup> graders significantly differ in terms of gender?

# Method

# Research Design

This study utilized a one-group pretest-posttest quasi-experimental design for examining the effect of using the reflective diary in Turkish course on bilingual students' academic achievement and writing skills. There were two 4<sup>th</sup> grade groups: 4-A and 4-B in the school where the study was conducted. The first researcher was the classroom teacher of 4-B. The study was initially intended to be designed as experimental research with pre-test and post-test control group. However, it was decided to employ one-group pre-test-posttest design because of the change of teacher in 4-A, which was designated as the control group. The new teacher of 4-A was a non-education major temporary substitute teacher. The teacher is a very important factor in the teaching process. Since research findings might be affected by the difference in the competences and qualifications of teachers, the experimental design was dropped in favor of one-group pretest-posttest quasi-experimental design.

## Research Sample

The study group was determined based on convenient sampling technique. The first researcher was the classroom teacher of class 4-B in Semdinli district of Hakkari province, where the native language of some students is not Turkish. Class 4-B consisted of 14 students (seven female and seven male). These students could not speak Turkish when they enrolled in primary school. They usually experienced the Turkish language first on the TV or in kindergarten. These bilingual students speak their native languages in their daily lives and begun to use Turkish only after a period of time studying in primary school. In the first year of her career, the researcher organized Turkish teaching activities on 3<sup>rd</sup> graders based on the curriculum but she observed that her students did not even have the outcomes they were supposed to have in earlier grades (1<sup>st</sup> and 2<sup>nd</sup>), they had difficulty in regards to writing skills, and the problem related to lack of writing skills was reflected in other classes as well. Her reflections made her realize that students needed a more student-centered practice to learn writing by practicing their writing skills. Hence the researcher determined to conduct her research with this specific group.

## **Research Instruments and Procedures**

Academic Achievement Test for Turkish Course and the Writing Skills Scoring Rubric were used in the study as data collection tools.

Academic Achievement Test for Turkish Course. Academic Achievement Test for Turkish Course was developed to measure the achievement level of primary school 4th graders in Turkish classes. To ensure content validity for the instrument, a table of specifications was prepared by using Bloom's taxonomy revised by experts (Anderson, 1999).

Table 1 represents the level of outcomes in terms of the cognitive process in Bloom's revised taxonomy.

## Table 1.

Outcomes in Bloom's taxonomy.

	Steps in Cognitive Domain						
Outcomes	Number of questions	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Uses punctuation marks accurately and appropriately.	9	1		8			
Uses orthographic rules in writing.	7			7			
Uses appropriate conjunctions when expressing emotions and thoughts (for instance: but, and, or, for example, especially, for, because, for this reason, as a result, more than, as much as).	6			6			
Identifies emotional or exaggerated elements in what he/she reads	2			2			
Identifies between real and imaginary expressions.	1				1		
Distinguishes the meanings of homonymic words.	1				1		
Distinguishes synonyms and antonyms.	2				2		
Distinguishes the real, metaphoric and operand meanings of words.	3				3		
Derives words by using suffixes and prefixes.	6		6				
Uses different types of words appropriately in writing.	7		7				
Divides the words at the end of a line with a hyphen appropriately.	3	1		2			
Identifies the main emotions in poems.	1					1	
Selects appropriate titles for texts.	1						1
Uses various types of vocabulary in writing.	3					3	
Uses portrayals and descriptions in writing.	1			1			
Writes meaningful and grammatical sentences.	1						1

The achievement test included 58 items selected according to the extent of how wide the topics are covered. To ensure construct validity, the test was implemented on 120 5<sup>th</sup> graders with the supposition that they had the same outcomes the year before. After the piloting, the test was descriptively analyzed, and item difficulty index, item

discrimination index, variance, skewness, and kurtosis values were calculated for each item on the test. Table 2 depicts the results of the descriptive analysis for the test.

# Table 2.

Descriptive Analysis for the Achievement Test.

Parameters	Values	
N	117	
Mean	30,4444	
Median	29,0000	
Mode	29,00	
Standard Deviation	12,41970	
Variance	154,249	
Skewness	,196	
Standard Error of Skewness	,244	
Kurtosis	-1,159	
Standard Error of Kurtosis	,444	
Range	45,00	
Minimum	10,00	
Maximum	55,00	

As Table 2 depicts, skewness, and kurtosis coefficients were close to 0. Additionally, mode, median, and mean values were very close to each other.

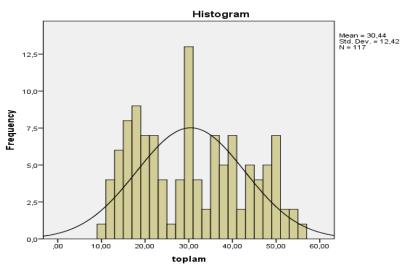


Figure 1. Histogram of Achievement Test.

The histogram for an ideal distribution should be symmetrical. The mode, median, and mean values were very close to each other as shown in Table 2 and Figure 1. Also, the histogram of the distribution was neither too sharp nor too kurtic. An opinion can be formulated on the data based on the proximity of skewness and kurtosis coefficients to 0 (Can, 2013). With the help of all these values, the distribution can be interpreted as ideal.

Item difficulty index (Pj) points to the percentage of respondents who provided correct answers. Because a participant can answer all items correctly, or no one can answer the item, Item difficulty index values are in the range of [0, 1]. Item discrimination index (Rj) indicates the extent to which success on an item corresponds to success on the whole test and it is the correlation between item scores and test scores. Item discrimination index can take values between [-1, +1] (Baykul, 2015). Negative values mean that the participants who received low scores from the test answered the item correctly whereas high scores mean the participants who received high scores from the test answered the item correctly. Since such items would not serve the purpose of the test, the items with negative item discrimination index values were excluded from the Academic Achievement Test for Turkish Course. After these items were excluded, the item difficulty index and item discrimination index were calculated to be 0.54 and 0.57 respectively. After these evaluations, the final form of Academic Achievement Test for Turkish Course was used with 54 items. KR-20 reliability coefficient, which is known as the internal consistency coefficient after the application, was found to be 0.986. These values indicate that the prepared test had moderate difficulty, was distinctive, and reliable. Table 3 displays the results of item analysis for some questions.

