The Effect of Using the Process Approach to Teach Writing to Basic Stage Students in Jordan on Their Writing Achievement

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ABSTRACT

This study aimed at investigating the effect of using the process writing approach on the writing achievement of tenth-grade EFL students in Jordan. One basic stage school was randomly selected, where one tenth-grade section was taught to write using the process approach, while the other section was taught using the traditional approach.

Means and standard deviations were used to compare the writing scores of the experimental and the control groups. Analysis of Covariance (ANCOVA) was used to know if those differences were due to the teaching method used.

Results showed that students who were taught using the process writing approach scored significantly higher than those who were taught using the traditional approach with regard to their total writing achievement and with regard to three other writing components (i.e.: message, length, and syntax), whereas no statistically significant differences were found with regard to writing mechanics and organization. It was recommended that EFL teachers as well as curricula planners reconsider the methods of teaching writing, so that more emphasis is given to the writing workshop.

INTRODUCTION and Background of the Study

The process writing approach refers to a teaching approach that focuses on the process a writer engages in when constructing meaning. This approach basically gives students responsibility for and ownership of their writing, so that the final written piece is the result of a conscious and ongoing process of planning, writing, revising, editing, sharing and publishing (Montague, 1995).

Writing is an enormously complex skill, and students should be given the opportunity to approach written composition as a communicative activity including informing, requesting, expressing personal opinion, recording events …etc). Learning to write in either a first or second language is a difficult and lengthy process which usually induces anxiety and frustration in many learners. This could be due to traditional practices in teaching writing which gradually move learners from controlled writing exercises toward freer writing once they have memorized the prescribed structures.

Typically, these techniques include:
1. Providing models to which learners make minor changes and substitutions.
2. Expanding an outline or summary.
3. Constructing paragraphs from frames, tables, and other guides.
4. Producing a text through answering a set of questions.
5. Sentence combining: developing complex sentences following different rules of combination (Richards, 1992; Reid et al., 1995).

Many teachers complain that they often lecture the class on the qualities of good writing and provide them with guidelines and examples of good writing, but discover that their students have no ‘feel’ to write or, when they do, they produce poorly written pieces. They probably know the rules, but fail to observe them as they write. (Purves, 1995) writes:

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"We have spent a lot of time teaching them about planning the menu, assembling the ingredients, and tasting for the herbs and spices, but we have neglected the cooking and serving and presentation of the dish" (17).

White and Rosario (1995) argue that in the lower levels of language instruction, writing is primarily used as a supportive skill, often taking last place behind listening, speaking and reading. Frequently, it is only in advanced foreign language courses that writing activities become communicative, creative, and audience oriented. Under these circumstances, writing in beginning classes is often not particularly meaningful and is used chiefly for evaluating or reinforcing grammar and vocabulary which have previously been learned in class.

Instructional planning should take into account the ways different learners approach writing tasks. Writing activities can be structured along developmental, process-oriented, and proficiency-based models. A process-oriented approach would call for a prewriting phase, a drafting or writing stage, and a revising phase. Each phase would enable students to focus their attention on different aspects of written communication: content, organization, purpose, audience, and grammatical accuracy. Each writing task has a distinct group of textual features that in turn require the use of different kinds of language skills and composing strategies. Development of writing abilities places demands on class time and entails some reorganization of classroom routines so that students have opportunities to collaborate (Rameriz, 1995).

Students should be asked to exchange their compositions so that they become readers of each other’s work. This is an important part of the writing experience because it is by responding as readers that students will develop an awareness of the fact that a writer is producing something to be read by someone else (White, 1987). And through analyzing and commenting on another person’s work, they will develop the ability to read their own writing critically. When they read, they are aware of what works and does not work, and often utilize that knowledge when they write. For example, they borrow elements from other people’s writing that catch their imagination and seem appropriate for their own writing (Hobelman and Wiriyachitra, 1990; Samway et al., 1993).

Dvorak (1986) cited in Rameriz (1995: 280) suggests the following developmental sequence for early writing assignments: At the initial level of language learning, writing assignments would approximate speech: diaries, dialogues, letters, journals, and stories. This would encourage students to focus on meaning rather than form and would allow students to relate written language to their oral proficiency. The teacher could engage in a written “conversation” with the students, responding and reacting to topics of mutual interest. During this first stage, learners could also become familiar with the conventions of written language. Therefore, instead of having students engage in “guided composition” exercises (sentence and paragraph completions; cloze passages; paragraph rewriting to alter events, characters, and time), they could be provided with a real writing context.

