

## Education Quarterly Reviews

Seban, S. (2022). The Effect of Genre-Specific Strategy Instruction on the Writing Achievement of Fourth-Grade Students. *Education Quarterly Reviews*, Vol.5 Special Issue 2: Current Education Research in Turkey, 157-172.

ISSN 2621-5799

DOI: 10.31014/ajor.1993.05.04.612

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.





### The Asian Institute of Research Education Quarterly Reviews

Vol.5 Special Issue 2: Current Education Research in Turkey, 2022: 157-172
ISSN 2621-5799

Copyright © The Author(s). All Rights Reserved DOI: 10.31014/aior.1993.05.04.612

# The Effect of Genre-Specific Strategy Instruction on the Writing Achievement of Fourth-Grade Students

Demet Seban<sup>1</sup>

<sup>1</sup> Faculty of Education, Alanya Alaaddin Keykubat University, Türkiye

E-mail: demet.seban@alanya.edu.tr

#### **Abstract**

The quality of writing instruction is the primary determinant of writing acquisition. Revising and feedback are crucial aspects of the writing process. In this study, genre-specific strategy instruction was used as part of feedback and revision to develop the text structure and content of different text types in fourth grade. The study also examined whether the effect differed based on the genre and students' gender. Thirty students' first and final drafts of opinion, expository, and argumentative texts were analyzed using rubrics for each type of genre. The results revealed no significant difference between female and male students' achievement in any different genres, but using this approach significantly affects students' total achievement in writing. Students' average persuasiveness in opinion and argumentative writing was not developed well when thinking about the genre elements in developing text structure and content. Writing expository texts achieved the highest scores. Strategy instruction for explicit guidance on the structure of the genre and using genre-specific criteria to revise draft texts are important writing strategies to raise the quality of writing.

Keywords: Genre-Specific Strategy Instruction, Revision Writing Achievement

#### 1. Introduction

Although writing is considered a fundamental literacy skill, many students consistently underperform because becoming a competent writer depends on learning complex skills that require sufficient time and quality of instruction (Graham et al., 2012). Compared to reading, there is a lack of research and evidence to support instructional practices in writing due to the high level of variation in writing instruction and the complexity of the skills (Graham et al., 2011). The variation in writing instruction supports the need for research on writing and the implementation of evidence-based practices to respond to the needs of students. Inquiry alternate ways of organizing the writing instruction are also essential to move toward new approaches.

One challenge students face in writing is changing tasks that vary by genre, in which conventional structures are used to organize information to create texts for different purposes (Biber & Conrad, 2019). Unlike middle-grade students, elementary students know less about writing informative or persuasive text (Lin et al., 2007). Students in elementary grades are rarely exposed to reading persuasive or argumentative texts and teachers reported that they spend considerable time teaching writing stories and rarely opinion essays (Sulak, 2018). Lack of exposure

to different genres in writing instruction creates a limited understanding of the text structures and schemas for persuasive and later argumentative reasoning (Finlayson & McCrudden, 2020). The lack of knowledge of the structure of an argument also creates a poorly organized essay with an absence of the transition to connect different parts of the text (Deane & Song, 2015). The second challenge is applying writing processes, including planning, drafting, revising, etc. Although it is a widely used model of writing as a process approach led by Calkins (1994), there is limited research on its effectiveness (McCarthey & Geoghegan, 2016). The last is the country's overall situation, like population, politics, admission, centralized curricula, and teacher education programs. The knowledge produced from the intellectual and practical experience of many years reflects the characteristics of the civilization in which the research was conducted. The higher evidence of the recommendations on writing instruction for elementary grades might not be that strong in another study context. Compared to the United States or Western societies, developing countries need more research-based evidence to build their practices to teach writing and avoid theory-practice contrast. National standards (1st to 8th grades) in Turkey explicitly emphasize the stages of writing as a process approach with the renovation of the curriculum standards in 2018 (M.E.B, 2019). Also, it is too new to the teachers to fully implement it in the classroom. Addressing the teacher for changing writing instruction without addressing the system and society will fail (Bransford et al., 2005; Graham, 2019). However, the quality of instruction needs to be changed in classroom writing practices that are affected by teachers' beliefs and knowledge (Graham, 2019; Troia et al., 2011).

This study was designed to address the challenges described above. Therefore, this study was planned as a long-term study to examine how to implement a process approach to teaching writing in elementary school classes. The study was conducted with an elementary teacher as a research partner. The elementary teachers are vital in implementing a process approach to develop children as reflective authors who can draft and revise their texts in response to peer and teacher feedback. This part of the study concerns examining the effect of genre-specific strategy and evaluation within the scope of revision and feedback on the development of text structure and content of different genres, including opinion, expository and argumentative writing of fourth-grade students. In the Turkish context, the focus of the studies related to writing instruction is mostly on narrative essays and middle school students (Graham et al., 2021). However, persuasion and argumentation are challenging tasks for even middle-grade students. According to the meta-analysis of the experimental studies examining the effectiveness of writing interventions conducted in schools in Turkey from primary grades to college, strategy instruction is found to be an effective treatment for improving the writing quality of Turkish students compared to the other interventions (peer assistance, pre-writing and process writing). On the other hand, it is a less scientifically tested instructional method, according to the meta-analysis of writing interventions in Turkey (Graham et al., 2021).

#### 1.1 Theoretical Framework

The ongoing attention and argument over the conceptualizations of writing development are due to its complex nature, with many distinguishable tasks and processes that do not develop naturally and require a significant amount of instruction and practice. Hillocks' (1987) meta-analysis created a growing interest in process-oriented approaches to teaching writing in elementary schools (Chapman, 2006) and dominated during the following decade as a pioneering writing approach (McCarthey, 2008). This approach is characterized by different stages, including student-selected writing topics, planning, drafting, revising, teacher-student and peer conferences, editing, and publishing, that are the cognitive process of writing (Calkins, 1994; Emig, 1971; Flower & Hayes, 1981; Graves, 1983; Tompkins, 2007). Teaching writing as a process approach has become an effective paradigm and is widely used in elementary classrooms, but its effectiveness varies. The difficulty of assessing the effectiveness of process approaches broadly comes from the teachers' practices that are implemented in different ways that demonstrate varying degrees of positive effects on student achievement (Lipson et al., 2000; McQuitty, 2014; Pritchard & Honeycutt, 2006). While McCarthey's (2008) study demonstrated a variety of instructional approaches used across classrooms, Lipson et al. (2000) found that even teachers who profess to use the same approach to teaching writing often differ in how they implement it. The process-oriented approach has been criticized for not being the most appropriate writing instruction for those with different backgrounds and historically marginalized groups (Delpit, 1988; Lensmire & Satanovsky, 1998). This approach is also criticized for being ineffective in improving the quality of writing as it focuses on the process such as drafting, revising, editing, and sharing their work while ignoring the quality of writing (Baines et al., 1999).