## Table 3.

	Options						Statistical Analyses			
Item Number	Group	Α	<b>B</b> *	С	D	Pj	Rj	Sj	skewness	kurtosis
1	Upper	1	30	2	0	0,50	0,81	0,91	0,57	-0,49
-	Lower	11	3	7	10					
Item Number	Group	A*	В	С	D	Рj	rj	Sj	skewness	kurtosis
2	Upper	31	0	0	1	0,51	0,90	1,57	0,86	-0,62
	Lower	2	11	8	9	0,01	0720	1,07	0,00	0,02
Item Number	Group	Α	<b>B</b> *	С	D	Pj	rj	Sj	skewness	kurtosis
3	Upper	1	31	0	0	0,64	0,65	0.65	1 17	1 03
3	Lower	5	10	10	5	0,64	0,65	0,65	1,17	1,82

Item Analysis of Some of the Questions Included in the Achievement Test.

*Note:* \*: Correct answer for the item. Pj: item difficulty index; Rj: item discrimination index; Sj: variance.

Writing Skills Scoring Rubric. The rubric was developed to evaluate 4th graders' texts written before and after the treatment in terms of writing skills. Scoring rubrics are tools that help identify the criteria for specific outcomes and the levels for these outcomes from perfect to weak (Goodrich, 2001). They allow teachers to be more objective in evaluating students (Kutlu, Dogan, & Karakaya, 2010, p. 53) because they provide opportunities to monitor what areas need improvement and to observe successful areas (Aslanoglu, 2003).

According to Moskal (2000) and Goodrich (2000), the steps in developing a scoring rubric are as follows: identifying a goal in line with the expected competencies, listing criteria based on these competencies, determining the levels for these criteria, making decisions as to which type of scoring will be used, providing students information about the rubric, implementing the treatment and scoring it based on the rubric, giving feedback to students about the results and making corrections.

Writing goals of Writing Skills Scoring Rubric correspond to outcomes determined in Turkish Language Curriculum for 1<sup>st</sup> to 4<sup>th</sup> grades (MoNE, 2015). Writing outcomes that cannot be measured in a single intervention like the one used in this study, which require a lengthier process, were not included in the evaluation. Criteria were determined to assess the acquisitions. Expert opinion was sought after preparing the outcomes in order to ensure content validity. The rubric consists of three parts. The first part consists of expressions related to grammar; the second part consists of expressions related to the text, and the third part consists of expressions related to the appearance/view of the text.

The rubric has been organized according to the scoring system in which the following levels are identified: "highly inadequate (1)", "inadequate (2)", "partially adequate (3)", "adequate (4)", "highly adequate (5) for each writing acquisition. There are two types of scoring rubrics: holistic and analytic. Holistic scoring rubrics allow holistic performance assessment without separately evaluating parts of the performance (Nitko as cited in Bekiroglu, 2008). For example, when teachers are to score compositions with holistic scoring rubrics, they should decide how many points will be given to the whole text by taking the criteria into consideration (Kutlu, Dogan, & Karakaya, 2010).

Analytic scoring rubrics are usually used where a single response needs deep focus (Nitko as cited in Mertler, 2001). Analytic scoring rubrics are more specific compared to holistic scoring rubrics and provide opportunities for more in-depth evaluations. Therefore, Writing Skills Scoring Rubric was developed as an analytic scoring rubric. Thus, the texts and reflective diaries written by students were scored in more detail. According to the scoring rubric, a student can receive a minimum of 19 points and a maximum of 95 points. The opinions of five experts were consulted to determine how much the graded scoring key corresponds to the items. One professor, three associate professors and one assistant professor comprised the expert board. All experts were working in the field of Turkish education. The CGI value (0.95), which was calculated according to Lawshe (1975) technique, exceeded the criteria for a minimum value of content validity (0.87) that Wilson, Pan, and Schumsky (2012) determined for five

experts. Accordingly, the content validity of the analytical grade scoring key of Writing Skills Scoring rubric was considered to be statistically significant.

First of all, Spearman's rank correlation coefficient t was used to analyze inter-rater reliability in the analyses where students' writing skills scores were used in order to determine the reliability of the scores provided by the researcher. Table 4 depicts the results of Spearman's rank correlation coefficients used for observing the interrater reliability of Writing Skills Scoring.

# Table 4.

		Spearman
Rater1pre – Rater2pre	r	,958**
	р	,000
	Ν	14
Rater1post -Rater2post	r	,955**
	р	,000
	Ν	14

Spearman's Rank Correlation Analysis for Interrater Reliability of Writing Skills Scoring.

\*\* p<.01

Spearman's rank correlation coefficient values varied between -1 and +1. When the correlation coefficient value approaches +1, the relationship in the positive direction increases and this indicates that variables increase or decrease at the same time (Kilmen, 2015). The finding that the correlation coefficient for teacher scores was greater than 0.70 shows high-level consistency between teachers (Kutlu, Dogan, & Karakaya, 2010, p. 85). As Table 4 shows, there was a high-level positive correlation between raters.

#### Data Collection

The study started after obtaining the necessary permissions from the Hakkâri Provincial Directorate of National Education. At the outset of the intervention process, the validity and reliability studies were conducted for an academic achievement test and writing skills scoring rubric. Finalized form of Writing Skills Scoring Rubric was given to study group students as the pretest. Students were asked to write about "Summer Holiday" for the pretest which aimed to measure students' writing skills and the texts written by students were scored with the rubric by two classroom teachers one of whom was the researcher.

After the pretest, based on the treatment schedule; students wrote in their reflective diaries for a full class hour on a weekly basis each Thursday after the lesson was completed. As Maden (2013) stated, reflective diaries should be written at certain intervals. Reflective diaries were examined by the researcher on the evening of the day they were written and returned to students the next day to read what they had written accompanied by the teacher. Students were asked to think about their errors and they were provided opportunities to reflect on their mistakes. Students then were given the

necessary feedback and asked to control and correct their mistakes. The points they should take into consideration in their next writing were explained. Reflective diaries were evaluated by different teachers each week. The intervention lasted 13 weeks excluding the pretest and posttest sessions.

Writing Skills Scoring Rubric was given to study group students as a posttest. Students were asked to write about "Their Dreams" in the context of the posttest to measure their writing skills. Posttest can be implemented with the same measurement tool used in pretest or with a similar measurement tool in the dame format (Buyukozturk, 2016). Since the focus in the study was not the content but whether students could reflect on their writing skills, students were given a different topic during the posttest. Student texts were scored with the help of the Writing Skills Scoring Rubric by two teachers.

## Data Analysis

According to literature, techniques that do not depend on the distribution should be selected in cases when the researcher is not sure whether the requirements for parametric techniques are met since impartment in hypotheses may increase in parametric tests when sample size decreases in small scale samples (when it is less than 30) (Akdag, 2011; Gamgam, 1989; Sipahi, Yurtkoru, & Cinko, 2008). For this reason, non-parametric techniques were preferred in all analyzes.

