



The Effect of Process-Based Writing Focused on Metacognitive Skills-Oriented to Fourth Grade Students' Narrative Writing Skill *

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Abstract

Writing is the basis of success at school and is one of the important means of learning and assessment in various courses. Writing is one of the most important skills that students need to acquire and improve. In recent years, it seems that in the teaching of writing, the product-based work has been replaced with the process-based one. The latter requires tracking, assessment, and correction in the process of writing; in other words, it requires running with metacognitive skills. In this study used the simultaneous mixed method. Quasi-experimental method used in the quantitative part. Qualitative research method used in order to validate and expand the quantitative data with the qualitative ones, to support the obtained data and examine them profoundly with multi-perspective. The aim of this study was to discover to what extent the writing approach based on metacognitive skills would improve fourth grade students' skills in writing narrative texts, and to observe the changes occurring in their products and writing performances during the study. The study sample included 64 students in a public school in Ereğli, Zonguldak (Turkey). The study used a mixed research method consisting of qualitative and quantitative methods to collect, analyze, and interpret the study data. In the implementation process, the experimental group performed their writing activities based on a process that focuses on metacognitive skills, and the control group performed their writing activities according to the Turkish curriculum. The study was conducted over eight weeks (28 hours) in the experimental group. The study analyzed students' skills in writing narrative texts and the use of metacognitive writing processes in the process of writing narrative text, and it was determined that there was a statistically significant difference between the groups to the advantage of the experimental group. It is observed that certain progress for each student in the experimental group in terms of the targeted metacognitive skills, but the control group students were not able to use such metacognitive skills adequately as tracking of

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the past writing, correcting when needed, or reorganizing. The results of this research are deemed to contribute to the limited literature on process-based writing skills and to help the primary school teachers enrich their teaching methods concerning the writing skill. Furthermore; the research is expected to be among the first examples in the area that emphasize the upper cognitive skills to lead further researches.

Introduction

Writing is described as “the operation of putting information structured in the brain into writing” (Öz, 2011, p. 251), “expressing what we hear, think, design, see and experience by writing” (Sever, 2011, p. 24), and “telling about emotions, thoughts, desires and dreams, that is, all phenomena that is related to human beings’ emotional and mental worlds using certain symbols and signs” (Pilav, 2014, p. 86). An evaluation of all these descriptions shows that the activity of writing is an important tool in all the means that people use to express themselves. Karatay (2013) claimed that writing experiences that improve writing skills and feedback-based practices should be included in all phases of education to help students improve their skills of telling about their knowledge, emotions and thoughts by writing, create an interest and desire in them to write, and teach them the habit of writing. Calkins as saying that there are three basic beliefs to teach students to write. In these cases, students should be involved in the writing process. Another, students should share what they write with other people. Finally, students must perceive themselves as authors (as cited in Fischer, 2002).

In recent years, there have been more process-based writing activities included in writing education (Maltepe, 2006; Oral, 2012; Urgan, 2007). Cavkaytar (2009) said that the processes included in writing were planning, drafting, content checking, spelling check and rewriting. The researchers who indicated the importance of metacognitive skills in writing education (Englert, Raphael, Anderson, Anthony, & Stevens, 1991) stated that the processes of designing, organizing, drafting, arranging and revising should be structured in a way to improve students’ inner-dialogue skills. Lienemann and Reid (2008) argue that such skills as planning, developing ideas, self-assessment, self-observation, and self-reflection are used in works of writing. The self-organizing writing involves using various strategies to complete the writing, as well as practicing self-observation while writing (Pritchard & Honeycutt, 2007).

The thinking method used to generate the writing comprises the “cognitive” dimension of writing, while the control method applied in the emergence of the written product comprises the “metacognitive” dimension of writing (Collins, 2000). Metacognition plays an important role in communication, persuasion, reading comprehension, writing, language learning, attention, memory, problem solving, social cognition, self-control and self-teaching (Flavell, 1979). The metacognitive knowledge involves the capacity of asking oneself the following kinds of questions and answers them. The cited capacity is an indicator for the individual’s knowledge about his/her cognitive system (Senemoğlu as cited in Aktaş, 2013, p. 64).

- What is my purpose in learning this topic? What a product am I supposed to achieve?
- What do I know about this topic (testing the level of self-knowledge)?
- How much time do I need to learn this topic?
- What should I plan to learn this topic effectively, and what way should I go through?
- How should I review the plan to eliminate the shortages?
- How should I find out my possible errors?
- Is the product suitable to my expectation? If not, how should I change my planning?

When adapting these questions to narrative writing, they might be formulated as follow:

- What kind of written product am I supposed to achieve?
- How much time do I need to write the text?
- What should I plan to write the topic effectively, and what way should I go through?
- How should I select the main and supportive characters of the story?
- What should the place and time of the story be?
- What can the problem of the story be?
- How should I start, develop and conclude the story?
- How should I review the text to eliminate the problems I faced in the process of writing and to correct the errors I made?
- Is the writing product suitable to my expectation? If not, what should I do?

Englert et al. (1991) argue that one needs to ask him/herself the following questions in the processes of planning, writing, and reviewing:

- Whom am I writing for?
- Why am I writing?
- What do I know about the subject?
- How can I organize my ideas?
- Do my ideas comply with the target audience and the purpose of the writing?
- Are all things in the writing logical?
- Have I realized my plan?
- Is there anything in my writing to add or remove?

An examination of the 2005 and 2015 Turkish curricula shows that writing processes focusing on the question “how?”, that is, process-based writing activities were more dominant in the recent curriculum than the previous one. According to Urgan (2007), the jump from a product-based to a process-based writing approach was mainly due to the view that students should be evaluated on their performances. However, this change in Turkish curricula is not effectively translated into the classroom. Some of the study results that support this opinion state that in-class activities do not include sufficient writing activities (Urgan, 2007), the traditional approach still exists which regards writing activities as the explanation of a proverb or a saying (Göçer, 2014), and the current writing activities do not improve students’ writing skills (İzdeş, 2011). Moreover, these types of problems in writing activities not only have a negative effect on students’ writing skills, but they also engender a negative attitude towards writing (İzdeş, 2011; Maltepe, 2006).

In Turkey, problems related to writing are not limited to the teaching process. Based on the literature on literacy, Ateş, Çetinkaya and Yıldırım (2014) stated that writing is a neglected study area compared to the number of the studies on reading, and made a general review of the literature on writing in their research. Accordingly, the studies conducted after the curriculum change in 2005 were mainly about the acquisition of writing skills, and there were far fewer content development studies.

Students' use of writing in a rapid, readable and effective way is important for their academic achievement and communication skills as it will make it easier for them to record and express their thoughts and learning in the education process (Erhardt & Meade, 2005; Hamstra-Bletz & Blote, 1993; Lam, Au, Leung, & Li-Tsang, 2011; Li-Tsang, Au, Chan, Chan, Lau, Lo, & Leung, 2011; Tseng & Cermak, 1993). Students spend approximately half of their school time writing (McHale & Cermak, 1992; Tseng & Chow, 2000), which increases the importance of the activities aimed at teaching writing and improving writing skills. The problems experienced in the acquisition dimension of writing stand as obstacles to the improvement of the content, and these problems should be eliminated first (Edwards, 2003; Galanis, 2008). On the other hand, the elimination of problems related to format and acquisition do not guarantee the improvement of the content. Researchers (Anılan & Gültekin, 2006; Arıcı & Urgan, 2008; Belet & Yaşar, 2007; Cavkaytar, 2010; Maltepe, 2006) have stated that educational activities focusing on improving skills will enhance students' abilities to express their emotions, thoughts, concepts and experiences in an accurate and effective way, and mentioned some process-based models, strategies and techniques that can be used in this process.

International literature on the process-based writing models includes studies that research the contributions of process-based writing to students (Olson, 2004), the impact of the story writing and planning strategy on story writing and self-regulation (Tracy, Reid, & Graham, 2009), the impact of the skills of self-organization on the teaching of writing strategies (Glaser & Brunstein, 2007), the impact of the teaching of the planning and writing strategy on the struggling writers' writing skills (Saddler, Moran, Graham, & Harris, 2004), and the impact of the teaching of the self-organization strategy and writing process on essay writing (Sexton, Harris, & Graham, 1998). National literature on the process-based writing models includes studies that the effect of the employed model on students' written communication skills and attitudes (Erdoğan, 2012; Karatay, 2011), writing communication and creative writing skills (Sever, 2013), spelling and punctuation, and tendency to write (Sever & Memiş, 2013), achievement and anxiety about writing (Bayat, 2014), skills in writing narrative texts and evaluating the text they write (Özkara, 2007), writing performances and independent learning levels (Şahin-Kızıl, 2007), and academic achievement (Güvercin, 2012). Although these studies differed in their duration and certain other aspects, almost all of the process-based writing activities improved students' writing skills, had a positive effect on participants' attitudes towards writing, and decreased their writing anxiety. These international and national studies achieved positive results related to writing skills regarding the variables they tackled. However, national studies were mainly conducted with older students, and there were a limited number of process-based writing studies conducted with primary school students. Postponing the content-developing writing activities to senior years might delay the improvement of students' writing skills.

