The Effect of Using Cooperative and Individual Weblog to Enhance Writing Performance

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ABSTRACT

Academic writing, whether individual or cooperative, is an essential skill for today's graduates. However, motivating and helping students to learn to write effectively, either in cooperative or individual scenarios, poses many challenges, many of which can be overcome by technical means. The aim of this study is to investigate the effect of using cooperative and individual weblogs to enhance writing performance, based on blended instructional design. An equally weighted sequential quantitative-qualitative (two-stage) mixed research design was used for this study. In the quantitative dimension, the “pretest-posttest control group design” that was applied as an experimental study was used. In the qualitative dimension, the views of students in the experimental group were examined as a “case study.” Twenty-one 5th grade students participated in the study, 12 in the experimental group, and 9 in the control group. While the experimental group worked on a cooperative weblog, the control group worked on an individual weblog. A writing performance exam was applied as pretest-posttest. Exam papers were scored with a writing performance evaluation scale. Results of the quantitative dimension indicated a statistically significant difference between the writing performance of students in the experimental and control groups in favor of the control group. When the sub-skills of students’ writing performance was examined on the posttest scores of the “ideas & content dimension,” a statistically significant difference was found in favor of the control group, but no significant difference was detected in the “sentence fluency, writing rules and organization” dimensions between the groups. Results of qualitative dimension showed that “feedback” has a positive effect on writing performance, unlike cooperative learning, which has an adverse effect.

Keywords

Blended instructional design, Cooperative learning, Weblog, Writing performance

Introduction

According to Graham and Harris (2009), many students show limited writing performance due to the fact that they do not make a good writing plan, have difficulties in creating content, do not know how to use writing strategies, their revision of the writing process is not meaningful enough, and they do not make enough effort to write. Obviously, writing enters into all aspects of human life, especially nowadays in the age of the Internet and email.

Vincent’s (2003) research in which an 11 year old student, who does not like to study writing activities and cannot write more than 1-2 lines of work in the paper-pencil studies, also supports this idea. In accordance with this argument, in her research that writing exercises through weblogs and social networks conducted by 3001 students aged between 12-13 years from 12 elementary and 12 middle schools, Clark (2009) stated that youngsters cannot make compound sentences, do not have a wide range of vocabulary or use a variety of words in their writings, and furthermore, they do not pay attention to capitalization, punctuation, and spelling.

In order to improve writing performance, students should observe the environment dedicatedly, and produce ideas on what they have observed and read. Then they must show their improvements gained through these means in the appropriate learning environments with the support of an effective teaching plan enhanced by various techniques (Chaffee, McMahon and Stout, 2004).

It was notable in the literature that cooperative learning is suggested to teach writing effectively. For instance, Johnson, Johnson and Stanne (2000) expressed that cooperative learning enables students to work together for both
their own learning and the other group members’ learning. It also enables each student to take responsibility for group members’ learning. Santangelo and Olinghouse (2009) and Graham and Perrin (2007) also state that well-constructed cooperative writing activities help students learn from each other and share their cultural backgrounds. In addition, it increases the quality of writing activities. Similarly, Santangelo, Harris and Graham (2007) indicate that cooperative writing activities give students the opportunity to take an active role in planning their writing with their peers and teachers through positive interaction, writing, revising, and editing.

Developing cooperative writing activities that have the abovementioned characteristics in an enjoyable learning environment that attracts students’ attention and enables them to socially interact with their peers and teachers without constraints on time or place is very important to increase writing performance. An online learning environment is the first environment that comes to mind in accordance with the qualities indicated above. Davidson-Shivers and Rasmussen (2006) define an online learning environment as an environment that any type of tasks can be given and in which students interact with each other and their teachers without face-to-face interaction, as in the classroom. In order to overcome this limitation, conventional face-to-face learning and online learning can be combined to create an effective learning environment for writing activities. That is to say that the strong interaction and communication opportunities that face-to-face learning offers and online learning’s advantage of being independent of time and setting have fostered the idea of developing an environment for teaching writing based on blended learning, which combines face-to-face learning and online learning.

A literature review revealed that blended learning is generally defined as the integration of internet-based learning and face-to-face learning (Bonk and Graham, 2006; Kerres and Witt, 2003; Rooney, 2003). In an effective blended learning environment, learning tools, which include messenger, tele-video conferencing, debate rooms, forums, emails, and web 2.0 tools, are as important as teachers (Cuhadar, 2008).