## Results

#### Findings related to First Sub-Problem

Table 5 depicts the findings with regards to the following question: "What is the relationship between pre- and post- achievement test scores and pre- and post- writing skill scores of bilingual 4<sup>th</sup> graders?"

#### Table 5.

*Correlations Between Achievement Test Pretest and Posttest And Writing Skills Pretest and Posttest.* 

			Writing Pretest	Writing Posttest
	Test pretest total	Test posttest total	Total	Total
TEST Pretest	1,000	,800**	,850**	,833**
Total		,001	,000	,000
	14	14	14	14
TEST Posttest		1,000	,898**	,954**
Total			,000	,000
		14	14	14
Writing Pretest			1,000	,948**
Total				,000
			14	14
Writing Posttest				1,000
Total				
				14

\*\*. p<.01

It was observed that there were strong significant correlations between academic achievement and writing skills. The positive correlations between pretest academic achievement score and both pre- and post- writing skill scores indicate that; those higher-achieving bilingual 4th graders have stronger writing scores and benefit more from the treatment. Moreover, those bilingual 4th graders who increase their academic achievement during the semester, seem to benefit even more from the treatment. This may also indicate that reflective diaries may contribute to the academic achievement of the students.

## Findings Related to the Second Sub-Problem

Table 6 displays the findings related to the research question "whether there was a statistically significant relationship between achievement test pretest and posttest results of bilingual 4<sup>th</sup> graders".

#### Table 6.

Students' Pretest and Posttest Scores Attained From The Achievement Test.
T 1 11 11 1

Test posttest total Test pretest total	Ν	Mean rank	Rank sum	Z	р
Negative rank	1 <sup>a</sup>	2,00	2,00	-3,173 <sup>d</sup>	,002
Positive rank	13 <sup>b</sup>	7,92	103,00		
Equal	0 <sup>c</sup>				
Total	14				
a Tastan asttasttatal/Tas	transfeattatal				

a. Testsposttesttotal<Testpretesttotal

b. Testsposttesttotal > Testpretesttotal

c. Testsposttesttotal = Testpretesttotal

d. Dependent on negative rank

Table 6 shows that the level of significance (p) for Z value obtained as a result of the Wilcoxon Signed Ranks Test was lower than 0.05. Accordingly, there was a significant difference between students' pre and posttest achievement scores. According to this finding, it can be said that there was a significant increase in the academic achievement of students (z= -3,173; p<0, 05). This may also indicate that writing diaries may contribute to the academic achievement of the students. Since negative rank was 1, and the positive rank was 13, all except one student had an increase in their posttest scores (Kilmen, 2015, p. 249).

#### Findings Related to the Third Sub-Problem

Table 7 represents the findings related to the research question "whether there was a statistically significant relationship between writing skills pretest and posttest results of bilingual 4<sup>th</sup> graders."

As Table 7 points out, the level of significance (p) for Z value obtained as a result of the Wilcoxon Signed Ranks Test was lower than 0.05. Accordingly, there was a significant difference between students' pre and post-test scores related to writing skills (z = -3,29; p<0,05). This may also indicate that writing diaries may contribute to

12

the writing skills of the students. Since negative rank was zero and positive rank was 14, all students had an increase in their posttest scores (Kilmen, 2015, p. 249). **Table 7.** 

WritingPosttesttotal - WritingPretesttotal	Ν	Mean rank	Rank sum	Z	p
Negative rank	0 <sup>a</sup>	,00	,00	-3,297 <sup>d</sup>	,001
Positive rank	14 <sup>b</sup>	7,50	105,00		
Equal	0 <sup>c</sup>				
Total	14				

Students' Pretest and Posttest Scores Attained From The Writing Skills Test.

a. WritingPosttesttotal <

b. WritingPosttesttotal >

c. WritingPosttesttotal =

d. Dependent on negative

# Findings Related to the Fourth Sub-Problem

Table 8 depicts the findings related to the research question "whether the bilingual 4<sup>th</sup> grader's achievement test pretest and posttest results and writing skills pretest and posttest results statistically significant in terms of gender".

As shown in Table 8, there were no significant differences between the pre and posttest scores of students in the achievement test and writing skills based on gender (p > 0.05). As shown in Table 8, the mean scores of female students were higher than those of male students, but this difference was not found to be significant. According to this finding, it can be said that the course diaries may be contributing to an increase in the academic achievement and writing skills of students irrespective of gender. **Table 8**.

Gender-based Difference Between Students' Achievement Test Pretest and Posttest Scores and Their Writing Skills Pretest and Posttest Scores.

	Gender	Ν	Mean rank	Rank sum	U	р
	1,00	7	8,21	57,50	19,500	,522
Test Pre Total	2,00	7	6,79	47,50		
	Total	14				
Test Post Total	1,00	7	9,64	67,50	9,500	,054
	2,00	7	5,36	37,50		
	Total	14				
	1,00	7	8,57	60,00	17,000	,336
Writing Pre Total	2,00	7	6,43	45,00		
	Total	14				
Writing Post Total	1,00	7	9,14	64,00	13,000	,141
	2,00	7	5,86	41,00		
	Total	14				

Note: 1 (female students) and 2 (male students).

#### Discussion, Conclusion, and Recommendations

The findings of the study showed that, that there was a high level of relationship between students' pre-test and post-test scores in the achievement test and in the writing test. According to this finding, reflective diaries may contribute to the academic achievement of the students. While students write in their diaries, they may become aware of their learning, and their learning motivation can be positively affected (Duman, 2004). Therefore, academic success may increase (Eker & Arsal, 2014). Accordingly, it can be said that writing skills increase when students learn Turkish better. It can also be argued that expressing their feelings, thoughts, and impressions may affect students' achievement positively. Studies in the literature related to this field support these findings as well (Yorusun, 2013; Tekin, Aytas, & Ugurel, 2016).

The second finding of the study points to a significant difference between students' achievement test pre and post-test scores in favor of post-test scores. The reason for the difference may be the fact that students in the study kept their own learning process under control by writing a reflective diary. They reviewed the topics of study and their learning was supported by feedback and corrections. This result is in parallel with the studies which examined the effect of reflective diaries on student achievement (Akkuzulu, 2011; Arslan & Ilgın, 2011; Demirci, 2016; Dunlap, 2006; Eker & Arsal, 2014; Eker & Coskun, 2012; Ersozlu & Kazu, 2011; Guvenc, 2010; Hasanoglu Tektas, 2004; Liuoliene & Metiuniene, 2009; Park, 2003).