Another point related to studies about process-based writing activities is that the dimension including the information about students' own writing processes was not at the forefront. Students' information about their own writing processes indicates to metacognitive skills. In the relevant literature, the studies examine the effect of metacognitive skills on reading, reading comprehension, achievement in Turkish lessons, and achievement in problem solving, as well as its correlation with different variables such as age, sex, book reading, achievement in courses and reading level in the family (Aktaş, 2013; Baydık, 2011; Çakıroğlu, 2007a; Kana, 2014; Muhtar, 2006; Özsoy, 2007; Uyar, 2015). There are also theoretical studies in the relevant literature that tackled and discussed the concept of metacognition, instruction based on metacognition, and the approaches to learning metacognitive skills (Çakıroğlu, 2007b; Doğan, 2013; Özbay & Bahar, 2012). However, there are few studies focusing on metacognitive skills in the study area of writing, as exist in the area of reading. The studies of metacognitive skills in the reading area are mainly aimed at older students. Almost all of the process-based studies consider certain metacognitive skills, such as tracking and revising, as stages of the writing process which might be the reason that the metacognitive skills are not in the forefront. However, students are also supposed to be educated about their own tracking and revising processes. Although there are not many studies in the national literature about writing that focus on metacognitive skills (Uygun, 2012), there are more studies of this type in the international literature that achieved

positive results (Englert et al., 1991; Fischer, 2002; Harris, Graham, & Mason, 2006; Ohrtman, 2007; Olson, 2004; Saddler et al., 2004; Saddler, 2006; Saddler & Asaro, 2007; Tracy et al., 2009; Zumbrunn, 2010; Zumbrunn & Bruning, 2012). These results show that there is a need for more studies at the primary education level that aim to both solve the problems experienced in writing education and improving students' writing skills and metacognitive skills.

Englert et al. (1991) stated that writing should be structured to include the phases of designing, organizing, drafting, arranging and revising. Similarly, in Tompkins's and Jones's studies, it is stated that effective writing should include five phases which are preparation before writing, drafting, rewriting after reviewing and arranging, arranging, and publishing and sharing, and that these phases formed process-based writing (as cited in Akyol, 2014). Güneş (2013) regarded these phases as pre-writing phases, writing phases and post-writing phases.

The pre-writing phase includes preparation aimed at getting motivated, selecting a topic, and determining the text type, target group and the main idea, in addition to the drafting (planning) studies that require building a correlation between the created opinions and putting them in a certain order.

The writing phase consists of three sections which are organized writing, revising, and publishing and sharing. Organized writing is the stage where writers try to turn the draft into a text. In this section, writers should review the draft and determine how to start the text, trying to present the opinions in a reasonable framework, and write a suitable title. This process requires that the text is read through several times. Revising is the section where writers make the final changes in the text, and in this process, writers work on the formative qualities such as spelling, grammar, readability and page layout. The final section of the writing phase is the publishing and sharing section, emphasizing that writing is a communication tool, where students share their writing with their friends, families and teachers, or with larger groups using different tools, such as school noticeboards, newspapers, magazines and web pages.

The post-writing stage refers to the evaluation of the created text and writing process. In this process, students evaluate their own performances, as well as the content and the achievement of the goals of writing.

According to Ülper (2008), researchers who defend the approach of process-based writing point to the necessity of knowing how to write better texts. In this process, the role and directions of the teacher are very important. Studies in national and international literature emphasized that (Englert et al., 1991; Fischer, 2002; Maltepe, 2006; Oral, 2012; Urgan, 2007) teachers in writing studies should give importance to preparation, give sufficient time, teach the sub-skills that are required to create a text, give support to students by monitoring them and the process at every stage, being a model for student, and make the writing activity enjoyable by soothing students' anxiety.

Göçer (2014) stated that teacher and student roles are different in the process-based learning model from the product-focused approach, and said that teachers are responsible for guiding and supporting students in the writing process, and that they are no longer the ones to evaluate students. In addition, the teachers not only tell students how to write, but they also write themselves. Karatay (2013) claimed that writing ability will be transformed in time into the ability to write individually and evaluate oneself when an environment based on writing, sharing and evaluating, and on the interactions between teacher and student, student and student, and student and family, is provided in every phase of the teaching process. Karatay (2013) also stated that the important stages of successful writing are performing observation before writing, consulting individual experiences, determining when to read and do research, as well as where and when to write, and create a writing draft or plan. Studies on the history of the reading and writing education suggest that language skills should be taken as a whole (Nystrand, 2006; Pearson, 2009). For example, Pearson (2009) narrates elaborately the history and evolution of reading education in three periods, from the period before 1975 in which behavioral approach prevailed up to 2000's. Pearson (2009) says that, in recent times, it has been preferred to teach the language skills in a holistic and interactive ways and to support this process with juvenile literature.

Taking the writing process together with reading works and supporting it with stories holds great importance in terms that students be introduced to different styles and narrative forms.

Based on information from the above relevant literature, it was concluded that the result-focused approaches emphasizes the students' products, while process-based approaches emphasizes students' performance during their creation of the product. However, another result put forward by the literature is that the process-based studies are usually limited to primary level education and, in general, students have not sufficiently improved their awareness in regards to their own writing processes.

Considering the acquisition of process-based approaches to improve students' skills, this study aimed to improve primary students' writing skills through writing activities that focused on metacognitive skills. The researchers chose to use narrative texts to improve students' writing skills. This type of text was preferred due to the fact that students are familiar with the narratives starting from their pre-school years (Ateş, 2011), and on the assumption that process-based writing activities focused on metacognitive skills might be more difficult in primary level compared to the middle-school level.

The aim of this study was to determine to which extent the process-based writing approach focusing on metacognitive skills improved fourth grade students' story writing skills, and the changes it caused in students' products and writing performances over the course of the study.

Accordingly, the research questions are:

1. Is there a significant difference between the experimental group students' pre-test and post-test total mean scores?
2. Is there a significant difference between the control group students' pre-test and post-test total mean scores?
3. Is there a significant difference between the experimental and control group students' pre-test and post-test total mean scores?
4. Is there a significant difference between the groups regarding their post-test scores when the experimental and control group students' pre-test mean scores are controlled?
5. How did the experimental group students' opinions about their own writing processes change?
6. How did the control group students' opinions about their own writing processes change?

This study aimed to improve fourth grade students' writing skills through process-based writing activities that focused on metacognitive skills. The researchers anticipates that the study will contribute to the limited literature about process-based writing at the primary level, and that how the study was implemented will stand as a good model for primary school teachers and enrich teachers' writing instruction processes. Moreover, this study will also be one of the first studies to put metacognitive skills at the forefront in writing instruction, and guide future studies. Considering that producing the letters as psychomotor will not guarantee the development of writing skills, this study offers teachers an applicable method as to how to improve students' writing skills in a process-based manner and how to enable them to acquire awareness about their own writing processes.

Methodology

Study Design

This study employed a mixed method, which consisted of qualitative and quantitative methods. Mixed methods which apply qualitative and quantitative methods collectively make a great contribution to the minimization of the mistakes that might be caused by the researchers themselves, or the nature of the study, and improve the quality of the study (Yıldırım, 2010a).

Creswell (2003) stated that there are three strategies followed in mixed method studies - "explanatory-consecutive process", "simultaneous process", and "transforming process." This study used the simultaneous mixed method. The qualitative data were collected during observations and interviews in the same timeframe as an experimental study and the control group pre-test-post-test experimental design included a combination of qualitative and quantitative methods, increasing the validity and reliability of the study, and contributing to the generation of more qualified results.

In the quantitative dimension, the study used the quasi-experimental method, in this case using a pre-test-post-test matched control group design, that made an unbiased assignment of one control group and one experimental group among the groups with similar characteristics based on the analysis results. In the experimental group, the lessons were taught using writing processes based on metacognitive skills. In the control group, they were taught according to the Turkish curriculum.

The qualitative dimension of the study included observations about the study process in addition to the comments of the participants in the control and experimental groups. The qualitative data about experimental and control group students' opinions about writing and story-writing processes were collected using a semi-structured interview method. The findings derived from these data were supported by the researcher logs that were written during the study.

The study used semi-structured interviews to select students, as well as criterion sampling, a purposeful sampling method. Marshall and Rossman stated that criterion sampling included the selection of the participants that are suitable for one criterion or more criteria as determined by the researcher (as cited in Yıldırım, 2010b). The criteria determined by the study were students' grades on their 2014 Fall semester school reports, and their pre-test achievement scores. The students in the experimental and control groups were analyzed based on these criteria, and a categorical selection was made of the students.

Study Sample

The sample of the study consisted of 64 fourth grade students (experimental group: 33, control group: 31) in a public school directed by the Ministry of National Education in Ereğli, Zonguldak (Turkey) that provided double-shift education. The study was conducted in the 2015 Spring semester of the Turkish school session. According to the Elementary Turkish Curriculum and Guide (Grades 1-5) (Republic of Turkey Ministry of National Education Board of Education and Discipline, 2009, p. 124), students are expected, as from the 4th grade, to select carefully the introductory and conclusive sentences when writing, to benefit from vocabulary, to write in logical coherency, to complete the incomplete text, and to evaluate their writings in terms of meaning and form. Therefore, this study was conducted with 4th grade students. The researchers obtained permission from the Karadeniz Ereğli Provincial Ministry of National Education to conduct the study.

Data Collection Tools

The study data were collected using the Story Writing Evaluation Form, reading texts, documents, researcher logs, observation form, a Self-evaluation Form which was created by the researchers, and a semi-structured interview form.

Story Writing Evaluation Form

This form was used to evaluate the experimental and control group students' performances regarding story-writing skills before and after the implementation of the study. The scale that was used for the study included the elements in the story, was aimed at evaluating written expression, and evaluated skills suitable for the fourth-grade level. Based on these criteria, the researchers determined that the Story Writing Evaluation Form, which was created by İzdeş (2011) was the scale that best fit the study objectives.

The Story Writing Evaluation Form consists of 17 articles: margins, paragraph and line spacing, draft, title, persons, place, time, plot, nodal point, solution, main idea, word, sentence, homogeneity (inter-sentences connection), paragraph, spelling and punctuation. The form was prepared as degreed grading key and its grading type is analytical. The degrees of sufficiency were defined for the criteria, which may result in points differing from 1 to 4. The total point that a student may take, in case of failure in all dimensions, will correspond to the number of dimensions (17 points). The maximum point that may be taken from the form is the number of dimension multiplied by four (68 points).

