The Effect of the Process Writing Approach on Writing Success and Anxiety

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Abstract

The process writing approach treats writing not as a completed product but as a process. Writing studies are carried out as a part of the process before the written text is completed. This approach focuses on the student in writing lessons, and the teacher only acts as a guide. The process writing approach involves activities occurring during the production of a written text. This study investigated the effect of the process writing approach on writing success and anxiety. The participants in this study were first-year preschool teaching students; a pretest-posttest control group quasi-experimental design was employed. Experimental procedures for the study lasted 10 weeks. Data regarding the dimension of written expression were obtained through evaluation of academic writings generated by students at the beginning and end of experimental procedures. Data associated with writing anxiety were collected through the Writing Apprehension Test. Analysis of covariance (ANCOVA) was used for statistical analysis of the data. As a result of the statistical analysis, the study found that the process writing approach had a significant effect on writing success and anxiety. Based on this finding, the use of process writing approach is recommended for written expression studies.

Key Words


Written expression is a difficult language skill for students. The fact that writing activities in schools are mostly oriented toward formal features (Göçer, 2011; Temizkan, 2007; Ulper, 2012) is among the reasons for this difficulty. It is preferable to give priority to content characteristics in the act of writing that aims at transferring a message. Moreover, receiving only negative feedback related to errors leads to writing anxiety in students (Barnett, 1992; Madigan, Linton, & Johnson, 1996). This can result in unsuccessful acts of writing and consequently, unsuccessful texts. However, this problem can be solved if evaluation of the written text is conducted as part of the writing process. This study aims to determine the effect of Flower and Hayes’s (1981) Process Writing Approach, which allows the written product to be checked and evaluated during the writing process, on students’ writing success and anxiety.

The Process Writing Approach

Four different approaches have been proposed for writing: the Schmidt model, the Van Galen model, the Hayes and Flower model, and the Hayes model (Güneş, 2007). In the approach developed by Flower and Hayes (1981), the points to be realized in the writing process are focused on improvement of the written product. In this approach, three dimensions of the act of writing are empha-

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sized: the task environment, long-term memory, and the writing process. Two important units of the task environment are the topic and the text. The writer's ability to determine and present the topic is a major part of the writing process. The writer's long-term memory is important for retrieving information from memory or activating hints that will realize it. The retrieved information is expected to be integrated into the topic. Although correct information about a specific topic can be retrieved, sometimes it cannot be organized in a way the reader can understand (McCurdy, Schmitz, & Albertson, 2010).

The writing process is the third unit of the cognitive process approach. This unit is composed of the stages of planning, translating, and reviewing. Planning refers to content production and organization (Graham, 2006). During the translation stage, opinions are transformed into written language, and the writer addresses numerous details of written language such as syntax, grammar, and spelling. During reviewing, the writer reads to develop the text or correct any errors. Constant monitoring during the writing process serves to determine the transitions from one phase to another (Flower & Hayes, 1981).

This approach was later refined by Hayes (1996), and a unit called working memory was added. The writer's motivational and affective characteristics are addressed during the writing process. Moreover, the act of writing is thought to be a product of the social environment (Ülper, 2008).

Flower and Hayes (1981) note that the process approach depends on four points. The first of these key points is that the act of writing is a series of distinctive thinking processes. The second is that these processes are interconnected. The third is that the act of composing is a goal-directed thinking process guided by the writer's developing network of goals, and the fourth is that the process involves producing sub-goals and changing main goals at times. These four points are implemented by each writer to a certain extent within the writing process.

The stages of the process writing approach have been presented in similar ways that differ in part from the order proposed by Flower and Hayes (1981) in some sources (Johnson, 2008; Karatay, 2011a; Simpson, 2013). One difference is that the subcomponents of the main stages of the process are instead posited as separate stages: prewriting, drafting, editing, revising, and publishing.