The third finding of the study indicates a significant difference between students' writing skills pre and post-test scores in favor of posttest scores. This finding may be associated with the opportunities provided by reflective diaries to enhance learning by writing. Writing is not a skill that can be learned in theory; it requires practice to enhance writing skills. The more students write, and the more they apply rules related to writing in their texts, the more they improve their writing skills. The literature review demonstrates that previous studies (Arslan & Ilgin, 2011; Butler & Nesbit, 2008) obtained results that were parallel with the finding related to this subproblem.

According to the fourth research finding, there were no significant differences based on gender in students' achievement test and writing skills pretest and posttest scores. This may be because the social environment in which both female and male students are raised and have identical general cultural expectations, upbringing styles, activities, and childcare. The school they attend has an identical approach to both genders in education (Capri & Celikkaleli, 2005). In previous studies which focus on the relationship between gender and academic achievement; while Ipek and Malas (2013) found no gender-related differences between students' pretest scores in academic achievement test, Coskun (2006) and Erduran Avci (2008) found that students' written expression skills differ significantly according to gender. Tulu (2009), who examined the factors affecting the language level of bilingual and monolingual students, found that gender affects the language development of bilingual students. On the other hand, it does not affect the language development of monolingual students. This study aimed to determine the effect of using reflective diaries on students' academic achievement and writing skills in Turkish courses. Experimental research studies may further be conducted in order to determine the effect of using reflective diaries on students' reading and verbal communication skills. Further studies can be conducted by using an experimental design with pretest and posttest and control groups in order to better determine whether the use of reflective diaries has an effect on students' academic achievement and writing skills. Further studies may focus on the relationship of using reflective diaries with different school subjects at different levels. This study was conducted in a single class with a small study group. The same research can be replicated in other provinces from different regions in Turkey with larger study groups.

# References

- Abali Ozturk, Y. & Sahin, C. (2014). Alternatif olcme degerlendirme yontemlerinin akademik basari, kalicilik, ozyeterlilik algisi ve tutum uzerine etkisi [The effects of alternative assessment and evaluation methods on academic achievement, persistence of learning, self-efficacy perception and attitudes]. *Egitimde Kuram ve Uygulama*, 10(4), 1022-1046.
- Ajello, T. (2000). Science journals: writing, drawing and learning. *Teaching Pre K-8*, February, 56-57.
- Akdag, M. (2011). İstatistiksel analizlerde "n" sayıları. Inonu Universitesi. Retrieved from http://iys.inonu.edu.tr/webpanel /dosyalar/669/file/SPSS.
- Akkuzulu, D. (2011). Yedinci sinif ogrencilerinin fen ve teknoloji dersi cevre ve insan unitesinde yansitici gunlukleri tutmasinin basarı ve tutuma etkisi [The effect of reflective keeping dairies by 7th grade students' in science and technology course, environment and human unit, on students' achievements and attitudes]. (Yayinlanmamis Yuksek Lisans Tezi). Gazi Universitesi Egitim Bilimleri Enstitusu, Ankara.
- Alamargot, D. & Fayol, M. (2009). Modeling the development of written composition. In R. Beard, D. Myhill, J. Riley, & M. Nystrand (Eds.) The Sage handbook of writing development (pp. 23-47). Los Angeles: Sage
- Anderson, L. W. (1999). Rethinking Bloom's taxonomy: implications for testing and assessment. ERIC Document Reproduction, Service No. ED435630, TM 030 228.
- Arslan, D. & Ilgin, H. (2011). Turkce dersinde ogrenci gunluklerinin degerlendirme araci olarak kullanilmasi [Using student journals as an assessment tool for Turkish lesson]. Mustafa Kemal Universitesi Sosyal Bilimler Enstitusu Dergisi, 8(16), 225-238.

- Aslanoglu, E, A. (2003). Ogretimde sunu becerilerinin degerlendirilmesinde dereceli puanlama anahtari (rubric) kullanilmasina iliskin bir arastirma [A research on rubric in evaluating the presentation skills in education]. (Yayinlanmamıs Yuksek Lisans Tezi), Ankara Universitesi Sosyal Bilimler Enstitusu, Ankara.
- Aymen Peker, E., Tas, E., Apaydin, Z. & Akman, E. (2014). Fen ve teknoloji dersi yasamimizdaki elektrik unitesi icin dusunme ajandasi (ogrenci gunlugu) tutulmasi ve tutulan ajandalarin ogrencilerin akademik basarisi uzerindeki etkileri [Keeping the thinking agenda (student diary) for electricity unit in science and technology course and the effects of agendas held on at the students' academic achievement]. International Journal of New Trends in Arts, Sports & Science Education, 3(3), 8-27.
- Baykul, Y. (2015). *Egitimde ve psikolojide olcme: klâsik test teorisi ve uygulamasi.* (3. baski). Ankara: Pegem Akademi.
- Bekiroglu, F. O. (2008). Performansa dayalı olcumler: teori ve uygulama [Performance based assessments: theory and practice]. *Turk Fen Egitimi Dergisi*, 5(1), 113-131.
- Bereiter, C. & Scradamalia, M. (1987). *The psychology of written composition*. Hillsdale, New Jersey: Erlbaum.
- Berninger, V., Fuller, F., & Whitaker, D. (1996). A process approach to writing development across the life span. *Educational Psychology Review*, 8, 193-218
- Butler, M. B. & Nesbit, C. (2008). Using science notebooks to improve writing skills and conceptual understanding. *Science Activities*, 44(4), 137-145.
- Buyukozturk, S., Kılıc, C. E., Akgun, O. A., Karadeniz, S. & Demirel, F. (2016). *Bilimsel* arastirma yontemleri. (22.baskı). Ankara: Pegem Akademi Yayıncılık.
- Can, A. (2013). *SPSS ile bilimsel arastırma surecinde nicel veri analizi*. (1. baski). Ankara: Pegem Akademi Yayıncılık.
- Capri, B. & Celikkaleli, O. (2005). Ilkogretim birinci kademedeki (7-11 yas grubu) cocukların korunum gelisim duzeylerinin cinsiyet ve sınıf degiskeni acısından incelenmesi [An investigation of elementary school students' (7-11years-old) conservation development levels according to sex and grade]. *Mersin Universitesi Egitim Fakultesi Dergisi*, 1(1), 48-65.
- Cardak, U. (2010). Fen ve Teknoloji dersine iliskin gunluk tutmanın ogrenci basarısı ve tutumu uzerine etkisi [The effect of using a diary in science and technology teachin on the success and attitude of students to the lesson]. (Yayinlanmamis Yuksek Lisans Tezi). Sakarya Universitesi Fen Bilimleri Enstitusu, Sakarya.
- Cavus, E. (2015). Fen ve Teknoloji dersinde fen gunlugu kullanımının ilkogretim ogrencilerinin bilisustu farkındalık ve akademik basarısına etkisi [In science and technology course use of journal science primary students' metacognitive awareness and academic success]. (Yayınlanmamis Yuksek Lisans Tezi). Adiyaman Universitesi Fen Bilimleri Enstitusu, Adiyaman.

