



## AN ANALYSIS OF THE EFFECT OF USING COLLABORATIVE STORY MAPS ON STORY WRITING SKILLS

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### Abstract

The aim of the study is to investigate the effect of story writing on the story writing skills of primary school students with the collaborative story map method. This quantitative study has a quasi-experimental design with a pretest-posttest comparison group. The study group consists of 131 primary school 2nd-grade students, 60 boys and 71 girls. There are two experimental groups and one control group in the study. The study lasted 12 weeks and 2 class hours per week. In the collaborative story map writing group, story writing was practiced with a collaborative story map. In the individual story map writing group, story writing work according to the individual story map. In the control group, a free story writing activity was conducted. The data were collected through the Story Grammar Elements Rating Scale. T-Test and ANOVA were used to analyze the data. In conclusion, writing stories with primary school students in the method of collaborative mapping and individual story mapping improves students' story writing skills. However, there is no difference between preparing a story map collaboratively or individually in terms of story writing skills.

**Keywords:** Collaborative writing, story map, primary school.

### INTRODUCTION

Writing is defined as the expression of knowledge, feelings, opinions, wishes, dreams and events in the mind by using certain symbols and signs (Akyol, 2018; Coşkun, 2014; Güneş, 2019). It is also one of the most powerful tools used in communication (Akyol, 2018). In addition to communicating, individuals write to record, share and preserve knowledge and experiences, convey their feelings and thoughts, create imaginary stories, learn, think, entertain, inform or persuade others, make discoveries about themselves and the meaning of events, meet their daily needs, and to achieve success (Arıcı & Urgan, 2013; Graham, 2019; Graham, Gillespie, & McKeown 2013; Karadağ Yılmaz & Erdoğan, 2019). In this respect, writing is a skill that an individual may need at every stage of life, making various contributions to it.

Graham & Alves (2021) describe writing as a fundamental skill that students must master in order to fully enjoy their educational, professional and civic responsibilities. However, writing skills develop later than other skills and is more difficult to learn since its development depends on many other skills (Dunsmuir & Clifford, 2003; Graham & Harris, 2009). It is a complex process that requires coordination of many high-level cognitive and metacognitive skills rather than knowledge (Anılan, 2005; Graham & Alves, 2021; Nguyen & Nguyen, 2022; Olinghouse & Wilson, 2013). The complex and multifaceted structure of writing makes writing education important. As such, the aim of writing education is to improve the linguistic and communicative skills of the individual, to develop skills such as thinking, understanding, questioning, classification, analysis-synthesis, and to foster the ability to express feelings and thoughts (Coşkun, 2005; Güneş, 2019).



In line with the purpose of writing education, raising talented writers may take more time than other skills. Therefore, devoting a significant amount of time to the development of writing skills, offering individuals experiences, and giving instructor assistance is crucial (Applebee et al., 2017). Many methods and techniques are used in fostering writing skills, which are implemented before, during or after writing. Especially the methods and techniques used before writing are important as they affect the way the writing process unfolds. This is because most of the writing methods are used in the pre-writing stage and by revealing the individuals' prior knowledge, students are motivated towards writing (Uysal & Sidekli, 2020).

The related research has shown that the activities used before writing improve students' writing skills in a positive way (Doğan & Müldür, 2014; Sidekli & Uysal, 2017; Susar Kırmızı & Beydemir, 2012). With pre-writing activities, the individual determines the subject and purpose of the text to be written, makes a plan about the text, organizes his/her information and creates a road map, which prevents the emergence of problems in the writing process, and facilitates it.

One of the methods widely used before writing is the story map, which includes the elements of scene and time, main and auxiliary characters, starter event, problem, problem solutions, conclusion, main idea, and reaction (Akyol, 1999). At the preparation stage, the individual is expected to identify and organize these elements. Determining the story elements helps draw the frame of the story and to make a visual description. While students plan their stories with the use of a story map, it helps students distinguish between important and unimportant information, focus on important details, comprehend story elements and visualize the story (Akyol, 2019). The application of the story map method facilitates students' generate ideas in the process of writing a narrative text. The story map helps students develop their critical thinking (Yunda, Komariah, & Burhansyah, 2017), imagination, thoughts and feelings by actively participating in the learning processes (Latifah & Rahmawati, 2019). It also provides students with the opportunity to plan, control and evaluate (Sidekli, 2013).

The related research findings confirm the positive effects of using story maps on students' writing skills, and concluded that the story map is effective in teaching story writing, and it is effective in determining the focus theme, creating a story frame, developing ideas consistently and developing content (Adesty, 2016; Allo, Wahibah, & Thayyib, 2020; Chairunisa, Nurchurifiani, & Marcella, 2022; Al-Shiblaway, 2020; Ibnian, 2010; Sivrikaya & Eldeniz Çetin, 2018; Usman, Safitri, & Marhum, 2019; Yuliana, 2017; Yunda, Komariah, & Burhansyah, 2017; Zikri, Taufina, & Marlin, 2020).