Later, a more balanced approach between teacher-directed and student-directed activities was adopted in writing instruction (Pritchard & Honeycutt, 2006). Developing and integrating different approaches and strategies are used to answer the criticisms of the process approach. Some approaches, such as genre-based and strategy instruction, are used as supportive alternative strategies to improve the quality of writing and increase student writing performance.

#### 1.2 Genre-based Strategy Instruction

Drawing on Englert et al. (1991), genre-based writing instruction was designed to increase students' expository writing skills using novel text structures. Recognizing the infrastructure of the text types and the knowledge of genre features helps readers find information, record, progress, and locate answers to their questions, as well as support their reading comprehension, note-taking, and summarization (Traga Philippakos & MacArthur, 2021). The primary determinant of the genre is the text's form or surrounding context (Bawarshi & Reiff, 2010). Different types of text have different characteristics in terms of purpose, context, and audience, so the teachers need to emphasize the features of different text types to use them as a guide in planning, developing, and revising processes of writing (Badger & White, 2000; Derewianka & Jones, 2016). The genre-oriented teaching enables students to understand how texts are explicitly structured to achieve particular purposes, which is necessary for metalinguistic awareness (Hyland 2018). The genre-driven approach also appeared to teach writing that requires teaching students explicitly the features of various genres such as narrative, nonfiction, and poetry (Donovan & Smolkin, 2006). The instruction includes the elements of narrative, expository, persuasive, or research writing and the use of graphic organizers for planning and organizing ideas (Dean, 2010; McCarthey, 2008). Addressing instruction on text structure means introducing expository texts are informational texts that provide definitions, information, and explanation about a subject and are often characterized by factual information, headings, and subheadings. Unlike expository texts, argumentative texts seek to persuade readers by establishing a discussion and defending a point of view (Derewianka & Jones, 2016; Ferretti & Graham, 2019).

Strategy instruction is based on the systematic instruction of writing processes (MacArthur, 2011), metacognitive strategies for self-regulation (Harris & Graham, 2009) and teaching students to use specific techniques to plan, monitor, evaluate, and revise their texts (Graham et al., 2012). Systematic and explicit instruction of writing processes across genres helps students critically identify genre elements and use them to transfer knowledge across reading and writing (Philippakos & MacArthur, 2020). Corden's (2007) study revealed that explicit instruction of literary devices improves the quality of children's narrative writing. Rietdijk et al. (2017) adopted writing strategy instruction for genre-specific strategies. The strategies were taught implicitly through teacher modeling and allowing students to reflect on their writing process at the end of each unit. The comprehensive writing program was found to be effective in improving the writing performance of the students in the upper grades of primary schools.

#### 1.3 Assessing Writing

The effect of writing instruction in primary grades varies by the nature of writing instruction (Kim et al., 2021). Studies have also revealed that the assessment positively affected the quality of writing (Graham & Sandmel, 2011). Assessing student writing in second—sixth-graders quite varies. These assessment strategies include teacher feedback, peer feedback, and student self-assessment, which use rubrics to evaluate their writing (Guastello, 2001). Meta-analysis results reported by Graham et al. (2012) and Koster et al. (2015) indicated that feedback and peer interaction could improve the quality of writing. In addition, teaching young students how to revise has a powerful impact on improving their writing (Graham, 2006a). Teaching approaches that include strategies for consulting and responding to children's literacy learning improve their learner activities by valuing their ideas as writers (Edwards & Jones, 2018). Boon (2016) used several strategies to increase children's uptake of feedback during peer assessment in primary school writing. If students receive task-based feedback, sufficient time to discuss their texts with their peers, and the opportunity to reflect on the process of revising, they better use the feedback to improve the quality of work being evaluated.

Periodically receiving feedback on their progress, children performed better in learning and using strategy effectively, writing paragraphs, and working productively (Schunk & Swartz, 1993). First-grade students also

revised their writing content and writing conventions in response to 90% of the feedback they received from their peers and teacher (Peterson & Portier, 2014). Performance feedback, which requires detailed, specific, and explicit feedback, was specifically used to improve students' writing fluency skills (Eckert et al., 2006; Truckenmiller et al., 2014). In the revising and rewriting stage of different genres, such as descriptive, instructive, explanatory, argumentative, and narrative texts, paying attention to the feedback of reader(s) and observing them while evaluating their texts improve the communicative effectiveness of the texts (Rietdijk et al. 2017). In another study, the writing success of second-and fourth-grade students in a cross-age tutoring writing program was assessed through written responses and group discussions. Although the results of second-grade students were not statistically different from the non-treatment group, there was a statistically significant academic difference in the writing performance of fourth-grade students, according to the 6+1 traits writing assessment rubric (Paquette, 2009). Furthermore, experiences with narrative and informational texts during the early years of schooling are necessary because it provides a foundation for students who will need success in the upper grades as information text structure is the primary literary format in content areas (Heider, 2009; Moss, 2004).

Given this theoretical and empirical background to the problem, this research was guided by the following questions:

- Is there a significant effect of genre-specific strategy instruction as part of the revision process in developing the fourth-grade students writing performance on the development of text structure and content of different genres (opinion /expository /argumentative texts)?
- Is there any effect of gender on students' writing performance on the development of text structure and content of different genres (opinion /expository /argumentative texts)?
- Is there any effect of genre on students' writing performance on the development of text structure and content?

#### 2. Method

This study aimed to examine the effect of genre-specific strategy and evaluation within the scope of revision and feedback on the development of text structure and content of different genres, including opinion, expository and argumentative writing of fourth-grade students. It was also examined whether the effect differed according to the genre and gender of the students. A quantitative research method was used in the study. This study was conducted with a single group, and individuals were not randomly assigned. A single group pretest-posttest design was used, and this pattern was named pre-experimental (Creswell, 2014).

#### 2.1 Participants

The study was conducted in a public school in the central district of Antalya, Turkey, where children with middle socioeconomic status. The participants were in the fourth grade; however, the students were engaged in nonfiction and narrative writing in the second-and-third grade. In second grade, they wrote "How-to-books" as a part of procedural writing, persuasive letters, and speeches as a part of opinion writing and information books. In the third grade, they wrote informational writing about science and persuasive reviews about books. Finally, in the fourth grade, the students engaged in writing opinion essays, informational writing building on expository structure, and persuasive essays building on argumentative structures. Thus, the data included the opinion, expository and argumentative essays of fourth-grade students who received process-based writing education in previous years. There were 30 participants (13 male and 17 female). Table 1 shows the text types and participants' genders.