- Cavus, E. & Ozden, M. (2012). İlkogretim ogrencilerinin fen ve teknoloji dersinde fen gunlugu kullanımına iliskin gorusleri [Primary school students' views about use of science journal in science and technology]. *Adiyaman Universitesi Egitim Bilimleri Dergisi*, 2(1).
- De Beaugrande, R. (1984). *Text production: Toward a science of composition*. Norwood, NJ: Ablex.
- Demirci, E. (2016). Ilkogretim 7. sinif fen ve teknoloji dersi yasamimizdaki elektrik unitesinde ogrenci gunluklerinin kullaniminin ogrencilerin ust bilissel beceri gelisimine ve basarilarına etkisi [The effects of keeping the student diaries for electricity unit in 7<sup>th</sup> grade science and technology course on the students' metacognitive development and academic achievement]. (Yayinlanmamis Yuksek Lisans Tezi). Pamukkale Universitesi Egitim Bilimleri Enstitusu, Denizli.
- Duman, B. (2004). *Ogrenme-ogretme kuramları ve surec temelli ogretim.* (1. baski). Ankara: Ani Yayincilik.
- Dunlap, J. C. (2006). Using guided reflective journaling activities to capture students' chancing perceptions. Tech Trends, 50, 6, 20-26.
- Eker, C. & Arsal, Z. (2014). Oz duzenleme stratejileri ogretimi surecinde ders gunlukleri kullanmanin oz duzenleme stratejileri ogretimine etkisi [Impact of teaching diaries on the use of students' self-regulation strategies]. *Karaelmas Journal of Educational Sciences*, 2, 80-93.
- Eker, C. & Coskun, İ. (2012). Ders gunlugu yazmanin ilkokul 4. sinif ogrencilerinin sosyal bilgiler dersi akademik basarilarina etkisi [The effect of writing course diaries on academic achievement of elementary school fourth grade students]. Mugla Sitki Kocman Universitesi Sosyal Bilimler Enstitusu Dergisi, 29, 111-122.
- Ellis, A. W. (1988). Normal writing processes and peripheral acquired dysgraphias. *Language and Cognitive Processes*, 3(2), 99-127.
- Er, O. & Sasmaz Oren, F. (2015). Fen ve teknoloji dersi 7. sinif "isik" unitesinde alternatif degerlendirme yaklasimlari temelli ogretimin ogrencilerin akademik basari ve tutumlari uzerine etkisi [The effect of the alternative assessment approaches based education during the "light" unit of science and technology class in 7<sup>th</sup> grade on the academic achievements and attitudes of students]. *Celal Bayar Universitesi Sosyal Bilimler Dergisi*, 13(4), 135-164.
- Erduran Avcı, D. (2008). Fen ve teknoloji egitiminde ogrenci gunluklerinin kullanilmasi [Using student diaries in science and technology education]. *Eurasian Journal of Educational Research*, 30, 17-32.

- Ersozlu, Z. N. & Kazu, H. (2011). Ilkogretim besinci sinif sosyal bilgiler dersinde uygulanan yansitici dusunmeyi gelistirme etkinliklerinin akademik basariya etkisi [The effects of reflective thinking activities on the academic successes of fifth grade primary social studies students]. *Uludag Universitesi Egitim Fakultesi Dergisi*, 24(1), 141-159.
- Fayol, M. (1997). On acquiring and using punctuation: A study of written French. In J. Costermans & M. Fayol (Eds.), Processing interclausal relationships: Studies in the production and comprehension of text (pp. 157–178). Mahwah, NJ: Lawrence Erlbaum
- Flower L. &Hayes, J. R. (1997). A cognitive process theory of writing. Villanueva, Victor, Jr., (Ed.) Cross-talk in comp theory: a reader in (s. 251-276). Urbana: National Council of Teachers of English.
- Francis, D. (1995). The reflective journal: A window to preservice teachers' practical knowledge. Teaching and teacher Education, 11(3), 229-241.
- Galbraith, D. (1999). Writing as a knowledge-constituting process. Knowing what to write: Conceptual processes in text production, 4, 139-164.
- Gamgam, H. (1989). Parametrik olmayan istatistiksel teknikler. (1. baski). Ankara: Gazi Universitesi Egitim Fakultesi Matbaasi.
- Goodrich, A. H. (2000). Using rubrics to promote thinking and learning. *Educational Leadership*, 57(5), 13-18.
- Goodrich, A. H. (2001). The effects of instructional rubrics on learning to write. *Current Issues in Education*, 4(4).
- Graham, S. (2008). Research on writing development, practice, instruction, and assessment: Introduction to a special issue of reading and writing. *Read Write*, 21:1-2.
- Guvenc, H. (2010). İsbirlikli ogrenme ve ders gunluklerinin ogretmen adayi ogrencilerin oz duzenlemeli ogrenmeleri uzerindeki etkileri [The effects of cooperative learning and learning journals on teacher candidates' self-regulated learning]. *Kuram ve Uygulamada Egitim Bilimleri*, 10(3), 1459-1487.
- Guvenc, H. (2011a). Calisma gunluklerinin 6. sinif ogrencilerinin oz duzenlemeli ogrenmeleri uzerindeki etkileri [Effects of study diaries on sixth graders selfregulated learning]. *Hacettepe Universitesi Egitim Fakultesi Dergisi*, 41, 206-218.
- Guvenc, H. (2011b). Yansitma materyalleriyle desteklenen isbirlikli ogrenmenin Turkce ogretmeni adaylarinin ozduzenlemeli ogrenmelerine etkileri [The effects of cooperative learning supported with reflective materials on Turkish teacher Candidates self-regulation]. *Egitim ve Bilim*, 36(159), 3-13.
- Haigh, J. M. (2001). Constructing Gaia: Using journals to foster reflective learning. Journal of Geography in Higher Education, 25(2), 167-189.

