



(ISSN: 2587-0238)

Harmankaya, M. Ö., Sallabaş, M. E. & Toker, T. (2023). The Effect of Flipped Writing Lessons on Writing Skills and Writing Self-Efficacy of Learners of Turkish as a Foreign Language, *International Journal of Education Technology and Scientific Researches*, 8(24), 2621-2648.

DOI: <http://dx.doi.org/10.35826/ijetsar.689>

Article Type: Research Article

## THE EFFECT OF FLIPPED WRITING LESSONS ON WRITING SKILLS AND WRITING SELF-EFFICACY OF LEARNERS OF TURKISH AS A FOREIGN LANGUAGE\*

**M. Özgün HARMANKAYA**

Dr., Yıldız Technical University, İstanbul, Türkiye, [ozgun.harmankaya@yildiz.edu.tr](mailto:ozgun.harmankaya@yildiz.edu.tr)

ORCID: 0000-0001-9420-858X

**Muhammed Eyyüp SALLABAŞ**

Prof. Dr., Yıldız Technical University, İstanbul, Türkiye, [sallabas@yildiz.edu.tr](mailto:sallabas@yildiz.edu.tr)

ORCID: 0000-0003-4346-4385

**Türker TOKER**

Assoc. Prof. Dr., Uşak University, Uşak, Türkiye, [turker.toker@usak.edu.tr](mailto:turker.toker@usak.edu.tr)

ORCID: 0000-0002-3038-7096

Received: 15.04.2023

Accepted: 26.08.2023

Published: 01.10.2023

### ABSTRACT

This study aimed to investigate the impact of flipped learning-based writing on the writing skills and writing self-efficacy of international students learning Turkish as a foreign language. To accomplish this, the study employed a quasi-experimental research design with a pre-test–post-test control model, which is a quantitative research approach. The study group consisted of 28 international students enrolled in the language teaching center of a state university during the 2021-2022 academic year. To constitute the experimental and control groups, a writing skill assessment was administered initially to ensure that both groups had comparable writing skills. Data for the study were collected using the “B1 Writing Test,” the “B1 Level Writing Skill Rubric for Turkish as a Foreign Language Learners,” and the “Writing Skill Self-Efficacy Scale for Foreigners Learning Turkish as a Second Language” in both the pre-test and post-test stages. For the data analysis, we employed dependent-sample t-tests and ANOVA tests for complex measures. The research findings revealed a statistically significant increase in writing achievement and perceptions of writing self-efficacy among students in the experimental group, where writing instruction was based on flipped learning. Moreover, a statistically significant difference was found in favor of the experimental group in the dimensions of organization and content, language and expression, and vocabulary, which are sub-dimensions of writing skill, and in the dimension of expression and form of self-efficacy perception. However, no statistically significant differences were observed between the pre-test and post-test scores of the experimental and control groups in the spelling and grammar dimensions of writing skills and the use of the grammar rules dimension within writing self-efficacy perception.

**Keywords:** Foreign language education, Turkish education, writing skill, flipped learning, self-efficacy in writing.

\* This research is derived from PhD dissertation entitled “The Effect of Flipped Learning-Based Writing Instruction on Writing Skills in Teaching Turkish as a Foreign Language” prepared by the 1st author under the academic supervision of the 2nd and 3rd authors.

## INTRODUCTION

Writing skills are used for diverse purposes and functions in society. Writing is an indispensable ability required to meet individual language-related needs in a multitude of social settings, including personal, professional, public, and educational contexts as well as within the various actions and situations faced within these contexts. Writing can be described as the process of converting mental concepts into symbols to express emotions, thoughts, desires, and experiences after engaging in cognitive activities such as sorting, categorizing, establishing connections, criticizing, predicting, analyzing, synthesizing, and evaluating (Güneş, 2013, pp. 157-158). This process is a fundamental indicator of foreign language proficiency. In fact, a certain sign of mastering a language is the ability to engage in written communication in that language fluently, accurately, and completely. However, in writing in a foreign language, it usually takes a very long time to ensure complete communication, because it requires a wide range of writing-related competencies. As Hyland (2003) states, foreign language writers must possess five distinct types of knowledge to produce an effective text. These categories of knowledge include the following.

- “Content knowledge: Knowledge of ideas and concepts in the subject area to be addressed.
- System knowledge: Knowledge of syntax, vocabulary, and rules of language.
- Process knowledge: Knowledge of preparing and implementing a writing task.
- Genre knowledge: Knowledge of the communicative purposes of a genre and its meanings in specific contexts.
- Context knowledge: Knowledge of reader expectations, cultural preferences, and relevant texts.”  
(Hyland, 2003, p. 27).

According to Hyland’s (2003) categorization of knowledge types, individuals who engage in writing in a foreign language must possess various competencies. These competencies encompass having knowledge of the target content, sufficient vocabulary to convey his/her knowledge of the content, using his/her vocabulary in harmony with the language structures of the target language, adopting discourse appropriate to the context, knowing the formal features of the genre, using these features appropriately in the writing process, and using them functionally for communicative purposes. However, the types of knowledge required by the writing process and the difficulties arising from the nature of writing itself make writing in a foreign language quite problematic for students. In this sense, researchers frequently underscore the complexity of writing in comparison to other language skills (Hayes & Flower, 1980; Hedge, 2008) and it is difficult to learn (Alan, 2019; Bağcı & Başar, 2013; Barkaoui, 2007; Çakır, 2010; Tangpermpoon, 2008; Weigle, 2014). Nevertheless, the requisites of these types of knowledge for the writing process, coupled with the inherent challenges intrinsic to writing itself, render the act of composing in a foreign language a considerably intricate task for students. Scholars have frequently underscored the complexity of writing in comparison to other language skills (Hayes & Flower, 1980; Hedge, 2008) and the challenges they pose to learners (Alan, 2019; Bağcı & Başar, 2013; Barkaoui, 2007; Çakır, 2010; Tangpermpoon, 2008; Weigle, 2014).

The complexity and difficulty of writing skills are reflected in writing education. The categories of knowledge and other linguistic competencies required for writing increased the time required for classroom writing activities. However, when the primary stages of writing education, such as preparation, the writing process, and feedback, are considered, teachers typically lack the time to spend on students' written products and provide each student with appropriate feedback (Karatay, 2020). Consequently, after a certain amount of time, the writing process turns into one in which only writing is performed, but adequate feedback and correction are not received. Aydemir (2019) states that issues such as students doing their assignments alone, insufficient practice in the classroom, and limited time make writing in a foreign language challenging for students.

Numerous studies have highlighted several key aspects of the writing process in a foreign language. These include the significance of adequate preparation (Alan, 2019; Kadan, 2020; Tiryaki, 2013; Yıldırım, 2018), importance of incorporating the theoretical dimension of writing (Karatay, 2020), presence of time-related challenges (Aydemir, 2019; Karatay, 2020; Tok, 2013), and significance of feedback (Erol, 2016; Karatay, 2020; Yorgancı & Baş, 2021). Therefore, it can be stated that for the development of writing skills, it is essential to implement strategies that overcome time-related issues, make the preparation phase of the writing process more effective, provide theoretical support for writing, and increase effective classroom feedback. Consequently, the utilization of technology to assist in replanning the writing process is seen as a means to support writing skills, particularly in areas with time-related issues. Indeed, technological capabilities offer substantial opportunities to enhance language proficiency in the target language.

It is widely known that individuals who wish to acquire a foreign language already utilize technology to study a language on their own. Technology-based applications enable learners to personalize the learning process because they can study anywhere, at any time, and at their own tempo. In light of these circumstances, it can be asserted that integrating in-class and out-of-class learning processes using technology-based learning opportunities is a requirement. The flipped learning model provides effective opportunities for language learning environments (Hung, 2015; Temizyürek & Ünlü, 2015). Flipped learning is a pedagogical approach (Flipped Learning Network, 2023) that supports learning outside class hours, where direct instruction is moved from the group learning space to the individual learning space with the help of technology to maximize student participation and learning in the classroom (Mazur et al., 2015). The resulting group space is transformed into a dynamic, interactive learning environment in which the teacher guides students. Flipped learning is defined by Hayırsever (2021, p. 192) as "taking the learning process, which includes high-level skills such as assimilation, application, transfer, and thus ensuring the permanence of information by flipping the traditional learning model, into the classroom environment; and leaving the process, which includes the acquisition and repetition of information when necessary, outside the classroom." Therefore, it can be stated that in a learning process based on flipped learning, students should learn the information they can learn independently with the materials provided and complete simple exercises on the subject, and the teacher contributes to making learning permanent by integrating previously learned information with new information.

Bergman and Sams (2012), who popularized the concept of flipped learning, stated that flipped learning saves teachers and students more time in the classroom than the traditional lesson process and that students who learn slower improve their comprehension more because they can watch the videos as many times as they want before the lesson. Creating context, providing motivation, activating vocabulary, and imparting subject-matter knowledge consumes a great deal of time in writing courses, particularly in the preliminary preparation stage of writing. This process is particularly difficult for students who lack content knowledge of the text to be produced and whose language proficiency is behind that of the class. Due to time limitations, the in-class time allocated to both writing preparation and the writing process makes it difficult to provide feedback on each student's writing after writing practice. Accordingly, it can be stated that learning content knowledge, content-related vocabulary elements, and language structures appropriate to the context of the content in technology-supported environments outside the classroom before writing lessons will allow students with different learning speeds to enter the classroom with similar information, thereby reducing the time spent on pre-writing preparation and providing more time for feedback and making corrections.