The researchers made changes to two items in the form by İzdeş (2011), first obtaining permission from İzdeş to use the form and to make these changes. The researchers deleted the expression "line spaces" from the item "Paragraph and Line Spaces" since the paper given to the students to write on was pre-ruled.

According to the Elementary Turkish Curriculum and Guide (Grades 1-5) (Republic of Turkey Ministry of National Education Board of Education and Discipline, 2009), fourth grade students are not expected to make a comprehensive description of the mental statuses of the characters in their stories. Thus, the item "The characters were described in physical and mental terms in detail" was changed to "the characters were described in physical terms in detail." Appealed to expert opinion in regard to the changes made according to the Turkish Curriculum and the acquisitions in the area of learning writing in 4th grade, and thus ensured the content validity of the form.

Reading Texts

The reading texts that were used in the activities performed by the experimental group students were about describing the elements and episodes of the story, finding a title, and completing the parts that were left missing in the story.

With this in mind, stories were analyzed by authors in children's literature in addition to the course books approved by the Ministry of National Education to determine suitable stories for the participating students. The researchers also consulted the opinions of four experts regarding the suitability of the selected stories in terms of class level, language and expression, spelling and punctuation. The experts thought that the problem situations and story structure in some of these stories were not clear and so these stories were changed and new stories had been determined. New stories were selected that were included in third, fourth, fifth, sixth and seventh grade Turkish textbooks and were suitable for the students' levels. When selecting the stories, the researchers thought it was likely that the students in the experimental group had not read them before. Also created maps for the selected stories and conducted preselections regarding the elements and occurrences in the stories. The 12 stories selected for the study were:

- Küçük Limon Ağacı (Small Lemon Tree)
- Vitrindeki Masal Kitabı (The Fairy Tale Book in the Shop Window)
- Rüzgâr İle Güneş (The Wind and the Sun)
- Pirinç Hakanı (The Rice Sultan)
- Kendine Hayran Olan Geyik (The Narcissistic Deer)
- Soru Balonları (Question Balloons)
- Sahibini Unutmayan Köpek (The Dog Who Did Not Forget Its Owner)
- Sevinç Çığlıkları (Screams of Joy)
- Çöp Ev (Garbage House)
- Çobanla Yaban Keçileri (The Shepherd and the Wild Goats)
- Küçük Kar Tanesi (Small Snowflake)
- Boğaç Han (Boğaç Khan)

Some of the texts, which were to be used in educational practices, were reviewed by researchers and experts and thus revised (long sentences were shortened, complex sentences were simplified, etc.) so that students may understand easily. The researchers appealed to expert opinion in regard to the changes and ensured the content validity of the texts.

Documents

The activities that were created by the researchers and performed by the students in the process-based writing activities focused on metacognitive skills, including studying the story structure, separating the paragraphs, putting the paragraphs in an order, finding a title, describing, language and expression check, spelling and punctuation check, and completing the missing parts in the stories, were evaluated in the context of the study documents.

Researcher Logs

These logs consisted of the notes taken during the study about the experimental group students and during the Turkish lessons which were taught to the control groups students according to the curriculum.

Observation Form

The experimental group students were also observed by an independent individual during the study process. The researchers made a review of the relevant literature to write observations about the study process, and prepared the observation form based on the derived information. The observation form included open-ended questions about the preparation for, and introduction to, the subject, the consistency between the lesson plan and the instruction of the subject, students' participation in the process, and the types of products created by the students in the process.

Self-Evaluation Form

The researchers created this form based on process-based writing criteria focusing on metacognitive skills for the experimental group students to evaluate themselves in terms of their performances in the story-writing process after all writing activities and the control group students after the post-test. This was also to have the experimental group students get into the habit of what to do in the writing process. This form had questions that students should ask themselves in the pre-writing process, writing process and post-writing process.

Semi-Structured Interview Form

This form was used to determine the experimental and control group students' opinions about story writing and the story-writing process before and after the research. Basically, answers were sought for these questions:

- What are students' thoughts about story writing?
- What do the students do before starting to writing a story?
- What do the students do in the story-writing process?
- What do the students do after completing the story?

When determining these questions, the researcher considered the stages of process-based writing, and aimed to determine to what extent the students used their metacognitive skills in the writing process.

Study Process

In the first stage of the five-stage study process, the experimental and control groups were determined, and decided to create the groups by assigning morning and afternoon students to experimental and control groups to prevent interaction between the groups and classroom teachers. The students were asked to write a story about a given topic to see whether they were equal to each other in terms of story-writing skills. The two groups were matched that did not have a significant difference between them school report notes for Turkish lesson, regarding their pre-test achievement scores obtained by evaluating written stories, duration of teachers' occupation, and classroom sizes.

Randomly, one of the morning groups was determined to be the experimental group and one afternoon group was determined to be the control group.

In the second phase of the study, semi-structured preliminary interviews were held with the experimental and control group students. In these interviews, the researchers aimed to identify students' opinions about story writing and writing processes, and discover to what extent they used their metacognitive skills in writing processes.

In the third phase of the study, story-writing activities were performed with the experimental group in the framework of process-based writing, and the control group students continued their writing activities with their classroom teachers according to the Turkish curriculum. In this stage, certain activities were performed with the experimental group students to enable them get to know the study in detail before it began. The activities performed by the students in this phase helped them learn the skill of self-review, and their attention was attracted to their mistakes to have them develop this skill. After the preparation for story writing, the students had perform story writing activities in the framework of process-based writing focused on metacognitive skills.

Before the first story writing activity, information cards were distributed about the writing processes that included the questions that students should ask themselves to plan their writing. After every writing activity, the students were gave Self-Evaluation Forms. This form aimed to make students evaluate their performances before, during and after the writing process, and it included items that sought to identify to which extent they were able to apply the plan they determined at the beginning of the writing process. The students were to use their metacognitive skills, such as planning, self-organization and self-review in the writing process, and improve these skills with the help of the information forms and self-evaluation forms.

In the fourth phase of the study, the post-test was administered. In the post-test, the students in both groups were asked to write a story about the topic they wrote in the pre-test. The stories written by the students were evaluated based on the Story Writing Evaluation Form in the post-test, as in the pre-test.

In the fifth and final stage of the study, semi-structured interviews were held with the experimental and control group students. These interviews aimed to determine whether there were any changes in students' opinions about story writing and writing processes compared to the pre-test, and identify any improvement in their use of metacognitive skills in writing processes.

This study is process-based and it comprises 8 weeks. The work schedule did not allow doing a work to improve the writing skills of the control group following the study.

Educational Activities

After the administration of the pre-test, training were provided to the experimental group for 28 hours (preparation for writing: 18 hours, writing process: 10 hours) over eight weeks. The practices for preparation for writing were performed over two hours, two or three days a week, and the writing practices were performed over two hours, once or twice a week. During the practices, the students were taught about story writing, focusing on metacognitive skills.

The pre-writing stages of the practice in the educational activities were designed according to the items in the Story Writing Evaluation Form. The main activities performed in the preparation process were; story map was used in the work of determining the story elements; reading texts were used in the works of outlining the story plan, sorting the paragraphs, writing the conclusion, body, and introduction of the story, forming the text title, describing the entities, and assessing the text in terms of language and expression, spelling and punctuation.

In the works of metacognitive skill-based and process-based narrative writing, the experimental group students wrote their stories by following the steps of process-based writing on the topics determined in line with expert opinions. Story map was used in this process. Students filled out the "Self-Evaluation Form" after writing their stories, to evaluate their own process of writing.

Over eight weeks, at the beginning of every activity, the subjects were revised taught in the previous activity to prevent students from forgetting the past studies, retain the information and transform it into skills.

Validity and Reliability Studies

Internal Validity

The teaching approaches used both in the experimental group and the control group, were observed by the observers. In the control group was observed in order to check whether the teaching was progressing according to the program whereas the experimental group was also observed an independent observer in order to check whether the process was progressing according to the plan.

As in Turkey the students are assigned to their classrooms in advance, it is difficult to create random groups and carry out experimental studies. So, it seems impossible to form study groups objectively by selecting students from different classes, to find a place (a classroom) to carry out the study and to design a schedule the participants can follow apart from the academic schedule. Due to these reasons, the sample in this research was not formed randomly but instead, the experimental and control groups were assigned randomly. When forming the study groups it was paid attention that they possessed equal properties in terms of particular variables (such as socio-economic level, school, class level, academic score) that might influence the results. One of the study groups was going to school in the morning and the other group was going in the afternoon, which prevented group interaction and thus helped avoiding the negativities that could have arisen from group interaction.

External Validity

The results obtained from the data collected in this research were associated with the studies that were carried out in similar periods and with similar samples as much as possible, and beyond-data generalizations were avoided.

Data Reliability

The research was a semi-experimental study that was carried out with the mixed method where the quantitative and qualitative approaches were used together. Thus; different studies were given place in order to ensure data reliability concerning the quantitative and qualitative data gathering processes.

The data gathered concerning the quantitative aspect of the research were also scored by an independent expert in order to check the reliability of the scores obtained concerning the quantitative data. The expert is a faculty member at a public university and specializes in Turkish education. So, first of all; the conditions where there was mutual agreement or disagreement between the scorers were defined and conformity values were determined based on the formula recommended by Miles and Huberman (1994). In this formula, reliability is measured by dividing the agreement score to the total score of the agreement and disagreement and then multiplying the result with 100. According to this, the percentage of conformity between the scorers is observed to change from .84 to .100.

The research is limited to upper cognitive skill process-based writing studies carried out at the fourth grade. The qualitative data of the research were obtained from the researcher logs, the interviews made with the students and also from the self-assessment forms of the students. In this way, it was tried to achieve variability of methods. In researches, variability of methods and researches contribute to the reliability of the research. In the application process, an independent observer was used in certain lessons in order to check how the experimental process was progressing. Yet; no peer observer was used to observe the changes undergone by the students. This can be regarded as a restriction in terms of the qualitative data.