- Hamzadayi, E. (2010). Butunlestirilmis ogrenme-ogretme yaklasiminin turkce ogretiminde okudugunu anlama ve yazili anlatim becerilerine etkisi [The influence of integrated learning -teaching approach in Turkish language teaching on reading comprehension and written expression skills]. (Yayınlanmamis Yuksek Lisans Tezi). Ankara Universitesi Sosyal Bilimler Enstitusu, Ankara.
- Hasanoglu Tektas, A. (2004). Matematik gunluklerinin ogrencilerin matematik basarilari, matematige karsi olan tutumlari ve matematik kaygilari uzerinde etkileri [Effects of math learning journals on mathematics achievement, attitudes toward mathemathic, and mathematics anxiety]. (Yayinlanmamis Yuksek Lisans Tezi). Bogazici Universitesi, Fen Bilimleri Enstitusu, İstanbul.
- Hayes, J. R. (2011). Kinds of knowledge-telling: Modeling early writing development. *Journal of Writing Research*, 3(2), 73-92.
- Ipek, J. & Malas, H. (2013). Bilgisayar destekli matematik dersinde STAR stratejisinin ilkogretim 2. sınıf ogrencilerinin matematik dersi basarilari ve problem cozme becerileri uzerindeki etkisi [The effects of star strategy of computerassisted mathematics lessons on the achievement and problem solving skills in 2<sup>nd</sup> grade courses]. Necatibey Egitim Fakultesi Elektronik Fen ve Matematik Egitimi Dergisi, 7(2), 314-345.
- Israel, E. (2007). Oz duzenleme egitimi, fen basarisi ve ozyeterlilik [Self-regulation instruction, science achievement and self-efficacy]. (Yayinlanmamis Doktora Tezi). Dokuz Eylul Universitesi, Egitim Bilimleri Enstitusu, İzmir.
- Karaca, M., Oner Armagan, F. & Bektas, O. (2015). The use of the reflective diaries in science lessons from the perspectives of eighth grade students. *International Journal of Environmental & Science Education*, 11(2), 53-74.
- Kilmen, S. (2015). *Egitim arastirmacilari icin SPSS uygulamali istatistik*. Ankara: Edge Akademi.
- Kutlu, O., Dogan, C. D., ve Karakaya, İ. (2010). Ogrenci basarisinin belirlenmesi performansa ve portfolyoya dayali durum belirleme. (3. baskı). Ankara: Pegem Akademi.
- Langer, A. M. (2002). Reflecting on practice: using learning journals in higher and continuing education. *Teaching in Higher Education*, 7(3), 337-351. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/13562510220144824
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563–575.
- Liuoliene, A. & Metiuniene, R. (2009). Learning through reflective journaling. Coactivity: Philology Educology / Santalka: Filologija: Edukologija, 17(4), 32-37.
- Maden, S. (2013). Temel dil becerileri egitiminde kullanilabilecek aktif ogrenme ogretimsel istatistikleri [Instructional work and tactics in active learning used on basic language arts education]. *Ana Dili Egitimi Dergisi*, 1(2), 20-35.

- Margolin, D. I. (1984). The neuropsychology of writing and spelling: Semantic, phonological, motor, and perceptual processes. *The Quarterly Journal of Experimental Psychology*, 36(3), 459-489.
- Martlew, M. (1983). Problems and difficulties: Cognitive and communicative aspects of writing. *The Psychology of Written Language*, 295-333.
- Ministry of National Education. (2015). Turkce dersi (1-8. Siniflar) ogretim programi [Turkish language curriculum for 1<sup>st</sup> to 8<sup>th</sup> grades]. Retrieved from http://ttkb.meb.gov.tr/
- Myhill, D. (2009). Developmental trajectories in the mastery of paragraphing: Toward a model of development. *Written Language and Literacy* 12(1), 26-51.
- Nesbit, C. R., Hargrove, T. Y., Harrelson, L., & Maxey, B. (2004). Implementing science notebooks in the primary grades. *Science Activities*, 40(4), 21-29.
- O'Connell, T. S., & Dyment, J. E. (2011). The case of reflective journals: Is the jury still out? *Reflective Practice*, 12(1), 47-59.
- Ozdemir, H. (2016). Ortaokul besinci sinifta okuyan iki dilli ogrencilerin yazma becerilerinin degerlendirilmesi [Evaluation of secondary school 5<sup>th</sup> grade bilingual students writing skills]. (Yayinlanmamis Yuksek Lisans Tezi). Yuzuncu Yil Universitesi, Egitim Bilimleri Enstitusu, Van.
- Park, C. (2003). Engaging students in the learning process: the learning journal. *Journal* of Geography in Higher Education, 27(2), 183-199.
- Polat, S. & Uslu, M. (2012). Fen ve teknoloji dersinde ust bilis stratejilerine dayali ogretim uygulamasinin 5. sinif ogrencilerinin erisilerine etkisi [The effect of teaching based on metacognitive strategies on 5<sup>th</sup> grade students' achievement in science and technology course]. Usak Universitesi Sosyal Bilimler Dergisi, 5(3), 28-43.
- Ruiz-Primo, M. A., Li, M., Ayala, C. & Shavelson, R. J. (1999). Student science journals and the evidence they provide: classroom learning and opportunity to learn. Paper presented at the NARST Annual Meeting, Boston.
- Sari, M. (2001). İki dilli cocuklarin cozumleme yontemiyle okuma-yazma ogrenirken karsilastiklari guclukler [Problems which bilingual children face while learning basic reading and writing with analysis method]. (Yayinlanmamis Yuksek Lisans Tezi). Cukurova Universitesi, Sosyal Bilimler Enstitusu, Adana.
- Segev-Miller, R. (2004). Writing from sources: The effect of explicit instruction on college students' processes and products. L1-*Educational Studies in Language and Literature*, 4(1), 5-33.
- Sipahi, B., Yurtkoru, E. S. & Cinko, M. (2008). Sosyal bilimlerde SPSS'le veri analizi. (2. baski). İstanbul: Beta Basim.