Table 1: The type of text and the gender of participants

	Participant	Participants' gender		
Genre	Male	Female	Total	
Opinion text	6	16	22	
Expository text	9	16	25	
Argumentative text	13	17	30	
Opinion + expository + argumentative	4	15	19	

#### 2.2 Data Collection

Process-based teaching writing was taken as a basis, and all the steps required by this approach were implemented. The basic principles of Calkins's writing workshops have been mainly followed. For each type of text writing, one to 1.5 months are allocated. Also, two to three hours were given for the implementation each week. Before each different writing exercise, the students' previous experiences with informative and persuasive essays were reminded, and a discussion was made on the genre through a sample text. The students first developed several ideas/topics at the beginning of each writing type. For instance, they were asked to create an essay entry chart for opinion writing. In one column, they were asked to write what they noticed. Then, they wrote what made them think in the other column and added examples. They used a graphic organizer with boxes and bullets to frame the essays for informational writing. When they started generating ideas, they were expected to choose a topic and develop texts that applied to the characteristics and genre structure. When they chose their topic, they used genre structure to improve their drafts. The selected drafts were reviewed by both peers and the teacher using genre-specific evaluation criteria for both structure and the content of the drafts.

#### 2.3 Data Analysis

The drafts and final written products were evaluated using rubrics for each genre. The opinion texts were assessed under the following nine categories: (1) introduction/observation, (2) thesis statement, (3) topic sentence I, (4) supporting information I, (5) topic sentence II, (6) supporting information II, (7) topic sentence III, (8) supporting information III and (9) conclusion. The expository texts were evaluated under the following ten categories:(1) purpose, (2) title, (3) main idea/topic, (4) introduction, (5) facts, (6) subtitles/categories, (7) sequence, (8) conclusion, (9) text features (pictures, graphics, etc.) and (10) language. The argumentative texts were evaluated under the following 11 categories:(1) data introduction, (2) claim, (3) supporting evidence I, (4) elaboration of evidence I, (5) supporting evidence II, (6) elaboration of evidence II, (7) counterargument, (8) supporting evidence, (9) elaboration of evidence, (10) rebuttals, and (11) conclusion. For each category, a four-point performance task writing rubric was used to score the texts. Expectations were clearly explained under each scale. According to this rubric, level 0 refers to fail meeting criteria, level 1 refers to unsatisfactory, level 2 refers to below expectations, level 3 refers to meeting expectations, and level 4 refers to exceeding expectations. A total of 154 texts were evaluated for this study. For at least 10 participants, each text, for consistency, was assessed by two different researchers. The consistency (rs = .85 to .95; p < .01) of the researchers' evaluation scores was found to be sufficient for reliability. First, the data were analyzed to examine the students' achievement scores and whether they were distributed normally. The Shapiro-Wilk normality test results revealed that the difference in pretest and posttest scores of the data for each genre (opinion, expository, and argumentative) distributed normally (,098; ,281 and ,138 p>,05). Thus, a paired-sample t-test was used to examine the difference between students' draft scores and final writing scores. The data for the structure categories of each genre were not normally distributed (.00 p>.05) so the Wilcoxon (paired) signed-rank test was used to compare the mean scores of the students in each category. To test the significant differences between the groups' pretest and posttest scores of different texts, one-way repeated measures ANOVA was used. Each group should have an equal number of scores for this type of analysis, so only 19 participants who wrote in all three types were included. To look at the difference between the pretests and posttests of three different text types, the texts were divided into the following three basic parts: introduction, body, and conclusion.

As the categories for each type differ, the scores for the body part of the expository and argumentative texts were re-evaluated to convert the scales into the same form. Then, the normality test was performed. It has been observed that the introduction posttest, and conclusion pre-and posttest scores did not show a normal distribution, and the W (19) value varied between .53 and .93 (p< .05). Therefore, the Friedman test, a non-parametric version of a repeated-measures ANOVA, was used to compare the means of introduction posttest, conclusion pre-, and posttest scores.

An ANOVA was used to compare the means of introduction pretest and body pre and posttest. In examining the effect of genre on success, the significance of Mauchly's test of Sphericity is checked for the introduction pre-test scores (p = .919, p > .05); body part pre-test scores (p = .158, p > .05) and body part post-test scores (p = .137, p > .05). The sphericity requirement was met, so no correction to the F-value was required to examine.

#### 3. Results

A significant difference was found between three different text types pre- and post-test results. Using genrespecific strategy and evaluation as a part of revision has a significant effect on the total achievement of students in writing opinion [t(21)=-5.30, p<0.01], expository [t(24)=-8.58, p<0.01] and argumentative texts [t(29)=-6.17, p<0.01] (Table 2). The student participation in writing workshops increased.

Table 2: T-test Results	of Oninion	Expository	and Aroum	entative Texts
Table 2. Thest Results	or Opinion.	LAPOSITOIY,	and Argum	Cilitative Texts

Twell 2: I test ites with er opinion, Empository, what inguitations						
Factors	N	X	Sd	df	t	p
Opinion draft	22	12.45	6.29	21	-5.301	.000*
Opinion final	22	19.31	7.87			
Expository draft	25	20.24	6.46	24	-8.58	*000
Expository final	25	27.16	5.76			
Argumentative draft	30	17.73	6.08	29	-6.17	*000
Argumentative final	30	22.73	6.86			

p<.01

When we look at the increase in the mean scores of each type of text, the most increase has been observed in the opinion texts, and the least increase has been observed in the argumentative texts. The students were also better at writing expository text than the other ones (Figure 1).

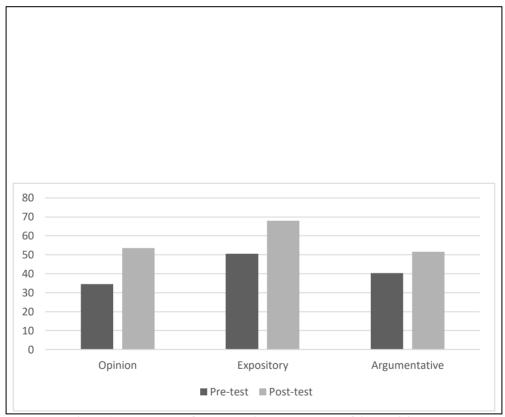


Figure 1: Percentage of Pretest and Posttest means of the Participants

#### 3.1 The Development of Text Structure and Content

#### 3.1.1 Opinion Texts

The structure and content of the opinion texts were evaluated under the following nine categories: introduction/observation, thesis statement, topic sentence I, supporting information I, topic sentence II, supporting information III and conclusion. In the categories of opinion, writing

students' success were increased in writing a thesis statement (Z=-2.948, p<.01, r=.24]) first paragraph topic sentence (Z=-2.754, p<.01, r=.58]) and supporting information (Z=-2.798, p<.01, r=.59) and conclusion (Z=-2.754, p<.01, r=.58). They did not have statistically significant achievement in writing the introduction (Z=-1.134, p<.01, r=.24), topic sentence (Z=-2.304, p<.01, r=.49), supporting information for the second paragraph (Z=-2.321, p<.01, r=.49), writing either third paragraph topic sentence (Z=-1.876, p<.01, r=.40), and supporting information (Z=-2.392, p<.01, r=.51).