Finally; in order to promote the quality of the research, in some sample situations of the participants, certain issues stated in the researcher logs were presented in the research just as they happened in real life. These statements were quoted in their original informal language. This study was conducted with the permission of concerned departments especially Ministry of National Education in Ereğli, Zonguldak. Teachers and parents were informed that participation in the survey was on

voluntary basis and that participants might leave the work at any stage, and thus their consents were received. Teachers and parents were also given information about privacy.

Data Analysis

The study will discuss the qualitative and quantitative data analysis processes separately. For the qualitative data analysis, the data collected was analyzed using the Story Writing Evaluation Form using SPSS software. The quantitative data were analyzed using the Kolmogorov-Smirnov Z test, t-test and covariance analysis. The interviews held with the participants were analyzed for the qualitative data analysis. Descriptive analysis was conducted on the study data, considering the research problems and process-based writing elements. In addition, the log was kept about the process and this and students' comments as expressed on the Self-Evaluation Forms were also evaluated.

Findings and Interpretation

Regarding the first sub-problem of the research, a t-test was conducted on the assessments to determine any difference between the total pre-test and post-test mean scores of the experimental group. The findings related to these assessments are presented in Table 1.

Table 1. The t-Test Results of the Pre-test and Post-test Mean Scores of the Students in the Experimental Group"

	N	\bar{X}	SD	t	p
Pre-test	33	34.4091	6.67605	-21.634	,000*
Post-test	33	51.4242	6.69436		

* $p < 0.05$

An analysis of Table 1 indicates that there is a statistically significant difference between the pre-test and post-test mean scores of the experimental group ($t = -21,634$, $p < .05$). Accordingly, the total post-test mean score ($\bar{X} = 51,4242$, $SD = 6,69436$) and total pre-test mean score of the experimental group ($\bar{X} = 34,4091$, $SD = 6,67605$) show that the writing education provided to the experimental group improved their overall story writing skills.

Regarding the second sub-problem of the research, the researchers checked any significant difference between the pre-test and post-test mean scores of the students in the control group. Table 2 presents the results of the t-test conducted on the assessments of the total pre-test and post-test mean scores of the students in the control group.

Table 2. The Results of the t-Test Conducted on the Assessments of the Total Pre-test and Post-test Mean Scores of the Students in the Control Group

	N	\bar{X}	SD	t	p
Pretest	31	34.5323	5.04304	-4.127	,000*
Posttest	31	38.3065	5.36296		

* $p < 0.05$

An analysis of Table 2 shows that the total pre-test mean scores ($\bar{X} = 34,5323$, $SD = 5,04304$) and total post-test mean scores ($\bar{X} = 38,3065$, $SD = 5,36296$) of the control group students had a significant difference between them ($t = -4,127$, $p < .05$). This shows that there was an improvement in the story-writing skills of the control group students over the eight-week study. This finding indicates that writing activities at school are effective in improving students' story-writing skills.

In the investigation of the third sub-problem of the research, the researchers attempted to determine any significant difference between the total post-test means cores of the experimental and control group students. To do this, the researchers applied an independent groups t-test that is presented in Table 3.

Table 3. The Results of the Independent t-Test Conducted on Total Post-test Mean Scores of the Experimental and Control Group Students

	N	\bar{X}	SD	t	p
Experimental Group	33	51.4242	6.69436	-8.676	,000*
Control Group	31	38.3065	5.36296		

*p<0.05

As seen in Table 3, there was a significant difference ($t = -8,676$, $p < .05$) between the mean scores of the experimental group ($\bar{X} = 51,4242$, $SD = 6,69436$) and control group ($\bar{X} = 38,3065$, $SD = 5,36296$). This shows that the story-writing skills of the experimental group students improved more than those of the control group students. In other words, the 28-hour education on process-based writing, focusing on metacognitive skills, contributed to the improvement of the experimental group students' story writing skills. The researchers believes that there will be more improvement in students' story-writing skills if they have more practice.

In the investigation of the fourth sub-problem, the researchers sought to determine whether there was any significant difference between the post-test scores of the groups when the pre-test mean scores of the experimental and control groups were controlled. Table 4 presents students' pre-test-post-test corrected arithmetic means and standard deviation values, as well as post-test corrected mean and standard error values.

Table 4. The Pre-test-Post-test Corrected Arithmetic Means and Standard Deviation Values, and Post-test Corrected Mean and Standard Error Values of Students in the Experimental and Control Groups

Groups	N		Total Scores		Corrected Post-test Mean Scores	
			\bar{X}	SD	\bar{X}_d	SE
Experimental Group	33	Pre-test	34.41	6.68	52.23	.84
		Post-test	52.20	6.83		
Control Group	31	Pre-test	34.53	5.04	38.26	.87
		Post-test	38.30	5.36		

As seen in Table 4, the corrected total post-test mean score of the experimental group ($\bar{X} = 52.23$) is higher than the mean score of the control group ($\bar{X} = 38.26$). The researchers conducted covariance analysis to determine whether that difference was significant. The results of this analysis was shown on Table 5.

Table 5. The Results of the Covariance Analysis Conducted on the Total Post-test Scores of the Students in the Experimental and Control Groups

Source of the Variance	Sum of the Squares	SD	Mean of the Squares	F	p
The Controlled Variable (Pre-test)	936.141	1	936.141	40.165	.000
Main Effect of Grouping	3125.069	1	3125.069	134.079	.000***
Error	1421.765	61	23.308		
Total	137797.860	64			

***p<.001

As seen in Table 5, the results of the covariance analysis showed that the main effect of the grouping was significant regarding the corrected post-test mean scores of the groups when the total pre-test scores were controlled [$F(1,61) = 134.079$, $p < .001$]. The study applied Bonferroni multiple comparisons test to determine which groups had this difference between them, and the results are shown in Table 6.

Table 6. The Results of the Bonferroni Test Regarding the Significance of the Difference Between Experimental and Control Group Students' Total Post-test Corrected Mean Scores

Comparison	Actual Difference	Standard Error	p
Experimental Group/Control Group	13.983	1.208	.000***

***p<.001

An analysis of Table 6 showed that there was a statistically significant difference between the experimental and control groups, to the advantage of the experimental group.

Regarding the sub-problem "How did experimental group students' opinions about the writing processes change?" the experimental group students' opinions about the writing processes were analyzed before and after the study. Table 7 presents the experimental group students' opinions and the frequency values of these opinions.

Table 7. Experimental Group Students' Opinions about the Writing Processes

Preliminary Interview	Keywords Stated	Frequency	Final Interview	Keywords Stated	Frequency
Affective	Positive Feeling (thinking that it is nice, feeling happy, liking, having fun, getting excited)	10	Affective	Positive Feeling (thinking that it is nice, liking, being fun, becoming happy)	9
	Thinking about what to write	5		Pre-writing	Drafting (story elements, plan of the event, determining the writing duration)
Pre-writing	Finding a title	2	Thinking about what to write		2
	Environmental organization	2			
	Thinking on the character and event	2			
	Generating different opinions	1			
	Focusing on the subject	1			
Writing	Putting the thoughts into writing	5	Writing	Page layout, paying attention to spelling and punctuation	9
	Paying attention to spelling and punctuation	3		Writing in consistency with the draft	5
	Generating new opinions	3		Working on the title	1
	Paying attention to the title and the parts of introduction, development and conclusion	1		Developing the problem	1
	Asking for the opinions of others	1		Focusing on the writing process	1
	Developing the problem	1			

Table 7. Continue

Post-writing	Re-reading and correcting the mistakes noticed	7	Post-writing	Re-reading and paying attention to the draft as well as the spelling and punctuation	7
	Getting involved in something else	3		Re-reading and correcting the mistakes noticed	6
	Including the name and surname, and the name of the class	1			
	Doing another check and paying attention to spelling and punctuation	1			
	Re-reading and eliminating mistakes	1			

An analysis of Table 7 indicated that the experimental group students had positive opinions in general about story writing before the study, and they maintained these opinions after the study. Three students in the experimental group said that they began to like writing during the study and also to write more comfortably. In general, students stated that writing stories was a nice experience, they were happy when writing, they liked to write stories, had fun and got excited about it. Before the study, one student expressed that "... I think writing stories is nice. You can express your thoughts and feelings on the paper. So I think it is similar to writing a composition, you just include some imaginary elements ..." Another student said "... I have enjoyed story-writing activity since we did the study. You made us like to write ..." and "I didn't know about the parts of introduction, development and conclusion before. I learned about these parts and the punctuation marks from you. I like to write stories ..." These statements by the students form the affective dimension of the opinions about story writing. Students' opinions about the story-writing process and the observations made during the implementation process showed that the study also had acquisitions related to the emotional dimension in addition to cognitive acquisitions.

There were differences between the experimental group students' opinions before and after the study regarding the steps followed before story writing. Before the study, the students stated that they mainly thought about what they would write before starting to write the story. They also worked on the title, the character and the event, and made environmental arrangements, such as preparing pencils and paper. After the study, they said that they prepared a draft and plan of events to include the story elements, determined the duration of writing, and thought about what to write. Based on this information, it was concluded that the students with whom interviews were held, had a mental preparation process. However, the mental preparation and thinking process after the study was very different from the mental preparation followed before the study. The important point here is that students' thoughts indicated that this process was followed in a more systematic and planned way after the study. One of the skills that the study aimed to teach the students was that the drafting activity should be performed in a systematic way. Students' opinions before the study were only focused on "thinking about what to write," and most students expressed this as "I think about what to do." After the study, only two students said they thought about what to write. The other students said that before writing they prepared a draft including the elements of the story, plan of the events to be told, the place and time, main and supporting and characters, the event, the attempts to solve the problem, how to start the story and how much time they would spend on writing the story. This situation was reflected in the interviews with the experimental group students (ES) and researcher logs as follows:

"... I create a map of the story. That means, a map that includes the main idea, the main character and everything else. We write the story on our paper. When I forget something, I can look at the back of the page to remember what I had written. But I used to write everything I thought of before this study. I write more comfortably now." ES1

"... Students now plan the stories they will write before passing onto the writing activity. In the first writing activity, almost all of the students would look at the elements in the story map when drafting their stories. This was less common in the second activity, and as of the third activity, a majority of the students began to draft their stories to include the story elements without looking at the story map ..." (Researcher log, May 25, 2015, p. 8)

A collective analysis of all these opinions indicates that the mental preparation process followed by the experimental group students before starting to write became more systematic and planned with the study. This finding was interpreted as that the education helped the students to perform the thinking process, or the mental preparation process, in a planned way.

