Comparing the Process Approach with the Product Approach in Teaching Academic Writing to First-year Undergraduates

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Abstract

The objective of this study is to determine whether the process approach or the product/ traditional approach is better in teaching first-year undergraduates to write academic texts. Fifty-one students of the University of Selangor had participated in the study. They were divided into Group A and Group B. A pre-test was given prior to the treatment and a post-test after it. For seven weeks, the participants in Group A were taught to write academic texts using the product approach while those in Group B were taught to write academic texts using the process approach. The data collected from the tests was analyzed using the Statistical Package for Social Sciences (SPSS) version 19.0. The data from the post-test was also triangulated with the data from the participants’ composing behaviors and the data from the participants’ folders. The results indicate that both the groups A and B show improvements in content, organization, vocabulary, language use, mechanics and overall results. However, the participants of group B show better improvement than those of Group A in terms of content, organization, mechanics and overall results. This shows that the process approach had not only significantly increased students’ level of proficiency in writing in general but also improved their ability to write academic text because it closely resembles the natural writing process. In conclusion, these findings imply that teachers of academic writing need to address procedural know-how explicitly and disclose what goes on in the process of writing academic texts to learners to help them write well.

Keywords: process approach; product or traditional approach; academic writing; academic texts

INTRODUCTION

Among the four language skills, students find writing as the most difficult (Chitravelu, Sithamparam, and Teh, 2005). In fact, the features of writing done in school and college setting are mostly formal oriented (Göçer, 2011; Temizkan, 2007; Ülper, 2012 as cited in Bayat, 2014) which makes writing even more difficult. Most of the time, students are trapped between two extreme forms of writing instruction. At one end of the continuum, teachers’ preoccupation with the correctness of forms and usage of the target language causes students to become anxious during writing (Barnett, 1992; Madigan, Linton & Johnson, 1996). This, in fact, incapacitates students as they seek to perform their writing tasks thus disabling them to write successfully. At the other end of the continuum, a considerable amount of the requirement of writing is left to chance. Britton, Burgess, Martin, McLeod and Rosen (1975, p.27) claim that most often students are given “the marshalling of significant data, logical ordering, precision, exclusion of the irrelevant, justification of assertion, and possibly formal proof. Very little help is given on how to write a formally structured and coherent product”. To complicate the problem even further, most often teachers make students write without first determining what levels of assistance in writing are needed by them.

At present, there are three different approaches to the teaching of writing. They are the product or traditional approach, the process approach, and the genre or social approach. However, this study only focuses on the first two mentioned approaches. Teachers who are advocates of the product or traditional

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approach claim that it should not be assumed that students are able to produce formally structured and coherent written products because knowledge about syntactic structures, grammar, and conventions of the target language are instinctive. According to Spenser (1983), analyzing the aspects of the language a person is learning is vital and required in the process of learning to write. Research has shown that students have indistinct ideas of what they are supposed to have and do in writing and to make matters worse, their inability to express themselves in the language makes it quite impossible for them to write (Spenser, 1983). In other words, equipping learners with knowledge and understanding of the rhetoric and conventions of the target language must be a requisite of writing instruction.

More recently, however, many teachers are beginning to realize that endowing learners with the rhetoric and conventions of the target language is insufficient in helping learners become good writers. Grammar is important as a tool or a means, but not as an end in itself. Many studies have provided evidence which suggests that the focus on language errors in writing improves neither grammatical accuracy nor writing fluency (White and Arndt, 1991). White and Arndt (1991) argue that writing is a thinking process in its own right. For that, writing requires a conscious intellectual undertaking which involves cognitive skills. Competency in language alone does not make writing easier. This is evident in the case of people writing in their native language. Although they have a considerable and sizeable stack of language resources to call upon, yet they are still frequently unable to deal with writing problems. In order to write well, White and Arndt propose that students be also taught the writing process. White and Arndt claim that they have evidence which they have obtained from differing types of observations of writers. The transcripts from these observations disclose that there is much more to writing than just learning and utilizing linguistic or rhetorical rules. More precisely, writing is an act of solving a problem which involves processes like generating ideas, discovering a ‘voice’ with which to write, planning, goal-setting, monitoring and evaluating what is going to be written as well as what has been written, and searching for language with which to express exact meanings. Furthermore, writers normally do not know at the outset exactly what it is they intend to write as many ideas only come forth during the act of writing itself (White and Arndt, 1991). Hence, the growing popularity of an approach in the writing pedagogy, which is often referred to as the process approach, is being perceived as the answer to all of the earlier mentioned problems of writing.