The Problem and Questions of the Study

English language teachers in Jordan never cease to complain that although many of their students find learning rules of grammar manageable, those students are not so good writers. This might be due to many reasons, such as, students’ writing abilities, their motivations to write in English, the methods of teaching used, the nature of the writing tasks, evaluation procedures… etc.

This study is intended to answer the following two questions:

1. Is there a significant effect of the teaching method on the total writing achievement of tenth grade students in Jordan?
2. Is there a significant effect of the teaching method on their writing achievement with regard to each writing component (i.e.: message, length, syntax, mechanics, and organization)?

It is expected that the findings of this study will give insight into the effect of using the process writing approach in elementary EFL grade levels. Therefore, teachers, supervisors and students may reconsider their attitudes towards the writing process and change their practices accordingly.

The Teaching Method

To develop the steps of the process writing approach, the researcher surveyed the related literature and summarized the underlying principles of this approach. In particular, the researcher built on the works of Calkins (1983); Murray (1985); Rivers (1987) Elbow and Belanoff (1989); Mangelsdorf (1992); and Susser (1994), to transform these principles into practical steps that the teacher could find both clear and applicable in the
classroom.
To validate these steps, a group of seven university English professors and three experienced EFL supervisors were consulted. All their comments and suggestions were adopted in preparing the following set of teaching steps:

1. Prewriting
1. the teacher gives students clear instructions for the writing session before they write.
2. students suggest potential topics to write on.
3. the teacher helps students decide on the topic of interest.
4. the teacher elicits or brainstorms relevant ideas.
5. the teacher helps students narrow the focus on the topic.
6. students prepare an outline that represents the main ideas in the topic.
7. students decide on the overall presentation and logical order of ideas with the help of the teacher.

2. Drafting
1. students work collaboratively to jot down as many ideas as they can.
2. students start writing their own ideas, focusing on meaning.
3. the teacher writes with students to give them sense of a real workshop of writers.
4. students move freely around, seeking and offering help to make meaning.

3. Revising
1. students write and read to themselves simultaneously to improve their written pieces.
2. the teacher encourages students to think of how well the text hangs together.
3. students exchange their written pieces giving positive feedback and suggestions for improvement.
4. the teacher negotiates meaning and provides clues without affecting students’ ownership and responsibility as writers.
5. students reconsider their written pieces, giving them form.
6. teacher goes around helping, answering questions and offering suggestions.

4. Editing
1. teacher displays a sample of an unedited essay.
2. the whole class participate in editing the displayed essay.
3. some volunteers read their written pieces to the class seeking feedback.
4. students collaboratively peer-edit their own pieces.
5. each student self-edits his own piece.
6. the teacher helps individual students to identify uncorrected mistakes and suggests correction leads.

5. Sharing and Publishing
1. students volunteer to share their final product with the whole class.
2. the teacher also shares his written piece, but not necessarily the first one.
3. the teacher helps students publish their final pieces in the class or school magazine.
4. The teacher encourages students to keep every piece in a writing folder for ongoing development and evaluation.

Review of literature
Until two or three decades ago, there was a scarcity of research on L2 teaching, especially on the teaching of writing, because it was believed that what applies to L1 learning also applies to L2 learning. However, In a review of comparative studies of first and second language writing, Silva (1993) found out that L2 writers produced something that is less fully supported or developed, less effectively linked, and less adapted to a target readership than that of L2 writers.

In the 1970s, the communicative approach to language teaching led to new attention being paid to, among others, the teaching of writing. From the mid-1970s, the research focus switched to the writer; then to process writing which involved the writing and formative assessment of multiple drafts (Raimes, 1991:409-410). From the mid-1980s, content was the focus of research, with some alienation between the pro-process and pro-product groups (Raimes,1991:410).

Zamel (1987) cited in Hobelman and Wiriyachitra (1990: 123) did a research on the writing habits of eight ESL students who were considered good writers. Results showed that all eight students viewed writing as a creative process and they wrote several drafts before turning in the final paper. They also deleted entire paragraphs in the first draft and only one student began with an outline, which was later changed.