Students' opinions about the activities in the writing phase, and those about the pre-writing phase, were different before and after the study. Before the study, some students said that in the story writing process they wrote the opinions they determined in the pre-writing phase, and some other students said that they continued thinking in the writing phase. In addition, there were also students stating that they paid attention to the page layout and spelling in the writing phase, and they added different thoughts to their writing. Most of the students that interviewed after the study said that they paid attention to the page layout and spelling, and many others said that they proceeded with their writing processes in accordance with the draft they had prepared. Some students said "Before the study, I used to write without thinking, that is, I did not care about it much. But now, I write more carefully and meticulously. I pay attention to the commas and the other punctuation marks, how my writing looks, the title must be interesting, and I separate the parts of introduction, development and conclusion," which are examples of the activities they said that they performed in the writing phase. The taken notes support these student comments and are reflected in the researcher log as follows:

"Students check the drafts they had prepared while writing their stories. When they consider changing something in the story in this phase, they make this change on the draft. In the writing process, they both read what they are writing, and they correct their mistakes related to the content and format." (Researcher log, May 22, 2015, p. 6)

Accordingly, the students in the experimental group performed the writing process in a controlled way. Students' opinions about this process and the observations of the researcher were the indicators of the fact that the students had begun to use their metacognitive skills, including tracking backwards, and correction and re-arranging when necessary, in addition to the writing skills that the study aimed to teach the students.

When they were asked what they did after they wrote their stories, some students said that before the study, they re-read the texts, corrected any mistakes, and completed the missing parts. However, the students did not make these corrections based on certain criteria, but when they recognized a mistake. Only one student clearly stated checking the spelling and punctuation specifically. The comments such as: "I write my name and surname. Then I write my school number and name of my classroom. I also write down the date. Then, I check the punctuation marks, and the paragraph spaces," "After I complete my story, I draw a picture about the story below. Then I write my name and surname," are the examples of students' post-writing activities. In their comments, the students did not express the stages of tracking, controlling and revising, and this can be interpreted as their failure to manage their metacognitive skills successfully before the study.

When asked during the study about what they did after writing their stories, a majority of the students said that they re-read and checked their texts, reviewed their drafts and story maps, and paid special attention to the spelling and punctuation marks. There were also some students stating, without emphasizing these points, that they re-read their stories after completing them, and corrected the mistakes they recognized. The taken notes about students' activities in the post-writing phase showed that the tracking, evaluation and revision processes followed by the students were clearer after the study. Researchers' notes about these processes are as follows:

"Students take some of the time they spare for story writing to check their writing. I recognized that when doing the post-writing reading, students look at the drafts or story maps they had created at the beginning. I observed some of the students doing this for a longer time than the others. I wanted to see if they made any changes. Most of them made corrections related to the punctuation. However, when I saw that some students made additions to their stories or deleted some parts and rewrote them, I liked it very much. I think the study is working. There are still some students who complete the post-writing activity by just reading the text and do not examine the draft or map again. We are almost at the end of the study. I had better attract their attention to the tracking process." (Researcher log, May 25, 2015, p. 9)

One student expressed the post-writing activities as:

"... I read the text. Sometimes I leave a one-inch margin instead of two. I correct the inches. I check whether there are any spelling mistakes, if I wrote down the main idea and had any descriptions." ES2

The students were divided into four groups before the implementation based on their academic achievement and pre-test achievement scores. In addition to the comments about this process, students expressed their thoughts on the Self-evaluation Form after the writing activities. The study included the comments of one student from each group.

An analysis of the comments of a student who had high academic and pre-test achievement scores showed that this student used personal metacognitive skills effectively in most of the writing activities. The student stated that he/she partially performed the practices addressed in the text writing duration, transitions and connections and the story elements. However, the student performed the practices related to these elements almost completely in the later activities.

The comments of a student who had a high academic achievement score and low pre-test achievement score were analyzed, and noticed that there was an improvement in the student's use of metacognitive skills in the writing activities. In the first writing activity, this student wrote the story without limiting the topic. However, in the later activities, the student defined the topic before writing, and determined what to tell in the story. Similarly, the student said that he/she did not read the story again after completing it, and partially practiced the revision and arranging phases in the first two activities. In the later activities, the student read the story again and worked on it.

The comments of a student who had low academic achievement and a high pre-test achievement score were analyzed and found that there was an improvement in the students' use of metacognitive skills in the writing activities. The student said he/she did not include all of the story elements in the text, but included them in most of the following activities. The student also said that he/she partially performed the practices aimed at defining the topic of the text and drafting. After the study, it was observed that there were improvements in the student's practices in relation to these points.

The comments of a student who had low academic and pre-test achievement scores were also analyzed, and determined that the student improved his/her use of metacognitive skills during the writing activities. This student did not make use of the preliminary information about the story in the first writing activity, while he/she used this information in the following writing activities. Moreover, the student stated that he/she did not pay much attention to organizing his/her thoughts about the text, determining the duration of writing, and correcting the mistakes in the text and on the page, while he/she mostly performed these practices in the later activities.

An overall analysis of the comments about the process indicated that the students, regardless of their academic and writing level, improved their metacognitive skills which were one aim of the study.

Interviews were held with the control group students before the study regarding the sub-problem "How did control group students' comments about their writing processes change?", and asked the students in the control group questions about the writing process. Table 8 presents control group students' comments about story writing and the frequency values of the comments they provided.

Table 8. Control Group Students' Comments About Story Writing

Preliminary Interview	Keywords Stated	Frequency	Final Interview	Keywords Stated	Frequency	
Affective	Positive feelings (thinking that it is nice, liking)	6	Affective	Positive feelings (feeling good, liking, getting excited)	11	
	Negative feelings (finding difficult, stress)	2		Negative feelings	2	
Pre-writing Writing	Thinking about what to write	7	Pre-writing	Thinking about what to write	6	
	Environmental organization	2		Envisaging/Fictionalizing	4	
	Thinking about the story elements	2		Doing nothing	2	
	Envisaging	2		Drafting or planning in mind	1	
	Doing research	1		Choosing words	1	
	Finding a title	1				
	Waiting for inspiration	1				
	Doing planning	1				
	Putting the thoughts into writing	6		Writing	Putting the thoughts into writing	4
	Putting oneself in the character's shoes when writing	2			Paying attention to spelling and punctuation	4
Finding a title	1	Writing whatever comes to the mind	2			
Focusing on the topic when writing	1	Writing in accordance with introduction, development and conclusion	1			
Paying attention to spelling and punctuation	1	Writing the story as planned	1			
Post-writing	Re-reading and correcting mistakes	7	Post-writing	Re-reading and correcting mistakes	9	
	Writing the name and surname, and the classroom	3		Re-reading and paying attention to the page layout, spelling and punctuation	2	
	Getting involved in something else	2		Writing the name and surname, and the classroom	1	
	Re-reading and generating new comments	1		Reviewing	1	

An analysis of the table indicated that control group students, like the experimental group students, had positive opinions in general about story writing in both interviews. The students in the control group said that they thought that it was a nice feeling to write stories and they got excited and felt good when writing. Some statements by the participants such as "When writing a story, we write whatever we think. This makes us happy as we create a story," "I think writing a story is very nice. Everything in it is imagination. And imagination is very beautiful. So, I like writing stories very much," and "... Writing stories is good for me. I feel happy when I write a story," support this view. In the preliminary interview, control group students also had positive comments about writing stories, which showed that the groups were similar in terms of their attitudes, as well as the pre-test scores. This result is important in terms of the equality of the groups.

In the preliminary interview, most of the control group students said that they planned what they would write in their minds before starting to write their stories. About this point, one student said "... First, I think about what to write. I think about the topic. I pay attention to the topic before writing the story. I think about what I can write about the topic. I also dream about it, that is, I push the limits of my imagination." In this category, the students said that they thought about how to write the story after doing some environmental organization, such as clearing up their desks and preparing their pencils. After determining the main topic, they decided on the main character and place and time, and envisaged the story afterwards. Accordingly, most interviewed students had a mental preparation process before starting to write. Compared to the statements of the experimental group, at least two control group students had more qualified preparation processes, as these students said that they spent this thinking process focusing on the story elements. The other students in the control group did not have as planned mental preparation processes as the experimental students. This situation was observed in the preliminary interview and maintained in the final interview in the control group without any major changes. "Thinking about what to write," was the most commonly expressed comment by the control group students in the final interview. This was reflected in the interviews with the control group students (CS) as follows:

"... After I determine the topic of the story, I think about what to write. Sometimes I also think while I'm writing the story, because nothing comes to my mind before that. I review the topic, and use my preliminary information. I write down what I know, and I try to write a story that fits the topic." CS1

An analysis of experimental and control group students' comments about this process indicated that their opinions were very different from each other. The experimental group students had a more planned preparation process, and as in the preliminary interview, the control group students could not proceed with their mental preparation process in a planned way. For this reason, it was concluded that the study helped the experimental group students to have a more planned thinking process in the pre-writing preparation stage, and put forward their opinions more effectively. The researchers believe that the activities in the control group did not make sufficient contribution to students' having an effective pre-writing preparation processes as the experimental and control group students had very different comments and as a result of this difference was observed in the process about the pre-writing process in the final interview.