The use of flipped learning in writing skills in teaching Turkish as a mother tongue significantly improves the written expression skills of Turkish language teaching department students (Özdemir, 2017), improves the writing achievement and metacognitive writing awareness of secondary school students, increases student-student and student-teacher interaction, and enables students to come to class better prepared (Kansızoğlu, 2018). Studies (Arslan, 2020; Ekmekci, 2014; Engin & Donancı, 2014; Luo et al., 2020) have indicated that the use of this model in developing writing skills in a foreign language has a substantial effect on writing abilities. The results of Arslan's (2020) systematic review also indicated the positive effects of the model, such as improving language skills, increasing motivation, encouraging students to be active, providing positive attitudes, building self-efficacy, taking responsibility for learning, increasing satisfaction, increasing interaction, learning at their own pace, providing opportunities for collaboration, and creating a flexible learning environment. Additional studies that have employed the flipped learning approach in foreign language education (Gasmi, 2017; Gürlüyer & Elkılıç, 2020; Sharom & Kew, 2021; Soltanpour & Valizadeh, 2018) have demonstrated that its utilization within language classes can provide outcomes such as enhanced educational readiness, improved time management, and increased levels of content knowledge. Consequently, it is believed that incorporating the flipped learning model into the process of teaching Turkish as a foreign language to develop writing skills can contribute to solutions to challenges such as time limitations, managing information within a limited time, lack of in-class interaction, and deficits in the content dimension of writing.

No research found in the literature review examined the effect of the flipped learning model on writing skills when teaching Turkish as a foreign language. Although international literature contains a number of studies examining the relationship between flipped writing practices and other psychological variables, the number of studies investigating its effect on writing self-efficacy is relatively small. Therefore, it is anticipated that the results of this study will provide data for discussions on the effect of using the flipped learning model in language education on self-efficacy perception. Accordingly, the objective of this study was to determine the effect of

---

writing instruction based on the flipped learning model on the writing skills and writing self-efficacy of B1 level international students studying Turkish as a foreign language. This study sought answers to the following questions for the relevant purpose:

1. Is there a statistically significant difference between the pre-test and post-test scores of the students in the experimental and control groups on the B1 Writing Skills Exam?
2. Is there a statistically significant difference between the pre- and post-test scores of the students in the experimental and control groups on the Writing Self-Efficacy Scale?

Within the scope of this research, writing skills and writing self-efficacy were analyzed in terms of both total scores and scores obtained from each sub-dimension to answer the relevant questions.

## **METHOD**

This section provides information about the research design, study group, data collection tools, data collection and analysis, and experimental process.

### **Research Design**

This study investigates the impact of writing instruction based on the flipped learning approach on writing achievement and self-efficacy in teaching Turkish as a foreign language. To accomplish this, a quasi-experimental design with pre- and post-test control groups, a quantitative research model, was used to determine the writing achievement and writing self-efficacy levels of the students in the experimental and control groups before and after the implementation. Experimental research refers to studies designed to evaluate the impact of variations or interventions initiated by the researcher on the dependent variable, while maintaining control over external factors that could influence the outcomes (Creswell, 2017, p. 156; Büyüköztürk et al., 2017, p. 203). In the context of this study, the dependent variable comprised writing proficiency and the subcomponents of writing self-efficacy. The independent variable of the study was writing instruction based on the flipped learning approach.

### **Study Group**

This research was conducted during the 2021-2022 academic year at a state university's language teaching center in Istanbul, focusing on 28 international students studying Turkish as a foreign language at the B1 level. The main reason for choosing the B1 level was to explore the expansion of language structures at that proficiency level, deepening of content knowledge related to education, and enhancement of the writing process knowledge dimension. This study used a quasi-experimental design involving paired pre-test and post-test control groups. Instead of selecting a specific population and sample, a study group was established and utilized. The study group was formed by administering a writing skills examination to students who had completed their A2 level education at the same institution, and their personal information was gathered. Subsequently, two paired groups were

created based on the scores obtained from this examination. Table 1 presents the mean scores of the groups after pairing.

**Table 1.** Writing Achievement Scores of Paired Groups

Group	N	$\bar{X}$	Standart Deviation
1.Group	14	74.5	9.63
2.Group	14	74.8	8.23

Based on the data presented in Table 1, the mean score for students in the first group on the exam for pairing was 74.5, while for students in the second group, it was 74.8. This suggests that the average writing scores of the two groups were equally similar. Subsequently, one of the two groups, which was created based on their equivalent scores, was assigned to the experimental group, while the other was assigned to the control group. The information about the gender characteristics of the students in the study group is shown in Table 2.

**Table 2** Gender Characteristics of Students

Gender	Experimental		Kontrol		Total	
	N	%	N	%	N	%
Male	6	42.9	7	50	13	46.4
Female	8	57.1	7	50	15	53.6
<b>Total</b>	14	100	14	100	28	100

Based on the data presented in Table 2, 46.4% of the study group were male and 53.6% were female. In the experimental group, 42.9% of the students were male and 57.1% were female. In the control group, the ratio of male and female was equal. It can be stated that the gender distribution of both groups is close. Information about the native languages of the students in the study group is given in Table 3.

**Table Hata! Belgele belirtilen stilde metne rastlanmadı.. Students' Native languages**

Native languages	Experimental		Kontrol		Total	
	N	%	N	%	N	%
Arabic	11	78.6	9	64.3	20	71.4
Malay	1	7.1	0	0	1	3.5
Persian	0	0	2	14.3	2	7.1
Spanish	1	7.1	0	0	1	3.6
Kazakh	0	0	1	7.1	1	3.6
Malayalam	0	0	1	7.1	1	3.6
Ukrainian	1	7.1	1	7.1	2	7.1
<b>Total</b>	14	100	14	100	28	100

Based on the data presented in Table 3, 71.4% of the study group consisted of students whose native languages was Arabic. Students whose native language is Arabic constitute the majority in both groups, 78.6% in the experimental group and 64.3% in the control group. Students with other native languages are distributed similarly in both groups. Information on the level of education of the students in the study group at the university is given in Table 4.

**Table 4.** The Level at which Students Will be Educated

Level of education	Experimental		Kontrol		Total	
	N	%	N	%	N	%
Licence	4	28.6	4	28.6	8	28.6
Master's Degree	8	57.1	8	57.1	16	57.1
PhD	2	14.3	2	14.3	4	14.3
<b>Total</b>	<b>14</b>	<b>100</b>	<b>14</b>	<b>100</b>	<b>28</b>	<b>100</b>

Based on the data presented in Table 4, 28.6% of the students in the study group learn Turkish for undergraduate, 57.1% for master's and 14.3% for doctoral purposes. This rate is equally distributed in the experimental and control groups at all education levels.

### Data Collection Tools

The data collection tools of the study are "A2 Level Writing Skill Rubric (A2 DPA) for Those Who Teach and Learn Turkish as a Foreign Language", "A2 Writing Skill Exam", "B1 Writing Skill Exam", "B1 Level Writing Rubric (B1 DPA) for Those Who Learn Turkish as a Foreign Language" and "Writing Skill Self-Efficacy Scale for Foreigners."

### A2 and B1 Writing Skills Exam

Following the researcher's preparation of the specification table for the A2 writing skills exam, we generated a set of 42 items. Subsequently, eight field experts were asked to evaluate these items, categorizing them as appropriate, partially appropriate, or inappropriate. Based on the consensus of these experts, 31 items were determined "appropriate." These 31 items were then subjected to expert evaluation again, with experts assigning scores between 1-5 to each item. The item with the highest score was chosen for inclusion in the group-pairing test conducted as a part of this study.

To assess the pre-test and post-test writing skills of the participants, the researcher utilized several sources, including the Common European Framework of Reference for Languages (European Council, 2020), the Turkish as a Foreign Language Teaching Programme (Maarif Foundation, 2020), and the Yeni İstanbul B1 textbook, and created a detailed specification table. Subsequently, a pool of 40 questions was generated, in accordance with the specification table. To ensure the content validity of these questions, the researcher consulted six field experts, and one measurement and evaluation expert. Following their evaluation, two items, specifically the 29th and 30th questions, which received the highest score of 26 points, were chosen for use in both the pre-test and post-test assessments.

### A2 Level Writing Skill Rubric for Those Who Teach and Learn Turkish as a Foreign Language (A2 DPA)

The evaluation of students' exam scores for placement into the B1 level study group involved the utilization of the "A2 Level Writing Skill Rubric for Turkish Language Learners and Teachers as a Foreign Language" (A2 DPA), which was developed by Harmankaya et al. (2022). The Content Validity Index (CVI) for each of the A2 DPA's four dimensions, encompassing a total of 15 items, was assessed using Lawshe's (1975) technique and yielded the following values: 0.950, 0.916, 0.916, and 0.916, with an total CVI of 0.916 for the total A2 DPA. Inter-rater

reliability coefficients were calculated to be .978, .989, .977, and .981 for each respective dimension and .991 for the entire DPA.