While writing is traditionally viewed as an individual activity, the importance of collaborative writing has become clear in recent years. As education shifted towards learner-centered collaborative learning, collaborative writing also attracted attention (Mohamadi Zenouzagh, 2020). Collaborative writing is defined as the co-production of a text by more than one writer and an activity that requires each writer to participate in all stages of the writing process, taking responsibility and ownership of the entire text (Storch, 2011; Storch, 2019). Collaborative writing is based on Vygotsky's social constructivist learning theory and has an important role in language learning (Shehadeh, 2011; Le, 2022). Collaborative writing is an effective method to improve the writing process and social relations. Collaborative writing increases social interactions among students, enables them to take responsibility, helps them determine their learning styles, encourages critical thinking and develops social skills (Deveci, 2018; Fung, 2010).

Studies on collaborative writing have concluded that it is an effective way to improve students' writing skills and social skills (Mazdayasna & Zaini, 2015; Pham, 2023; Pratiwi, 2020; Rezeki & Rahmani, 2021; Shehadeh, 2011; Storch, 2011; Villarreal & Gil-Sarratea, 2019) and students find this type of work enjoyable (Shehadeh, 2011).

Many previous studies have shown that story map and collaborative writing, which are pre-writing methods, are effective on improving writing skills. The current study, unlike other studies, focuses on preparing for writing with the collaborative story map method. In previous studies on collaborative writing, the samples consisted of secondary school, high school and university students, and focused



on the purpose of producing shared texts. This study was conducted with primary school 2nd-grade students. Since students at this grade level in Turkey are 7-8 years old on average, their writing skills are just developing, and they do not have enough experience to write collaboratively. This led to making the study in the form of collaborative story map preparation rather than collaborative writing, because it is convenient for students in the planning stage of preparing the collaborative story map before writing.

When students create a story map with their classmates, they benefit from the advantages of collaborative learning to prepare a more detailed story map, define the story elements better, and thus create a wider-framed picture by making a better description for their stories. Thus, this process enables students to write better stories. As such, the aim of the study is to investigate the effect of story writing on the story writing skills of primary school students with the collaborative story map method. Therefore, the research questions were formed as follows:

1. Is writing with a collaborative story map effective in improving students' story writing skills?
2. Is there a difference between preparing a collaborative story map and an individual story map in terms of their effect on story writing skills?
3. Is there a difference between the story writing skills of the experimental groups and the control group?

## METHOD

### Model of research

This quantitative study has a quasi-experimental design with a pretest-posttest comparison group (McMillan & Schumacher, 2006). This design is preferred because of the difficulty of forming groups in which the participants are randomly assigned in the classroom environment in schools (Baştürk, 2009). The interventions were carried out in three classrooms (groups), which were determined to be suitable for the purpose of the study, without disturbing the existing classroom settings. Of these three groups, two were experimental and one was the control group, and the effect of the interventions was examined by comparing their pretest and posttest scores. The activities performed with the groups are presented in Table 1.

**Table 1.** Activities carried out with the groups.

Groups	Activity	Pre test - Post test
Experimental 1	Writing with a Collaborative Story Map	Narrative texts written by students without any intervention
Experimental 2	Writing with an Individual Story Map	
Control Group	Story writing	Story Elements Rating Scale

### Study group

The study was conducted with 131 2nd grade students, 60 boys and 71 girls, in a socioeconomically middle school in one of the eastern provinces of Turkey. Sample size was calculated by G-power analysis. In the calculation, with an effect size of .4, a bias of .05, a confidence interval of .95, and a population representativeness of .95; the sample was calculated as 102 people. The sample of this study consisted of 131 students. The students learned to read and write first, sometimes face-to-face and sometimes through distance education, due to the restrictions during the pandemic period. Although the special situation of the students participating in the study, such as learning disability, was not the same, all of them could read and write. We first administered a pre-test to the participants. We determined that the pre-test scores of the groups were close and then the groups were randomly assigned to the conditions. Because it was not possible to disrupt the structure of the classes for a long time. Therefore, we assigned the groups to the conditions without disturbing the structure of the classrooms. We determined the groups as collaborative story map, individual story map and control



group. Since the gender distribution in the groups was close to each other, we did not intervene in the numbers. The numbers of the participants are as in Table 2.

**Table 2.** Number of participants.

Participants	Boy	Girl	Total
Experimental 1 (Writing with a collaborative story map)	17	26	43
Experimental 2 (Writing with an individual story map)	22	22	44
Control group	21	23	44
Total	60	71	131

Looking at the Table, it is clear that the number of students in the groups is very close, but overall, the number of girls is higher than that of the boys.