An analysis of the control group students' comments about their practices during writing indicated that they had similar comments in the preliminary and final interview, and their comments were in line with the experimental group's comments about this process before the study. The practices done before writing mainly consist of writing down the thoughts before starting to write. In the interviews, some control groups students said that they wrote what they thought in the story-writing process, and few of them said that they put themselves in the character's shoes when writing. It is noteworthy that only one student said that he/she wrote the story according to the plan created before. The statements below show what they did in the writing process: "... I organize the story in my imagination," "... It feels like I am in the story when I am writing. I run from one adventure to another," "... When I am writing the story, I add some other things to what I thought before. I develop it a little

more. This improves my story and makes it better. Sometimes it makes it meaningless, so I change it. I mean, it is not certain what I will write in the story. Sometimes I create a draft", and "... When I am writing the story, I check the readability of my handwriting. I should write in a proper way so everyone can read it." These statements imply that the control group students do not perform the writing process in a systematic and controlled way. The notes were taken support these comments of the students. This was reflected in the researcher log as follows:

"The students performed the story-writing activity in their course books with the direction of the teacher. The direction of the teacher was 'Now you will write a story about the topic given to you.' The classroom teacher said that the students should only pay attention to the questions Who, What, When, Which, Where and Why (Wh) and making descriptions. Despite this explanation, almost all of the students started their writing activities without making any plans or drafts before. In the writing process, almost none of the students read what they wrote and checked their mistakes relating to the content and format." (Researcher log, May 06, 2015, p. 2)

Students' comments about this process and observations during these activities imply that students did not make an effective use of metacognitive skills, such as backward tracking, and making revisions and new arrangements when necessary.

The control and experimental group students had very different comments about this process in the final interview. At this point, it was concluded that the study helped the experimental group students perform the writing process in a more planned and controlled way. However, the activities performed in the control group did not make sufficient contribution to the students to enable them to have an effective story writing process.

In the preliminary interview, the control group students were asked about what they did after they wrote their stories, and a majority of the students said that they re-read their texts after completing their stories, and corrected mistakes, if any. However, the students said that they made these corrections when they saw a mistake, but not based on certain criteria. About this point, one student said "... After I finish my story, I read it. If I see any mistakes, I correct them. Because I want my story to be nice. Then, I think about it a little more, and consider if I should add anything ..." The other students' comments were about "writing their names and surnames," "solving test questions or reading books," and "doing no checking." In this category, the groups are similar to each other. These results indicate that the experimental and control groups are very similar to each other.

In the final interview, a majority of the control group students said that they read their stories after finishing them, and corrected the mistakes they saw. About this process, only two students said that they re-read their stories considering certain criteria, such as spelling and punctuation, and page layout. Some practices performed by the control group students at the end of the writing process are reflected by their statements such as "... I check the punctuation marks to see whether I wrote them correctly. I check the paragraphs, and correct the mistakes if I see any. I mean, I spend some effort ..., " and "... I read it again. If I don't like it, I correct the parts that do not seem to work well." These statements imply that a majority of the students re-read that their stories after they finished writing, and they corrected the mistakes if they see any. In addition, one student said that he/she just looked through the story quickly, and another student reported doing no check of the story.

The study concluded that the groups were also different in terms of the practices performed after the writing is complete. Experimental group students mainly examined their stories regarding the content, page layout and spelling, while most of the control group students only corrected the mistakes they noticed. The study findings indicated that experimental group students followed the revision and correction phases in a more effective way. When compared to the experimental group, it was observed that the practices in the control group did not make sufficient contribution to students' effective performance of the post-writing review stage. Students' comments about this process and the observations showed that students did not make a sufficient use of metacognitive skills, such as backward tracking after writing, and making corrections and revisions when necessary.

A collective analysis of the qualitative and quantitative data indicated that the eight-week education provided to the experimental group students improved their story writing skills and use of metacognitive skills. Both qualitative and quantitative findings of the study proved that experimental group students' story writing skills were significantly improved compared to the pre-research stage and to the control group. The written researcher logs supported this finding. Moreover, the interviews with the experimental and control group students before and after the study, the written researcher logs and self-evaluations of the students showed that experimental group students improved their use of metacognitive skills in addition to their writing skills. In conclusion, writing practices based on processes focusing on metacognitive skills improved students' story writing and metacognitive skills.

Conclusion, Discussion, and Suggestions

There was a significant difference between the experimental group students' pre-test and post-test mean scores. Studies that are organized according to writing processes based on metacognitive skills improved students' story-writing skills and had a positive effect on them. This results of the study are consistent with studies of process-based story writing (Olson, 2004; Özkara, 2007; Karatay, 2011; Güvercin, 2012; Sever, 2013), and the results of the studies about story writing based on metacognitive skills in the national and international literature (Fischer, 2002; Saddler et al., 2004; Harris et al., 2006; Saddler, 2006; Saddler & Asaro, 2007; Tracy et al., 2009; Uygun, 2012; Zumbrunn, 2010; Zumbrunn & Bruning, 2012).

There was a statistically significant difference between the pre-test and post-test scores of the control group students. Accordingly, the lessons taught to the control group students over eight weeks based on the Turkish curriculum contributed to their story-writing skills. While this result of the study is consistent with the results of the studies by Özkara (2007), and Öztürk (2007), there isn't consistent with the results of the studies (Glaser & Brunstein, 2007; Sever, 2013) in which the control group students did not make a significant difference between pre-test and post-test scores. However, although there was a significant difference between the pre-test and post-test scores of the control group students in this study, process observations and the control group students' comments about the writing process suggest that they mainly started story writing practices without having a systematic preparation process, and the practices aimed at tracking the process were not performed in a planned way. This result of the study is consistent with the results of the studies by Harris et al. (2006), Erdoğan (2012), and Uygun (2012). In these studies, as a result of the lessons that have been processed according to present program, the control group students' was determined they could not perform the writing process in a planned and systematic way. At this point, there emerge questions to be discussed, such as why the writing process is not applied effectively despite the fact that it is included in the Turkish curriculum, what objectives are included in the curriculum in regard to written expression, and what contributions an emphasis on the writing process may make to achieve the objectives. These questions require further research, which would contribute to the literature significantly.

A comparison of the post-test mean scores of the control and experimental groups showed that the post-test scores of the experimental group were significantly higher than those of the control group. Accordingly, the experimental group students who performed the story-writing activities based on writing processes focusing on metacognitive skills were more successful than the control group students who performed these activities according to the Turkish curriculum. This result was consistent with the results of the other relevant studies (Saddler et al., 2004; Saddler, 2006; Harris et al., 2006; Saddler & Asaro, 2007; Tracy et al., 2009; Uygun, 2012; Zumbrunn, 2010; Zumbrunn & Bruning, 2012).

In the story-writing process, the experimental group students performed preparation, planning, tracking and revision studies, which shows that the students improved their use of metacognitive skills in addition to their writing skills. This supports the conclusion that education improves students' writing skills, and it also enhanced their awareness about the use of metacognitive skills. This result of the study is consistent with the studies that examined the use of metacognitive skills during the writing process (Fischer, 2002; Harris et al., 2006; Saddler & Asaro, 2007; Uygun, 2012; Zumbunn, 2010).

The control group students had positive opinions about writing before the study, which increased the effectiveness of the activities performed in the study. Moreover, it facilitated the improvement of students' writing skills in addition to their metacognitive tracking skills in that they had awareness about the structure of the story, brought their sample stories to the class and worked on them, and used the story elements as tools of preparation and tracking in both pre-and post-writing processes. In terms of the improvement of students' writing skills and metacognitive skills related to the writing processes, the use of the text structures increased the effectiveness of the study. This result is partially consistent with the result of the study conducted by Uygun (2012).

Suggestions

Suggestions for Implementation

1. It is not only the writing skills of the students that should be improved. Education about metacognitive skills should also be included at school to improve their awareness about their own writing skills and processes. This is important to allow the students to complete and manage their own writing processes independently.
2. Providing feedback to the students about their mistakes in the writing process makes great contributions to the students' ability to improve themselves. Informative feedback is again a process that requires working with student and being a model. For this reason, teachers should definitely include instructive feedback about students' work in the process of teaching writing.
3. It was determined that the 2005 Turkish curriculum included process-based writing practices. The 2015 Turkish curriculum emphasizes that the area of learning writing was to be based on a "process-based writing model." Process-based writing activities were to be included in the program -considering the program taught by the classroom teacher was the actual program- however, the researchers believe that both pre-service teachers and in-service teachers should be provided with more qualified training programs on the improvement of students' writing skills, the instruction of process-based writing activities, and the use of these skills in the classroom. It will contribute to the enhancement of students' competencies in process-based writing if academic studies about process-based writing practices explain the process in detail, as done in this study.
4. Another point that should be considered by the teachers who provide writing instruction with the purpose of generating quality writing products and having successful writing processes, is allowing the responsibility in the writing process to gradually pass to the students, and improving students' metacognitive processes in such a way as to enable them to manage their own writing processes. At the end of the training provided to them, students should be able to track and evaluate their writing processes and products, and perform practices to further improve them.
5. In order for the teacher to be able to teach the writing methods and techniques that are effective in improving the written expression skills of primary level students, it is necessary that more writing activities are included in the Turkish Teaching lessons in Education Faculties.