Weblogs or blogs are one of the prominent Web 2.0 tools in the interactive web technology environment. Blogs are defined by different writers (Baggetun and Wasson, 2006; Glogoff, 2003; Martindale and Wiley, 2005) as web environments that are easy to create and through which links such texts, pictures, and audio and video files can be shared and updated; additionally, individuals from different locations at different times can comment on these links.

Using blogs in education, in addition to the advantage of archiving, provides teachers and students the opportunity to interact and share their thoughts with each other and with other people. Furthermore, blogs increase students’ individual responsibility by publishing their performance and aid in their entertainment by reading the comments on their performance and enabling them to think critically (Du and Wagner, 2007; Shelly, Gunter and Gunter, 2010). Another useful aspect of blogs in learning, as Farmer and Barlett-Bragg (2005) stated, is that students who tend to learn both individually and in a group have reading and writing experiences by internalizing the blog environment. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks. When the body of literature is observed, it is seen that except diary writing, the blog writing study conducted on grade students over 15 weeks.

Accordingly, Graham and Harris (2009) stated that by taking into consideration the students’ common facilities, interest areas, and individual differences, an “individual weblog environment” based on blended instructional design can systematically bring the deficient characteristics (making a good plan, using an appropriate environment and strategy, sufficient application, and meaningful review) that are necessary for good writing performance. Chen et al. (2011) also supports this idea with the results of the blog writing study conducted on 5th grade students over 15 weeks. Their study results indicated that students gained the skills of writing meaningful and rich content, organization, fast writing, and gathering information via the internet.

**Purpose of study**

In the light of abovementioned research results and discussions, this study aimed to examine the effect of cooperative and individual weblog-integrated writing instructions, based on blended instructional design, on 5th grade students’ writing performance. The expectation was to obtain answers to the two research questions below.
• Is there a statistically significant difference between the writing performance of students who were in cooperative weblog-integrated learning environment and who were in individual weblog-integrated learning environment which are based on blended instructional design?
• What are students’ opinions about the effects of cooperative weblog-integrated writing instruction on their writing performance?

Method

Research design

An equally weighted sequential quantitative-qualitative (two-stage) mixed research design was adopted for this study.

For the quantitative aspect, the effect of the two independent variables, cooperative and individual weblog-integrated writing instructions, based on blended instructional design, on writing performance, which is the dependent variable of the research, was examined. For this reason, in this aspect, “pre- and post-test control group design,” which is one of the experimental designs, was applied. Experimental design shows in Table 1.

Table 1. Pre-test and post-test control group of experimental design

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pre-test</th>
<th>Experimental process</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group I</td>
<td>O₁₁</td>
<td>X₁</td>
<td>O₁₂</td>
</tr>
<tr>
<td>Experimental Group II</td>
<td>O₂₁</td>
<td>X₂</td>
<td>O₂₂</td>
</tr>
<tr>
<td>Control Group</td>
<td>O₃₁</td>
<td>X₃</td>
<td>O₃₂</td>
</tr>
</tbody>
</table>

In Table 1, “O” shows the implementation of the writing performance exam, which consists of a pre-test and post-test; “X,” shows the implementation of writing performance in an “individual weblog environment”; X₂ shows the implementation of cooperative weblog-integrated writing instruction environment based on blended instructional design in experimental groups; and X₃ shows the implementation of face-to-face writing instruction in control groups.

For the qualitative aspect, the case study method was used to reveal opinions of the students in the experimental group about the effects of cooperative weblog-integrated writing instruction, on their writing performance.

Study groups and equivalency process

The study group consisted of students from two classes of an elementary state school in Istanbul, which possessed all the required physical features and was convenient for the researchers in the spring term of 2010-2011 academic year.

Study groups

The experimental process was conducted with 21 students who were divided into experimental and control groups. Students in the experimental group (n = 12) were randomly chosen from the class 5/B, and students in the control group (n = 9) were randomly chosen from the class 5/C.

In the experimental group, there were 7 (58.3%) female and 5 (55.6%) male students, and in the control group there were 3 (33.3%) female and 6 (66.7%) male students.