Also, the introduction paragraphs' draft and final mean scores of the student were higher than those of other categories (Figure 2). They were already successful in writing an introduction paragraph based on their observations. Compared to the students' mean scores in each category, writing a thesis statement has the highest scores after revising. Students were also better at developing the first paragraph to support a thesis statement.

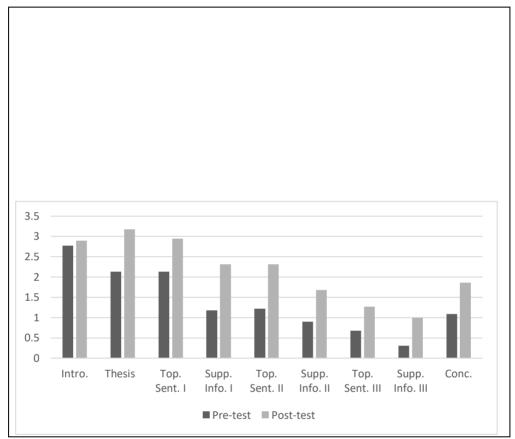


Figure 2: Percentage of Pretest and Posttest Means of the Opinion Text Structure

#### 3.1.2 Expository Texts

The structure and content of opinion texts were evaluated under the following 10 categories: purpose, title, main idea/topic, introduction, facts, subtitles/categories, sequence, conclusion, text features (pictures, graphics, etc.), and language. There was a significant difference between the draft and final paper scores in the categories of the main idea/topic (Z=-3.900, p<.01, r=.78), introduction (Z=-4.300, p<.01, r=0.86), facts (Z=-3.879, p<.01, r=0.77), subtitles/categories (Z=-3.704, p<.01, r=0.74), sequence (Z=-3.666, p<.01, z=-73), conclusion (Z=-2.801, z=-56), text features (pictures, graphics, etc.) (Z=-3.169, z=-3.169, z=-3.169,

Although there was a significant difference in the scores for the conclusion and text feature categories, the mean scores of these categories were relatively low compared to other categories (Figure 3).

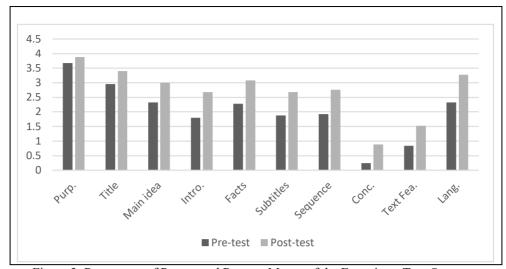


Figure 3: Percentage of Pretest and Posttest Means of the Expository Text Structure

#### 3.1.3 Argumentative Texts

The argumentative texts were evaluated under the following 11 categories: data introduction, claim, supporting evidence I, elaboration of evidence II, supporting evidence II, elaboration of evidence II, counterargument, supporting evidence, elaboration of evidence, rebuttals, and conclusion. A significant difference has been observed in the pre-test and post-test of the scores for data introduction (Z=-2.889, p<.01, r=.52), claim (Z=-2.640, p<.01, r=.48), elaboration of second evidence (Z=-2.682, p<.01, r=.48), writing rebuttals (Z=-3.207, p<.01, r=.58]) and conclusion (Z=-3.391, p<.01, r=.61). The results of the other categories respectively; first supporting evidence (Z=-1.633, p<.01, r=.29) and its elaboration (Z=-1.741, p<.01, r=.31), second supporting evidence (Z=-2.145, p<.01, r=.39), developing counterargument (Z=-2.195, p<.01, r=.40) and supporting evidence for counterargument (Z=-1.508, p<.01, r=.27) and elaboration of this evidence (Z=-2.145, p<.01, r=.39) showed no significant difference between the draft and final writing achievement scores of the students.

The mean scores of the students in elaborating evidence for supporting evidence of the claim are relatively low compared to the other categories. They were better at writing claims and supporting evidence (Figure 4).

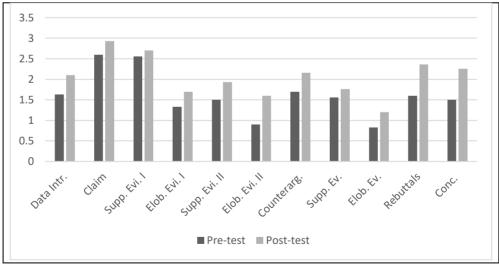


Figure 4: The Percentage of Pretest and Posttest Means of the Argumentative Text Structure

#### 3.2 Gender Difference

No significant difference has been observed between male and female students' draft and final writing scores of different texts (Table 3).

Table 3: T-Test Results of Gender Difference in Genre Writing

Factors	Group	N	X	Sd	df	t	p
Opinion draft	Male	6	9.00	2.19	20	-1.63	.11
	Female	16	13.75	6.87			
Opinion final	Male	6	21.16	7.57	20	.666	.51
	Female	16	18.62	8.10			
Expository draft	Male	9	20.00	6.28	23	-0.13	.89
	Female	16	20.37	6.77			
Expository final	Male	9	26.66	3.39	23	-0.31	.75
	Female	16	27.43	6.84			
Argumentative draft	Male	13	15.38	6.71	28	-1.93	.06
	Female	17	19.52	5.03			
Argumentative final	Male	13	19.84	6.13	28	-2.13	.04
	Female	17	24.94	6.72			

p<.01

Although there was no significant difference between opinion text scores based on gender, male students' average scores exceeded that of female students for the first time (Figure 5).