Clarke (1988) compared the progress of children encouraged to write freely with those encouraged to write
conventionally. Findings indicated that children who were encouraged to write freely wrote more often, their pieces of writing were significantly longer, and fewer spelling errors were traced compared with those who wrote conventionally.

Samway (1988) studied the writing processes of 15 elementary non-native children. Results indicated that children’s non-native English speaking status had little effect on their success as writers. It also showed that children approached writing as a message-oriented collaborative experience and they were able to convey their messages successfully despite their syntactic and semantic miscues. Children were noticed to pay little attention to writing mechanics during their revision and evaluation, and they were capable of acting as real writers when their teachers gave them the chance to write for authentic purposes.

El-Shafie (1991) studied the writing behaviors of six Arab EFL students who were taught to write using the process writing approach. Results showed that students made recognizable and consistent progress in the quantity and quality of writing over a period of a year and they also revised extensively to find words to convey meaning. In general, students substituted, added, and deleted words far more often than they expanded, reduced, and moved parts of their texts. The researcher recommended using the process approach and some rhetorical and textual exercise to help EFL Arab students develop as writers.

Harlin and Lipa (1993) investigated elementary children’s awareness of the writing process across grade levels. Results showed that younger subjects cared more about spelling, making marks on paper, and printing, while older subjects thought of writing as putting thoughts and ideas on paper and making sense. Results also showed that writers experienced greater independence as they were actively involved in the writing process and given the opportunity to interact with their peers. Moreover, the students’ attitudes toward writing became more positive as their experiences with the writing process increased.

In another study, Samway (1993) investigated the criteria which non-native speaking children employ when evaluating writing. Analysis of data revealed that children tended to focus on meaning regardless of their age and whether the piece was written by them or by anonymous peer. The study also showed they expressed extensive knowledge of writing processes and they were able to rationalize their classifying of stories as “very good”, “okay”, and “not so good”. The researcher argued that by giving young children the chance to reflect on what they write or what other peers write, they can discover by themselves what they actually know about writing and what good writing means.

Reyes, Laliberty and Oransky (1993) conducted a case study which gives an example of process instruction with modification that proved to be successful for both mainstream and linguistically different students.

Children from both language groups began to explore the other language group and its speakers in social interaction, writing topics and translation of created texts. These interactions occurred increasingly in the classroom and beyond the school campus. According to the authors, these experiences provided the children with “authentic opportunities to experience every day, living-and-breathing, cultural, and linguistic diversity instead of relying solely on vicarious experiences from multicultural books” (Reyes et al., 1993, 667).

Montague (1995) examined the effect of error correction in the writing process on the literacy acquisition of L2 learners. Results showed that when standardized tests were administered using numerical values, process oriented children did not perform well. However, those children’s egos were reinforced for risk-taking with literacy in native and home languages. Also the self-esteem of each writer was raised as they were valued for individual writing talent. Finally, the act of writing became an approachable task by all children in the process writing classroom.

Ferris (1995) conducted a study on fifty-five students to check students’ reactions to teacher response in multiple-draft composition. It was found out that students paid more attention to teacher feedback on preliminary drafts compared to final drafts, they utilized a variety of strategies to respond to their teachers’ comments, they appreciated receiving comments of encouragement and they, overall, find their teachers’ feedback useful in helping them to improve their writing. Ferris suggested that teachers should be more responsive to students’ writing by providing them with clear and well-stated feedback.

Huwari (1996) conducted a study to describe and analyze the procedures Jordanian EFL teachers focus upon when they evaluate their students’ compositions. The findings of the study revealed teachers were mainly concerned with the correctness of the structures and the mechanics of writing, perhaps at the expense of rhetorical
aspects such as organization, coherence and cohesion. The findings also indicated that teachers did not usually provide adequate feedback concerning the students’ flaws and errors. The researcher recommended that teachers should emphasize both the grammatical elements and the discourse aspects of writing as they teach and evaluate students.

Procedure

Design of the study
The design used in this study is called the quasi-experimental design. The independent variable is the teaching method of writing which has two levels: (the traditional writing approach and the process writing approach). The dependent variable was the students’ writing achievement.