According to Karatay (2011a), ideas are generated, and the topic and target reader are determined in the prewriting stage. During the drafting stage, specified ideas are put on paper. Ideas and the organization are addressed again in the revision stage (Simpson, 2013). In the editing stage, mistakes in logical coherence among sentences and paragraphs are corrected. Finally, in the publishing stage, the produced text is shared with others. Classroom application of the process writing approach is carried out through the realization of the functions in these five stages.

Product-based evaluation does not improve writing skills (Murray, 1972). However, this problem disappears in the process writing approach. The writer both improves himself/herself and communicates with the reader through language. This approach does not mean that the student writes about a topic determined beforehand in a limited period of time (Raimes, 1983). The teacher only facilitates the student's act of writing instead of presenting information or motivating (Badger & White, 2000). Process writing has been considered a method of thinking (Applebee, 1986) that facilitates students' analyses and organization of ideas (Barnett, 1992), develops cooperation among students (Nunan, 1991), provides the opportunity to manage and control writing (Brown, 2001), and allows for varied activities (Onozawa, 2010). However, some criticism has been leveled at this approach. Among this criticism is that it does not account for the mental processes used by the writer during text production (Flower & Hayes, 1981); that ignoring grammar, structure, and the written product causes inconvenience (Reid, 2001); that too much emphasis is put on drafts, thereby causing students to fail exams (Horowitz, 1986); and that the conflict that emerges between the product and the process hinders classroom activities (Hyland, 2003).

A limited number of studies have been carried out on the process writing approach in Turkish. Güvercin's (2012) study concluded that this approach affects the writing success of intermediate-level students learning Turkish as a foreign language. Karatay's (2011b) study found that the process writing approach has a positive impact on first-year Turkish language teaching students' writing success and attitudes toward writing. Yaylı's (2009) study found that first-year Turkish language teaching students' negative attitudes toward writing decreased through the teacher evaluation, peer evaluation, and self-evaluation in process writing.

Writing Anxiety

Anxiety is an emotional state that emerges according to the powerlessness felt while preparing for a
recognized danger (Ellis, 1994). Writing anxiety is a kind of situational anxiety, since the student develops it just before writing. However, writing anxiety is a kind of language anxiety as well (Cheng, Horwitz, & Schallert, 1999). McLoad (1987) addresses writing anxiety as a type of anxiety associated with situations in which a person has difficulty during the writing process, despite having the required writing skills.

One of the factors leading to writing anxiety is the fact that the written material will be evaluated (Daly & Wilson, 1983). Writing anxiety can be manifested emotionally as sadness, anger, and fear; or physically as various cramps when a person is required to write (Özbay & Zorbaz, 2011). Grabe and Kaplan (1996) claim that writing is composed of many components. The fact that the act of writing leads to anxiety can be attributed to the complex nature of writing. In addition, Daly (1978) associates writing anxiety with individual differences in writing tendencies. Factors such as personality traits, students' opinions on their writing competence, teachers' opinions, student-teacher interaction, classroom environment, and exams are among the sources of writing anxiety (Karakaya & Ülper, 2011).

From the relevant literature, Yaman (2010) identified two types of anxiety: anxiety whose negative effects block learning activities and anxiety that facilitates learning by providing motivation. The latter type of anxiety can be understood through students' writing success to a certain extent. Citing Brand and Leckie (1988) as well as Petzel and Wenzel (1993), Yaman (2010) notes that the negative type of writing anxiety leads to procrastination, fear, tension, loss of self-confidence and power, and interruption of the thinking process. Bruning and Horn (2000) ascertained that checking written material carelessly increases writing anxiety, and that this anxiety harms students cognitively and affectively as well as decreasing their motivation.