Many college students, especially the first-year ones, face difficulties in writing their assignments. This is because at this level, they are required to write academic texts. However, since they have no experience or formal training to write academic texts they find that they are unable to perform well in it. The aim of this present study, therefore, is to determine whether the product writing approach or the process writing approach is better in helping first-year students in institutions of higher learning to develop the ability to write texts of academic nature effectively.

**LITERATURE REVIEW**

**Academic Writing**

For most researchers in the academic discourse, mastery of academic writing is the main goal of composition pedagogy. Unfortunately, many students of various disciplines are not able to do so, thus, they are pleading for assistance to master academic writing. Responding to such concerns, many researchers started to investigate college students’ initiation into academic discourses and their ways of thinking (Durst, 2006).

Beginning in the mid to late 1980s, these researchers have begun to undertake studies to examine the demands of the specific writing tasks and situations students are confronted with in colleges and universities, and how they comprehend and manage academic writing in general. Harowitz (1986), for example, tries to narrow down the gap between the skills needed in content courses and those of English for Academic Purpose (EAP) which emphasize more on types of rhetorical skills required to complete writing tasks in university writing classes. Leki and Carson (1994), on the other hand, study the reactions of the students’ faculty to their writing, students’ writing needs and their perceptions of these needs while Johns (2006) and Flowerdew (2005) discuss the methods, challenges and possibilities of teaching research skills to students who studied English language.
In addition, many researchers agree with Flowerdew (2005) that in order to write academic texts efficiently, students need to first learn several complex strategies and skills which they learn and use in content classes. Johns (2006) points out that most students require instructions on how to choose, evaluate, and integrate information and its sources into their own writing. It is also found that besides the skills to read and respond to texts in university content classes are inadequate; students also need to have the skills to manipulate data from different sources like interviews and questionnaires (Spack, 1988; Horowitz, 1986). Spack (1988), nonetheless, recommends students learn to formulate and test generalizations, observe and report noteworthy pieces of information, or produce points of reference for comparing homogenous phenomena. Horowitz (1986) asserts that students are sometimes required to relate theory to data that they obtain from their research.

The Process of Composing

The baffling process of composing is of great interest to many researchers. Researchers like McCrimmon (1980), Bergman and Senn (1986), Fowler (1986), McCuen & Wrinkler (1995) and O’Malley and Pierce (1996) believe that the process of writing typically takes place in three identifiable stages: pre-writing, writing and rewriting. Spack (1988), nonetheless, believes that the process of composing requires strategies such as planning, pre-writing, drafting, consulting, revising, and editing. Spack (1988) refers to planning as the process of assigning of tasks and constructing timetable for studying and composing while pre-writing is the process of gathering, exploring, and organizing information. Drafting, on the other hand, is the process of structuring of ideas into linear discourse. Consulting is the process of ensuring aims and objectives are achieved. Meanwhile, the process of revising and that of editing are carried out together during phases called re-writing that occur recursively throughout the act of composing (Spack, 1988; Shih, 1986).

Speaking of recursiveness, the composing process is indeed recursive (Flower and Hayes, 1981). According to White and Arndt (1991), the complex and recursive nature of writing and the reciprocal action of the different phases of writing occur concurrently. Humans do not think in a linear manner, but writing is linear and because of this a writer needs to know how to match his thoughts to his intended messages in an appropriate manner. It is extremely rare for writers to know exactly what they will write ahead of time. This is because many ideas only emerge once they have begun to write. They, then, retract and revise, and make alterations in words or structures they have used before they move forward to proceed with their writing. Writers normally do this repeatedly until they are satisfied with the end result. Since writing entails a process of creating meaning through generating, constructing, and improving one’s ideas, writing practice in the ESL classroom should mirror the same process where focus and sufficient time are provided for students to revise and re-draft their text with the teacher interposing to facilitate the process of writing. The writer is allowed to visit and revisit each stage of the writing process as many times as he finds necessary and as he does this, he makes changes and alterations in order to get his message across as effectively as possible. As discovered by Perl (1980), the success of writing greatly depends on the recursive quality of composing.