Equivalency process

Before the experimental process, a “Writing Performance Test,” which is described under the title “Data Collection Instruments,” was applied to the entire study group as a pre-test, to create equivalency between the experimental group and the control group in terms of their writing performance. After the pre-test, the Mann-Whitney U-test was used to determine the equivalence between the experimental and control groups. Table 2 shows the values for pre-test scores of the groups.
As seen in Table 2, there is no significant difference between pre-test scores of the experimental and control groups in terms of ideas/content (U = 42.00, p > .05), coherence (U = 45.50, p > .05), organization (U = 46.50, p > .05), and writing rules (U = 48.50, p > .05) aspects and of their writing performance (U = 44.00, p > .05). It can be inferred from this that the groups have equal basic writing skills.

Qualitative aspect of the research

It was conducted by 12 students, including 7 females and 5 males, from experimental group.

Data collection instruments

In order to answer the research questions, data was collected through the three instruments explained below:

Writing performance test

The scale that was used as a pre- and post-test to measure the writing performance of the students was developed by Seval Fer and H. Gulhan Orhan Karsak. In this test, the open-ended question directed to students was, “Think of all the branches of fine arts and their characteristics and write a story including either only one branch or all.” Answer sheets were evaluated by three different primary school teachers, without any interaction, using a writing performance evaluation scale.

Writing performance evaluation scale

The writing performance evaluation scale was developed to evaluate the writing performance of the students.

The scale, which was originally developed by Seval Fer and H.Gulhan Orhan Karsak for this research, consists of 25 items testing basic writing performance, including ideas/content (13 items), organization (3 items), fluency (6 items), and writing rules (3 items). Each item is graded in four categories as: very good (4), good (3), adequate (2), and inadequate (1). According to the evaluation of eight experts of the field, no editing was made on the scale. The consistency among the evaluations of three 5th grade teachers based on the test scores, which are used to determine the writing performance of the students, was examined through the Pearson Correlation Analysis. As the basic writing performance scores were analyzed, the highest correlation was detected between the 2nd and the 3rd evaluators (r = .98; p < .05), while the lowest correlation was detected between the 1st and the 2nd evaluators (r = .94; p < .05). The high level of positive and significant correlation among the evaluators indicates that the evaluation was consistent and reliable.
Interview form

For the qualitative aspect of the research, an interview form including two questions was used to identify the students’ opinions on the effect of cooperative weblog-integrated writing instruction based on blended instructional design on their writing performance. Special attention was given to ensure that the interview questions reflected the students’ views on the effect of cooperative weblog-integrated writing instruction based on blended instructional design on their writing performance. The questions were preferred because they were appropriate for focus groups and the possibility for students to add their ideas.

Learning environment

Cooperative weblog-integrated instructional design was applied to the experimental group in a blended learning environment, while individual weblog-integrated instructional design was applied to the control group. Some of the activities were implemented by the teachers of groups over four weeks. During the first week, four-hour preparatory activities were implemented. In the following three weeks, three-hour writing activities were completed per week. Activities in the learning environment were observed by two volunteer observers to determine whether the stages of instructional design were applied during the teaching process or not. One of the observers was the teacher of another class in the same school and the other was one of the researchers.

Working process of the experimental group

Cooperative weblog-integrated instructional design in a blended learning environment, which was developed to be applied in the experimental group, is based on the ADDIE model that has the following main and substages.

- **Analysis:** In the context of “Learner Analysis,” which is the first step of this stage, a preference form was prepared by referring to the 2005 Ministry of National Education Turkish Curriculum in order to ascertain students’ preferences for writing activities. According to the preferences of most students, story writing was determined as the most preferred genre, and the four most preferred fine arts branches were theater, painting, music, and sculpture, respectively.

A writing test was applied as a pre-test to measure students’ writing skills. In the context of “Determining Tasks and Objectives,” which is the second step of the Analysis stage, after defining the general aims, expected writing tasks related to these aims were determined and divided into four groups: ideas/content, fluency, organization, and writing.

The writing objectives related to the defined writing tasks were taken from the 2005 Ministry of National Education Turkish Curriculum for Primary Education.