Population and sample of the study
The population of the study consisted of all tenth-grade students in Amman Directorate of Education (II) during the second semester of the academic year 2001/2002. The total number of schools that have tenth-grade students was (85), containing (190) tenth-grade sections with an average of about two sections per school*. The simple random technique was used to select one of the schools to conduct this study. This school (Wadi Sir Secondary School for Girls) has two tenth-grade sections. Through random assignment of the two approaches of teaching writing, students in section A (44 students) were taught using the process writing approach, while students in section B (42 students) were taught using the traditional writing approach. The same teacher taught the two sections.

The tenth-grade was selected because it represents the highest grade level in the basic stage where students are expected to write long, well-organized and developed pieces as stated in the English Language Curriculum and its General Guidelines for the Basic Stage.

*These statistics were taken from the official records of the Ministry of Education in 2001/2002.

Research Instrument

The writing Achievement Scale
Al- Magableh (2003) notes that approaches to writing assessment fall into two main categories: conventional and non-conventional approaches (149). Research findings on writing assessment indicate that the focus has recently shifted from grammatical accuracy to the communicative and interactive fluency. Murray (1985), Killingsworth (1993) and Glazer (1994), for instance, argue that when grading composition, teachers should go beyond focusing on the mechanics of writing to focusing on organization and manipulation of ideas, provision of sound content, and creativity of the writer.

Richards (1992) argues strongly for using the following criteria to judge a coherent text:
1. “Development: Presentation of ideas must be orderly and convey a sense of direction.
2. Continuity: There must be consistency of facts, opinions, and writer perspective, as well as reference to previously mentioned ideas. Newly introduced ideas must be relevant.
3. Balance: A relative emphasis (main or supportive) must be accorded each idea.
4. Completeness: The ideas presented must provide a sufficiently thorough discourse.” (104).

Grabe and Kaplan (1996) also emphasize using non-conventional assessment and suggests that evaluators of writing should take the following questions into consideration in judging the appropriateness of the written piece:
1. what are the linguistic parts, and how do they work together?
2. To what extent do the linguistic features reflect functional purposes?
3. How do sentences relate together to form a larger text?
4. How much coherence can be perceived by the readers?

Rameriz (1995) also states that grading a written piece means evaluating the overall quality of the work and this holistic evaluation has to be backed to some predetermined criteria. Nevertheless, the various components of the written piece may not contribute to the overall sum in the same degree (287-289).

To achieve the purposes of this study, the researcher developed a writing achievement scale derived from the literature on writing assessment. To validate the writing achievement scale, the researcher gave it to three EFL experts who asked for certain changes and suggested weights for the writing criteria. The researcher made all the necessary changes accordingly and returned it to them. The final version of the writing achievement scale, which was approved by the three experts, included the
following five writing dimensions and their relative weights:

1. The clarity of message conveyed (25%).
2. The appropriateness of syntactic structure, word order and diction (25%).
3. The amount of writing a writer can produce (20%).
4. Organization of ideas (20%).
5. The accuracy of writing mechanics, such as punctuation, spelling, paragraphing and indentation (10%).

It was recommended by the three experts that on each written piece there should appear the sub-scores and the average total score of the student.

Reliability of the Writing Scale

To account for the reliability of the writing achievement scale, the researcher randomly selected one tenth-grade section at al Esraa’ Secondary School for Girls. He asked students to write on the following topic: “Women in the Past and Today”. Three experienced EFL teachers were selected to rate students’ writing. Each rater read each piece of writing and suggested a grade. After two weeks, he was asked to read the same piece again and give a grade a second time. The estimated coefficient of intra-rater reliability was (91.7). Inter-rater reliability was also estimated by comparing the scores given to each student on his written piece by the three raters. Inter-reliability coefficient was (88.9). Therefore, both values were considered appropriate to conduct this study.

Implementation

The following procedures were used to implement the steps of the process writing approach:

I- The researcher sat with the cooperative teacher for about two hours to discuss the steps of the process writing approach. It was made clear to her that the following points should be borne in mind:

1. The steps of the process approach need not to be completed during one class period. Therefore, the teacher should not push students to turn in their unfinished pieces every time they write in class.
2. The teacher should not correct every written piece. He can arrange with individual students to correct samples of their written pieces that are in their writing folders.
3. Checklist of the editing symbols should be displayed during the editing stage whenever necessary.
4. The more students write, the more likely they will develop as writers.