In the studies of anxiety, students with high levels of anxiety have generally been found to experience lower levels of success (Aydın & Zengin, 2008). Anxiety studies on Turkish writing include studies of identification (İşeri & Ünal, 2012; Karakoç Öztürk, 2012; Tiryaki, 2011), scale development (Karakaya & Ülper, 2011; Özbay & Zorbaz, 2011; Yaman, 2010), and scale presentation (Zorbaz, 2011). This study examines the effect of Flower and Hayes's (1981) process-writing model on writing anxiety and success. It is thought that the process writing approach can have a positive impact on students' writing anxiety and success due to its characteristics. The difficulties students experience during writing activities emerge from their practices during the process of written text production. With the process writing approach, teacher-student interaction occurs during practice of written production. Therefore, a more successful written product is expected to emerge, and success can reduce writing anxiety. In order to test these hypotheses, answers are needed to the following questions, which are addressed in the present research:

1. Does the process writing approach have a statistically significant effect on writing success?
2. Does the process writing approach have a statistically significant effect on writing anxiety?

Method

The research design is a pretest-posttest control group quasi-experimental design. The reason for the quasi-experimental research design is that the participants in the experimental group and the control group were assigned randomly (Erkuş, 2009). All studies involving the dimensions of academic writing were conducted using the process writing approach in the experimental group, while the traditional method was employed for the control group. All experimental procedures in this study were implemented by the researcher.

Participants

The participants of the research were first-year students studying preschool teaching at Akdeniz University, Faculty of Education in fall term of 2012. The total number of participants was 74. Out of these participants, 38 (24 female, 14 male) formed the experimental group while 36 students (25 female, 11 male) formed the control group. Since the experimental and control groups had equal levels of anxiety and success in written expression at the beginning of the research, they were determined by lot.

Data Collection Instruments

Data were collected with two instruments. One was the Writing Apprehension Test developed by Daly and Miller (1975). This scale was adapted to Turkish by Zorbaz (2010). Cronbach's alpha coefficient of the adapted scale was calculated to be .901. This reliability test was applied to second-stage primary school students. Then, in a reliability study of the same scale on university students, Cronbach's alpha coefficient was calculated to be .938 (Tiryaki,
2011). As a result, the Writing Apprehension Test was found to be a sufficiently valid and reliable scale to use in this study.

The gathered data on writing anxiety were analyzed with a statistics program. The scores received from the negative statements on a 5-point Likert scale consisting of 26 items were inverted, and total score was calculated separately for each group. Writing anxiety levels for the experimental and control groups were totally identified. Changes occurring in the writing anxiety of the groups were determined by experimental procedures. The total score received from the Writing Apprehension Test indicated levels of writing anxiety; low scores on this scale correspond to low writing anxiety, and are thus desirable.

The second data collection instrument was the students' writing, in the form of the academic essays participants were asked to write. In order to determine the levels of success in written expression, participants were provided with varied topics at the beginning and end of the experimental procedures and asked to write an academic essay on one of these topics. The topics were selected from different areas, taking participants' individual differences into account. Furthermore, only topics were provided instead of statements constraining the scope of the essays. Some of these topics were "communication problems among people", "the effect of a life goal on the quality of life", and "improper urbanization". These topics were determined according to the definition of academic writing put forth in the literature (Coffin et al., 2003; Gillet, Hammond, & Martala, 2009; Oshima & Hogue, 2007) and expert opinion. The reason for presenting the topics in this manner was that the topic to be discussed in an academic essay was to be limited to a certain extent by the argument to be defended. The essays were evaluated by two experts.

Since the data were collected in two different ways, a different method of analysis was used for each type of data. Academic essays were evaluated by two experts of written expression to determine the participants' writing success. Evaluators were academic staff with a doctoral degree in Turkish language teaching and more than five years of experience teaching written expression to students of faculty of education at universities. For the evaluation of academic essays, four criteria were identified according to literature and expert opinion: the organization, content, word choice, and language use required for academic essays. A checklist of these four dimensions was prepared in order to standardize the evaluation of essays. Each dimension was assigned a possible 25 points, and the subsections of each dimension, also determined by the consensus of the evaluators, were assigned a possible 5 points each.