- **Development:** For the “Determining Teaching Strategies and Methods-Preparatory Activities” step, which is the first step of the Development stage, implementer teachers and participant students were provided with information through a power point presentation. Implementer teachers were informed about the instructional design plan and implementation, and the students were informed about the characteristics, processes, and rules of writing a story; fine arts branches that were preferred by students; features and uses of weblogs and about the forms used. Students also received computer literacy training, including punctuation and capitalization. In the second step of the Development stage, “Presenting Tasks,” three cooperative groups were formed, each of which had four students. Each of the students in the cooperative groups participated in one of the sub-themes specified in the reading instruction. In context of “Writing Activities,” the jigsaw technique, one of the cooperative learning techniques, is used, and includes stages as defining learner characteristics, preparing materials, forming groups, distributing the subjects, working in cooperative groups and expert groups, exchanging information in groups, and individual assessment. In the context of “Feedback”, which is the fourth step of the Development stage, the aim was to enable the teacher to guide writing activities. Students wrote comments to each other, as well as to the teacher, who was tasked with writing to students regularly each week by using the evaluation forms.

In the fifth step of the Development stage, “Deciding and Preparing Teaching Materials and Setting” a weblog address was assigned to each student by researchers via the blog server called “Blogcu” (http://www.blogcu.com). For the preparatory activities, PowerPoint presentations were prepared, and for the writing activities, reading
instructions and a draft form for story writing were prepared. In the context of the last step, “Developing Assessment Instruments,” teacher assessment, group work self-assessment, and group work peer assessment instruments were developed using the same items with different names. The pre-test was envisaged to be used as the post-test.

- **Implementation:** In this stage, all the steps of the Development stage were implemented.
- **Evaluation:** The evaluation was completed by using the “Writing Scale,” “Group Work Self-Assessment Form,” “Group Work Peer Assessment Form” and “Teacher Assessment Form” by referring to the writing tasks and objectives that were defined in the second step of the Analysis stage. The post-test was applied.

**Study process of the control group**

The individual weblog-integrated instructional design in a blended learning environment, which was developed to be applied in the control group and based on the ADDIE model, has the following main and sub-stages.

- **Analysis:** The steps followed in this stage are the same as the steps defined in the Analysis stage of the instructional design developed for the experimental group.

- **Development:** The first steps of this stage are the same as the steps defined in the development stage of the instructional design developed for the experimental group. On the other hand, in the context of “Presenting Writing Tasks,” the second step of this stage, each students’ participation in the themes in the reading instruction and write in the blogs was individually enabled. The third step of this stage, “Writing Activities,” allowed students to obtain information about the specified fine arts theme and answer the questions related to the theme by using the websites given in the reading instructions. Next, the students were requested to complete the draft form for story writing. The students were also required to complete their writing tasks individually, depending on the plan, and by considering the writing processes. The “Feedback” step, the fourth step of “Development” stage, the teachers guided the students during the writing activities; enabled the students to write comments to each other and to the teacher who was tasked with writing to the students regularly each week by using the evaluation forms.

“Deciding Teaching Materials and Setting” was the fifth step of this stage, in which it each student was assigned a weblog address by researchers via the blog server called “Blogcu” (http://www.blogcu.com). In preparation of this step, PowerPoint presentations were prepared, and for writing activities, reading instructions and a draft form for story writing were prepared. In the context of the last step of this stage, “Developing Assessment Instruments,” instruments for teacher assessment were developed, as well as group work self-assessments and group work peer assessment. The students were requested to use the assessment instruments individually.

- **Implementation:** In this stage, all the steps of development stage were implemented.

- **Evaluation:** The evaluation forms that were used are the same as the forms used in the Evaluation stage of the instructions designed and developed for the experimental group. After the implementation, each student evaluated his/her own writing performance by completing the “Self-Assessment Form” and evaluated one of the group member’s writing performance by completing the “Peer Assessment Form.”

**Data analysis**

**Quantitative aspect**

The first research question aimed to reveal the effects of cooperative and individual writing activity based on blended instructional design in which weblog and face to face environments exist on students writing performance. Cooperative and individual blended instructional designs are the two independent variables and students’ writing performance is the dependent variable of the research. The Mann-Whitney U-Test was used to answer the research question. The significance level was accepted as $p < 0.05$. 

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Qualitative aspect

In the qualitative aspect of the research, a focus group interview was conducted on 12 students from the experimental group. The questions in the interview form were directed to the students. The responses of the students were recorded by the teacher of the experimental group, while the researcher observed the interview.

At the end of the interview, recorded responses were decoded into text. The content analysis of the data gathered by the focus group interview was done. The content analysis was done by the means of NVivo 8 qualitative data analysis program.