II- To ensure that the cooperative teacher could fully implement the steps of the process writing approach, the researcher demonstrated two writing sessions to tenth grade students in the presence of that teacher using the steps of the process writing approach. The researcher also visited that teacher during the implementation of this approach and provided assistance when needed. In fact, these demonstrations and visits were required by the teacher herself to help her implement the prescribed steps. However, the early written pieces produced by the students in the two groups (i.e. the control group and the experimental group) were disregarded in their final evaluation of the two groups to avoid any likelihood of the researcher’s intervention.

III- During the eight weeks of the experiment, students were set to write for forty-five minutes once or twice a week. On the final writing session, students in both groups were asked to produce the best writing piece they could do, because it would be corrected and graded. They were asked to write on the following topic” “How is our life different from our parent’s old days?” Finally, data were collected and analyzed.

Statistical Treatment

The researcher calculated the means and standard deviations of the two groups. Analysis of covariance (ANCOVA) was used to account for any differences in the writing achievement of both groups that can be attributed to the teaching method.

Findings of the Study:

1- Findings related to the first question: Is there a significant effect of the teaching method on the total writing achievement of tenth grade students in Jordan?

Analysis of covariance (ANCOVA) was used to account for any significant differences in the total writing scores of the two groups (Table 1).

As table (1) shows, the calculated F value of the group as the main source of variance (17,454) is significant at (α = .05). This means there was a significant effect of the teaching method on the total writing achievement of tenth grade students. This difference was in favor of the experimental group (1) as shown in table (2) of the adjusted means (Table 2).

2- Findings related to the second question: Is there a significant effect of the teaching method on their
writing achievement of the two groups with regard to each writing component (message, length, syntax, mechanics, and organization)?

Analysis of covariance (ANCOVA) was used to account for any significant differences between the mean scores of the two groups with regard to each of the writing components (Tables 3-12).

Table (3) shows that the calculated F value of the group as the main source of variance with regard to students' ability to convey a message in writing (5.897) is significant at ($\alpha=.05$). This means that there was a significant effect of the teaching method on the ability of tenth grade students to convey a message in writing. This difference was in favor of the experimental group as shown in (Table 4).

Table 5 shows that the calculated F value (11.757) was significant at ($\alpha=.05$). This means that the teaching method has a significant effect on the length of the written piece tenth-grade students can produce. This difference was in favor of the experimental group (Table 6).

Table (7) shows that the calculated F value of the group as the main source of variance (10.252) is significant at ($\alpha=.05$). This means that there was a significant effect of the teaching method on the syntactic abilities of tenth-grade students as writers. This difference was in favor of the experimental group (Table 6).

Table (9) shows that the calculated F value of the group as the main source of variance (3.462) was non-significant at ($\alpha=.05$). This means that there was no significant effect of the teaching method on the writing mechanics of tenth-grade students (Table 10).

Table (11) shows that the calculated F value of the group as the main source of variance (3.703) was not significant at ($\alpha=.05$). This means that the teaching method has no significant effect on the organization of the written pieces of tenth-grade students (Table 12).

**Discussion of Results**

The main purpose of this study was to investigate the effect of using the process writing approach on the writing achievement of tenth-grade students. Results showed that students who were taught to write English using the process writing approach scored significantly higher with regard to their total writing achievement. They also showed that students scored significantly higher with regard to some writing components, such as clarity of message, length of the written piece, and syntactic accuracy. As for the other two writing components (writing mechanics and organization of ideas) there were no significant differences between the two groups that can be attributed to the teaching method.

These results seem to indicate that using the process writing approach to teach writing helped students to write more freely and creatively. Students might have felt that they were responsible for producing something that is worth reading, informative, and purposeful. They seem to have been aware of what most good writers should do as real writers. Researchers, such as (Ferris, 1995) and (Ikeguchi, 1997), indicate that skilled L2 writers tend to approach writing tasks as a creative, generative process, while unskilled writers view writing in terms of language elements (words, sentences, paragraphs) that have to be organized linearly into a text. Students appear to react more responsively when teacher feedback or error correction is directed at the content of a text rather than at language features. In this regard, Reyes (1992) states that unless teachers draw student attention to errors found in writing, error correction is ignored by second language learners, nevertheless they develop into good writers by practicing writing.