The new millennium, however, marks a different trend in composing. Al Husseini (2014), for example, feels that ESL students should learn several of those complex strategies and skills practiced in university content classes so that they can write academic texts effectively. Writing is the basis of an academic practice but writing is a skill that is seldom explicitly taught (Baxter, Hughes & Tight, 1998; De Lyser, 2003; and Antoniou and Moriarty, 2008). Consequently, many academics have to battle not only with technical writing skills but with the emotions that writing arouses and with the demanding process of developing a sense of self as an academic writer. It needs not be like this. Cameron, Nairn, and Higgings (2009) identify three strategies that can help learners to make sense of academic writing and its relationship with writing. One of the strategies is to confront and talk about the emotional turmoil that writing arouses so that they can take charge of such emotions in order to help them in the writing process. The second strategy is to address procedural know-how explicitly and disclose what goes on in the process of writing. This renders information about strategies for productive writing to novices and convinces them that what they perceive as failings (for example, having to write and rewrite again and again) are actually the means of producing good writing. The third strategy is to provide novices with the opportunity to assume themselves as experienced writers in the presence of others.
Similarly, Santangelo, Harris, and Graham (2007) point out that the reason why many students find writing extremely difficult and frustrating is because they are not able to learn and apply the strategies used by skilled writers. They find that Self-Regulated Strategy Development (SRSD) has led to significant and meaningful improvements in writing knowledge and skills as students learn strategies that can help them manage the writing process. In addition, SRSD also increases motivation and self-regulation which occur due to a few reasons. The first of these reasons is the collaboration among students that takes place during instruction has enhanced their sense of ownership over the strategy and allowed them to make sense of why the use of strategy is beneficial. Secondly, introducing self-regulation techniques into instruction makes the students see how their effort and attitudes influence learning. Finally, positive reinforcement by the teachers has fostered students’ belief in their ability to improve. Likewise, Weisendanger, Perry, and Braun (2011) come up with a strategy called Suggest-Choose-Plan-Compose (SCPC). They conclude that SCPC is a strategy that supports students’ development of creative writing and construction of text in a sequential manner. However, for the strategy to be fully mastered and utilized effectively by most of the learners, repeated practice and varying amount of gradually reduced teacher support are necessary. Independent mastery, then, can only be achieved with repeated use of SCPS with prompting and continued support from teachers (Weisendanger, Perry, and Braun, 2011).

Another researcher who has high regard for the use of strategy is Keen (2010) who uses a certain concept called strategic revision to analyze drafts and revise texts in order to look into strategies and techniques deployed in the process of revision. The findings of Keen’s study indicate that some students are aware of a range of goals for writing and are able to use these goals as reference points when redrafting in response to peer assessments. Besides that, students are capable of generalizing from specific examples to identify characteristics of interesting and effective writing. Yet, there are students who can use the characteristics selectively and creatively as writing goals. Other than that, there are indications to show that students can produce peer assessments which are quite accurate to be used by writers in redrafting their accounts. In fact, some students may have combined peer assessments, judgments, and recommendations with goals attained from their knowledge of writers’ motivation or assessment criteria or of both, to create strategies for enhancing or creating drafts of their writing. The findings further show that students are able to use a range of types of alteration to develop their drafts. There are even students who can use one or more of these alteration types strategically. Finally, there are also indications to show that some students are able to redraft in order to affect shifts in major elements in texts or sections of text (Keen, 2010).

Last but not least, another researcher whose name is Watson has carried out a study to investigate the use of reflective journaling in the teaching of academic writing as a strategy to enhance students’ understanding of the different expository methods employed as part of the writing process. The results of Watson’s (2010) study indicate an overall improvement in students’ conceptualization of the expository method. Throughout his study, Watson is able to see how reflective journals reveal what their writers had learnt, how writers have learnt to express themselves in journals, how journals can help people learn. Besides that, the study has shown how useful reflective journaling is by promoting a thorough understanding of a situation, clearly identifying goals, viewing and assessing possible options and thinking before acting (Nicholls, 2001). However, Liuoliene and Metiueniene (2009) who have also undertaken a study on reflective journaling find that it is not just a log of events but a collection of specific topics that provide favorable conditions for learning via reflection. This type of journaling encourages learners to participate actively in the learning process which facilitates the exploration of self-constructs of meaning. In other words, reflective journaling is a strategy that can be used to help learners to acquire knowledge through the questioning of instructional or learning practices geared towards the formulation of meaning (Liuoliene and Metiueniene, 2009).