### Data collection tool

The data were collected through the *Story Grammar Elements Rating Scale*. The scale was adapted from Harris and Graham's (1996) Scale for Scoring the Inclusion and Quality of the Parts of a Story by Coşkun (2005). There are 8 items in the scale: main character, locale, time, initiating event, goals, attempt, direct consequence, reactions. A story map was prepared for the students according to the *Story Grammar Elements Rating Scale*. This tool was given to the students during the story writing phase. The story map is presented in Table 3 below.

**Table 3.** Story map.

Story map	
<b>Main character</b>	: Write down the characteristics of the character
<b>Locale</b>	
<b>Time</b>	
<b>Initiating event</b>	: What event does the story start with?
<b>Goals</b>	: What is the goal of the character of the story?
<b>Attempt</b>	: What does the character do to achieve his/her goal?
<b>Direct consequence</b>	: What happens in the end, how do the events end?
<b>Reactions</b>	: What are the reactions of the character?

### Intervention and data collection

We did not make any changes for the teachers of the groups. Because we thought that the teacher of the group would carry out this process best. Therefore, each teacher conducted the study in his/her own class during the implementation process. Before starting the implementation, we held a meeting with the teachers of the groups. In the meeting, we informed them about the purpose of the study and the process. In this meeting, we focused on cooperation, individual work, creating story maps, writing texts, evaluating texts and giving feedback to students. Then we made a sample application for teachers.

Before the intervention started, the elements of the story map were explained to three groups and a demonstration was made. Then, the students of all three groups were asked to write a narrative text. The texts written in this process were collected and scored according to the *Story Grammar Elements Rating Scale* and used as a pretest score. Then the intervention process started. During the intervention process,

**Collaborative story map writing group:** In this group, we practiced collaborative story mapping and story writing for 12 weeks. First, we gave the group an example of writing with a story map. We explained how a story map is prepared and how it is transformed into a text. We prepared a story map together with the students and then asked them to write a text according to this map. Students first prepared a collaborative story map for 2 weeks under the guidance of the teacher. In this process, the teacher wrote a map template on the board and created a map with the help of the students. After the map was prepared, students wrote individual stories according to the map. The teacher checked all the



stories for conformity with the story map and gave feedback to the students about the text. In the next 10 weeks, students chose a partner to collaborate with. Together, students first prepared a story map. Then they presented the story map to the teacher. After the teacher checked the story map, students wrote texts individually. The teacher then checked the text's conformity to the story map and gave feedback to the students about the text. Thus, both the process was monitored and the students were motivated and focused on the work.

**Individual story map writing group:** In this group, we practiced writing stories with individual story maps for 12 weeks. First, we gave the group an example of writing with a story map. We explained how a story map is prepared and how it is transformed into a text. We prepared a story map together with the students and then asked them to write a text according to this map. During the implementation process, students prepared individual story maps every week. Then they presented the story map to the teacher. After the teacher checked the story map, students wrote texts individually. The teacher then checked the text's conformity to the story map and gave feedback to the students about the text. Thus, both the process was monitored and the students were motivated and focused on the work.

**Control Group:** In this group, we did a 12-week story-writing exercise. We first informed the group about the story elements. We did a case study showing elements in a story. Then we did a story writing exercise with the students. We did not use a story map in the control group. Each week, students first identified a topic and then wrote a story based on it. Then the teacher presented their stories. The teacher checked the stories and gave feedback to the students.

In addition to the feedback in the texts, an award was given for the teachers in all three groups to collaborate. We used stickers made of emojis. Considering the ages of the students who made up the study group, this award was important. Thus, we aimed to increase the motivation to write in long-term writing work.

In all groups, we gave students 80 minutes to write stories. This process was not in one piece and the students took a break. We did not interfere with the subject in the stories of the students. Students were completely free in this regard. In this process, students wrote stories about real events, memoirs, fiction and creative genres. But mostly the stories were creative and based on real life. Students read their stories to their friends. The stories were displayed on the classroom board. Students in the collaborative story writing group also provided the opportunity to compare stories with their groupmates.

For all three groups, apart from these practices, no extra activity was performed for story writing. At the end of the 12 week implementation period, the students of the three groups were asked to write a story as in the pre-test. The stories were then collected and scored according to the *Story Grammar Elements Rating Scale* and used as the final test score.

### **Data Analysis**

The scores obtained from the texts were scored according to the scale meanings. To test the reliability of the scoring, 50 % of the texts were scored by another rater. The Cronbach's Alpha value between the scores of the two raters was calculated as .981. This result means that the reliability between the raters was high. The internal consistency score was calculated as .703 in the pre-test and .711 in the post-test. These results mean that internal consistency is at a high level.