The subsections of the organization section were the presence of an introduction, body, and conclusion; the use of a thesis statement in the introduction; the specification of the points to be discussed in the thesis statement; the presence of topic sentences at the beginning of paragraphs reflecting the topic to be addressed; and reference to the thesis statement in the conclusion. The subsections for content were the presence of a specific main idea in the essay; explanations supporting the main idea, the absence of redundant information, the suitability of the narrative technique for the topic, and a title reflecting the text. The subpoints for word choice were avoiding ambiguous words, the use of synonyms and slang inappropriate for academic writing; use of an extensive inappropriate vocabulary; and effective use of words for expression. The subpoints for language use were the use of an academic style; establishing logical and semantic links between sentences; constructing appropriate relationships between ideas through conjunctions; making use of techniques of effective expression such as exemplification, logical inference, and reference to research results; and ensuring continuity in the text. The total score assigned according to these criteria was the score of the relevant paper. The rate of agreement between the two experts' evaluations was 89% for the pretest and 91% for the posttest.

Procedures

Experimental procedures lasted 10 weeks. The Writing Apprehension Test was given to the experimental and control groups at the beginning of the research. This testing lasted approximately 30 minutes. Both groups were then asked to write an academic essay. For this purpose, three topics were provided, and the participants were asked to choose one and write an essay.

Before starting the experimental procedures, the necessary planning was done for the procedures to be carried out with the experimental group. One of these tasks was providing information about process writing approach to participants in the experimental group. Therefore, a checklist of the writing stages was prepared. The checklist was given in a more analytic form so that the writing process could be understood clearly and precisely. Thus,
the stages of planning, translating, and reviewing that form the structure of the writing process were provided and examined in detail as brainstorming, planning, drafting, editing, and proofreading in the checklist used by participants in the experimental group. “Brainstorming” on this checklist refers to the stage of preparation in which the topic is determined. The procedures to be carried out in all of these stages were indicated with interrogative sentences, and each question was assigned a value ranging from 1 to 5. For instance, questions such as “Were the dimensions of the topic efficiently discussed with the group members?” and “Were the people who would read the essay (target audience) defined?” appeared as the part of the brainstorming section, a technique used for determining the topic of the writing (Badger & White, 2000; Seow, 2002), at the beginning of the planning stage. The members of groups in the experimental group used these criteria while evaluating their friends’ essays and their own. The function of the checklist was to remind the participants of what to do at which stage and how to evaluate others’ essays as well as their own. Studies were conducted on groups within the experimental group. Four people took part in each group. Group members decided on the topics of essays, plans, and conclusions to be drawn by discussing them with each other, and then proceeded to write. The topics comprised general concepts that were identified through brainstorming, and texts defending a specific argument were limited to these topics. The written texts were supposed to demonstrate basic characteristics of academic writing such as an argument; an organization including an introduction, body, and conclusion; and standard language use. Participants had two weeks to complete the essays to be written on specified topics. However, some participants completed their essays earlier. Only a few participants stated that they could not use the time efficiently. Throughout all the experimental procedures, the professor guided the students in the areas in which they needed help.

In the control group, lessons in written expression were conducted in the traditional way. Participants wrote an academic essay weekly during the experimental period. During the process of writing, the professor and the students were not heavily engaged in dialogue except for answering the questions about writing. Evaluations were carried out after the essays were completed, and then the participants were given feedback.