### ***B1 Level Writing Rubric for Turkish as a Foreign Language Learners (B1 DPA)***

In this research, the “B1 Level Writing Skill Rubric for Turkish as a Foreign Language Learners (B1 DPA),” which was developed by Yorgancı and Baş (2021), was utilized to assess the writing skill exams administered as both pre-test and post-test. Within the context of this study, the B1 Writing Performance Assessment (DPA) was re-evaluated by five raters of 24 students at the B1 level, and the reliability of the scoring process was examined. The inter-rater reliability of the B1 DPA in this study was .966 for dimension 1, .903 for dimension 2, .973 for dimension 3, .944 for dimension 4, and .971 for the total DPA score.

### ***Writing Skill Self-Efficacy Scale for Foreigners***

In the research, the “Writing Skill Self-Efficacy Scale for Foreigners,” as developed by Büyükkiz in 2012, was employed to assess students’ self-efficacy in writing in the pre-test and post-test. This scale, comprising two dimensions and 16 items, was prepared using a 7-point Likert-type scale. Validity and reliability assessments were conducted based on data collected from 144 students learning Turkish as a foreign language. Within this scale, the highest achievable score for the expression and form dimension is 91, whereas for the dimension of using grammar rules, the highest possible score is 21. The lowest attainable scores for these dimensions were 13 and 3, respectively. Regarding the total scale, the highest and lowest scores were 112 and 16, respectively. Regarding the scale’s structure, Büyükkiz’s (2012) exploratory factor analysis revealed a two-factor structure, with an eigenvalue exceeding 1, accounting for 56.85% of the total variance. Subsequently, confirmatory factor analysis was performed, resulting in the following fit indices: RMSEA=.048, SRMR=.047, GFI=.90, AGFI=.86, CFI=0.99, and NFI=.96. To assess the scale’s internal consistency, Cronbach’s alpha coefficients were found .928 for the first factor, .743 for the second factor, and .922 for the total scale.

### **Data Collection Process**

Prior to starting the study, the researchers received approval for the use of the data collection tools. Subsequently, ethical approval and research authorization were obtained from the relevant institutions. The research process was initiated upon receipt of approval from the Yıldız Technical University Social Sciences and Humanities Research Ethics Committee at its meeting numbered 2021/05 on July 28, 2021. Afterward, research authorization dated January 7, 2022, was granted by the YTU TÖMER directorate. The data collection process started during the final week of the A2 level course and concluded at the conclusion of the B1 level course.

### **Data Analysis**

When analyzing quantitative data, two types of parametric and non-parametric analysis tests were employed based on the normality of the data. According to Büyüköztürk (2020, pp. 40-43), the assessment of normal



distribution can be conducted using skewness/kurtosis coefficients (SC/KC), graphical representations (such as histograms, stem-and-leaf plots, box plots, etc.), and normality tests. In the present study, the skewness/kurtosis coefficient was used to determine the normal distribution. Table 5 displays the skewness and kurtosis coefficients for the pre- and post-test data of the scores of writing skill and its sub-dimensions, as well as self-efficacy and its sub-dimensions.

**Table 5.** Findings on Skewness and Kurtosis Coefficients of Pre-test and Post-test Data

Measurement Tool	Tests	N	$\bar{X}$	Sd	SC	KC
Organization and Content (B1 DPA)	Pre-Test	28	15.43	3,29	-.014	.084
	Post-Test	28	22.25	3.35	-.431	-.940
Language and Expression (B1 DPA)	Pre-Test	28	16.82	1,96	.110	.644
	Post-Test	28	20.75	2.18	-.113	-.011
Vocabulary (B1 DPA)	Pre-Test	28	7.21	1.13	.039	.363
	Post-Test	28	9.07	1.99	.704	.267
Spelling and Grammar (B1 DPA)	Pre-Test	28	19.00	2.77	-.022	.165
	Post-Test	28	24.00	3.47	-.217	-.542
Writing Achievement (B1 DPA)	Pre-Test	28	58.46	7.99	-.370	.196
	Post-Test	28	76.07	8.43	-.302	-.187
Use of Grammar Rules (Self-efficacy Scale)	Pre-Test	28	11.93	3.46	-.195	-.793
	Post-Test	28	14.54	3.43	-.794	.314
Expression and Form (Self-efficacy Scale)	Pre-Test	28	55.36	12.78	-.697	.334
	Post-Test	28	66.79	13.77	-1.034	.518
Self-efficacy (Self-efficacy Scale)	Pre-Test	28	67.29	15.09	-.648	.227
	Post-Test	28	81.32	16.33	-1.031	.799

Since the skewness and kurtosis coefficients presented in Table 5 were within the acceptable range, as established by George and Mallery (2019, p. 114), we proceeded to apply parametric tests. Specifically, we conducted a dependent sample t-test to determine whether a statistically significant difference existed between the pre-test and post-test scores of both the experimental and control groups concerning their writing skills and their sub-dimensions, as well as their scores on the writing self-efficacy scale and its sub-dimensions, all within their groups. Furthermore, we conducted a two-way ANOVA for complex measures to explore the variation in the pre-test and post-test scores of the experimental and control groups on both the rubric and self-efficacy scales.

### Experimental Process

In this section, the process steps of the experimental application process are given:

1. The research institution determined the writing activities and outcomes of the textbooks.
2. The learning outcomes of the textbook's writing activities were restructured seamlessly and thematically integrated into the flipped writing lesson, and a set of in-class and out-of-class activities was designed for the scope of the research project.
3. An implementation plan for conducting the experiment was developed to gain a holistic understanding of the experimental process.
4. A group of 28 students who had completed the A2 level was subjected to the A2 writing skills exam. Based on their scores, they were divided into the experimental and control groups.

5. Prior to the experiment, a pre-test involving the B1 writing test and the writing self-efficacy scale was administered.
6. The experiments were conducted as planned.
  - a. The students in the experimental group were instructed to implement flipped writing education during their six-week B1 education. In addition, they were introduced to the utilization of the Edpuzzle learning management system and Google Classroom for related tasks. The students were also provided with explanations about both the in-class and out-of-class stages of the writing activities that would occur throughout the process.
  - b. Throughout the six-week implementation period, videos were regularly uploaded to the Edpuzzle learning management system, and the corresponding activities were shared with the students.
  - c. Tasks associated with the videos and activity sheets were completed in the classroom setting.
  - d. To provide additional writing training support equivalent to the reinforcement time given to the experimental group, the control group participated in writing club activities on specific days of the week immediately following their lessons. During this phase, a different teacher conducted writing activities with students in the control group.
7. Following completion of the B1 level, both the writing skills exam and the pre-test-based writing self-efficacy scale were administered to both the experimental and control groups.
8. Data collected from the writing skills exam and writing self-efficacy scale were analyzed using statistical programs.

## **FINDINGS**

In this section, the findings of this study are presented under two primary headings: in the first section, findings regarding writing skills and their sub-dimensions are presented, while in the second section, findings regarding writing self-efficacy and its sub-dimensions are discussed.

### **Findings Related to the First Research Question**

An attempt was made to determine whether the experimental process, applied based on the purpose of the study, had an effect on the students' writing skills and the sub-dimensions of writing skills using the pre-test and post-test of writing skills. In this regard, the mean scores of the experimental and control groups on the writing skills test were compared both within and between groups.

#### ***Findings on General Writing Achievement***

Descriptive statistics of the pre- and post-test scores of the students in the experimental and control groups are shown in Table 6.

**Table 6.** Descriptive Statistics of Experimental and Control Group Students’ Writing Achievement Pre-test and Post-test Scores

General Writing Achievement	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	60,07	7,87
	Experimental	14,00	56,86	8,08
	Total	28,00	58,46	7,99
Post-Test	Control	14,00	72,07	6,82
	Experimental	14,00	80,07	8,17
	Total	28,00	76,07	8,43

Based on the information presented in Table 6, we can observe that the mean writing achievement scores of students in the control group, who underwent training using the current course curriculum, exhibited a rise from the first mean score of  $\bar{X}= 60.07$  in the pre-test to  $\bar{X}= 72.07$  in the post-test. Conversely, the mean writing achievement scores of students in the experimental group, who received writing training through a flipped learning approach, displayed an increase from  $\bar{X}= 56.86$  in the pre-test to  $\bar{X}= 80.07$  in the post-test following the experimental process.

The pre- and post-test mean scores of students in both the experimental and control groups were compared to assess whether there was a statistically significant difference. A two-way ANOVA test for complex measures was conducted as the data met the necessary prerequisites, including normal distribution. Table 7 displays the results of this two-way ANOVA, aimed at determining the statistical significance of the difference in writing achievement between the pre- and post-test mean scores of the experimental and control groups.

**Table 7.** Two-Way ANOVA Results Related to Writing Achievement Pre-test and Post-test Scores of Students in Experimental and Control Groups

Source of Variance	SS	df	MS	F	p
Intergroups	2242,48	27,00			
Group	80,16	1,00	80,16	0,96	0,34
Error	2162,32	26,00	83,17		
Intragroup	5742,50	28,00			
Measurement (Pre Test- Post Test)	4340,16	1,00	4340,16	117,28	0,01
<b>Group*Measurement</b>	440,16	1,00	440,16	11,89	0,01
Error	962,18	26,00	37,01		
Total	7984,90	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

Based on the information presented in Table 7, it can be concluded that group membership had a statistically significant impact on students’ writing achievement (as measured by the post-test–pre-test difference) in both the experimental and control groups. This signifies that the influence of belonging to different operation groups, as measured by writing achievement scores, was significant [ $F_{(1-26)}=11.89, p<.05$ ]. Furthermore, this significant difference was at a large effect size (partial eta squared:0.314). These results indicate that the use of flipped learning as an instructional approach for teaching writing had varying effects on the writing achievements of students in the experimental group compared with those in the control group, where current teaching methods were employed. Considering these findings, it can be inferred that flipped learning-based writing instruction practices are more effective in enhancing students’ writing achievements than are the conventional teaching methods currently in use.