The analysis revealed that the data obtained showed a normal distribution. Accordingly, t-test and one-way analysis of variance (ANOVA) were applied. The eta-square correlation coefficient was used to calculate the effect size.

## **RESULTS**

In this section, the results of the study are presented. First, the mean, standard deviation and correlation scores of the pretest and posttest scores of the experimental and control groups were shown. Then, the comparison of the pretest scores of the three groups before the intervention, then the



comparison of the pre-test and posttest scores of each group within themselves, and finally the comparison of the post-test scores of the three groups, the findings obtained in the analysis of the data are shown and interpreted with tables and figures.

Table 4 shows the mean, standard deviation and correlation values of the pre-test and post-test scores of the groups.

**Table 4.** Mean, Std. Deviation, and correlation values of the groups.

Groups	n	Tests	Mean	Std.Dev.	Correlation	Sig. (2-tailed)
Experimental Group 1	43	Pre-test	7.6279	2.1605	.380	.012*
		Post-test	12.4651	2.3639		
Experimental Group 2	44	Pre-test	7.25	1.93048	.263	.084
		Post-test	11.6591	2.32222		
Control Group	44	Pre-test	7.5	1.84895	-.068	.660
		Post-test	8.8409	1.56923		

\*p<.05

Before the intervention, an ANOVA test was conducted to determine whether there was a statistical difference between the scores of the groups according to the level of writing narrative texts of the students. The results of the analysis are presented in Table 5 below.

**Table 5.** Comparison of pre-test results of all groups.

Source of Variance	Sum of Squares	Df	Mean Squares	F	sig.
Between-group	3.223	2	1.611	.41	.665
Within-group	503.297	128	3.932		
Total	506.519	130			

\*p<.05

When Table 5 is examined, at the end of the test, the average of the students in the Experimental Group 1 (Mean<sub>Experimental 1</sub> = 7.6279), the average of the students in the Experimental Group 2 (Mean<sub>Experimental 2</sub> = 7.2500), the average of the students in the control group (Mean<sub>Control</sub> = 7.5000) and Dunnett C multiple comparison test, no statistically significant difference was found [ $F_{(2,128)} = .41$ ,  $p > .05$ ], which means that the scores of the three groups were equal at the beginning.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in Experiment 1 (writing with collaborative story map) group. The result of the analysis is given in Table 6.

**Table 6.** Comparison of pretest and posttest scores of experimental group 1.

	Mean	n	Std.Dev.	t	p
Pretest	7.6279	43	2.16050	-12.560	.000*
Posttest	12.4651	43	2.36390		

\*p<.05

Looking at the table, a significant difference is observed between the average of the students' story scores before the intervention (Mean<sub>Pretest</sub> = 7.6279) and the average of the story points after the intervention (Mean<sub>Posttest</sub> = 12.4651) ( $t = -12.560$ ,  $p < .05$ ). Accordingly, it can be said that collaborative story map and story writing practice affect story writing skills positively.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in Experiment 2 (Writing with individual story map) group. The result of the analysis is given in Table 7.

**Table 7.** Comparison of pretest and posttest scores of experimental group 2.

	Mean	n	Std.Dev.	t	p
Pretest	7.2500	44	1.93048	-11.250	.000*
Posttest	11.6591	44	2.32222		

\*p&lt;.05

Looking at the Table, a significant difference is observed between the average of the students' story scores before the intervention (Mean<sub>Pretest</sub> = 7.2500) and the average of the story points after the intervention (Mean<sub>Posttest</sub> = 11.6591) (t= -11.250, p<.05). Thus, the practice of writing stories with individual story map can be said to affect students' story writing skills positively.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in control group. The result of the analysis is given in Table 8.

**Table 8.** Comparison of pretest and posttest scores of the control group.

	Mean	n	Std.Dev.	t	p
Pretest	7.5000	44	1.84895	-3.550	.001*
Posttest	8.8409	44	1.56923		

\*p&lt;.05

Looking at the Table above, a significant difference was found between the mean score of the story written before the intervention (Mean<sub>Pretest</sub> = 7.5000) and the mean score of the story written after the intervention (Mean<sub>Posttest</sub> = 8.8409) (t= -3.550, p<.05). As such, it can be safely concluded that the practice of writing stories every week in the control group affects the story writing skills of the students positively. The mean pre-test and post-test scores of all groups are presented in Figure 1 below.