Results showed that students who were taught using the process approach wrote longer pieces with more ideas than those who were taught using the traditional approach. This finding also agrees with those of other researchers, such as (Turvey, 1984) cited in Rameriz (1995: 287), and (Cimcoz, 2000) who argue that students must be given an understanding of their capacity to write, motivation, self-confidence and courage. These researchers also argue that students seem to be more motivated to write when teachers respond to their writing as communication (meaning) instead of writing as form (word choice, sentences, paragraphing, mechanics, spelling). Montague (1995) also reports that research in second language acquisition indicates that linguistic development in L2 occurs as learners attempt to make sense of what they comprehend and can produce in oral and written discourse.

Another reason behind producing longer pieces by students who were taught to write using the process approach could be that students did not feel that they were under the pressure of producing "perfect" pieces every time they write. Probably, they were interacting meaningfully with print, which resulted in significantly longer written pieces that were also more semantically and syntactically acceptable than the pieces written by
their counterparts who were taught using the traditional approach. This finding also agrees with those of Hobelman et al. (1990) and Leki (1994) who point out that the traditional approach is deficient in two important respects: first, the teacher views the student’s writing as a product, and second, the teacher focuses on form (syntax, grammar, mechanics) rather than on content. The content is seen mainly as a vehicle for the correct expression of the grammatical and organizational patterns taught, and the correct choice of vocabulary.

Results, however, showed that the teaching method has no significant effect on the writing mechanics of tenth-grade students. This might indicate the time and effort extensively spent on teaching these writing mechanics could be saved for the process of writing itself. Students may learn and observe the conventions of writing provided that they have more opportunities to read authentic pieces and write more often. This finding is also similar to the findings of other researchers, such as Bruce and Lewkowicz (1991), and Tsui (1991), cited in (Allison, 1995:3) who concluded from their studies on writing that dwelling on lexico-grammatical problems of beginning writers is not likely to improve their ability to write grammatical and coherent pieces.

Finally, results of this study showed that there were no statistically significant differences between the two groups with regard to their organization of writing. Mean scores also indicated that students in the experimental group were able to produce longer, more meaningful and grammatical written pieces, but not well-organized ones. A possible reason for this might be that more time and practice should have been given to editing and sharing steps. Students seemed to have been used to producing some writing each time they were set to write in their previous classes. As White (1995) points out, students enter the upper levels of instruction with little, if any, background in meaningful writing. They are then asked to produce formal, creative and specialized writing in non-controlled situations without having been trained to do so. Thus, it is natural for learners to write down their ideas just as they would normally do in English, without taking into consideration their lack of equivalent linguistic sophistication in the target language. This results in paragraph after paragraph of incomprehensible and/or incoherent written language. Students become frustrated and so do their instructors.

To sum up, a process approach to writing provides students with many opportunities for peer and teacher feedback during the different composing phases. By making writing an integral part of ESL/EFL teaching as early as possible, the writing process ceases to be only a supportive least practiced skill. Group writing assignments, peer editing, and the multiple revisions allowed in process writing serve to demystify the task of writing in a foreign language. In addition, students are provided with valuable opportunities to learn from each other as they interactively and collaboratively write to one another and read to one another.

**Recommendations**

Based on the finding of this study, the following recommendations can be made:

1. Teachers may use the process writing approach, so that students can write long pieces that are meaningful and grammatical. Teachers might interact with their students through dialogue journals, making marginal comments on students’ writings and then in turn responding to students’ revisions. They may also provide oral feedback to students’ written drafts through the use of cassette tapes focusing on such aspects as organization, grammar, and mechanics.

2. Curricula planners of English as a foreign language may give more emphasis to the process writing approach in developing teachers’ manuals and students’ writing materials.

3. Another study might be needed to investigate the relationship between the reading achievement and the writing achievement of EFL students.
Table 1: Analysis of covariance between the two groups with regard to their total writing achievement scores.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRETOT</td>
<td>9763.618</td>
<td>1</td>
<td>9763.618</td>
<td>127.535</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>1336.218</td>
<td>1</td>
<td>1336.218</td>
<td>17.454</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>4976.172</td>
<td>65</td>
<td>76.556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>15939.170</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .688 (Adjusted R Squared = .678).