**Findings Related to the Organization and Content Dimension of Writing**

Descriptive statistics of the pre- and post-test scores of the students in the experimental and control groups on the organization and content dimensions of writing are presented in Table 8.

**Table 8.** Descriptive Statistics Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students on the Organization and Content Dimension of Writing

Organization and Content Scores	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	15,79	2,55
	Experimental	14,00	15,07	3,97
	Total	28,00	15,43	3,29
Post-Test	Control	14,00	20,36	3,34
	Experimental	14,00	24,14	2,11
	Total	28,00	22,25	3,35

Based on the information provided in Table 8, we can observe that the average achievement scores of the control group, which underwent training following the current course structure, showed an increase from an initial mean score of  $\bar{X}=15.79$  in the pre-test to  $\bar{X}=20.36$  in the post-test within the organization and content dimension of writing. In contrast, the average achievement scores of the experimental group, who received writing instruction based on flipped learning, started at  $\bar{X}=15.07$  in the pre-test and significantly improved to  $\bar{X}=24.14$  in the post-test following the experimental process.

The mean scores of both the experimental and control groups in the pre-test and post-test phases were compared to determine whether there was a statistically significant difference in the organization and content dimensions of writing between these groups. To assess this, a two-way ANOVA test for complex measures was conducted, given that the data met the assumptions of a normal distribution and other relevant prerequisites. Table 9 presents the outcomes of the two-way ANOVA for complex measures, which assesses the statistical significance of the disparities in the pre-test and post-test mean scores for the organization and content dimensions of writing between the experimental and control groups.

**Table 9.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students on the Organization and Content Dimension of Writing

Source of Variance	SS	df	MS	F	p
Intergroups	164,03	27,00			
Group	16,51	1,00	16,51	2,91	0,10
Error	147,52	26,00	5,67		
Intragroup	919,50	28,00			
Measurement (Pre Test- Post Test)	651,45	1,00	651,45	85,90	0,01
<b>Group*Measurement</b>	70,88	1,00	70,88	9,35	0,01
Error	197,18	26,00	7,58		
Total	1116,68	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

Based on the data presented in Table 9, it can be concluded that there is a statistically significant impact of group membership on student achievement in the organization and content dimensions of writing (as indicated by the post-test–pre-test difference) within both the experimental and control groups. This signifies that the influence

of belonging to different treatment groups, as measured by the organization and content dimension scores in writing, was indeed significant [ $F_{(1-26)}=9.35$ ,  $p<.05$ ]. Furthermore, this significant difference is substantial in magnitude, with a large effect size (partial eta squared:0.264). These findings indicate that the use of flipped learning instruction had varying effects on the achievement of students in the experimental group compared with those in the control group, where conventional instruction methods were employed, particularly in the organization and content dimensions of writing. Consequently, it can be inferred that flipped learning-based writing instruction practices are more effective in enhancing students' achievement in the organization and content dimensions of writing than writing course practices currently in use.

### **Findings Related to the Language and Expression Dimension of Writing**

The data related to the language and expression dimensions of writing, including descriptive statistics of pre- and post-test scores for students in both the experimental and control groups, are shown in Table 10.

**Table 10.** Descriptive Statistics Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students in the Language and Expression Dimension of Writing

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	17,14	2,21
	Experimental	14,00	16,50	1,70
	Total	28,00	16,82	1,96
Post-Test	Control	14,00	19,57	1,87
	Experimental	14,00	21,93	1,86
	Total	28,00	20,75	2,19

Based on the information provided in Table 10, it is evident that the average achievement scores in the language and expression dimension of writing for the control group, which underwent training following the current course operation, experienced an increase from an initial mean score of  $\bar{X}=17.14$  in the pre-test to  $\bar{X}=19.57$  in the post-test. In contrast, the average achievement scores of the experimental group, who received writing instruction based on flipped learning, started at  $\bar{X}=16.50$  in the pre-test and showed significant improvement, reaching  $\bar{X}=21.93$  in the post-test after the experimental process.

The study examined whether there was a statistically significant difference between the pre-test and post-test mean scores of students in both the experimental and control groups in terms of their language and expression skills in writing. This comparison was carried out using a two-way ANOVA test for complex measures, as the data met the necessary prerequisites, including a normal distribution. Table 11 displays the results of the two-way ANOVA, indicating whether there was a statistically significant difference in language and expression achievement between the pre-test and post-test mean scores of the experimental and control groups.

**Table 11.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students in the Language and Expression Dimension of Writing

Source of Variance	SS	df	MS	F	p
Intergroups	66,71	27,00			
Group	5,14	1,00	5,14	2,17	0,15
Error	61,57	26,00	2,37		
Intragroup	316,00	28,00			
Measurement (Pre Test- Post Test)	216,07	1,00	216,07	82,10	0,01
<b>Group*Measurement</b>	31,50	1,00	31,50	11,97	0,01
Error	68,43	26,00	2,63		
Total	382,71	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

In accordance with the data presented in Table 11, it can be concluded that there was a statistically significant group effect on the achievement of students in both the experimental and control groups regarding the language and expression dimensions of writing (measured as the difference between the post-test and pre-test scores). In other words, the impact of being in different treatment groups on the scores obtained on the language and expression dimensions of writing as a result of repeated measurements was statistically significant [ $F_{(1-26)}=11.97$ ,  $p < .05$ ]. This significant difference reflects a substantial effect size (partial eta squared, 0.315). These findings indicate that the utilization of flipped learning-based writing instruction has distinct effects on the achievement of students in the experimental group compared with students in the control group, who followed traditional learning methods. Specifically, flipped learning-based writing instruction appears to be more effective in enhancing students' performance in the language and expression dimensions of writing than current writing course approaches.

**Findings Related to the Vocabulary Dimension of Writing**

Descriptive statistics of the pre- and post-test scores of the students in the experimental and control groups on the vocabulary dimension of writing are given in Table 12.

**Table 12.** Descriptive Statistics Related to the Pre-test and Post-test Scores of the Experimental and Control Group Students on the Vocabulary Dimension of Writing

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	7,50	1,22
	Experimental	14,00	6,93	1,00
	Total	28,00	7,21	1,13
Post-Test	Control	14,00	8,43	1,40
	Experimental	14,00	9,71	2,33
	Total	28,00	9,07	2,00

According to the information presented in Table 12, the average achievement scores for the control group, who underwent training using the current course methods in the writing vocabulary dimension, showed an increase from an initial mean score of 7.50 in the pre-test to 8.43 in the post-test. In contrast, the students in the experimental group, who received writing education utilizing flipped learning approaches in the vocabulary dimension of writing, exhibited mean achievement scores of 6.93 in the pre-test and 9.71 in the post-test following the experimental phase.

The mean scores of both the experimental and control groups in the pre-test and post-test phases, specifically in the vocabulary dimension of writing, were subjected to a comparative analysis to determine if there was a statistically significant difference between these groups. Given that the data met the necessary assumptions, a two-way analysis of variance (ANOVA) test for complex measures was conducted. Table 13 presents the outcomes of this two-way ANOVA, specifically examining the statistical significance of the differences in the pre-test and post-test mean scores between the experimental and control groups in relation to the vocabulary dimension of writing.

**Table 13.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students on the Vocabulary Dimension of Writing

Source of Variance	SS	df	MS	F	p
Intergroups	37,93	27,00			
Group	0,89	1,00	0,89	0,63	0,44
Error	37,04	26,00	1,42		
Intragroup	115,00	28,00			
Measurement (Pre Test- Post Test)	48,29	1,00	48,29	22,98	0,01
<b>Group*Measurement</b>	12,07	1,00	12,07	5,74	0,02
Error	54,64	26,00	2,10		
Total	152,93	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

Referring to the data presented in Table 13, it can be asserted that there was a statistically significant group effect on students' achievement in the vocabulary dimension of writing (as indicated by the post-test–pre-test difference) between the experimental and control groups. In other words, the impact of being in different operation groups on vocabulary scores, as observed through repeated measurements, was statistically significant [ $F_{(1-26)}=5.74$ ,  $p < .05$ ]. The significant difference was at a large effect level (partial eta squared:0.181). These findings suggest that the implementation of writing instruction based on the flipped learning approach allows for differing outcomes in terms of student achievement in the vocabulary dimension of writing when compared to the current teaching methods employed in the control group. Specifically, flipped learning-based writing instruction appears to be more effective in enhancing student achievement in the vocabulary dimension of writing than the traditional teaching methods currently in use.

**Findings Related to the Spelling and Grammar Dimension of Writing**

The descriptive statistics of the pre-test and post-test scores of the students in the experimental and control groups on the spelling and language dimensions of writing are presented in Table 14.