The control group participants were provided with an academic writing topic in each lesson, and they were asked to choose one of these topics and write an essay. Special attention was paid to topics involving a general heading and details constraining the possible scope of the essays. In this regard, the control group and experimental group wrote essays on topics with similar characteristics. The difference between these groups was that participants in the experimental group devised their own topics while control group participants had their possible topics provided by the professor. The topics included concepts such as traditions, smoking, education, and politics. Participants were supposed to write a text on a relevant aspect of the topic. For instance, they would write on a specific aspect of the topic of traditions (their importance, function, type, the attitude of the new generation toward traditions, etc.). These texts were supposed to employ the standard features of academic writing, as in the experimental group. After the essays were completed, they were examined separately by two expert evaluators, and participants were given feedback using these evaluations. The feedback covered general problems encountered in the essays. The participants in the control group wrote an academic essay every week throughout the experimental procedures. During the process of writing, the professor and the students were not heavily engaged in dialogue except for answering the questions about writing. Evaluations were carried out after the essays were completed, and then the participants were given feedback.

Data Analysis

Single factor analysis of covariance (ANCOVA) was carried out to determine whether changes in writing success and anxiety took place in the experimental and control groups. Büyüköztürk (2011) argued that if the impact of an experimental procedure is given priority in a design with a pretest-posttest control group, the most appropriate statistical procedure is a single factor analysis of covariance in which the pretest is controlled as the covariate. In the present research, data were analyzed through single factor analysis of covariance by controlling the scores participants got in the pretests as well.

Results

For the first research problem, data were examined through single factor analysis of covariance (ANCOVA) to determine whether the participants’ pretest-posttest scores on their academic essays significantly differed by group. Accordingly, the mean
score of the participants in the experimental group was calculated to be 77.37, while the participants in the control group had a mean score of 71.25. When the pretest scores were controlled, the adjusted mean score was calculated as 76.89 for the experimental group, and 71.75 for the control group. In addition, the equality of variances regarding the posttest scores of the groups on written expression was checked using Levene's test, and variances were found to be equal (F=.00; p=.998>.05). According to these results, all the assumptions of the analysis of covariance were met.

Single factor analysis of covariance (ANCOVA) was applied to determine the presence of an observed difference between the groups' adjusted mean scores on the attitude scale. The analysis showed a statistically significant difference between the experimental group and control group participants' mean academic writing scores on the posttest adjusted according to pretest academic writing scores (F_{(1,23)}=5.818; p=.018). The fact that the difference favored the experimental group was understood through the adjusted means (\(\bar{X}_{\text{experiment}}=76.89; \bar{X}_{\text{control}}=71.75\)). Because of this finding, the process writing approach affected the participants' academic writing success.

For the second research problem, data were analyzed via single factor analysis of covariance (ANCOVA) to determine whether the participants' pretest-posttest scores on the Writing Apprehension Test significantly differed by group. According to pretest-posttest results of the Writing Apprehension Test, the mean scores were calculated to be 64.37 for the experimental group, and 71.17 for the control group. When the pretest scores were controlled, the adjusted mean score was calculated as 64.00 for the experimental group and 71.56 for the control group. Moreover, equality of variances regarding the groups' scores on the posttest of anxiety was checked using Levene's test, and variances were found equal (F=.071; p=.791>.05). These results indicate that all the assumptions of the analysis of covariance were met.

Single factor analysis of covariance (ANCOVA) was carried out to determine whether there was an observed difference between the groups' adjusted mean scores on the attitude scale. As a result of the analysis, it was ascertained that there was a statistically significant difference between the experimental group and control group participants' mean anxiety scores on the posttest adjusted according to pretest anxiety scores (F_{(1,73)}=19.661; p=.000). The adjusted means demonstrated a difference in favor of the experimental group (\(\bar{X}_{\text{experiment}}=64.37; \bar{X}_{\text{control}}=76.17\)). However, when the adjusted means were examined (\(\bar{X}_{\text{experiment}}=64.00; \bar{X}_{\text{control}}=76.56\)), the mean score of the control group was found to be higher than that of the experimental group. A high score on Writing Apprehension Test indicates an increased level of anxiety. Hence, the process writing approach had a significant impact on decreasing participants' writing anxiety.