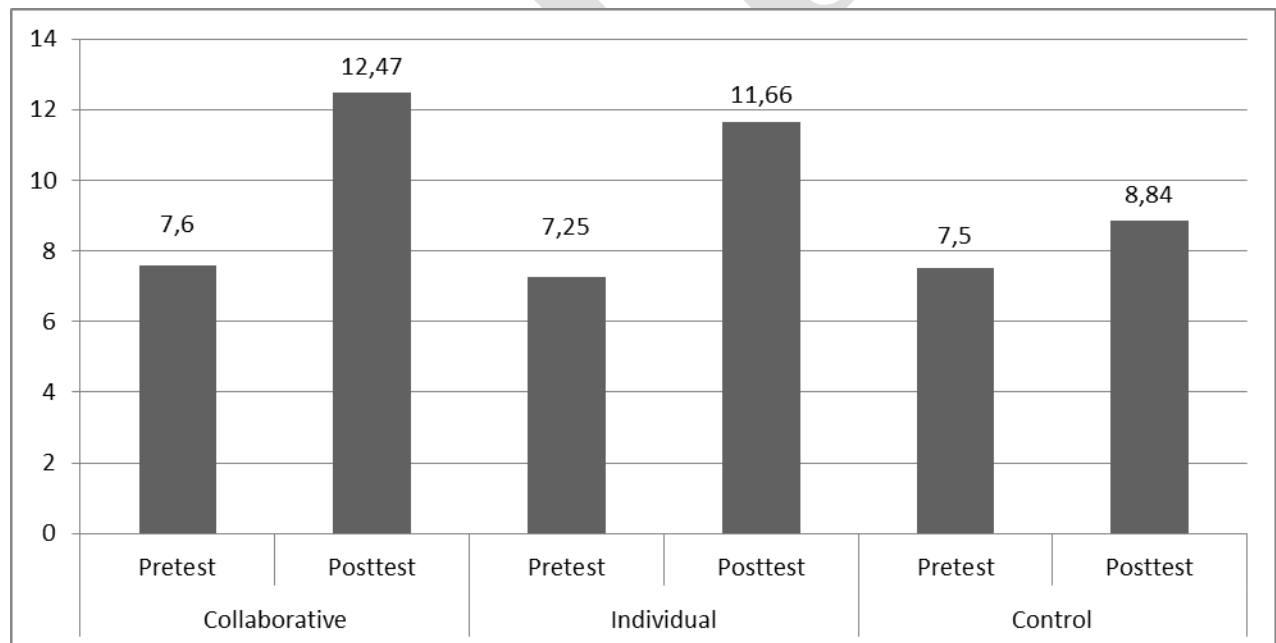
**Figure 1.** Comparison of the pretest and posttest mean scores of the groups.

Figure 1 shows that the scores of the groups were close to each other in the pre-test, while the scores of the groups increased in the post-test. ANOVA analysis was performed to compare the post-test scores of the groups. The results of the analysis are given in Table 9.

**Table 9.** Comparison of posttest results of all groups.

Source of Variance	Sum of Squares	Df	Mean Squares	F	sig.
Between-group	316.461	2	158.230	35.379	.000*
Within-group	572.470	128	4.472		
Total	888.931	130			

\*p&lt;.05

The Table above shows the score averages of the students in the Experimental Group 1 (Mean<sub>Experimental 1</sub> = 12.4651), Experimental Group 2 (Mean<sub>Experimental 2</sub> = 11.6591), and the Control Group (Mean<sub>Control</sub> = 8.8409), revealing a statistically significant difference [ $F_{(2,128)} = 35.379, p < .05$ ]. According to the eta-square ( $\eta^2 = .356$ ) value in the effect size calculation, 35.6% of the variance is explained by the independent variable. The Dunnett C multiple comparison test revealed a significant difference between the Experimental Group 1 and the Control Group in favor of the Experimental group, and between the Experimental Group 2 and the Control Group in favor of Experimental Group 2, while there was no significant difference between the Experimental 1 and Experimental 2 groups. Accordingly, writing a story with a collaborative story map and an individual story map gives better results than writing a story without using a story map. However, there is no significant difference between writing with a collaborative story map and writing with an individual story map.

### DISCUSSION, CONCLUSION, AND SUGGESTIONS

In this section, the conclusions reached in light of the findings are discussed and suggestions are presented. The study aimed to investigate the effect of using the collaborative writing and story mapping method on primary school students' story writing skills. For this purpose, a 12-week study was conducted with three groups: collaborative story map writing, individual story map writing and control group. Thus, it provided the opportunity to see both the difference of using a collaborative story map compared to the control group and the difference between using the individual story map and the collaborative story map in writing.

It was concluded that writing with a collaborative story map or an individual story map improves the story writing skills of primary school students, which is consistent with the results of previous studies. Previous research has concluded that the story map, which is one of the pre-writing methods, is effective in fostering the story writing skill (Adesty, 2016; Allo, Wahibah, & Thayyib, 2020; Chairunisa, Nurchurifiani, & Marcella, 2022; Al-Shiblaway, 2020; Ibnian, 2010; Sivrikaya & Eldeniz Çetin, 2018; Usman, Safitri, & Marhum, 2019; Yuliana, 2017; Yunda, Komariah, & Burhansyah, 2017; Zikri, Taufina, & Marlina, 2020).