**Table 14.** Descriptive Statistics Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students in the Spelling and Grammar Dimension of Writing

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	19,64	2,95
	Experimental	14,00	18,36	2,53
	Total	28,00	19,00	2,78
Post-Test	Control	14,00	23,71	3,43
	Experimental	14,00	24,29	3,63
	Total	28,00	24,00	3,47

Based on the information presented in Table 14, the average achievement scores of students in the control group, who underwent training using the existing course structure, exhibited an increase in the spelling and grammar aspects of writing, rising from an initial mean score of  $\bar{X}=19.64$  in the pre-test to  $\bar{X}=23.71$  in the post-test. Conversely, students in the experimental group, who received writing education centered around flipped learning, started with a mean pre-test score of  $\bar{X}=18.36$  and saw an increase to  $\bar{X}=24.29$  in the post-test following the experimental process.

The comparison of the pre-test and post-test mean scores for the spelling and grammar dimensions of writing between the experimental and control groups aimed to determine if a statistically significant difference existed. Given that the data exhibited a normal distribution and met other necessary conditions, a two-way analysis of variance (ANOVA) test for complex measures was conducted. Table 15 presents the results of the two-way ANOVA for complex measures, specifically addressing the statistical significance of differences in pre-test and post-test mean scores between the experimental and control groups in terms of spelling and grammar achievement.

**Table 15.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students in the Spelling and Grammar Dimension of Writing

Source of Variance	SS	df	MS	F	p
Intergroups	371,00	27,00			
Group	1,786	1,00	1,79	0,13	0,73
Error	369,214	26,00	14,20		
Intragroup	513,00	28,00			
Measurement (Pre Test- Post Test)	350,010	1,00	350,01	60,29	0,01
<b>Group*Measurement</b>	12,071	1,00	12,07	2,08	0,16
Error	150,929	26,00	5,80		
Total	884,00	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

According to the data presented in Table 15, it can be concluded that there was no statistically significant impact of group membership (experimental vs. control) on the improvement in scores (post-test–pre-test difference) related to the spelling and grammar dimension of writing. In other words, the observed differences in scores between the two groups were not statistically significant [ $F_{(1,26)}=2.08, p > .05$ ]. These findings indicate that the use of flipped learning-based writing instruction did not yield distinct outcomes in terms of student achievement when compared to students in the control group, who followed the current learning approach without experimental intervention, specifically concerning spelling and grammar skills in writing. Consequently, it can be inferred that flipped learning-based writing instruction methods do not exhibit superior effectiveness in enhancing student achievement in the spelling and grammar aspects of writing when contrasted with the writing course practices currently in use.

### Findings Related to the Second Research Question

In accordance with the objectives of the research, an attempt was made to assess whether the experimental procedure, aligned with the goals of the research, had an impact on students' writing self-efficacy and its sub-



dimensions, using the pre-test and post-test application of the writing self-efficacy scale. To achieve this, a comparison was made between the average scores of students in both the experimental and control groups, both inter- and intra-group, with respect to the writing self-efficacy scale.

**Findings Related to Writing Self-Efficacy**

Descriptive statistics of the pre-test and post-test scores of the students in the experimental and control groups on the writing self-efficacy scale are given in Table 16.

**Table 16.** Descriptive Statistics of Experimental and Control Group Students’ Writing Self-Efficacy Pre-test and Post-test Scores

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	67,86	15,72
	Experimental	14,00	66,71	15,00
	Total	28,00	67,29	15,09
Post-Test	Control	14,00	77,07	20,27
	Experimental	14,00	85,57	10,21
	Total	28,00	81,32	16,33

In accordance with the information presented in Table 16, we observe that the control group students, who underwent training following the current course structure, exhibited a mean writing self-efficacy score of  $\bar{X}=67.86$  in the pre-test, which subsequently increased to  $\bar{X}=77.07$  in the post-test. Conversely, the experimental group students, who received writing instruction through a flipped learning approach, displayed a mean writing self-efficacy score of  $\bar{X}=66.71$  in the pre-test prior to the experimental process, which saw a notable rise to  $\bar{X}=85.57$  in the post-test following the experimental process.

The pre-test and post-test mean scores of the students in the experimental and control groups on the writing self-efficacy scale were compared between the groups to determine whether there was a statistically significant difference. Although the data exhibited a normal distribution, the assumption of homogeneity of variance was not met. Therefore, the Greenhouse-Geisser test was used to address this issue, followed by two-way ANOVA for complex measures. Table 17 presents the results of the two-way ANOVA for complex measures, indicating whether the variance in the pre-test and post-test mean scores between the experimental and control groups on the writing self-efficacy scale is statistically significant.

**Table 17.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students from the Writing Self-Efficacy Scale

Source of Variance	SS	df	MS	F	p
Intergroups	11770,30	27,00			
Group	189,45	1,00	189,45	0,43	0,52
Error	11580,89	26,00	445,42		
Intragroup	4339,50	28,00			
Measurement (Pre Test- Post Test)	2758,02	1,00	2758,02	57,09	0,01
<b>Group*Measurement</b>	325,45	1,00	325,45	6,74	0,02
Error	1256,04	26,00	48,31		
Total	16109,80	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

Based on the data presented in Table 17, it is evident that the group factor had a statistically significant impact on students' writing self-efficacy (post-test–pre-test difference) within both the experimental and control groups. In other words, the collective influence of the repeated measurement factor, which involves students in different operation groups, significantly affected the scores related to writing self-efficacy [ $F_{(1-26)}=6.74$ ,  $p < .05$ ]. This difference was characterized by a large effect size (partial eta squared:0.206). These findings indicate that flipped learning-based writing instruction has a distinct effect on the writing self-efficacy of students in the experimental group compared to those in the control group, where the experimental process was not implemented and current learning methods were employed. Consequently, it is apparent that flipped learning-based writing instruction practices are more effective at enhancing students' writing self-efficacy.

### **Findings Related to the Using Grammar Rules Dimension of Writing Self-Efficacy**

The descriptive statistics of the pre- and post-test scores of the students in the experimental and control groups on the dimension of using grammar rules of writing self-efficacy are given in Table 18.

**Table 18.** Descriptive Statistics Regarding the Pre-test and Post-test Scores of the Experimental and Control Group Students from the Using Grammar Rules Dimension of Writing Self-Efficacy

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	11,50	3,41
	Experimental	14,00	12,36	3,59
	Total	28,00	11,93	3,46
Post-Test	Control	14,00	14,50	3,86
	Experimental	14,00	14,57	3,11
	Total	28,00	14,54	3,44

In accordance with the information provided in Table 18, it is evident that there was an increase in the mean scores of the control group students, who underwent training using the current course operation in the area of applying grammar rules to enhance their writing self-efficacy. Specifically, their mean score improved from an initial value of  $\bar{X}=11.5$  during the pre-test to  $\bar{X}=14.50$  in the post-test. In contrast, for the students in the experimental group who received writing instruction through the flipped learning approach, their mean scores in the pre-test were  $\bar{X}=12.36$ , and following the experimental process, they exhibited an increase to  $\bar{X}=14.57$  in the post-test.

The mean scores of the pre-test and post-test assessments of students in both the experimental and control groups were analyzed to determine whether there was a statistically significant difference in their performance in the domain of applying grammar rules to enhance their writing self-efficacy. As the data exhibited a normal distribution and met the necessary criteria, a two-way ANOVA test for complex measures was conducted. The results of the two-way ANOVA test, which aimed to establish whether the variations in the pre-test and post-test mean scores between the experimental and control groups with regard to their proficiency in utilizing grammar rules for writing self-efficacy were statistically significant, are shown in Table 19.

**Table 19.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Students in the Experimental and Control Groups on the Using Grammar Rules Dimension of Writing Self-Efficacy

Source of Variance	SS	df	MS	F	p
Intergroups	537,48	27,00			
Group	3,02	1,00	3,02	0,15	0,70
Error	534,46	26,00	20,56		
Intragroup	200,50	28,00			
Measurement (Pre Test- Post Test)	95,16	1,00	95,16	23,98	0,01
<b>Group*Measurement</b>	2,16	1,00	2,16	0,54	0,47
Error	103,18	26,00	3,97		
Total	737,98	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

In reference to the data presented in Table 19, it can be concluded that there was no statistically significant difference in the impact of group membership (experimental and control) on students' scores for the dimension of using grammar rules in writing self-efficacy (post-test minus pre-test difference). In other words, the influence of being in different treatment groups on scores related to the use of grammar rules in writing self-efficacy was not significant [ $F_{(1-26)}=0,54$   $p > .05$ ]. These findings indicate that the implementation of flipped learning-based writing instruction did not result in a noticeable difference in scores between students in the experimental and control groups, where current instructional methods were employed for writing. Accordingly, it can be inferred that writing education practices based on flipped learning are not more effective at enhancing students' self-efficacy in utilizing grammar rules in their writing than writing course methods currently in use.

**Findings Related to Expression and Form Dimension of Writing Self-Efficacy**

Descriptive statistics of the pre-test and post-test scores of the students in the experimental and control groups on the expression and form dimensions of writing self-efficacy are presented in Table 20.