To test the validity and the reliability of the research, the following steps, defined by Yildirim and Simsek (2000, 76), were followed: (1) For external reliability, the researcher remained in the background and participated in the process as an observer. For this purpose, the focus group interview was conducted by the implementer teacher; (2) To provide internal validity, the goal was to obtain internally consistent and significant results; (3) To provide external validity, the study group, setting, and the processes were explained in detail.

Results

Results of the research were examined from quantitative and qualitative aspects.

Results of the quantitative aspect

The first research question was expressed as, “Is there a statistically significant difference between the writing performance of students who received writing instructions in a cooperative weblog-integrated learning environment based on blended instructional design, and students who received writing instructions in an individual weblog-integrated environment?” In this context, the Mann-Whitney U-Test was used to compare the writing performance of the students after the instruction. Table 3 shows the results of the test.

<table>
<thead>
<tr>
<th>Writing Tasks</th>
<th>Groups</th>
<th>N</th>
<th>Mean rank</th>
<th>Sum of ranks</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas/Content</td>
<td>Experimental</td>
<td>12</td>
<td>8.58</td>
<td>103.00</td>
<td>25.00</td>
<td>.03**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>9</td>
<td>14.22</td>
<td>128.00</td>
<td>27.50</td>
<td>.05*</td>
</tr>
<tr>
<td>Fluency</td>
<td>Experimental</td>
<td>12</td>
<td>8.79</td>
<td>105.50</td>
<td>25.00</td>
<td>.03**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>9</td>
<td>13.94</td>
<td>125.50</td>
<td>27.50</td>
<td>.05*</td>
</tr>
<tr>
<td>Organization</td>
<td>Experimental</td>
<td>12</td>
<td>9.50</td>
<td>114.00</td>
<td>36.00</td>
<td>.19*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>9</td>
<td>13.00</td>
<td>117.00</td>
<td>36.00</td>
<td>.19*</td>
</tr>
<tr>
<td>Writing Rules</td>
<td>Experimental</td>
<td>12</td>
<td>9.00</td>
<td>108.00</td>
<td>30.00</td>
<td>.08*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>9</td>
<td>13.67</td>
<td>123.00</td>
<td>30.00</td>
<td>.08*</td>
</tr>
<tr>
<td>Writing Performance</td>
<td>Experimental</td>
<td>12</td>
<td>8.25</td>
<td>99.00</td>
<td>21.00</td>
<td>.01**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>9</td>
<td>14.67</td>
<td>132.00</td>
<td>21.00</td>
<td>.01**</td>
</tr>
</tbody>
</table>

* p > .05. ** p < .05.

As is seen in Table 3, the Mann-Whitney U values (U = 21.00, p < .05) for the writing performance of the experimental and control groups indicate that there is a statistically significant difference between the scores of the groups in favor of the control group. According to the results related to the sub-skills of writing performance, it is seen that students in the control group have statistically significantly higher scores in the aspect of ideas/content (U = 25.00, p < .05). In contrast, no statistically significant difference was detected between the scores in the aspects of fluency (U = 27.50, p > .05), writing rules (U = 36.00, p > .05), and organization (U = 30.00, p > .05). It can be inferred from the results that writing instructions in an individual weblog-integrated environment based on blended instructional design is more effective than writing instructions in a cooperative weblog-integrated learning environment based on blended instructional design, in terms of students' writing performance. The anticipated reasons for this result are discussed in the “Results” chapter.
Results of the qualitative aspect

The following two questions were asked to students on the interview.

- Would you prefer cooperative or individual weblog writing activity if you had the opportunity to choose?
- What are your opinions about the effects of group work self-assessment, group work peer assessment, and teacher assessment concerning the effect of giving feedback on weblog on writing performance?

Results presented under the two themes which is following these questions and supported with concept maps.

The effect of cooperative weblog writing on writing performance

Twelve students were asked first question. Five students gave no response. As seen in Figure 1, three students preferred cooperative weblog writing and four students preferred individual weblog writing. The fact that only three students preferred cooperative weblog writing supports the results of the quantitative aspect.

Three students who preferred cooperative weblog writing stated that cooperative learning was more effective on their writing performance and was more personally useful. They also expressed that they had a chance to exchange information and to acquire more detailed information; in addition, while exchanging information, a discussion platform was created in which, as students stated, learning was facilitated. The examples below reflect the views of the students who preferred cooperative writing.