The Product Approach

This is an approach to writing that focuses on palpable aspects of writing which can be examined by viewing writing as textual products. Its prime concern is for the material form while its interest is in the linguistic or rhetorical resources that writers use to produce texts. There are a variety of forms of text-focused theories but the two broad ones that have made so much impact on the beliefs about teaching and learning of writing based on the product approach are the texts as the autonomous object and texts as discourse. The product approach that was used to teach the participants of Group A in this study is the former.
The product approach that is based on the theory that sees texts as autonomous object views writing as a textual product, a logical and consistent arrangement of elements organized according to a system of rules. Being a textual product, writing can, therefore, be analyzed and described independently irrespective of contexts or writers. This is because texts have a structure that consists of words, clauses, and sentences that are arranged in an orderly manner and by adhering to a system of rules which guides the arrangement of these elements, writers can encode their intended meanings. In this case, on the other hand, writing is like a language in that it can be considered as an autonomous mechanism that does not rely on any writers but on setting out ideas using correct forms. From this perspective, students’ essays “are seen as langue, that is, a demonstration of writer’s knowledge of forms and his or her awareness of the system of rules used to create texts” (Hyland, 2002, p.7). As such, the goal of writing instruction is to enable students to achieve propositional explicitness and accuracy so much so writing is an extension of grammar that is normally used to develop a general understanding of language. In the past, the main teaching method for this type of product approach was guided composition which required no context other than that of the classroom and a few skills besides the ability to recall learned structures. The teacher’s role in this kind of writing classroom was that of an expert conveying knowledge to novices (Hyland, 2002).

The notion that texts can operate independently of contexts implies that human communication occurs by transmitting ideas from one mind to another through language (Shannon and Weaver, 1983). Based on this notion, writing is incorporeal. It is unconnected to context and the writer’s personal experience because meanings of the texts can be deciphered by anyone with the skills to decipher them. Differences in opinion in terms of interpretations or understandings do not arise as all writers and readers strictly comply with consistent practices. Writing, thus, is regarded as an object and its rules imposed on compliant users. Writing is mainly conducted to show knowledge of facts that are isolated from their contexts. Students in many schools are usually instructed to write and demonstrate this knowledge. Writing assessment is based on students’ abilities to display facts and produce clear exposition (Hyland, 2002).

In other words, the product approach to teaching writing is a form-dominated approach which has been a very popular mode of instruction in second language writing since the 1960s (Raimes, 1991). This approach considers writing as a manifestation of “linguistic knowledge” (Pincoas, 1982, cited in Badger and White, 2000, p. 153). As such, writing is taught through controlled composition in an effort to train students to use the correct form of the target language (Zamel, 1976, 1982, 1983; Susser, 1994). Likewise, the writing syllabus is “based on a mechanistic philosophy of teaching and learning” (Zamel, 1987, cited in Hanjani & Li, 2014, p.150) which is designed on the conviction that students can learn to write accurately if they are taught in stages from familiarization to controlled writing to guided writing and finally free writing (Badger & White, 2000, p. 153). Teachers who use this approach normally assume the role of examiners and treat students’ writing as proofs of their linguistic skills (Mangelsdorf & Schlumberger, 1992). The emphasis on writing is always on accuracy rather than fluency (Zamel, 1985; Raimes, 1985, 1991; Susser, 1994) resulting, therefore, in students’ preoccupation with their linguistic errors more than any other flaws in their writing when they do their revision (Reid, 1984). This is indeed an indication that the evaluation of writing assessment in the product approach is summative in nature (Ferris, 2003).