**Table 20.** Descriptive Statistics Related to the Pre-test and Post-test Scores of the Students in the Experimental and Control Groups in the Expression and Form Dimensions of Writing Self-Efficacy

Test	Groups	N	$\bar{X}$	Sd
Pre-Test	Control	14,00	56,36	13,80
	Experimental	14,00	54,36	12,12
	Total	28,00	55,36	12,79
Post-Test	Control	14,00	62,57	17,14
	Experimental	14,00	71,00	7,87
	Total	28,00	66,79	13,77

Considering the information provided in Table 20, it can be observed that the average scores of students in the control group, who underwent training following the current course operation, showed an improvement in their writing self-efficacy scores in the expression and form dimensions. Specifically, their mean score increased from an initial pre-test value of  $\bar{X}=56.36$  to  $\bar{X}=62.57$  in the post-test. Conversely, the mean scores of students in the experimental group who received writing training through flipped learning exhibited a noteworthy change in their writing self-efficacy scores in the expression and form dimensions. Prior to the experimental process, their mean score in the pre-test was  $\bar{X}=54.36$ , and following the experimental process, it increased substantially to  $\bar{X}=71.00$  in the post-test.

A comparison of pre-test and post-test mean scores in the expression and form dimension of writing self-efficacy for students in both the experimental and control groups was undertaken to determine if there was a statistically significant difference between the two groups. Despite the data displaying a normal distribution, it is important to note that the assumption of homogeneity of variance was not met. Consequently, the Greenhouse-Geisser test was interpreted, followed by a two-way ANOVA test for complex measures. In light of this approach, Table 21 presents the outcomes of the two-way ANOVA for complex measures, assessing whether the differences in pre-test and post-test mean scores between the experimental and control groups in the context of the expression and form dimensions of writing self-efficacy are statistically significant.

**Table 21.** Two-Way ANOVA Results Regarding the Pre-test and Post-test Scores of the Expression and Form Dimension of Writing Self-Efficacy of the Students in the Experimental and Control Groups

Source of Variance	SS	df	MS	F	p
Intergroups	8331.70	27,00			
Group	144.64	1,00	144,64	0,46	0,50
Error	8187.07	26,00	314,89		
Intragroup	3034.00	28,00			
Measurement (Pre-Test- Post-Test)	1828.57	1,00	1828,57	57,64	0,01
<b>Group*Measurement</b>	380,64	1,00	380,64	12,00	0,01
Error	824,79	26,00	31,72		
Total	11365,70	55,00			

SS: Sum of Squares, df: Degree of Freedom, MS: Mean of Squares, F: F-Ratio, p: Significance Level

With reference to the data presented in Table 21, it is evident that there is a statistically significant group effect on the changes in the expression and form dimension scores (post-test minus pre-test) of writing self-efficacy among students in both the experimental and control groups. In other words, the impact of belonging to different treatment groups, as a repeated measurement factor, had a significant influence on the achievement scores related to expression and form in writing [ $F_{(1-26)}=12.00$ ,  $p < .05$ ]. The significant difference was at a large effect level (partial eta squared:0.316). These results indicate that students in the experimental group, where flipped learning instruction practices were implemented, experienced a different impact on their perception of expression and form dimension in writing self-efficacy compared to students in the control group, who received current teaching methods. Consequently, it is apparent that flipped learning-based writing instruction is more effective in enhancing students' perception of their writing self-efficacy in terms of expression and form than the writing course approaches currently in use.

## CONCLUSION and DISCUSSION

This study aimed to determine the impact of flipped learning instruction on the writing skills and writing self-efficacy of international students acquiring Turkish as a second language. Based on the findings, it was determined that the writing achievement of the experimental group, which received writing education based on flipped learning, increased significantly when compared to the achievement of the control group, which received writing instruction according to current practice. Considering the sub-dimensions of writing skills, the experimental group engaged in flipped writing practices demonstrated statistically significant improvement in the dimensions of organization and content, language and expression, and vocabulary, whereas there was no

statistically significant difference in the dimensions of grammar and spelling. The findings of this study on general writing achievement are consistent with those of Ekmekçi (2014) and Unk Ilseyanti et al. (2016), Abdelshaheed (2017), Yitolu (2017), Leis et al. (2015), Qader (2017), and Soltanpour & Valizadeh (2018).

In a study conducted with university students learning English as a foreign language, Leis et al. (2015) discovered that the group that received writing instruction based on flipped learning tended to use more words in their written expressions than the control group. In a study conducted with EFL learners in Taiwan, Hsieh et al. (2017) found that students' idiom vocabulary was considerably higher in a group taught using a flipped learning model. The results of this study also indicate that writing instruction based on the flipped learning model is more effective than the current course teaching process for enhancing the vocabulary dimension of writing.

In Ekmekçi's (2014) study, it was revealed that the most significant enhancements in written texts produced by students occurred in terms of relevance and content, followed by improvements in organization and structure, overall presentation, word diversity and selection, grammar and sentence structure, and spelling rules. Ahmed (2016) examined the impact of instruction based on the flipped learning approach on the thought, content, Organization, form and expression dimensions of writing of university students learning English in Saudi Arabia. His findings indicated that the instruction provided resulted in statistical significance in all dimensions compared to the control group. Consequently, this study aligns with the research outcomes of both Ekmekçi (2014) and Ahmed (2016) concerning the sub-dimensions of writing, except for the spelling and grammar dimensions. However, it should be noted that the results of this study pertaining to the grammar and spelling aspects of writing differ from those of Ekmekçi's (2014) study. Notably, Ekmekçi's (2014) research was conducted with Turkish EFL learners at the university level, and the study spanned a single semester lasting for 14 weeks.

Harvey's (2013) study revealed that, when implementing the flipped learning model for a short period, no significant impact was evident. However, as time progressed and more topics were covered, this effect became apparent. This suggests that variations in spelling and grammar skills in writing may be related to the duration of the experimental process. Notably, in contrast to our 6-week study, Ekmekçi's study lasted for 14 weeks. Additionally, in the context of English education in Turkey, students receive English education for a minimum of 8 years before university. Thus, they were already familiar with nearly all grammar topics covered in their university-level English education. In contrast, the international students who participated in this study had only studied Turkish for three months before the research and had encountered the grammar topics included in the study for the first time. Furthermore, B1 is notably one of the stages in which teaching Turkish as a foreign language places significant emphasis on grammar topics. It is possible that these kinds of situations, along with similar factors, may not have a positive impact on students' pre-class preparation, especially concerning the spelling and grammatical aspects of writing. Additionally, researchers' differing perspectives on the focal point of writing may play a role in achieving different results in terms of spelling and grammar. Writing skills comprise of various subcomponents. Therefore, in a flipped writing class, it can be thought that the sub-dimensions highlighted by the researcher may improve more.

To better comprehend the study's findings on grammar, the literature analysis reveals the following results: In the study conducted by Al-Harbi and Alshumaimeri (2016) with secondary school students learning English in Saudi Arabia, grammar was taught using the flipped learning model, and it was concluded that the model had a significant effect on grammar performance, but this effect was not statistically significant. According to Yavuz's (2020) research, the effect of flipped learning on foreign language grammar achievement scores was not statistically significant. In this study, the experimental group of students who received writing training based on flipped learning did not demonstrate a statistically significant difference from the control group of students, despite having mathematically higher score increases in the grammar and spelling dimensions of writing skills. When specifically assessed in these two studies, it is not clear whether the flipped learning model has a higher impact on spelling and grammar than the traditional approach. Nevertheless, additional studies (Bulut, 2018; Dinçer, 2020; Karakurt, 2018; Seçilmişoğlu, 2019) have focused on the influence of the flipped learning model on grammar achievement in the context of foreign language instruction, reporting a positive effect. The diversity in outcomes may be attributed to factors such as the characteristics of the study participants, duration of the experiments, and experimental design. As a matter of fact, a significant part of the mentioned studies continued for one semester, spanning 14 weeks.

The results concerning the second sub-problem in this study revealed a significant statistical increase in the writing self-efficacy of the group exposed to writing instruction through flipped learning compared to the group receiving current instruction methods. Furthermore, when analyzing the sub-dimensions of writing self-efficacy, a significant difference was observed in the dimension of expression and form, while no statistically significant difference was found in the dimension related to the use of grammar rules when compared to the current instruction methods. Additionally, it is worth noting that, although not statistically significant, the control group exhibited a higher mathematical increase in scores than the experimental group. These findings about writing self-efficacy align with previous research conducted by Hsiao et al. (2021) and Nourinezhad et al. (2022) but contradict the findings of a study conducted by İyitoğlu (2018). Moreover, various studies on various skills in foreign language instruction, such as those by Fathi and Barkhoda (2021), Namaziandost and Çakmak (2020), and Namaziandost et al. (2020) offer additional insights into this field. In a qualitative investigation conducted by Ping et al. (2020), a significant proportion of Malaysian EFL learners with limited academic proficiency reported enhanced confidence in their writing efficacy and improved writing skills following participation in a flipped writing program. Abeysekera and Dawson (2015) suggest that, in accordance with self-determination theory, learners possess three fundamental cognitive requirements: competence, autonomy, and relatedness, and that an educational environment based on flipped learning contributes to competence and autonomy, especially through feeling experienced, establishing relationships with the group, and making individual decisions about the learning process. According to Bandura's (1997) theory of self-efficacy, both direct and indirect experiences gained through observation play a pivotal role in shaping one's perception of self-efficacy. Consequently, within a writing environment based on flipped learning, it can be thought that the opportunity for individuals to engage in comprehensive preparation and study of the subject matter before class, the identification and elimination of

personal shortcomings during the preparatory phase, and ultimately, the acquisition of subject knowledge to contribute effectively to in-class discussions collectively contribute to the enhancement of writing self-efficacy.