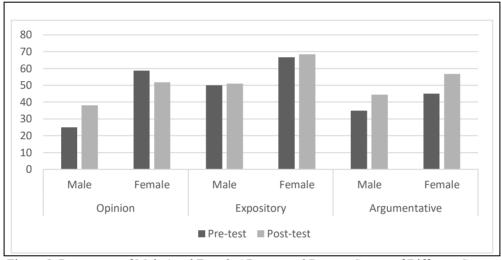


Figure 5: Percentage of Males' and Females' Pretest and Posttest Scores of Different Genres

#### 3.3 The Effect of Genre

Figure 6 depicts the development of the main parts: introduction, body, and conclusion. According to the figure, students increased their scores in an opinion text body, expository text introduction, and argumentative text conclusion (19% - 20%). The increase in the scores of opinion text introduction and conclusion and expository text body and conclusion varied between 15% and 17%. Argumentative text introduction and body scores have the least increasing rates (10% - 11%). The participants were good at writing an introduction compared to the other parts. In the development of the body paragraphs, it appears that students were better at expository texts. In their final paper, they developed body paragraphs of opinion texts in their final forms. The conclusion part of the expository texts had the lowest scores.

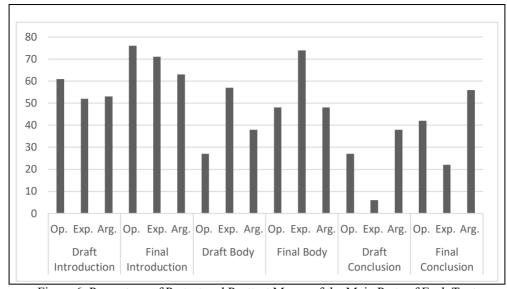


Figure 6: Percentage of Pretest and Posttest Means of the Main Parts of Each Text

The ANOVA and Friedman test results revealed no significant difference (F=.96, df=2, p=.013, η2=.03) between the introduction pretest scores of opinion and expository and argumentative texts. Also, there was a significant difference (x2=6.31, p=.043) between the introduction posttest scores of opinion texts (median =7), expository texts (median =6), and argumentative texts (median =5). The difference occurred between the means of opinion texts and argumentative texts. The development of the introduction of opinion texts was significantly higher than the argumentative essays. The body part of each writing pretest score varied significantly depending on whether the task was opinion, expository, or argumentative (F=13.4, df=2, p=.001,  $\eta$ 2 =.30). Also, a significant difference has been observed between opinion and expository texts; the success rate was 30% due to the genre. A comparison of the mean number of pre-texts completed by participants showed that students performed reasonably well in expository writing ( $\bar{x}=13.97$ , S=1.04) and argumentative writing ( $\bar{x}=10.34$ , S=1.04). However, their performance in writing body parts was considerably low in writing opinion texts ( $\bar{x}$ =6.95, S=1.04). There was also a significant difference between the posttest scores of the body parts (F=12.6, df=2, p=.001,  $\eta$ 2 =.24). The difference occurred between the expository texts ( $\bar{x}=18$ , S=1.16) and other genres, which are opinion texts ( $\bar{x}=11.7$ , S=1.16) and argumentative texts ( $\bar{x}$ =12.6, S=1.16). There was a significant difference (x2=18.3, p=.001) between the conclusion pre-tests scores of opinion texts (median =1), expository texts (median =0), and argumentative texts (median = 1). The difference occurred between the means of expository texts and the other genres. The performance for writing a conclusion for expository texts is considerably low compared to other genres. A significant difference (x2=9.93, p=.007) has been observed between the conclusion posttest scores of opinion texts (median =2), expository texts (median =1), and argumentative texts (median =2). The difference occurred between the means of expository post-texts and argumentative posttests.

#### 4. Discussion

Despite the limitations, such as sample size and lack of a control group, the results of the present study should be interpreted with the knowledge of two issues. One is the students who were familiar with this process from the second grade, and the other is the nature of the study that is a part of a long-term study that aims to apply the process approach -writing workshop- in the Turkish context. This study offers evidence-based instruction for elementary teachers to teach writing with the adaptation process of the national curriculum.

Using strategy instruction and a genre-specific approach as part of the revision and feedback have been found to be effective in improving the quality of students' narratives. This study focused on writing different types of texts and explicitly teaching fourth-grade students the characteristics of genres such as opinion, expository and argumentative texts. Although there is a significant difference between the total scores in each text type, no difference has been observed between girls and boys regarding writing performance. Although there was the highest increase in opinion text, the highest mean scores were in expository text type. The study results are consistent with predictions from other studies that provide additional empirical support for the positive link

between using explicit strategy instruction, and teaching genre-specific elements for planning, revising, and writing quality. The findings of three recent meta-analyses provide further support for the positive effect of text structure instruction (Graham et al., 2012; Kansizoglu & Bayrak Comert, 2017; Koster et al., 2015). They reported average weighted effect sizes for explicit strategy and text structure instruction ranging from .59 to 1.15, respectively. Graham et al. (2012) examined the effect of writing instruction practices applied to primary school students (first-second graders), and they identified strategy instruction, self-regulation attached strategy instruction, text structure instruction, peer-support, writing evaluation, process-based approach, and comprehensive writing programs as seven interventions of 13 effective writing practices.

Graham and Perin (2007) evaluated the effectiveness of writing instruction methods used in the 4<sup>th</sup> – 12<sup>th</sup> grades and reported process-based writing approach, teaching strategy, and peer support as effective methods within 11 dimensions. Koster et al. (2015) examined 32 studies using meta-analysis to determine effective instructional writing practices for fourth and sixth graders. Among the ten goal-setting dimensions, strategy instruction, instruction of text structures, peer support, and feedback were the most effective intervention for students' writing achievements. Kansizoglu and Bayrak Comert (2017) conducted a meta-analysis study to identify the level at which the "writing as a process" approach affects students' writing success. The results of 21 experimental/ quasi-experimental studies conducted in Turkey that meet the criteria for inclusion have been synthesized. According to the meta-analysis results, using a planned writing and evaluation model has the highest effect on students' writing achievements.

These findings also support the results explicitly indicating that teaching student to use genre or task-specific strategies have positively affected writing quality and students' achievement. Olinghouse et al. (2015) found that both the discourse and topic knowledge of fifth-grade students contributed to the quality of writing and the number of genre-specific elements included in writing stories, persuasive papers, and informational texts. These results reveal that students' knowledge about writing can affect the quality of writing even though developing writers may have limited skills.

Ferretti and Lewis (2018) examined the effects of writing goals and knowledge of the persuasion genre on the quality of argumentative writing. Their analyses showed that genre-specific writing goals and knowledge of persuasion predicted the quality rate of writing (Gillespie et al., 2013; Olinghouse & Graham, 2009; Olinghouse et al., 2015). Although writing argumentative essays is challenging for young learners, Philippakos et al. (2018) designed research to develop an intervention based on strategy instruction and used genre elements to guide planning and evaluation for revision. Pretest–posttest comparisons showed improvements in quality in genre elements.