The Process Approach

The process approach views composing as a process in which the writer explores, generates ideas, and continuously moves back and forth to uncover and reconstruct his ideas in an attempt to define meaning (Zamel, 1983). Composing is thinking (Raimes, 1983). In the context of a writing class, the process approach is regarded as a method of thinking (Applebee, 1986). It entails the provision of an assertive, supportive, and collaborative workshop setting within which students, with sufficient time and little intervention, can work through their composing processes. The teacher’s role is only to facilitate students to develop workable strategies for “getting started (helping students to find topics, generate ideas and information, focus and plan structure and procedure), for drafting (encouraging students to do multiple drafts), for revising (encouraging students to add, delete, modify, and rearrange ideas), and for editing (attending to vocabulary, sentence structure, grammar, and mechanics)” (Silva, 1990, p. 15).

In addition, the process approach acknowledges that writing is a complex, recursive, and creative process and regards these characteristics of writing as a set of behaviors that is indistinguishable in the broad outlines for first and second language writers (Friedlander, 1990). According to Mather and Jaffe (2002), writing should be viewed as a process that consists of stages that are interactive, overlapping and recursive.
These stages are prewriting (planning), writing (composing), rewriting (revising and editing), and sharing. During prewriting, students are helped to generate topics through brainstorming and sharing of ideas with others. They also have to consider the purpose for the writing as well as the audience it is written for. Once they have decided on a topic, they start writing their first draft. Any time during this process of writing, students may go back to researching for information on the topic they have chosen when they find they do not have enough information about it or selecting a new topic if they realize they are not interested in their earlier chosen topic. During the rewriting stage, students revise their draft and focus their attention on their organization of ideas and selection of vocabulary. Besides that, they proofread for mistakes and correct errors in spelling, punctuation, capitalization, and usage. Mather and Jaffe (2002) recommend teachers help their students at this stage by encouraging them to do peer-editing, using a thesaurus, learning to use proofreading symbols, learning an editing strategy or using a revision guide.

Another important feature of composing in academic context is collaborative learning. The process approach is deemed as the one that is most suitable for teaching academic writing because it provides “a positive, encouraging, and collaborative workshop environment within which students, with ample time and minimal interference, can work through their composing processes” (Silva, 1990, p. 15). Holmes (2004) comes up with some suggestions to develop activities that involved discussion and collaboration in an effort to make writing a more positive and effective experience. Ariza Martinez (2005) finds that brainstorming is very helpful in generating many ideas or words that are related to a specific topic and that the activities of using picture sequence and cartoons foster personal expressions that prove to be a catalyst for vocabulary development. Ariza Martinez also notices that the adolescent low-achievers who are extremely weak in writing who have participated in her study like the process writing positive, motivating and collaborative atmosphere. Therefore, EFL and ESL writing classes have started to accept and make use of the process approach because it is found successful (Onozawa, 2010).

**METHODOLOGY**

This study utilized the quasi-experimental design. This was because the researcher was not able to artificially create groups for the experiment as there were only two classes of first-year students of Bachelor of Education (TESL) who were taking the course of “Academic Writing Skills” for the second semester of the 2011/2012 session. The students had already been placed in two different groups since they entered the university, therefore, assigning them to two groups randomly would not only disrupt classroom learning but also the then students’ as well as department’s schedules. In addition, since the research was going to take up the whole semester it was easier to use the students of two intact classes as they were easily accessible and were unlikely to withdraw from the study. The group that consisted of twenty-six students of whom eight were males and eighteen were females was assigned as Group A while the other which comprised twenty-five students of whom eight were males and seventeen were females was assigned as Group B.