Research findings indicate that perception of self-efficacy plays a pivotal role in predicting writing skills, demonstrating a noteworthy correlation with writing performance across various studies (Bruning & Horn, 2000; Graham et al., 2019; McCarthy et al., 1985; Pajares et al., 1999; Rankin et al., 1994; Schunk & Swartz, 1993; Webb et al., 2016; Woodrow, 2011). In the context of our study, we observed no statistically significant differences in academic achievement in spelling and grammar in writing. Additionally, no statistically significant advantage was detected in the experimental group in terms of the utilization of grammar rules in writing self-efficacy. Therefore, it can be said that these results of the research have consistency in terms of both skills and self-efficacy beliefs in the grammar dimension of writing. Moreover, a statistically significant difference was observed in both the language and expression dimensions, and the organization and content dimensions of writing skills. Similarly, a statistically significant difference was found in the expression and form dimensions of writing self-efficacy. Therefore, it can be asserted that the research results consistently demonstrate the relationship between self-efficacy and performance in these dimensions. When we interpret the quantitative findings of the study along with results from similar research in the literature, it can be concluded that writing education practices based on flipped learning positively impact writing skills and the perception of writing self-efficacy in the context of Turkish as a foreign language in general.

## **SUGGESTIONS**

1. It has been established that the implementation of flipped learning in writing education enhances language learners writing achievements. Consequently, activities aligned with the flipped learning model could be conducted to enhance students' Turkish language writing skills.
2. This study was conducted with B1-level learners of Turkish as a foreign language. Further investigations could explore the impact of the flipped learning model on writing skills at various proficiency levels.
3. Detailed research should be conducted to reveal the mediating factors that contribute to the development of writing abilities and self-efficacy in writing within the context of flipped learning applications.
4. In this quasi-experimental research, international Turkish language learners were not categorized by their level of achievement (low, intermediate, or advanced), and the analysis was conducted considering the overall achievement level of the entire class. Existing literature suggests that the flipped learning model tends to be more beneficial for students with lower academic performance. Accordingly, studies can be conducted to determine the level of benefit of the flipped learning model for groups with low, intermediate, and high writing achievement.
5. Studies can be conducted to thoroughly examine how flipped learning affects both the grammatical dimension of writing and the dimension of writing self-efficacy related to the use of grammatical rules.

## ETHICAL TEXT

In this article, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules have been followed. The responsibility for any violations that may arise regarding the article belongs to the authors. The ethics committee permission of the article was given by Yıldız Technical University Social and Human Sciences Research Ethics Committee at its meeting numbered 2021/05 on 28.07.2021.

**Author(s) Contribution Rate:** In this study, the contribution rate of the first author is 60%, the contribution rate of the second author is 30%, and the contribution rate of the third author is 10%.

## REFERENCES

- Abdelshaheed, B. S. M. (2017). Using flipped learning model in teaching English language among female English majors in Majmaah University. *English Language Teaching*, 10(11), 96-110. <https://doi.org/10.5539/elt.v10n11p96>
- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development*, 34(1), 1-14. <https://doi.org/10.1080/07294360.2014.934336>
- Afrilyasanti, R., Cahyono, B. Y., & Astuti, U. P. (2015). Effect of flipped classroom model on Indonesian EFL students' writing ability across and individual differences in learning. *International Journal of English Language and Linguistics Research*, 4(5), 65-81. <https://www.eajournals.org/wp-content/uploads/Effect-Of-Flipped-Classroom-Model-on-Indonesian-EFL-Students%E2%80%99-Writing-Ability-Across-and-Individual-Differences-in-Learning.pdf>
- Ahmed, M. A. E. A. S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language*, 14(2), 98-114. <https://doi.org/10.17265/1539-8080/2016.02.003>
- Alan, Y. (2019). *4+1 Planlı yazma ve değerlendirme modelinin Türkçeyi yabancı dil olarak öğrenen öğrencilerin yazma becerilerine ve bağdaşıklık araçlarını kullanma düzeylerine etkisi* [Yayımlanmamış doktora tezi]. Hatay Mustafa Kemal Üniversitesi.
- Al-Harbi, S. S., & Alshumaimeri, Y. A. (2016). The flipped classroom impact in grammar class on EFL Saudi secondary school students' performances and attitudes. *English Language Teaching*, 9(10), 60-80. <https://doi.org/10.5539/elt.v9n10p60>
- Arslan, A. (2020). A systematic review on flipped learning in teaching English as a foreign or second language. *Journal of Language and Linguistic Studies*, 16(2), 775-797. <https://doi.org/10.17263/jlls.759300>
- Aydemir, E. (2019). *The impact of flipped classroom approach on the reading and writing achievement, self-regulated learning, and classroom interaction of pre-service English teachers* [Yayımlanmamış doktora tezi]. Bahçeşehir Üniversitesi.
- Bağcı, H., & Başar, U. (2013). Yazma Eğitimi. In M. Durmuş & A. Okur (Ed.), *Yabancılar Türkçe Öğretimi: El Kitabı* (ss. 309-331). Grafiker.
-



- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.
- Barkaoui, K. (2007). Teaching writing to second language learners: Insights from theory and research. *TESL Reporter*, 40(1), 35-48. <https://www.researchgate.net/file.PostFileLoader.html?id=55bd22735f7f71e9268b456e&assetKey=AS%3A273823486676992%401442296014069>
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.
- Bruning, R., & Horn, C. (2000). Developing motivation to write. *Educational Psychologist*, 35(1), 25-37. [https://doi.org/10.1207/S15326985EP3501\\_4](https://doi.org/10.1207/S15326985EP3501_4)
- Bulut, C. (2018). *Impact of flipped classroom model on EFL learners' grammar achievement: Not only inversion, but also integration* [Yayımlanmamış yüksek lisans tezi]. Yeditepe Üniversitesi.
- Büyükkız, K. K. (2012). Türkçeyi ikinci dil olarak öğrenen yabancılar için yazma becerisi öz yeterlilik ölçeğinin geliştirilmesi: Geçerlilik ve güvenilirlik çalışması. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(12), 69-80. <https://dergipark.org.tr/tr/pub/mkusbed/issue/19552/208324>
- Büyüköztürk, Ş. (2020). *Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum* (28. bs). Pegem Akademi.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2017). *Bilimsel Araştırma Yöntemleri* (23. bs). Pegem Akademi.
- Creswell, J. W. (2017). Nicel yöntemler. In S. B. Demir (Ed.), & M. Bursal (Çev.), *Araştırma deseni: Nitel, nicel ve karma yöntem yaklaşımları* (3. bs). Eğiten Kitap.
- Çakır, İ. (2010). Yazma Becerisinin Kazanılması Yabancı Dil Öğretiminde Neden Zordur? *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(28), 165-176. <https://dergipark.org.tr/tr/download/article-file/219533>
- Dinçer, N. (2020). *The effects of flipped learning model on EFL students' grammar proficiency and learner autonomy* [Yayımlanmamış yüksek lisans tezi]. Bahçeşehir Üniversitesi.
- Ekmekçi, E. (2014). *Flipped writing class model with a focus on blended learning* [Yayımlanmamış doktora tezi]. Gazi Üniversitesi.
- Erol, H. F. (2016). Yabancı Dil Olarak Türkçe Öğretiminde Yazma Becerisi. In F. Yıldırım & B. Tüfekçioğlu (Ed.), *Yabancı Dil Olarak Türkçe Öğretimi: Kuramlar, Yöntemler, Beceriler, Uygulamalar*. Pegem Akademi.
- Engin, M., & Donancı, S. (2014). Flipping the classroom in an academic writing course. *Journal of Teaching and Learning with Technology*, 3(1), 94-98. <https://doi.org/10.14434/jotlt.v3n1.4088>
- Fathi, J., & Barkhoda, J. (2021). Exploring the effect of flipped classroom on EFL learners' reading achievement and self-efficacy. *Journal of Foreign Language Research*, 11(3), 435-452. <https://doi.org/10.22059/jflr.2021.330102.889>
- Flipped Learning Network (2023). The four pillars of F-L-I-P™. <https://flippedlearning.org/definition-of-flipped-learning/>
-