Story maps allow students to make a good plan as they give the opportunity to take a mental snapshot of the text that the student will write before starting to write and make a visual description of it. In addition, the story map helps students enhance their imagination, thoughts, and feelings (Latifah & Rahmawati, 2019), provides the opportunity for planning, control and evaluation in pre-writing, writing and post-writing processes (Sidekli, 2013), and helps distinguish important and unimportant information while planning their stories. Writing with a story map positively affects the ability to write a story, as it helps to focus on important details (Akyol, 2011). Some other studies conclude that collaborative writing makes a strong positive contribution to writing skills (Pratiwi 2020, Rezeki & Rahmani, 2021; Shehadeh 2011; Storch, 2011). This is because collaborative writing is related to social interaction, taking responsibility and sharing, identifying learning styles, and critical thinking. It is useful in many subjects (Deveci, 2018; Fung, 2010; Storch, 2011; Storch, 2019) and fosters language learning (Shehadeh 2011; Le, 2022). Thus, students are expected to write better texts through collaborative writing and improve their writing skills by using it.

In previous studies, the collaborative writing process was in the form of the authors co-producing a text because collaborative writing is expressed as the co-production of a text by two or more authors





(Storch, 2011; Storch, 2019). However, in the current study, students were not asked to produce a single shared text together. Rather than producing a joint text, the students prepared the story map collaboratively and wrote their stories individually. Thus, it was ensured that the students prepared a better story map by collaborating while preparing the story they were going to write and creating the general setting of the story because it was thought that if several students prepared a story map together, they would describe the story elements better, distinguish important and unimportant details better, and thus would write higher-quality texts. Indeed, writing a story with a collaborative story map was found out to have a positive effect on their story writing skills.

The fact that the individual or collaborative preparation of the story map positively affects the story-writing skills of the students is actually an expected result, considering the previous studies. In this study, it was in the form of collaboratively preparing the story map rather than collaborative writing. A significant part of the previous studies was conducted with older students and was carried out in the form of producing a joint text. Since the group in which this study was conducted was primary school students (which corresponds to the age of 7-8 years) and they were still at the beginning of the process of developing their writing skills, they were expected to have difficulties in collaborative writing. Therefore, preparing the story map cooperatively was thought to be more useful for them.

Preparing a collaborative story map was useful in improving story writing skills, but there was no significant difference between preparing an individual story map and a collaborative story map. There could be several reasons for this. The first may be that the process of collaboration was limited to the process of preparing a story map and they wrote their stories individually. Although there was cooperation, the individual writing of the text may not have provided enough interaction and sharing opportunities.

Secondly, due to the young age of the students, when they began the story writing process, they could act individually and wrote their text only on the items on the map. In other words, while writing the story elements with a classmate, the student may have ignored his/her classmate's suggestions and wrote the story only according to the map in his/her mind. This is because stories are a good space for young children to develop their emotions by establishing a relationship between themselves and the hero of the story (Akyol, 2019), to create their own hero and to reveal their imagination. Thus, students may have had difficulty in complying with the cooperative working principles at this point. For example, if this study had been in the form of writing informative texts, it might have had a different outcome. Because informative texts are mostly non-fictional and highlight objectivity, the structure of informative texts may be more suitable for collaboration than narrative texts (Marinak & Gambrell, 2009; Sidekli, 2014). For this reason, it may be more suitable for children at primary school level to cooperate.

In conclusion, writing stories with primary school students in the method of collaborative mapping and individual story mapping improves students' story writing skills. However, there is no difference between preparing a story map collaboratively or individually in terms of story writing skills.

### **Suggestions**

This study shows that the story map method improves the story writing skills of primary school students, and thus using a story map at an early age at the beginning of the writing skill development process will be useful. A second issue is related to how the story map is prepared. In this study, no difference was found between individual and collaborative story map preparation. As such, both methods can be recommended. However, teachers should especially take advantage of collaborative learning and writing. This study did not have any data on how the students cooperated in the process of preparing the story map, the dialogue between the students, and teacher observations. Therefore, further research may collect more data to better explain the difference between collaborative and individual writing.



## Ethics and Conflict of Interest

The rules of research and publication ethics were followed at every stage of this study. The ethical approval for this research was obtained from the Ethics Committee of the Harran University Rectorate on 15.02.2024 with the decision number 2024/5. The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Contribution Rate of Authors

The authors contributed equally to the paper. The authors have also read and accepted the final version of the manuscript.