Student 5: …we had more information in the groups in which we discussed the same topics. We learned more detailed information from our friends.

Student 1: Working with a group was like learning by discussion.

Students who stated that if they had been given an opportunity to choose, they would have chosen individual weblog writing instead of cooperative writing, mentioned the disadvantages of cooperative working. They said that during group discussions, they encountered conflicts and some of the group members showed an intolerant attitude towards each other by dominating others. The following example reflects the views of students who preferred individual writing.
Student 4: Writing with a group was really difficult because everybody in the group wanted something different. Everybody wanted to do keyboard typing.

Student 9: For example, in our group someone wanted us to write what s/he said all the time and didn’t accept our ideas. It was really hard and annoying.

When the students were asked to mention what they thought about the impact of teacher’s guidance, nine students did not give any response, while, as seen in Figure 2, three students mentioned the positive impact of the teacher’s guidance.

According to the students, teacher guidance had a positive effect on conflicts, but teachers could be more helpful as the number of groups decreases. In addition, one of the students indicated that the problems encountered during the performance process could have been solved without teacher guidance by simply thinking. The example below reflects the students’ views on teacher guidance.

Student 12: When we had problems, we had a chance to share them with our teacher.

Student 1: Actually, when there was a problem we could solve it by thinking/solve it on our own.

*The effect of giving feedback on a weblog on writing performance*

Students were asked second question. When the students were asked about the effect of group work self-assessment, as can be seen in Figure 2, two students expressed positive views.

*Figure 2. Students’ views on the effect of feedback on writing performance*

Students believe that group work self-assessment helps them notice their errors and it improves their writing performance when it is done regularly. Students’ views on the group work self-assessment are as follows:

Student 2: I realized that we wrote better as we did more assessments.

Student 11: While completing the form, we noticed the mistakes we made as we were writing the previous story. We tried to write better.
In order to reveal students’ views on the effect of group work peer assessment on writing performance, students were asked about the effect of the comments that their friends wrote on their story and the effect of their own comments on their friends’ stories. As can be seen in Figure 2, three students expressed positive views and two students expressed negative views on the effect of peer assessment.

In the context of the effect of group work peer assessment, students were asked about the effect of the comments written by their friends on their writing performance. One student expressed a positive view and two students expressed negative views. The student who made a positive comment said that the comments of their friends from different groups helped them notice their errors. The following example reflects the positive view of a student:

Student 12: The good thing about their comments is that they highlight all the errors we’ve made.

Despite this view, two students stated that their friends’ comments on the weblog created a negative effect on their writing performance. The students found the comments insufficient as they were not detailed enough and that they repeated themselves. The comments of these students are as follows:

Student 5: I didn’t like the comments that our friends wrote for us. I expected them to correct our writing errors. Their comments were too short. They should have shown our errors in a better way.

Student 12: Some of our friends wrote the same comments all the time.

When the students were asked about the effect of their comments on weblog on their friends’ writing performance, two students expressed positive views. None of the students expressed negative views. The students noted that they were able to share their experiences, in addition to helping their friends make fewer errors with the help of comments written on the stories. The following example reflects the positive view of one of the students:

Student 9: Our friends started to pay more attention to their errors. We showed them how to write. It helped them.

The students were also asked about the effect of the teacher’s comments on their writing performance and motivation. As can be seen in Figure 2, three students stated that the teacher’s comments helped them notice the points that require more attention and helped them write more elaborately. In addition, according to them, their teacher’s comments were more serious than their friend’s comments. The students’ views are as follows:

Student 3: I care about teacher’s comments more. I read my friends’ comments, too and kept them in mind while writing our next story. I warned my friends. The teacher writes better comments, though.

Student 5: Well, after the teacher’s comments, we paid more attention to writing rules like writing -de, -ki (commonly confused suffixes in Turkish). It was helpful.

Discussion and conclusions

According to the results of the quantitative aspect of the research, writing instruction in an individual weblog-integrated learning environment based on blended instructional design, in terms of the ideas/content aspect, contributed to the improvement of writing performance more than writing instruction in a cooperative weblog-integrated learning environment.