Suggestions for Studies

1. This study was conducted with fourth grade students using narrative texts, which increased the effectiveness of the results. The results of the study enhanced the notion that process-based writing studies can be conducted with younger students when narrative texts are used. Considering this text structure, with which the students are familiar, studies on writing skills improvement can be conducted with third grade students. On the other hand, the researchers also suggest that process-based writing activities which are accompanied by metacognitive skills are conducted with older students using different models and approaches, and different studies are planned to improve and to test students' writing skills.
2. The text type selected in this study was the narrative text. Future studies might select another text type and investigate this model's effect on the improvement of students' written communication skills.
3. The sample of this study included students with moderate socio-economic levels. It is suggested that studies about process-based writing activities focusing on metacognitive skills are conducted with students from different socio-economic levels.
4. In this study, the students' use of metacognitive skills was not evaluated in quantitative terms, which is in contrast with the evaluation of their writing skills. The data about students' metacognitive skills were derived from observations, students' opinions, and participants' self-evaluation forms. Studies can reach more objective results by creating and using tools that can evaluate students' use of metacognitive skills quantitatively. It is also possible to increase the reliability of the study results by ensuring the presence of more independent observers in the classroom.

There were still some students, even though few, in the study who could not perform the tracking studies in a systematic way, which shows that these types of studies should be conducted over longer periods, particularly focusing on the use of metacognitive skills. Thus, the researchers believe longer studies will make important contributions to the relevant literature.

References

- Aktaş, A. (2013). *Interaction between the success level of turkish teaching courses and attitude and metacognitive skills* (Unpublished master's thesis) Trakya University Institute of Social Sciences, Edirne, Turkey.
- Akyol, H. (2014). *Programa uygun Türkçe öğretim yöntemleri*. Ankara: Pegem Akademi Yayıncılık.
- Anılan, H. ve Gültekin, M. (2006). The effectiveness of clustering method in developing written expression skills. *Journal of Social Sciences, Eskişehir Osmangazi University*, 7(1), 1-23. Retrieved from <http://dergipark.ulakbim.gov.tr/ogusbd/article/view/5000080835>.
- Arıcı, A. F. ve Ungan, S. (2008). An evaluation of secondary school students' writing mistakes with respect to some points. *Dumlupınar University Journal of Social Sciences*, 20, 317-328. Retrieved from http://birimler.dpu.edu.tr/app/views/panel/ckfinder/userfiles/17/files/DERG_/20/315-327.pdf.
- Ateş, S. (2011). *Evaluation of fifth-grade Turkish course learning and teaching process in terms of comprehension instruction* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Ateş, S., Çetinkaya, Ç. ve Yıldırım, K. (2014). Elementary school classroom teachers' views on writing difficulties. *International Online Journal of Educational Sciences*, 6(2), 475-493. doi: <http://dx.doi.org/10.15345/iojes.2014.02.018>. Retrieved from http://www.iojes.net/userfiles/Article/IOJES_1331.pdf.
- Bayat, N. (2014). The effect of the process writing approach on writing success and anxiety. *Educational Sciences: Theory & Practice*, 14(3), 1123-1141. doi: 10.12738/estp.2014.3.1720. Retrieved from <http://www.edam.com.tr/kuyeb/pdf/tr/0eccc6c6686acff81fb50a9c064e525c31141.pdf>.
- Baydık, B. (2011). Examining the use of metacognitive reading strategies of students with reading difficulties and their teachers' reading comprehension instruction practices. *Education and Science*, 36(162), 301-319. Retrieved from <http://egitimvebilim.ted.org.tr/index.php/EB/article/view/1354/330>.
- Belet, D. Ş. ve Yaşar, Ş. (2007). Effectiveness of learning strategies over reading comprehension, writing skills and learners' attitudes towards Turkish course. *Journal of Theory and Practice in Education*, 3(1), 69-86. Retrieved from http://home.anadolu.edu.tr/~sdbelet/yayinlar/ogrenme_stratejileri.pdf.
- Cavkaytar, S. (2009). *Application of balanced literacy in Turkish education: an action research with 5th grade* (Unpublished doctoral dissertation). Anadolu University Graduate School of Educational Sciences, Eskişehir, Turkey.
- Cavkaytar, S. (2010). Benefitting from writing process method to improve written expression skills in primary education. *The Journal of International Social Research*, 3(10), 133-139. Retrieved from http://www.sosyalarastirmalar.com/cilt3/sayi10pdf/cavkaytar_serap.pdf
- Collins, J. L. (2000). Review of key concepts in strategic reading and writing instruction. In J. L. Collins (Ed.), *Cheektowaga-Sloan Handbook of Practical Reading and Writing Strategies* (pp. 5-10). Retrieved from <http://gse.buffalo.edu/org/writingstrategies/PDFFiles/CHEEKTOWAGA-SLOAN.PDF>.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage Publications, Inc.
- Çakıroğlu, A. (2007a). *The effect of metacognitive strategy training on improving the achievement level of students having low achievement levels of reading comprehension* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Çakıroğlu, A. (2007b). Metacognition. *Turkish Journal of Social Research*, 2, 21-27. Retrieved from <http://www.tsadergisi.org/tsadergi/arsiv/agustos2007/02.pdf>.
- Doğan, A. (2013). Metacognition and metacognition based teaching. *Middle Eastern & African Journal of Educational Research*, 3, 6-20. Retrieved from <http://www.majersite.org/issue3/1dogan.pdf>.

- Edwards, L. (2003). Writing instruction in kindergarten: Examining an emerging area of research for children with writing and reading difficulties. *Journal of Learning Disabilities, 36*, 136-148.
- Englert, C. S., Raphael, T. E., Anderson, L. M., Anthony, H. M., & Stevens D. D. (1991). Making strategies and self-talk visible: Writing instruction in regular and special education classrooms. *American Educational Research Journal, 28*(2), 337-372. doi: 10.3102/00028312028002337. Retrieved from http://www.researchgate.net/publication/250184504_Making_Strategies_and_Self-Talk_Visible_Writing_Instruction_in_Regular_and_Special_Education_Classrooms.
- Erdoğan, Ö. (2012). *The effects of process based creative writing activities on students' writing expression and attitude towards writing* (Unpublished doctoral dissertation). Hacettepe University Graduate School of Social Sciences, Ankara, Turkey.
- Erhardt, R. P. ve Meade, V. (2005). Improving handwriting without teaching handwriting: The consultative clinical reasoning process. *Australian Occupational Therapy Journal, 52*, 199-210. doi: 10.1111/j.1440-1630.2005.00505.x
- Fischer, K. L. (2002). *Learning to write in elementary school: development of selfregulated writing in six young writers* (Unpublished doctoral dissertation). Faculty of the Graduate School of the University of Maryland, College Park, USA.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34*, 906-911. Retrieved from <http://psycnet.apa.org/psycinfo/1980-09388-001>.
- Galanis, J. A. (2008). The effect of the handwriting without tears program on student cursive writing achievement at Central Institute for the Deaf (CID). *Independent studies and capstones, Paper 417*. Retrieved from http://digitalcommons.wustl.edu/pacs_capstones/417
- Glaser, C., & Brunstein, J. C. (2007). Improving fourth-grade students' composition skills: effects of strategy instruction and self-regulation procedures. *Journal of Educational Psychology, 99*(2), 297-310. DOI: 10.1037/0022-0663.99.2.297
- Göçer, A. (2014). *Yazma eğitimi*. Ankara: Pegem Akademi Yayıncılık.
- Güneş, F. (2013). *Türkçe öğretimi yaklaşımlar ve modeller*. Ankara: Pegem Akademi Yayıncılık.
- Güvercin, A. (2012). *Comparison of TÖMER model and process based writing model in teaching Turkish as a foreign language* (Unpublished master's thesis). Necmettin Erbakan University Department Of Educational Sciences, Konya, Turkey.
- Hamstra-Bletz, L., & Blöte, A. (1993). A longitudinal study on dysgraphic handwriting in primary school. *Journal of Learning Disability, 26*, 689-699.
- Harris, K. R., Graham, S., & Mason, L. H. (2006). Improving the writing, knowledge, and motivation of struggling young writers: Effects of self-regulated strategy development with and without peer support. *American Educational Research Journal, 43*(2), 295-340. doi: 10.3102/00028312043002295. Retrieved from <http://studysites.sagepub.com/donoghuestudy/articles/Harris%20Graham%20Mason.pdf>.
- İzdeş, M. (2011). *The effects of writing education to 7th grade students on their story writing skills* (Unpublished master's thesis). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Kana, F. (2014). Metacognitive awareness of reading strategies levels of secondary school students. *Erzincan University Journal of Education Faculty, 16*(1), 100-120. doi: <http://dx.doi.org/10.17556/jef.73171>. Retrieved from <http://eefdergi.erzincan.edu.tr/article/view/5000011197/5000038855>.
- Karatay, H. (2011). The effect of 4+1 planned writing and evaluation model to develop the attitudes of preservice teachers as to written expression and their writing skills. *Turkish Studies, 6*(3), 1029-1047. Retrieved from http://turkishstudies.net/Makaleler/2016362704_63_halit_karatay.pdf.