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## REFERENCES

- Akyol, H. (2018). *Türkçe ilk okuma yazma öğretimi* [in Turkish]. Ankara: Pegem Academy.
- Akyol, H. (2019). *Programa uygun Türkçe öğretim yöntemleri* [in Turkish]. Ankara: Pegem Academy.
- Allo, A. D., Wahibah, W., & Thayyib, M. (2020). Using story mapping technique in teaching writing skills at SMAN 1 Palopo. *FOSTER: Journal of English Language Teaching*, 1(2), 114-121.
- Al-Shiblaway, S. K. Z. (2020). The effect of the story map strategy in improving the short story writing skills of middle school students in Iraq. *Nasaq*, (28), 986-998.
- Anılan, H. (2005). *Yazılı anlatım becerilerinin geliştirilmesinde kelime ağı oluşturma yönteminin etkililiği* [The effectiveness of clustering method in developing written expression skills] (Unpublished doctoral dissertation). Anadolu University, Eskişehir.
- Arıcı, A. F., & Urgan, S. (2013). *Yazılı anlatım: El kitabı* [in Turkish]. Ankara: Pegem Academy.
- Baştürk, R. (2009). *Deneme modelleri* [in Turkish]. A. Tanrıoğen, (Ed.) in Bilimsel araştırma yöntemleri [in Turkish]. (p. 29-50). Ankara: Anı Publishing.
- Applebee, A. N., Bazeran, C., Berninger, V. W., Brandt, D., Graham, S., Matsuda, P. K., Murphy, S., Rowe, D. W., & Schleppegrell, M. (2017). Taking the long view on writing development. *Research in the Teaching of English*, 51(3), 351-360.
- Chairunisa, S. A., Nurchurifiani, E., & Marcella, E. D. (2022). Improving students' writing ability of narrative text through story mapping technique at the tenth grade of Sma Muhammadiyah 2 Bandar Lampung in the academic year 2021/2022. *Journal of English Education Students (JEES)*, 4(1), 1-8.
- Coşkun, E. (2005). *İlköğretim öğrencilerinin öyküleyici anlatımlarında bağdaşıklık, tutarlılık ve metin elementleri* [Cohesion, coherence and text elements in narrative texts of primary school students] (Unpublished doctoral dissertation). Gazi University, Ankara.
- Coşkun, E. (2014). *Türkçe öğretiminde metin bilgisi* [in Turkish]. H. Akyol and A. Kırkkılıç (Ed.) in İlköğretimde Türkçe öğretimi [in Turkish] (p. 231-283). Ankara: Pegem Academy.
- Deveci, T. (2018). Student perceptions on collaborative writing in a project-based course. *Universal Journal of Educational Research*, 6(4), 721-732. <https://doi.org/10.13189/ujer.2018.060415>
- Doğan, Y., & Müldür, M. (2014). 7. sınıf öğrencilerine verilen yazma eğitiminin öğrencilerin hikâye yazma becerisine etkisi [Effect of writing training provided for 7th grade students on the story-writing skills of students], *Mersin University Journal of the Faculty of Education*, 10(1), 49-65.
- Dunsmuir, S., & Clifford, V. (2003). Children's writing and the use of information and communications technology. *Educational Psychology in Practice*, 19(3), 170-187.
- Fung, Y. M. (2010). Collaborative writing features. *RELC journal*, 41(1), 18-30.
- Graham, S., & Harris, K. R. (2009). Evidence-based writing practices: Drawing recommendations from multiple sources. *British Journal of Educational Psychology*, 6, 95-111.
- Graham, S. (2019). Changing how writing is taught. *Review of Research in Education*, 43(1), 277-303. doi:10.3102/0091732X18821125
- Graham, S., & Alves, R. A. (2021). Research and teaching writing. *Reading and Writing*, 34, 1613-1621.