The reason for this result is that an individual weblog-integrated writing instruction environment based on blended instructional design could present a blog page in which students could freely make designs. This opportunity may have motivated the students to create more original ideas in their stories and to be more ambitious in content writing. The results that writing with blogs improves thinking skills that were reached by different researchers (Franklin-Matkowski, 2007; Miller, 2011; Olander, 2007) who study the effect of blogs on writing performance and motivation parallels this idea. Additionally, Du and Wagner (2007) mention that individual weblogs have the nature that reinforces taking responsibility and the opportunity to compare the weblog writings. Similarly, Jones (2006) supports this idea with the result of her study, which focuses on the advantages of being the owner of the content that she has created through individual writing studies. Thus, this opportunity which was presented by "individual weblog
environment” could provide much more meaningful improvement for writing performance comparing to “cooperative weblog environment.” Olthouse (2010), who studied the effect of different contexts of writing performance, supports the idea with the result about writing performance was effected from context.

Other reason for this result is as students mentioned in the focus group interview- the ideas of some of the students who worked in cooperative groups in a weblog environment were not accepted by the others. Because of this, students in the “cooperative weblog environment” might not have expressed their ideas independently in comparison to the students in the “individual weblog environment.” This limitation may have also prevented the development of skills to link the ideas within and between paragraphs. This finding supports the positive effects of an “individual weblog environment” on developing ideas/content performance, contrary to a “cooperative weblog environment.” Additionally, the conflicts among the group members explain the fact that a “cooperative weblog environment” has no effect on ideas/content performance. This was also prevented students from focusing on the aims of the study and to express themselves clearly. During the focus group interview, most of the students stated that they would have preferred doing the weblog writing activities individually.

According to other results revealed in the quantitative process, writing instruction in a cooperative weblog-integrated learning environment based blended instructional design is not more efficient than writing instruction in an individual weblog-integrated learning environment in terms of improving the performance on fluency, organization and writing rules tasks. The first explanation for this may be the conflict problems which were expressed in the focus group interview. For instance, the fact that students could not reach a consensus while planning their writing and did not effectively use the time given by their teacher may have made it difficult to improve their abovementioned skills. Additionally, it was revealed that the egocentric and intolerant attitudes of some of the group members negatively affected students’ performance. So, the conflicting views of students on the effect of cooperative planning and cooperative weblog writing on writing performance support the finding that cooperative weblog writing is not effective for performance improvement on the three abovementioned tasks.

The second explanation for the results could be attributed to the fact that there is no significant effect of an “individual weblog environment” on the improvement of performance on three above mentioned tasks may be the students’ age. In other words, 5th grade students might not have taken enough responsibility for cooperative learning in the weblog environment because of their age. According to the results of the qualitative aspect of the study, students found the comments on their stories insufficient. The fact that the related researches (Sun, 2010; Franklin-Matkowski, 2007; Miller, 2011; Blankenship, 2007) that examined the development of writing performance on the weblog were conducted mainly on high school and university students supports this argument.

In addition, the fact that both of the environments do not have a significant effect on improving the performance related to the three abovementioned writing tasks is similar to the results of Clark’s (2009) research in which weblog and social network writing studies were conducted on students aged 12-13 years. Clark stated that youngsters cannot make compound sentences, do not have a wide range of vocabulary or use a variety of words in their writings. Furthermore, they do not pay attention to capitalization, punctuation, and spelling.

Finally, according to the results of the quantitative aspect of the research, writing instruction in an individual weblog-integrated learning environment based blended instructional design is, as a whole, more effective on writing performance compared to the writing instruction in a cooperative weblog-integrated learning environment. This can be attributed to the fact that individual learning is more appropriate for the characteristics of writing studies than cooperative learning.

When weblog writing studies are examined (Blankenship, 2007; Chen et al., 2011; Miller, 2011; Sun, 2010), it can be seen that the studies were conducted individually. In the studies mentioned above, it was revealed that an “individual weblog environment” is effective on writing performance. This finding is parallel to the findings of this research in terms of improving the performance on ideas/content tasks and writing performance as a whole.

Due to the fact that the quantitative aspect of this research is experimental and it is not possible to generalize the results, as the research has a qualitative aspect, in order to improve writing performance, which has lifelong importance, the effects of similar studies concerning the first stage of primary school education should be examined.
In the light of the limitations of this study, suggestions for the new research are as follows: More time should be allocated to plan cooperative weblog-integrated writing instruction that is based on blended instructional design. In addition, to increase academic achievement and performance, the effects of a weblog environment should be examined in the process of the curriculum development of all subjects.

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References