In this study, each text has been evaluated in different categories regarding structure and content. A problem with focusing on the last parts of the opinion and argumentative texts and improving their content has been observed. While this is the third paragraph that supports the thesis statement in opinion articles, it has become the conclusion part of the expository text. In argumentative texts, it was challenging to develop each paragraph.

Finalizing the writing activity in each text type and making it ready for printing/sharing with the reader has increased over time, and 19 students have completed their writing activities in each text type. However, considering the average persuasiveness of students in opinion and argumentative writing, it would be safe to say that it was not well developed. Students failed to provide support for the second and third paragraphs, including topic sentences and supporting information. It is also evident in argumentative essays.

Subsequently, no statistically significant improvement has been observed in most of the elements of the text's developing part. It is also interesting to add that students were successful in the introduction paragraphs of both the opinion and expository text drafts, which are not an issue for argumentative texts. Having a good introduction is an indicator of developing the text more successfully. However, as students focus on the introduction in revising, they poorly develop other genre-specific elements. These results are also consistent with the results of other studies.

Students who received a detailed goal focusing instruction on the inclusion of genre-specific discourse elements positively affected the quality of students' written arguments resulting in writing more persuasively than those who received a general writing goal. Few students considered the alternative perspective (Ferretti et al., 2009). A significant minority of these students (43%) could not state that persuasion involves convincing another person (Ferretti & Lewis, 2019). My-side bias is common in students' persuasive writing (Ferretti & Fan, 2016).

According to Beyreli and Konuk (2018) study, students' ability to create persuasive texts was improved through education. At the end of the education, counter opinions, source, elaboration are the three categories between six categories that did not reach "very good" level out of an of 17 categories in total. The failure to address counterview, inadequate resource use, and elaboration techniques were explained as it might be because of insufficient development of critical and abstract thinking and a lack of the students' research culture. Persuasive writing that includes opinion and argumentative writing is challenging for young and emerging writers as it requires both social considerations like convincing a reader and cognitive processes such as planning and revising (Philippakos, 2017). Also, students in elementary grades know more about stories than persuasive and informational texts (Gillespie et al., 2013). Written argumentation is also insensitive to alternative perspectives and is often of poor quality compared to other genres. Students who provide strong reasons with supporting examples often fail to provide alternative views in their written arguments (Ferretti & Graham, 2019). When developing counterarguments for convincing the reader, children at an early age have difficulty choosing persuasive reasons and taking the perspective of others (Golder & Coirier, 1994). Although there was a difference in the mean scores of males and females, the results were not statistically significant. The study results did not support the superiority of females over males in writing and writing knowledge (Gelati, 2011). Also, it supports the results of Gillespie et al.'s (2013) research. Their study examined the relationship between the characteristics of writing types and knowledge about the writing process. They also controlled writing achievement and gender as they might affect knowledge about the writing process. Gender and writing achievement were not controlled for statistically significant. The genre explains approximately 30% of the success. Although the improvement in opinion text is higher than in expository and argumentative texts, students are better at writing expository texts than other types of argumentative and opinion texts, respectively. Also, the study results challenge the meta-analysis findings of Kansizoglu and Bayrak Comert (2017), indicating that effect sizes do not differ significantly depending on the text type (informative, narrative, and free) used in process-based writing instruction. When looking at the texts as an introduction, body, and conclusion, students were good at the introduction but showed more improvement in opinion texts. The students performed reasonably well developing the body paragraphs on expository writing and argumentative writing but low in writing opinion texts. However, the performance for writing a conclusion for expository texts is considerably low compared to other genres.

#### 5. Conclusion

Although the size of the sample is one of the limitations of this study, the background of the students who were introduced to process-based writing at the beginning of the second grade and were exposed to different types of writing experiences made this study stronger than the studies that examined the effect of different writing strategies with the students for a very limited time. Stories and informational genres have received the most attention in writing research and classrooms (Donovan & Smolkin, 2006). Compared to other genres, such as stories, exposure to persuasive text may be limited. Furthermore, most research was conducted on writing strategies, and less research focused on planning and revising strategies (Harris et al.,2013). The results of this study contributed to the body of knowledge in the areas that require more attention than others. The quality of composing is determined by how many and how well genre elements are used within a text (Graham et al.,2011). The characteristics of the genre-specific elements of different texts overlap. Also, they have several unique features specific to that genre. Improving the quality of the essay depends on deciding the central genre elements and enhancing the quality of these features. In this study, fourth-grade students had strategy instruction for explicit guidance on the structure of the genre, including topic, audience, purpose, and form of the text.

Genre-based strategy instruction included students using organizers to plan for considering the elements of the specific genre. They also applied genre-specific criteria derived from these elements to evaluate and revise their draft texts with teachers and peers. Process-based writing and genre-specific strategy instruction affected the writing achievement of primary school students. For academic growth and increasing students' writing and

interdependence skills, evidence-based writing practices should be implemented and begin from the beginning of schooling.

Teaching approaches that include strategies for consulting and responding to children's literacy learning develop their learner activities by valuing their ideas as writers (Edwards & Jones, 2018). Students who are also assigned as a reviewer for reading, rating and suggesting the persuasive essays of their peers wrote better quality final essays than both control groups that one of them only reads the texts and the other read the narratives to control time and effort (Philippakos & MacArthur, 2016). According to the study results, specific genre knowledge also enriches students' feedback on each other's writing, resulting in improvement in writing quality (Hoogeveen & van Gelderen, 2015). The need for teaching more about the elements of common writing genres in elementary grades became apparent as a result of this study. The earliest they were introduced to different genres and the most knowledgeable and proficient writers they became. Teachers need more writing activities to discuss genre-specific features and learn more strategies for planning, developing and revising their writing pieces. This is necessary for students to learn the production process of informative texts, including expository, persuasive, and argumentative texts. This study shows that developing an argument based on an opinion or a claim is more complicated than giving information on a topic. In addition, the beginning of the essay is more focused on development compared to the body of the text. Therefore, it is crucial to spend more time writing persuasive essays in early grades and focus on every element of the genre structure.