- Spalding, E., & Wilson, A. (2002). Demystifying reflection: A study of pedagogical strategies that encourage reflective journal writing. *Teachers College Record*, 104(7), 1393-1421.
- Stephens, K. & Winterbottom, M. (2010). Using a learning log to supports tudents' learning in biology lessons. *Journal of Biological Education*, 44(2), 72-80.
- Tekin Aytas, C. & Ugurel, I. (2016). Bir matematik sinifindaki yazma aktivitelerine dayali ogretim uygulamasinin ogrencilerin ogrenmeleri uzerindeki etkileri [The effects of an instruction practice based on the writing activities on students' learnings in a mathematics class]. *Milli Egitim*, 211, 113-146.
- Tompkins, G. E., & Jones, P. D. (2008). *Teaching writing: Balancing process and product*. Pearson/Merrill Prentice Hall.
- Thorpe, K. (2004). Reflective learning journals: From concept to practice. *Reflective Practice*, 5(3), 327-343.
- Tulu, Y. (2009). Ana dili Turkce olan ve ana dili Turkce olmayan (iki dilli) 4–7 yas cocuklarin dil duzeylerine etki eden faktorlerin incelenmesi [The examination of the factors which affect the language development of children at the age of 4-7 whose native language Turkish and native language not Turkish (bilingual)]. (Yayinlanmamis Yuksek Lisans Tezi). Selcuk Universitesi, Sosyal Bilimler Enstitusu, Konya.
- Uline, C., Wilson, J. D., & Cordry, S. (2004). Reflective journals: A valuable tool for teacher preparation. *Education*, 124(3).
- Ungan, S. (2007). Yazma becerisinin gelistirilmesi ve onemi [Develepment of and importance of writing skills]. *Sosyal Bilimler Enstitusu Dergisi*, (23), 461-472.
- Uslu, H. (2009). Altinci ve yedinci sinif fen ve teknoloji ile matematik derslerinde gunluklerin kullanilmasina yonelik ogrenci goruslerinin belirlenmesi [Students' ideas about writing journals in science and technology and mathematics lessons in the sixth and seventh grades]. (Yayinlanmamis Yuksek Lisans Tezi). Suleyman Demirel Universitesi, Fen Bilimleri Enstitusu, Fen Bilgisi Egitimi Anabilim Dali, Isparta.
- Van Galen, G. P. (1991). Handwriting: Issues for a psychomotor theory. *Human* Movement Science, 10(2-3), 165-191.
- Wallin, P., & Adawi, T. (2018). The reflective diary as a method for the formative assessment of self-regulated learning. *European Journal of Engineering Education*, 43(4), 507-521.
- Wilson, F. R., Pan, W. & Schumsky, D. A. (2012). Recalculation of the Critical Values for Lawshe's Content Validity Ratio. *Measurement and Evaluation in Counseling* and Development, 45(3), 197–210.
- Wormeli, R. (2004). Summarization in any subject: 50 techniques to improve student learning. Retrieved from https://ebookcentral.proquest.com/lib/akdenizebooks/reader.action?docID=3002108

- Yildirim, C. (2012). Bilimsel surec becerileri etkinliklerinin ilkogretim 7. sinif ogrencilerinin yansitici dusunmelerine etkisi [The effect of scientific process skills activities on elementary school 7<sup>th</sup> grade student's reflective thinking]. (Yayinlanmamis Yuksek Lisans Tezi). Pamukkale Universitesi Fen Bilimleri Enstitusu, Denizli.
- Yildiz, A. & Buyukkasap, E. (2011). Ogretmen adaylarinin Compton olayini anlama duzeyleri ve ogrenme amacli yazma aktivitelerinin akademik basariya etkisi [Prospective teachers' levels of understanding Compton Effect and the impact of writing activities for learning purposes on academic success]. Uluslararasi Insan Bilimleri Dergisi, 8(1), 1643-1664.
- Yorusun, S. (2013). 8. sinif ogrencilerinin dusunce yazisi yazma becerileri ile akademik basarilari arasindaki iliski uzerine bir inceleme [A research of the opinion writing skills and the academic achievement relation of 8. grade students: The example of Silifke Ataturk Elementary School]. (Yayinlanmamis Yuksek Lisans Tezi). Afyon Kocatepe Universitesi, Sosyal Bilimler Enstitusu, Afyonkarahisar.

# Türkçe Öğretiminde Ders Günlüğü Kullanımının İki Dilli Öğrencilerin Akademik Başarıları ile Yazma Becerilerine Etkisi

# Atıf:

Can, C., & Kutluca-Canbulat, A.N. (2019). Effect of using reflective diaries in teaching Turkish on bilingual students' academic achievement and writing skills. *Eurasian Journal of Educational Sciences*, 82, 1-26, DOI: 10.14689/ejer.2019.82.1

# Özet

*Problem durumu*: Dil eğitiminin temel amacı, kişilerin düşünme, iletişim, anlama ve anlatma becerilerini geliştirmektir. Bu nedenle bütün ülkeler eğitim sistemlerinde dil eğitimine büyük önem verirler (Kavcar, 1983). Eğitimin formal boyutunun gerçekleştirildiği okullarda dil eğitiminin amacına ulaşabilmesi, öğretim programının niteliğine ve bu programın uygulanmasında işe koşulan öğrenme-öğretme sürecinin etkililiğine bağlıdır (Hamzadayı, 2010).

Türkçe Öğretim Programı'nın (MEB, 2015) öğrencilerin çevreleriyle iletişim kurmaları, iş birliği yapmaları, ortak karar vermeleri ve karşılaştıkları sorunları çözmeleri; yazılı metinleri doğru ve akıcı bir biçimde okuyabilmeleri, okuduklarını değerlendirip okumayı bir alışkanlık haline getirmeleri; duygu, düşünce, istek, hayal, tasarı ve izlenimleri ile bir konu hakkındaki görüşlerini dilin imkânlarından yararlanarak yazılı anlatım kurallarına uygun şekilde anlatmaları, yazmayı alışkanlığa dönüştürmeleri ve yeteneği olanların bu becerilerini geliştirmeleri gibi amaçları vardır. Bu çalışmada temel dil becerilerinden yazma öğrenme alanının öğretim süreci açısından etkileliği ve öğrenme sürecine olan etkileri ele alınmıştır.

Türkçe Öğretim Programı'nda (MEB, 2015) yazma becerisinin geliştirilmesiyle, öğrencilerin duygu, düşünce, hayal, tasarı ve izlenimlerini dilin imkânlarından yararlanarak ve yazılı anlatım kurallarına uyarak anlatmaları, yazmayı kendini ifade etmede bir alışkanlık haline getirmeleri ve yazmaya yeteneği olanların da bu becerilerini geliştirmeleri amaçlanmaktadır. Bir ifade etme becerisi olan yazma becerisi, konuşma becerisi gibi doğal bir potansiyelle gelmeyen, eğitim yoluyla öğrencilerin bile en çok zorlandıkları dil becerisidir. Anadili Türkçe olan öğrencileri pile en çok zorlandıkları dil becerisidir. Anadili Türkçe olmayan öğrenciler için buna bir de anadilinin farklı olması faktörü eklenince yazma becerisini kazanmak daha zor olmaktadır. Eğitim sistemleri içinde bulunduğu toplumun bireylerine ulusal dilin bütün inceliklerini öğreterek, onların yaşamlarında dili yetersiz kullanmalarından kaynaklanan sorunlar yaşamalarına meydan vermemek olmalıdır (Sarı, 2001).