- Gasmi, A. A. (2017). *An investigation of the impact of flipped instruction on EFL students' engagement in academic writing classes: A case study of foundation students in Oman* [Unpublished doctoral dissertation]. The University of Liverpool.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 25 step by step: A simple guide and reference* (Fifteenth edition). Routledge, Taylor & Francis Group.
- Graham, S., Wijekumar, K., Harris, K. R., Lei, P.-W., Fishman, E., Ray, A. B., & Houston, J. (2019). Writing skills, knowledge, motivation, and strategic behavior predict students' persuasive writing performance in the context of robust writing instruction. *The Elementary School Journal*, 119(3), 487-510. <https://doi.org/10.1086/701720>
- Güneş, F. (2013). *Türkçe öğretimi: Yaklaşımlar ve modeller*. Pegem Akademi.
- Gürlüyer, M., & Elkılıç, G. (2020). Examining EFL students' achievements and perceptions in terms of writing skills in flipped classroom environment. *Kastamonu Education Journal*, 28(3), 1471-1486. <https://doi.org/10.24106/kefdergi.4190>
- Harmankaya, M. Ö., Sallabaş, M. E., & Toker, T. (2022). Türkçeyi yabancı dil olarak öğreten ve öğrenenler için A2 düzeyi yazma becerisi dereceli puanlama anahtarı geliştirme çalışması. *IBAD Sosyal Bilimler Dergisi*, 13, 511-524. <https://doi.org/10.21733/ibad.1212818>
- Harvey, S. (2014). The "flipped" Latin classroom: A case study. *Classical World*, 108(1), 117-127. <https://doi.org/10.1353/clw.2014.0060>
- Hayes, J. R., & Flower, L. S. (1980). Identifying the organization of writing processes. In L. W. Gregg & E. R. Steinberg (Ed.), *Cognitive processes in writing* (ss. 3-30). Lawrence Erlbaum.
- Hayırsever, F. (2021). Ters yüz sınıf modelinin yükseköğretim düzeyinde uygulanması ve değerlendirilmesi. In A. Özdemir (Ed.), *Ters yüz sınıf modeli: Kuramdan uygulamaya* (ss. 191-245). Pegem Akademi.
- Hedge, T. (2008). *Writing* (2. bs). Oxford University Press.
- Hsiao, I.-C. V., Hung, S.-T. A., & Huang, H.-T. D. (2021). The flipped classroom approach in an English for specific purposes (ESP) course: A quasi-experimental study on learners' self-efficacy, study process, and learning performances. *Journal of Research on Technology in Education*, 1-20. <https://doi.org/10.1080/15391523.2021.1976329>
- Hsieh, J. S. C., Wu, W.C. V., & Marek, M. W. (2017). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, 30(1-2), 1-21. <https://doi.org/10.1080/09588221.2015.1111910>
- Hung, H.-T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. <https://doi.org/10.1080/09588221.2014.967701>
- Hyland, K. (2003). *Second language writing*. Cambridge University Press.
- İyitoğlu, O. (2018). *The impact of flipped classroom model on EFL learners' academic achievement, attitudes and self-efficacy beliefs: A mixed method study* [Yayımlanmamış doktora tezi]. Yıldız Teknik Üniversitesi.
- Kadan, Ö. F. (2020). *5E öğrenme modelinin Türkçeyi yabancı dil olarak öğrenen öğrencilerin yazmaya yönelik tutum ve yazma becerilerine etkisi* [Yayımlanmamış doktora tezi]. Hatay Mustafa Kemal Üniversitesi.
-

- Karakurt, L. (2018). *Flipped and blended grammar instruction for b1 level efl classes at tertiary education* [Yayımlanmamış yüksek lisans tezi]. Hacettepe Üniversitesi.
- Karatay, H. (2020). Türkçenin yabancı dil olarak öğretiminde yazma eğitimi. In H. Karatay (Ed.), *Türkçenin yabancı dil olarak öğretimi el kitabı* (ss. 412-471). Pegem A Yayıncılık.
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel psychology*, 28(4), 563-575. <https://onlinelibrary.wiley.com/doi/10.1111/j.1744-6570.1975.tb01393.x>
- Leis, A., Cooke, S., & Tohei, A. (2015). The effects of flipped classrooms on English composition writing in an EFL environment. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(4), 37-51. <https://doi.org/10.4018/IJCALLT.2015100103>
- Luo, Z., O'Steen, B., & Brown, C. (2020). Flipped learning wheel (FLW): A framework and process design for flipped L2 writing classes. *Smart Learning Environments*, 7(1). <https://doi.org/10.1186/s40561-020-00121-y>
- McCarthy, P., Meier, S., & Rinderer, R. (1985). Self-efficacy and writing: A different view of self-evaluation. *College Composition and Communication*, 36(4), 465-471. <https://doi.org/10.2307/357865>
- Namaziandost, E., & Çakmak, F. (2020). An account of EFL learners' self-efficacy and gender in the flipped classroom model. *Education and Information Technologies*, 25, 4041-4055. <https://link.springer.com/article/10.1007/s10639-020-10167-7>
- Namaziandost, E., Tilwani, S. A., Khodayari, S. M., Ziafar, M., & Alekasir, S. (2020). Flipped classroom model and self-efficacy in an Iranian English as a foreign language context: A gender-based study. *Journal of University Teaching and Learning Practice*, 17(5), 271-285. <https://doi.org/10.53761/1.17.5.17>
- Nourinezhad, S., Hadipourfard, E., & Bavali, M. (2022). The effect of flipped learning on English writing performance and self-efficacy of Iranian medical students. *Journal of Language Horizons*, 6(1), 161-181. <https://doi.org/10.22051/lghor.2021.34132.1409>
- Özdemir, O. (2017). *Türkçe öğretmeni adaylarının yazılı anlatım becerilerinin geliştirilmesinde ters yapılandırılmış öğretim yönteminin etkisi* [Yayımlanmamış doktora tezi]. Gazi Üniversitesi.
- Pajares, F., & Valiante, G. (1999). Grade level and gender differences in the writing self-beliefs of middle school students. *Contemporary Educational Psychology*, 24(4), 390-405. <https://doi.org/10.1006/ceps.1998.0995>
- Ping, R. L. P., Verezub, E., Badiozaman, I. F. bt A., & Chen, W. S. (2020). Tracing EFL students' flipped classroom journey in a writing class: Lessons from Malaysia. *Innovations in Education and Teaching International*, 57(3), 305-316. <https://doi.org/10.1080/14703297.2019.1574597>
- Qader, R. (2017). *The effect of flipped classroom instruction on Iraqi EFL learners' writing skills* [Yayımlanmamış yüksek lisans tezi]. Gaziantep Üniversitesi.
- Rankin, J. L., Bruning, R. H., & Timme, V. L. (1994). The development of beliefs about spelling and their relationship to spelling performance. *Applied Cognitive Psychology*, 8(3), 213-232. <https://doi.org/10.1002/acp.2350080303>
-

- Schunk, D. H., & Swartz, C. W. (1993). Goals and progress feedback: Effects on self-efficacy and writing achievement. *Contemporary Educational Psychology*, 18(3), 337-354.  
<https://doi.org/10.1006/ceps.1993.1024>
- Seçilmişoğlu, C. (2019). *The effects of flipped learning model in teaching English grammar* [Yayımlanmamış yüksek lisans tezi]. Ufuk Üniversitesi.
- Sharom, K., & Kew, S. N. (2021). A conceptual framework on technology integration in English writing flipped classroom. *IOP Conference Series: Materials Science and Engineering*, 1051.  
<https://doi.org/10.1088/1757-899X/1051/1/012010>
- Soltanpour, F., & Valizadeh, M. (2018). A flipped writing classroom: Effects on EFL learners' argumentative essays. *Advances in Language and Literary Studies*, 9(1), 5-13. <https://files.eric.ed.gov/fulltext/EJ1166914.pdf>
- Tangpermpoon, T. (2008). Integrated approaches to improve students writing skills for English major students. *ABAC Journal*, 28, 1-9. <http://www.assumptionjournal.au.edu/index.php/abacjournal/article/view/539>
- Temizyürek, F., & Ünlü, N. (2015). Dil öğretiminde teknolojinin materyal olarak kullanımına bir örnek: "Flipped classroom". *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 4(1), 64-72.  
<https://dergipark.org.tr/tr/pub/buefad/issue/3816/51248>
- Tiryaki, E. N. (2013). Yabancı Dil Olarak Türkçe Öğretiminde Yazma Eğitimi. *Ana Dili Eğitimi Dergisi*, 1(1), 38-44.  
<https://doi.org/10.16916/aded.16018>
- Tok, M. (2013). Türkçenin yabancı dil olarak öğretiminde akademik yazma ihtiyacı. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 10(23), 1-25. <https://dergipark.org.tr/tr/download/article-file/182886>
- Webb, F. A., Vandiver, B. J., & Jeung, S. (2016). Does completing an enriched writing course improve writing self-efficacy of talented secondary students? *Gifted Child Quarterly*, 60(1), 47-62.  
<https://doi.org/10.1177/0016986215605359>
- Weigle, S. C. (2014). Considerations for teaching second language writing. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Ed.), *Teaching English as a second or foreign language* (4. bs, ss. 222-237). National Geographic Learning.
- Woodrow, L. (2011). College English writing affect: Self-efficacy and anxiety. *System*, 39(4), 510-522.  
<https://doi.org/10.1016/j.system.2011.10.017>
- Yavuz, D. (2020). *Effect of flipped instruction in grammar teaching in English as a foreign language class* [Yayımlanmamış yüksek lisans tezi] Bursa Uludağ Üniversitesi.
- Yıldırım, H. Ç. (2018). *Yabancı dil olarak Türkçe öğretiminde planlı yazma ve değerlendirme modelinin yazma becerisine etkisi* [Yayımlanmamış doktora tezi]. Gazi Üniversitesi.
- Yorgancı, O. K., & Baş, B. (2021). Yabancı dil olarak Türkçe öğrenenler için B1 düzeyi yazma becerisi dereceli puanlama anahtarı geliştirme çalışması. *Okuma Yazma Eğitimi Araştırmaları*, 9(1), 67-80.  
<https://doi.org/10.35233/oyea.934684>