**Discussion**

One of the conclusions drawn from the present research is that the process writing approach affected writing success in a positive and statistically significant way. As the process writing approach focuses on the process of text construction, many dimensions underlying writing (Grabe & Kaplan, 1996) have been closely examined in the studies where this approach was employed. The studies also found that the likelihood of unsuccessful text production at the end of the writing process decreased considerably. Another reason for the success of the approach is that written texts are evaluated several times in the studies in which this approach is implemented. Since evaluations are carried out by students themselves, their friends, and their teacher, texts contain fewer errors. A study conducted by Yalı (2009) found that lessons using process writing decreased students' negative views about writing. This outcome could result from errors' being evaluated and corrected as soon as they emerge in the writing process.

In this study, some participants completed their tasks before others. This could be attributed to individual differences among the participants. A study carried out by de Larios, Manchon, Murphy, and Marin (2008) ascertained that different people spent different amounts of time on writing studies. Furthermore, a considerable amount of improvement was observed in written language use among participants in the experimental group during the research process. The fact that the primary goal during the process writing approach is communication and students felt free to express themselves with this learning format may have led to their use of more complex sentences. In Lee's (2006) study, carried out with 100 university students from different fields of study learning English, the process writing approach was found to enable students to use complex sentences.

The present research found that the process writing approach improved participants' success in written
expression. Çakır’s (2003) study on university students also observed that process writing activities improve students’ written expression in terms of cohesion, grammaticality, rhetorical structures and content, informational value, and creativity. In this respect, Çakır’s findings coincide with the results of this study. Other studies also confirm the success of the process writing approach (Adigüzel, 1998; Karatay, 2011b; Scannella, 1982; Şentürk, 2009; Ülper & Uzun, 2009).

The present research also found that the process writing approach decreased writing anxiety to a statistically significant extent. Sawkins (1971) and Thompson (1981) ascertained that writing leads to anxiety. The primary reason for writing anxiety is the idea of being evaluated. The idea of confronting the errors that will be pointed out in the evaluation leads to a certain amount of tension for the student (Graves, 1994; Özbay & Zorbaz, 2011; Routman, 1996). However, errors are minimized during the process of text production during process writing, and the level of anxiety decreases. In this way, students cultivate a positive attitude toward writing. Yayılı’s (2009) study also determined that process writing changes students’ negative views about writing. Furthermore, writing anxiety was found to decrease in a study conducted with the portfolio technique (Öztürk & Çeçen, 2007), which can be considered an extended form of process writing.

Writing anxiety has several subdimensions including physical anxiety, cognitive anxiety, and avoidance behaviors (Cheng, 2004); appreciation, prejudice, evaluation apprehension, and sharing what one writes (Özbay & Zorbaz, 2011). These subdimensions indicate that writing anxiety can take various forms and have different causes. The present study observed that the idea of being evaluated in particular led to anxiety in the experimental group, but also that it considerably decreased as the experimental procedures were maintained. This finding was discerned through statistical analyses. The fact that a considerable amount of time was spent on writing throughout the experimental procedures could be another reason for the effectiveness of the process writing approach in decreasing writing anxiety. Cheng’s (2002) study also found that an increase in study time decreased writing anxiety.

The findings of this research study suggest the benefits of the process writing approach in the studies of written expression. Students find writing activities more difficult than other language skills. Therefore, the obstacles to successful learning of writing skills should be accurately identified, and varied techniques should be used to eliminate them. In this regard, process writing appears to be a beneficial approach. Likewise, writing anxiety is a psychological state that inhibits writing studies. Since the process writing approach decreases this anxiety dramatically, this approach is recommended for alleviating writing anxiety. Moreover, the process writing approach is especially effective in alleviating the dimension of writing anxiety associated with language skill. However, this approach may not eliminate anxiety resulting from students’ personality traits. Further studies are needed to understand this distinction. Finally, the question of whether anxiety, a psychological characteristic, can be changed by the process writing approach should be retested through studies of longer duration.
References/Kaynakça