#### References

- Baines, L., Baines, C., Stanley, G. K., & Kunkel, A. (1999). Losing the product in the process. English Journal,
- Bawarshi, A., & Reiff, M. J. (2010). Genre: An introduction to history, theory, research, and pedagogy. West Lafayette, IN: Parlor Press.
- Beyreli, L., & Konuk, S. (2018). A research on the improvement of persuasive writing skill of sixth grade students in secondary school. Education and Science, 43(193), 181-215.
- Biber, D. & Conrad, S. M. (2019). Register, genre and style. Cambridge: Cambridge UP.
- Bransford, J., Darling-Hammond, L., & LePage, P. (2005). Introduction. In L. Darling Hammond & J. Bransford (Eds.), Preparing teachers for a changing world: What teachers should learn and be able to do (pp. 35–117). New York, NY: Wiley
- Boon, S. I. (2016). Increasing the uptake of peer feedback in primary school writing: findings from an action research enquiry. Education 3-13, 44(2), 212-225, https://doi.org/10.1080/03004279.2014.901984
- Calkins, L. M. (1994). The art of teaching writing. Portsmouth, NH: Heinemann.
- Chapman, M. (2006). Preschool through elementary writing. In P. Smagorinsky (Ed.), Research on composition. Multiple perspectives on two decades of change (pp. 15-47). New York, NY: Teachers College Press
- Corden, R. (2007). Developing reading-writing connections: The impact of explicit instruction of literary devices on the quality of children's narrative writing. Journal of Research in Childhood Education 21(3), 269-289. https://doi.org/10.1080/02568540709594594
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th Ed.). Thousand Oaks, CA: Sage Publications Inc.
- Dean, D. (2010). What works in writing instruction: Research and practices. Urbana, IL: National Council of Teachers of English.
- Deane, P., & Song, Y. (2015). The key practice, 'Discuss and Debate Ideas': Conceptual framework, literature review, and provisional learning progressions for argumentation. (Research Report No.RR-15-33). Princeton, NJ: Educational Testing Service. https://doi.org/10.1002/ets2.12079
- De Smedt, F., & Van Keer, H. (2018). Fostering writing in upper primary grades: A study into the distinct and combined impact of explicit instruction and peer assistance. Reading and Writing: An Interdisciplinary Journal, 31(2), 325–354. https://doi.org/10.1007/s11145-017-9787-4
- Delpit, L. D. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. Harvard Educational Review 58(3), 280–298.
- Donovan, C. A., & Smolkin, L. B. (2006). Children's understanding of genre and writing development. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), Handbook of writing research (pp. 131-143). New York, NY: **Guildford Press**
- Derewianka, B. & Jones, P. (2016). Teaching language in context. Oxford University Press, New York.

- Eckert, T. L., Lovett, B. J., Rosenthal, B. D., Jiao, J., Ricci, L. J., & Truckenmiller, A. J. (2006). Classwide instructional feedback: Improving children's academic skill development. In S. Randall S. (Ed.), *Learning disabilities: New research* (pp. 271–285). Hauppauge, NY: Nova Science.
- Edwards, G., & Jones, J. (2018). Boys as writers: perspectives on the learning and teaching of writing in three primary schools. *Literacy*, 52(1), 3-10. https://doi.org/10.1111/lit.12122
- $Emig, J.\ (1971).\ The\ composing\ processes\ of\ twelfth-graders.\ Urbana, IL:\ National\ Council\ of\ Teachers\ of\ English.$
- 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), 337–72. https://doi.org/10.3102/00028312028002337
- Ferretti, R. P., & Lewis, W. E. (2019). Knowledge of persuasion and writing goals predict the quality of children's persuasive writing. *Reading and Writing*, *32*, 1411-1430.
- Ferretti, R. P., & Graham, S. (2019). Argumentative writing: Theory, assessment, and instruction. *Reading and Writing*, 32, 1345–1357. https://doi.org/10.1007/s11145-019-09950-x
- Ferretti, R.P., & Fan, Y. (2016). Argumentative writing. In C. A. MacArthur, S. Graham & J. Fitzgerald (Eds.), *Handbook of writing research* (2<sup>nd</sup> ed., pp. 301–315). NY: Guilford.
- Finlayson, K., & McCrudden, M. T. (2020). Teacher-implemented writing instruction for elementary students: A literature review. *Reading & Writing Quarterly*, 36(1), 1-18. https://doi.org/10.1080/10573569.2019.1604278
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Gelati, C. (2011). Female superiority and gender similarity effects and interest factors in writing. In V. Berninger (Ed.), *Past, present, and future contributions of cognitive writing research to cognitive psychology* (pp. 153–174). Philadelphia: Psychology Press.
- Gillespie A, Olinghouse, N. G, & Graham S. (2013). Fifth-grade students' knowledge about writing process and writing genres. *Elementary School Journal*, 113(4), 565–585.
- Golder, C., & Coirier, P. (1994). Argumentative text writing: Developmental trends. *Discourse Processes, 18*(2), 187-210. https://doi.org/10.1080/01638539409544891
- Graham, S. (2019). Changing how writing is taught. *Review of Research in Education*, *43*, 277–303. https://doi.org/10.3102/0091732X18821125
- Graham, S., & Perin, D. (2007). Writing next: Effective strategies to improve writing of adolescents in middle and high schools. New York: Carnegie Corporation.
- Graham, S. (2006a). Strategy instruction and the teaching of writing. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (187–207). New York: Guilford Press.
- Graham, S., & Sandmel, K. (2011). The process writing approach: A meta-analysis. *The Journal of Educational Research*, 104, 396–407. https://doi.org/10.1080/00220671.2010.488703
- Graham, S., Harris, K. R., & Hebert, M. (2011). *Informing writing: The benefits of formative assessment*. A Carnegie Corporation Time to Act report. Washington, DC: Alliance for Excellent Education.
- Graham, S., Bollinger, A., Booth Olson C., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). Teaching elementary school students to be effective writers: A practice guide (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Graham, S., Tavsanli, O. F. & Kaldirim, A. (2021). Improving writing skills of students in Turkey: A meta-analysis of writing interventions. *Educational Psychology Review*, *34*, 889-934. https://doi.org/10.1007/s10648-021-09639-0
- Graves, D. H. (1983). Writing: Teachers and children at work. Portsmounth, NH: Heinemann.
- Guastello, E. F. (2001). Parents as partners: Improving children's writing. In W. M. Linek, E. G. Sturtevant, J. A. R. Dugan, & P. E. Linder (Eds.), *Celebrating the voices of literacy: Yearbook of the College Reading Association* (pp. 279–295). Readyville, TN: College Reading Association
- Harris, K. R., Graham, S., Friedlander, B., & Laud, L. (2013). Bring powerful writing strategies into your classroom! Why and how. *The Reading Teacher*, 66(7), 538-542.
- Heider, K. L. (2009). Information literacy: The missing link in early childhood education. *Early Childhood Education Journal*, *36*, 513-518. https://doi.org/10.1007/s10643-009-0313-4
- Hillocks, G. (1987). Synthesis of research on teaching writing. Educational Leadership, 45, 71-82.
- Hoogeveen, M., & van Gelderen, A. (2015). Effects of peer response using genre knowledge on writing quality a randomized control trial. *The Elementary School Journal*, 116(2), 265-290.
- Kansizoglu, H. B., & Bayrak Comert, O. (2017). The effect of the process approach on students' writing success: A meta-analysis. *Cukurova Universitesi Egitim Fakultesi Dergisi*, 46(2), 541-586. https://doi.org/10.14812/cuefd.292046
- Kim, Y. S. G., Yang, D., Reyes, M. & Connor, C. (2021). Writing instruction improves students' writing skills differentially depending on focal instruction and children: A meta-analysis for primary grade students. *Educational Research Review*, *34*, 100408. https://doi.org/10.1016/j.edurev.2021.100408.