Türkiye'de çeşitli faktörlerin yazma becerisi üzerindeki etkilerinin farklı gruplar üzerinde incelendiği pek çok araştırma yapılmıştır. Ancak anadili Türkçe olmayan ilkokul öğrencilerinin yazma becerilerini geliştirmeye yönelik yapılan bir çalışmaya rastlanmamıştır.

Alan yazın incelendiğinde öğrencilerin yazma becerisine yönelik kazanımlara ulaşabilmelerine yönelik olarak yansıtma materyalleri, yapılandırmacı yaklaşımın öğrenciden beklentileri ile uyumlu görülmektedir. Öğrencilerin Türkçe başarısı ve yazma becerisinin geliştirilmesi için öğrencilerin kendi öğrenmelerini takip etmeleri ve öğrendiklerini yansıtmalarına fırsat vermesi açısından ders günlüğü yazma uygun bir etkinlik olarak görülmüştür.

*Araştırmanın Amacı:* Bu araştırmanın amacı, dördüncü sınıf Türkçe dersinde ders günlüğü kullanımının iki dilli öğrencilerin akademik başarıları ve yazma becerileri üzerindeki etkisini belirlemektir.

Araştırmanın Yöntemi: Bu çalışmada tek grup ön test-son test deneysel desen kullanılmıştır. Araştırmanın çalışma grubunu kolay ulaşılabilirlik esasına göre belirlenen, araştırmacının görev yaptığı okulda okuttuğu 4.sınıf öğrencileri oluşturmaktadır. Çalışma grubundaki öğrencilerin uygulamaların başında ve uygulama sonunda Türkçe dersine ilişkin akademik yeterliklerini ve yazma becerilerini belirlemeye yönelik olarak uygulamalar yapılmıştır. Araştırma verileri, öğrencilerin Türkçe dersindeki akademik başarılarını belirlemek amacıyla araştırmacı tarafından hazırlanan Türkçe Dersi Akademik Başarı Testi ve öğrencilerin yazma becerilerini ölçmek amacıyla öğrencilerin yazdığı yazılar ve bu yazıları değerlendirmek için araştırmacı tarafından geliştirilen Yazma Becerileri Dereceli Puanlama Anahtarı ile toplanmıştır. Araştırmanın uygulama sürecinde, on üç hafta boyunca öğrencilere her ders sonunda derste öğrendiklerini yansıttıkları ders günlüğü yazdırılmıştır. Yazılan ders günlüklerine ilişkin gerekli dönüt ve düzeltmeler yapılmıştır. Araştırma verileri, Wilcoxon İşaretli Sıralar Testi, Mann-Whitney U ve Spearman Sıra Farkları Korelasyon Katsayısı testleri ile analiz edilmiştir.

Araştırma Bulguları: İki dilli öğrencilerin başarı testi ön puanları ile son puanları ile yazma becerileri ön ve son test puanları arasında yüksek düzeyde bir ilişki olduğu saptanmıştır. Buna göre, öğrencilerin duygu, düşünce ve izlenimlerini yazarak ifade etmelerinin başarılarını olumlu yönde etkileyebileceği söylenebilir. Öğrencilerin başarı testinden aldıkları ön ve son test puanları arasında son test puanları lehine anlamlı bir fark olduğu sonucuna ulaşılmıştır. Bu farkın sebebi öğrencilerin kendi öğrenme sürecini ders günlüğü yazarak kontrol altında tutmaları, konuyu tekrar etmiş olmaları, öğrenmelerinin öğretmenlerinin dönüt ve düzeltmelerle desteklenmesi olabilir. Öğrencilerin yazma becerileri ön ve son ölçümlerden aldıkları puanlar arasında son test puanları lehine anlamlı bir fark olduğu sonucuna ulaşılmıştır. Ulaşılan bu sonuç, ders günlüklerinin yazmayı yazarak öğrenmeye fırsat vermesi ile ilişkilendirilebilir. Çünkü yazma, teoride öğrenilecek bir beceri değildir. Öğrenciler, nekadar çok yazarsa ve yazılarında bu yazma kurallarını nekadar çok uygularsa o ölçüde yazma becerilerini kazanabilecektir. Öğrencilerin başarı testinden aldıkları ön ve son test puanları ile yazma becerilerinden aldıkları ön ve son test puanlarının cinsiyet açısından anlamlı bir farklılık göstermediği sonucuna ulaşılmıştır. Bunun bulgunun sebebi, hem kız hem de erkek öğrencilerin bulunduğu sosyal çevrenin, öğrenim gördükleri okulun, yetiştirilme tarzının aynı olması sebebiyle gerek genel kültürel beklenti ve aktivitelerin gerekse de ilgilendikleri doğal aktiviteler ve çocuklar büyütülürken yapılan bakım uygulamalarının benzer olması olabilir (Çapri ve Çelikkaleli, 2005).

Araştırma Sonucu ve Öneriler: Bu çalışmada ders günlüğü yazma etkinliğinin iki dilli öğrencilerin akademik başarılarını arttırdığı ve yazma becerilerini geliştirdiği sonucuna ulaşılmıştır. Ayrıca öğrencilerin akademik başarılarının ve yazma becerilerinin cinsiyete göre değişkenlik göstermediği saptanmıştır.

Ders günlüğü kullanılarak yazmanın öğrencilerin okuma ve sözlü iletişim becerileri üzerindeki etkisini belirlemeye yönelik veya daha güçlü bir değişken olabilmesi için ön test-son test kontrol gruplu deneysel desende başka çalışmalar yapılabilir. Farklı derslerde ve sınıf seviyelerinde ders günlüğü tutmanın etkililiği araştırılabilir. Bu araştırma, küçük bir çalışma grubuyla tek bir sınıfta gerçekleştirilmiştir. Benzer bir araştırma daha büyük bir çalışma grubuyla tüm dördüncü sınıf Türkçe öğretimi için gerçekleştirilebilir.

Anahtar Kelimeler: Türkçe dersi akademik başarı testi, yazma becerileri dereceli puanlama anahtarı, yansıtma materyalleri