- Karatay, H. (2013). Süreç temelli yazma modelleri: 4+1 planlı yazma ve değerlendirme modeli. In M. Özbay (Yay. Haz.). *Yazma eğitimi* (pp. 21-48). Ankara: Pegem Akademi Yayıncılık.
- Lam, S. S. T., Au, R. K. C., Leung, H. W. H., & Li-Tsang, C. W. P. (2011). Chinese handwriting performance of primary school children with dyslexia. *Research in Developmental Disabilities, 32*, 1745-1756. doi: 10.1016/j.ridd.2011.03.001.
- Li-Tsang, C. W. P., Au, R. K. C., Chan, M. H. Y., Chan, L. W. L., Lau, .G. M. T., Lo, T. K., & Leung, H. W. H. (2011). Handwriting characteristics among secondary students with and without physical disabilities: A study with a computerized tool. *Research in Developmental Disabilities, 32*, 207-216. doi: 10.1016/j.ridd.2010.09.015
- Lienenmann, T. O., & Reid, R. (2008). Using self-regulated strategy development to improve expository writing students with attention deficit hyperactivity disorder. *Reston, 74*(4), 471-486. Retrieved from <http://content.ebscohost.com/ContentServer.asp?T=P&P=AN&K=508079738&S=R&D=eue&EbscoContent=dGJyMNL80SeprE4wtvhOLCmr02eprZSrQ%2B4SbKWxWXS&ContentCustomer=dGJyMPGptE%2BxrrZQuePfgeyx43zx>.
- Maltepe, S. (2006). *Evaluation of writing processes and products in Turkish courses based on creative writing approach* (Unpublished doctoral dissertation). Ankara University Institute of Social Sciences, Ankara, Turkey.
- McHale, K., & Cermak, S. A. (1992). Fine motor activities in elementary school: Preliminary findings and provisional implications for children with fine motor problems. *American Journal of Occupational Therapy, 46*, 898-892.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. London: Sage Publications.
- Muhtar, S. (2006). *Effects of training university EFL students in metacognitive strategies for reading* (Unpublished master's thesis). Ankara University Institute of Social Sciences, Ankara, Turkey.
- Nystrand, M. (2006). The social and historical context for writing research. In C. A. MacArthur, S. Graham & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 11-27). New York, NY: Guilford.
- Ohrman, C. E. (2007). *Teaching six-trait assessment as a means to improving student writing* (Unpublished doctoral dissertation). College of Graduate Studies University of Idaho, USA.
- Olson, A. A. (2004). *Teaching writing effectively: Using the six traits with process approach to writing* (Unpublished master's thesis). The Faculty of Pacific Lutheran University, USA.
- Oral, G. (2012). *Yine yazı yazıyoruz*. Ankara: Pegem Akademi Yayıncılık.
- Öz, F. (2011). *Uygulamalı Türkçe öğretimi*. Ankara: Anı Yayıncılık.
- Özbay, M., & Bahar, M. A. (2012). Advanced reader and the education of metacognitive. *International Journal of Turkish Literature Culture Education, 1*(1), 158-177. Retrieved from [http://www.tekedergisi.com/Makaleler/204744706_12%C3%96ZBAY,%20%C4%B0LER%C4%B0%20OKUR%20VE%20%C3%9CSTB%C4%B0L%C4%B0%C5%9E%20E%C4%9E%C4%B0T%C4%B0M%C4%B0%20\(2\).pdf](http://www.tekedergisi.com/Makaleler/204744706_12%C3%96ZBAY,%20%C4%B0LER%C4%B0%20OKUR%20VE%20%C3%9CSTB%C4%B0L%C4%B0%C5%9E%20E%C4%9E%C4%B0T%C4%B0M%C4%B0%20(2).pdf).
- Özkara, Y. (2007). *The effect of 6+1 analytic writing and evaluative model on enhancing 5th grade students' narrative writing skills* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Özsoy, G. (2007). *The effect of metacognitive instruction on problem solving achievement of fifth grade primary school students* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Öztürk, E. (2007). *The effect of metacognitive instruction on problem solving achievement of fifth grade primary school students* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.

- Pearson, P. D. (2009). The roots of reading comprehension instruction. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of Research on Reading Comprehension*, (pp. 3-31) New York, NY: Routledge.
- Pilav, S. (2014). Yazma ve öğretimi. In M. Elkatmış (Yay. Haz.). *Türkçe ilkokuma ve yazma öğretimi* (pp. 86-107). Ankara: Maya Akademi.
- Pritchard, R. J., & Honeycutt, R. L. (2007). Best practices in implementing a process approach to teaching writing. In S. Graham, C. A. Macarthur, & J. Fitzgerald (Eds.), *Best practices in writing instruction* (pp. 28-49). New York: The Guilford Press. Retrieved from https://books.google.com.tr/books?id=VIGLURcC9mkC&pg=PA28&hl=tr&source=gbs_toc_r&cad=3#v=onepage&q&f=false.
- Saddler, B., Moran, S., Graham, S., & Harris, K. R. (2004). Preventing writing difficulties: The effects of planning strategy instruction on the writing performance of struggling writers. *Exceptionality*, 12(1), 3-17. doi: 10.1207/s15327035ex1201_2. Retrieved from http://www.tandfonline.com/doi/pdf/10.1207/s15327035ex1201_2.
- Saddler, B. (2006). Increasing story-writing ability through self-regulated strategy development: Effects on young writers with learning disabilities. *Learning Disability Quarterly*, 29(4), 291-305. doi: 10.2307/30035555. Retrieved from <http://ldq.sagepub.com/content/29/4/291.full.pdf>.
- Saddler, B., & Asaro, K. (2007). Increasing story quality through planning and revising: effects on young writers with learning disabilities. *Learning Disability Quarterly*, 30 (4), 223-234. doi: 10.2307/25474635. Retrieved from <http://ldq.sagepub.com/content/30/4/223.full.pdf>.
- Sever, E. (2013). *The effect of processed writing models at the 4th level of primary school students on their writing and creative writing* (Unpublished master's thesis). Bülent Ecevit University Graduate School of Social Sciences, Zonguldak, Turkey.
- Sever, E., & Memiş, A. (2013). The effects of process-based writing models on primary school 4th grade students' spelling-punctuation skills and writing dispositions. *The Black Sea Journal Of Social Sciences*, 5(9), 243-259. Retrieved from http://sbe.giresun.edu.tr/fileadmin/user_upload/diger/makleler_ozet_7.sayi/kamil/xxx/Suerec_Temelli_Yazma_Modellerinin_Ilkokul_Doerduencue_Sinif_OEgrecilerinin_Yazim.pdf.
- Sever, S. (2011). *Türkçe öğretimi ve tam öğrenme*. Ankara: Anı Yayıncılık.
- Sexton, M., Harris, K. R., & Graham, S. (1998). Self-Regulated strategy development and the writing process: effects on essay writing and attributions. *Exceptional Children*, 64, 295-311. doi: 10.1177/001440299806400301
- Şahin-Kızıl, A. (2007). *A quasi experimental study on the effect of weblog integrated process approach on EFL students' writing performance, autonomous learning and perceptions* (Unpublished master's thesis). Karadeniz Technical University Institute of Social Sciences, Trabzon, Turkey.
- Republic of Turkey Ministry of National Education Board of Education and Discipline. (2009). *Elementary Turkish curriculum and guide (Grades 1st-5th)*. Ankara: Devlet Kitapları Müdürlüğü Basım Evi.
- Republic of Turkey Ministry of National Education Board of Education and Discipline. (2015). *Turkish (Grades 1st-8th) curriculum*. Ankara: Devlet Kitapları Müdürlüğü Basım Evi.
- Tracy, B., Reid, R., & Graham, S. (2009). Teaching young students strategies for planning and drafting stories: The impact of self-regulated strategy development. *The Journal of Educational Research*, 102(5), 323-331. doi: 10.3200/JOER.102.5.323-332. Retrieved from http://www.researchgate.net/profile/Robert_Reid10/publication/249037736_Teaching_Young_Students_Strategies_for_Planning_and_Drafting_Stories_The_Impact_of_Self-Regulated_Strategy_Development/links/53f5ee4c0cf2888a7491f989.pdf.
- Tseng, M. H., & Cermak, S. H. (1993). The influence of ergonomic factors and perceptual - motor abilities on handwriting performance. *American Journal of Occupational Therapy* 47, 919-926.

- Tseng, M. H., & Chow, S. M. K. (2000). Perceptual-motor function of school-age children with slow handwriting speed. *American Journal of Occupational Therapy* 54, 83-88.
- Ungan, S. (2007). Development of and importance of writing skills. *Erciyes University Journal of the Institute of Social Sciences*, 23, 461-472. Retrieved from http://sbedergi.erciyes.edu.tr/sayi_23/sayi_23.htm.
- Uyar, Y. (2015). *Development of self-regulated reading skills and its impact on comprehension* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Uygun, M. (2012). *The Effects of Self Regulated Strategy Development on Writing Expression, Self Regulation of Writing, Retention and Writing Attitude* (Unpublished doctoral dissertation). Hacettepe University Graduate School of Social Sciences, Ankara, Turkey.
- Ülper, H. (2008). *The effects of teaching writing programme prepared in accordance with cognitive process model on student achievement* (Unpublished doctoral dissertation). Ankara University Institute of Social Sciences, Ankara, Turkey.
- Yıldırım, K. (2010a). Raising the quality in qualitative research. *Elementary Education Online*, 9(1), 79-92. Retrieved from <http://dergipark.ulakbim.gov.tr/ilkonline/article/view/5000038091/5000124592>.
- Yıldırım, K. (2010b). *The effects of cooperative learning on certain variables related to reading, parents', and students' opinions toward cooperative learning* (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara, Turkey.
- Zumbrunn, S. (2010). *Nurturing young students' writing knowledge, self-regulation, attitudes, and self-efficacy: The effects of self-regulated strategy development* (Unpublished doctoral dissertation). University of Nebraska at Lincoln, USA. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1070&context=cehdsdiss>.
- Zumbrunn, S., & Bruning, R. (2012). Improving the writing and knowledge of emergent writers: The effects of self-regulated strategy development. *Reading and Writing*, 26, 91-110. Retrieved from http://download.springer.com/static/pdf/510/art%253A10.1007%252Fs11145-012-9384-5.pdf?originUrl=http%3A%2F%2Flink.springer.com%2Farticle%2F10.1007%2Fs11145-012-9384-5&token2=exp=1449148455~acl=%2Fstatic%2Fpdf%2F510%2Fart%25253A10.1007%25252Fs11145-012-9384-5.pdf%3ForiginUrl%3Dhttp%253A%252F%252Flink.springer.com%252Farticle%252F10.1007%252Fs11145-012-9384-5*~hmac=c210dcd3baf222c89a9eeb049de188d8e773a0cbe12e8d4df9143a8d46fe74d7.