- Koster, M., Tribushinina, E., de Jong, P. F., & van den Bergh, H. (2015). Teaching children to write: A meta-analysis of writing intervention research. *Journal of Writing Research* 7(2), 249-274
- Lensmire, T., & Satanovsky, L. (1998). Defense of the romantic poet? Writing workshops and voice. *Theory into Practice*, 37(4), 280-288.
- Lin, S. C., Monroe, B. W., & Troia, G. A. (2007). Development of writing knowledge in grades 2-8: A comparison of typically developing writers and their struggling peers. *Reading & Writing Quarterly*, 23, 207-230. https://doi.org/10.1080/10573560701277542
- Lipson, M. Y., Mosenthal, J., Daniels, P., & Woodside-Jiron, H. (2000). Process writing in the classrooms of eleven fifth-grade teachers with different orientations to teaching and learning. *Elementary School Journal*, 101, 209-231.
- McCarthey, S. J. (2008). The impact of no child left behind on teachers' writing instruction. *Written Communication*, 25(4), 462-505. https://doi.org/10.1177/0741088308322554
- McCarthey, S. J., & Geoghegan, C. M. (2016). The role of professional development for enhancing writing instruction. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds), *Handbook of writing research* (2<sup>nd</sup> ed., pp. 330–348). Guilford Press.
- McQuitty, V. (2014). Process-oriented writing instruction in elementary classrooms: Evidence of effective practices from the research literature. *Writing and Pedagogy*, 6, 467-495. https://doi.org/10.1558/wap.v6i3.467
- M.E.B. (2019). *Turkce dersi (1-8. sınıflar) ogretim programi* [Turkish curriculum (1-8 garades)]. Ankara: Milli Egitim Bakanligi.
- Moss, B. (2004). Teaching expository text structures through information trade book retellings. *The Reading Teacher*, 57(8), 710-718.
- Olinghouse, N. G., Graham, S., & Gillespie, A. (2015). The relationship of discourse and topic knowledge to fifth graders' writing performance. *Journal of Educational Psychology*, 107, 391–406.
- Olinghouse, N. G., & Graham, S. (2009). The relationship between the writing knowledge and the writing performance of elementary-school children. *Journal of Educational Psychology*, 101, 37–50.
- Paquette, K. R. (2009). Integrating the 6+1 writing traits model with cross-age tutoring: An investigation of elementary students' writing development. *Literacy Research and Instruction*, 48, 28–38. https://doi.org/10.1080/19388070802226261
- Peterson, S. S., & Portier, C. (2014). Grade one peer and teacher feedback on student writing. *Education 3-13*, 42(3), 237-257. https://doi.org/10.1080/03004279.2012.670256
- Philippakos, Z. A., & MacArthur, C. A. (2016). The effects of giving feedback on the persuasive writing of fourth-and fifth-grade students. *Reading Research Quarterly*, 51(4), 419-433.
- Philippakos, Z. A., MacArthur, C. A. (2020). Developing strategic, young writers through genre instruction: Resources for grades K-2. Guilford Press.
- Philippakos, Z. A. T., MacArthur, C. A., & Munsell, S. (2018). Collaborative reasoning with strategy instruction for opinion writing in primary grades: Two cycles of design research. *Reading & Writing Quarterly*, 34(6), 485-504. https://doi.org/10.1080/10573569.2018.1480438
- Philippakos, Z. A. (2017). Giving feedback: Preparing students for peer review and self-evaluation. *The Reading Teacher*, 71(1), 13-22. https://doi.org/10.1002/trtr.1568
- Pritchard, R. J., & Honeycutt, R. L. (2006). The process approach to writing instruction: Examining its effectiveness. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 275–290). New York: Guilford Press
- Ralph P., Ferretti, R. P., & Graham, S. (2019). Argumentative writing: theory, assessment, and instruction. *Reading and Writing*, 32, 1345–1357. https://doi.org/10.1007/s11145-019-09950-x
- Rietdijk, S., Janssen, T., van Weijen, D., van den Bergh, H., & Rijlaarsdam, G. (2017). Improving writing in primary schools through a comprehensive writing program. *The Journal of Writing Research*, 9(2), 173-225. https://doi.org/10.17239/jowr2017.09.02.04
- Schunk, D. H., & Swartz, C. W. (1993). Goals and progress feedback: Effects on self-efficacy and writing achievement. *Contemporary Educational Psychology*, 18(3), 337-354.
- Sulak, S. E. (2018). Investigation of writing habits of primary school teachers. International Electronic *Journal of Elementary Education*, 10(4), 497–504. https://doi.org/10.26822/iejee.2018438140
- Tompkins, G. E. (2007). Literacy for the 21st century: Teaching reading and writing in prekindergarten through grade 4. New Jersey: Pearson.
- Traga Philippakos, Z. A., & MacArthur, C. A. (2020). Integrating collaborative reasoning and strategy instruction to improve second graders' opinion writing. *Reading & Writing Quarterly*, 36(4), 379-395. https://doi.org/10.1080/10573569.2019.1650315
- Traga Philippakos Z. A. & MacArthur, C. A (2021). Examination of genre-based strategy instruction in middle school English language arts. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas.* 94(4), 151-158. https://doi.org/10.1080/00098655.2021.1894082

- Truckenmiller, A. J., Eckert, T. L., Codding, R. S., & Petscher Y. (2014). Evaluating the impact of feedback on elementary aged students' fluency growth in written expression: A randomized controlled trial. *Journal of School Psychology*, *52*(6): 531–548. https://doi.org/10.1016/j.jsp.2014.09.001
- Troia, G., Lin, S. C., Cohen, S., & Monroe, B. W. (2011). A year in the writing workshop: Linking writing instruction practices and teachers' epistemologies and beliefs about writing instruction. *The Elementary School Journal*, 112, 155-182. https://doi.org/10.1086/660688