- Graham, S., Gillespie, A., & McKeown, D. (2013). Writing: importance, development, and instruction. *Read Writing*, 26, 1-15 <https://doi.org/10.1007/s11145-012-9395-2>
- Güneş, F. (2019). *Türkçe öğretimi yaklaşımlar ve modeller* [in Turkish]. Ankara: Pegem Academy.
- Ibnian, S. S. K. (2010). The effect of using the story-mapping technique on developing tenth grade students' short story writing skills in EFL. *English Language Teaching*, 3(4), 181-194.
- Karadağ Yılmaz R., & Erdoğan, Ö. (2019). *Yazma, yaratıcı yazma eğitimi* [in Turkish]. H. Akyol and A. Şahin (Ed.). in *Türkçe öğretimi: Öğretmenler ve öğretmen adayları* [in Turkish] (p. 55-77). Ankara: Pegem Academy.
- Latifah, N., & Rahmawati, I. N. (2019). Teaching and learning narrative text writing through story mapping. *English Education: Jurnal Tadris Bahasa Inggris*, 12(1), 78-96.
- Le, M. T. (2022). The effects of collaborative writing to learners' text in terms of writing accuracy from sociocultural theory perspective. *International Journal of TESOL & Education*, 2(1), 54-62.
- Marinak, B. A., & Gambrell, L. B. (2009). Ways to teach about informational text. *Social Studies and the Young Learner*, 22(1), 19-22.
- Mazdayasna, G., & Zaini, A. (2015). The effect of collaborative pre-writing discussions on L2 writing development and learners' identity construction. *Iranian Journal of Applied Linguistics*, 18(2), 141-164
- Mcmillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-Based inquiry*. Sixth Edition. Boston, MA: Allyn and Bacon
- Mohamadi Zenouzagh, Z. (2020). Syntactic complexity in individual, collaborative and E-collaborative EFL writing: mediating role of writing modality, L1 and sustained development in focus. *Educational Technology Research and Development*, 68(6), 2939-2970.
- Murphy, S., Rowe, D. W., & Schleppegrell, M. (2017). Taking the long view on writing development. *Research in the Teaching of English*, 51(3), 351-360.
- Nguyen, T. H. N., & Nguyen, T. T. H. (2022). Use of google docs in teaching and learning English online to improve students' writing performance. *International Journal of TESOL & Education*, 2(2), 186-200. <https://doi.org/10.54855/ijte.222210>
- Olinghouse, N. G., & Wilson, J. (2013). The relationship between vocabulary and writing quality in three genres. *Read and Writing* 26, 45-65.
- Pham, V. P. H. (2023). The impacts of collaborative writing on individual writing skills. *Journal of Psycholinguistic Research*, 52(4), 1221-1236.
- Pratiwi, V. U. (2020). Improving students' writing skills through collaborative learning: A case study of Senior High School Veteran 1 of Sukoharjo. *Theory and Practice in Language Studies*, 10(5), 527-535.
- Rezeki, Y. S., & Rahmani, E. F. (2021). The implementation of collaborative writing technique to improve students' writing performance and soft skill. *VELES Voices of English Language Education Society*, 5(2), 81-94.
- Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of second language writing*, 20(4), 286-305.
- Sidekli, S. (2013). Story map: How to improve writing skills. *Educational Research and Reviews*, 8(7), 289-296.
- Sidekli, S. (2014). *Metin öğretimi* [in Turkish] M. Yılmaz (Ed.). in *Türkçe öğretimi* [in Turkish] (p.167-196). Ankara: Pegem Academy.
- Sidekli, S., & Uysal, H. (2017). An examination of graduate theses made for writing education: A meta-analysis study. *Electronic Turkish Studies*, 12(25), 705-720
- Sivrikaya, T., & Eldeniz Çetin, M. (2018). Öykü yazma stratejisinin kaynaştırma öğrencilerinin öykü yazma becerilerine etkisi [The impact of story writing strategy on story writing skills of mainstreaming students] *Education Sciences*, 13(1), 1-18.
- Storch, N. (2011). Collaborative writing in L2 contexts: Processes, outcomes, and future directions. *Annual Review of Applied Linguistics*, 31, 275-288. doi:10.1017/S0267190511000079
- Storch, N. (2019). Collaborative writing. *Language Teaching*, 52(1), 40-59. doi:10.1017/S0261444818000320
- Susar Kırmızı, F., & Beydemir, A. (2012). İlköğretim 5. sınıf Türkçe dersinde yaratıcı yazma yaklaşımının yazmaya yönelik tutumlara etkisi [Effect of attitudes for writing of creative writing approach in Turkish course of primary fifth grades]. *Ahi Evran University Journal of Kırşehir Education Faculty*, 13(3), 319- 337



- Usman, S., Safitri, A., & Marhum, M. (2020). The application of story mapping technique to improve writing skills. In *4th International Conference on Arts Language and Culture (ICALC ,2019)* (512-523). Atlantis Press.
- Uysal, H., & Sidekli, S. (2020). Developing story writing skills with fourth grade students' mind mapping method. *Education and Science, 45*(204), 1-22.
- Villarreal, I., & Gil-Sarratea, N. (2020). The effect of collaborative writing in an EFL secondary setting. *Language Teaching Research, 24*(6), 874-897. <https://doi.org/10.1177/1362168819829017>
- Yuliana, Y. (2017). Story mapping in teaching writing narrative text. *International Journal of Language Teaching and Education, 1*(1), 8-15.
- Yunda, R., Komariah, E., & Burhansyah, B. (2017). Using story mapping technique to improve students' ability in writing recount text. *Research in English and Education Journal, 2*(4), 32-40.
- Zikri, I., Taufina, T., & Marlina, M. (2020). Efektifitas graphic organizer story map terhadap kemampuan menulis narasi siswa di sekolah dasar. *Jurnal Basicedu, 4*(4), 1228-1235.

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