Table 2: The adjusted means and standard errors of the two groups with regard to their total writing achievement scores.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: POSTTOT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td>1.00</td>
<td>55.533(a)</td>
</tr>
<tr>
<td>2.00</td>
<td>46.666(a)</td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: PRETOT = 51.1826.

Table 3: Analysis of covariance between the two groups with regard to their abilities to convey a message in writing.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREMSG</td>
<td>928.200</td>
<td>1</td>
<td>928.200</td>
<td>127.239</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>43.021</td>
<td>1</td>
<td>43.021</td>
<td>5.897</td>
<td>0.18</td>
</tr>
<tr>
<td>Error</td>
<td>474.169</td>
<td>65</td>
<td>7.295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1504.493</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .685 (Adjusted R Squared = .675).
Table 4: The adjusted means and standard errors of the two groups with regard to their ability to convey a message in writing.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: Message</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: message = 12.5613.

Table 5: Analysis of covariance between the two groups with regard to the length of the written piece.

<table>
<thead>
<tr>
<th>Tests of Between-Subjects Effects</th>
<th>Dependent Variable: Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Type III Sum of Squares</td>
</tr>
<tr>
<td>PRELNG</td>
<td>311.073</td>
</tr>
<tr>
<td>Group</td>
<td>99.545</td>
</tr>
<tr>
<td>Error</td>
<td>550.339</td>
</tr>
<tr>
<td>Corrected Total</td>
<td>917.91</td>
</tr>
</tbody>
</table>

R Squared =.400 (Adjusted R Squared =.382).

Table 6: The adjusted means and standard errors of the two groups with regard to the length of the written piece.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: length = 12.0588.
Table 7: Analysis of covariance between the two groups with regard to syntax.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREGRMR</td>
<td>765.893</td>
<td>1</td>
<td>765.893</td>
<td>73.797</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>106.403</td>
<td>1</td>
<td>106.403</td>
<td>10.252</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>674.594</td>
<td>65</td>
<td>10.378</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1569.738</td>
<td>67</td>
<td>14.285</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .570 (Adjusted R Squared = .557).

Table 8: The adjusted means and standard errors of the two groups with regard to syntax.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1.00</td>
<td>14.285(a) .553</td>
</tr>
<tr>
<td>2.00</td>
<td>11.781(a) .553</td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: syntax = 12.8860.

Table 9: Analysis of covariance between the two groups with regard to writing mechanics.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESP</td>
<td>131.291</td>
<td>1</td>
<td>131.291</td>
<td>67.067</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>6.777</td>
<td>1</td>
<td>6.777</td>
<td>3.462</td>
<td>.067</td>
</tr>
<tr>
<td>Error</td>
<td>127.245</td>
<td>65</td>
<td>1.958</td>
<td>15.567</td>
<td>.000</td>
</tr>
<tr>
<td>Corrected Total</td>
<td>261.629</td>
<td>67</td>
<td>1.958</td>
<td>15.567</td>
<td>.000</td>
</tr>
</tbody>
</table>

R Squared = .514 (Adjusted R Squared = .499)
Table 10: The adjusted means and standard errors of the two groups with regard to mechanics.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: Mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Mean</td>
</tr>
<tr>
<td>1.00</td>
<td>4.912(a)</td>
</tr>
<tr>
<td>2.00</td>
<td>4.279(a)</td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: mechanics = 4.6176.

Table 11: Analysis of covariance between the two groups with regard to the organization of ideas.

Tests of Between-Subjects Effects
Dependent Variable: Organization

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRELNK</td>
<td>162.730</td>
<td>1</td>
<td>162.730</td>
<td>23.191</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>25.981</td>
<td>1</td>
<td>25.981</td>
<td>3.703</td>
<td>.059</td>
</tr>
<tr>
<td>Error</td>
<td>456.094</td>
<td>65</td>
<td>7.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>633.882</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared =.280 (Adjusted R Squared =.258).

Table 12: The adjusted means and standard errors of the two groups with regard to organization.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Dependent Variable: Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Mean</td>
</tr>
<tr>
<td>1.00</td>
<td>7.445(a)</td>
</tr>
<tr>
<td>2.00</td>
<td>6.202(a)</td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: organization = 9.0588.
REFERENCES


The Effect of Using... Hamzah Ali Omari

* &amal% koz

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