To ensure that the participants of both Group A and Group B had an adequate and similar proficiency in English, an analysis of covariance (ANCOVA) was conducted on the pretests for both groups. The purpose of ANCOVA was to find out whether there were any significant differences between the proficiency levels of both groups. If there were, then the marks would have to be aligned to suit the post-tests and vice versa. However, in this study, no such problem occurred, as the ANCOVA revealed that there were no significant differences in the levels of proficiency of the participants between the two groups.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Error</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>1</td>
<td>18</td>
<td>1.463</td>
<td>.437</td>
<td>.845</td>
</tr>
<tr>
<td>Organization</td>
<td>1</td>
<td>20</td>
<td>1.527</td>
<td>1.431</td>
<td>.260</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>1</td>
<td>20</td>
<td>.653</td>
<td>.477</td>
<td>.752</td>
</tr>
<tr>
<td>Language Use</td>
<td>1</td>
<td>19</td>
<td>.387</td>
<td>.911</td>
<td>.495</td>
</tr>
<tr>
<td>Mechanics</td>
<td>1</td>
<td>23</td>
<td>.167</td>
<td>1.00</td>
<td>.328</td>
</tr>
<tr>
<td>Overall Results</td>
<td>1</td>
<td>10</td>
<td>8.595</td>
<td>.435</td>
<td>.925</td>
</tr>
</tbody>
</table>
Table 1 shows the outcome of the ANCOVA which was initially conducted to determine the proficiency levels of the participants. Based on the table, there are no significant differences (p > 0.05) in any of the sources; content [(F(1,18) = .44, p = .845], organization [(F(1,20) = 1.43, p = .260], vocabulary [(F(1,20) = .48, p = .752], language use [(F(1,19) = .91, p = .495], mechanics [(F(1,23) = 1.00, p = .328] and the overall results [(F(1,10) = .44, p = .925]. These findings suggested that both groups consisted of participants who had an equal level of proficiency. Thus, the results of all the pre-tests and post-tests conducted in the later parts of this experimental study were deemed to be highly reliable. This study employed the quasi-experimental design described in Cresswell (2012).

Table 2 Adaptation of Between-Group Designs – Quasi-Experimental Design
(Source: Cresswell, 2010)

<table>
<thead>
<tr>
<th>Before the experiment</th>
<th>1st – 3rd week of research</th>
<th>4th to 10th week of research</th>
<th>11th – 13th week of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned Group A</td>
<td>Pre-test</td>
<td>Taught using the product approach</td>
<td>Post-test</td>
</tr>
<tr>
<td>Assigned Group B</td>
<td>Pre-test</td>
<td>Taught using the process approach</td>
<td>Post-test</td>
</tr>
</tbody>
</table>

The participants in both groups were given three weeks of class time to write the essay for the pre-test. They were allowed to collect materials for the test but were not allowed to write the essay at home. All materials and writing drafts were kept in a folder and had to be submitted to their instructors at the end of every class session. The pre-test essays had to be handed over to the instructors at the end of the class session on the third week. Next, the intervention or treatment was administered to the participants of each group over a period of seven weeks from Week 4 to Week 10, with each weekly lesson consisting of three hours. The instructor who taught the participants in Group A was given special training on how to teach using the product approach while the instructor who taught the participants in Group B the process approach. Then, the instructors were provided with teaching materials which were relevant for their teaching approaches.

Lastly, the post-test was administered to the participants in the two groups in the eleventh week to the thirteenth week. In the post-test, the participants were allowed to apply all the strategies that they had learned in the approaches used to teach them. The final written products were submitted at the end of the thirteenth class session along with all materials and drafts that were kept in a folder. The materials and drafts were later analyzed. The composing behaviors of the participants during the pre-test and post-test were also noted. Thus, data from the pre-test and post-test were triangulated with the data obtained from the observations of the participants’ composing behaviors and data obtained from the analyses of participants’ folders.

The process of scoring the pre-test and post-test of the participants in Group A and those in Group B were carried out by their respective instructors. Subsequently, an examiner who had more than twenty years of experience in marking was engaged to moderate the scores provided by the instructors. The marking scheme used to mark the participants’ pre-test and post-test scripts was adopted from Hughey, Wormuth, Hartfield and Jacobs (1983) which was taken from a book entitled ‘Teaching ESL Composition - Principles and Techniques’. The participants’ essays were evaluated in terms of content, organization, vocabulary, language use, and mechanics.

The first set of data which was obtained from the pre and post-tests was analyzed using the Statistical Package for Social Science (SPSS) for Windows Version 19.0. Two different types of data analysis methods were utilized, which included descriptive statistics, by portraying frequencies and percentages and differential statistics by using paired-sample t-tests. On the other hand, the second set of data for this study was obtained from observing the participants’ composing behaviors during the pre-test and the post-test. This set of qualitative data was analyzed manually by matching the behaviors of the participants with the patterns of behaviors of expert writers. The third set of data was obtained from the participants’ writing folders. These folders were also manually analyzed for evidences of participants’ use
of the strategies learnt during the product and process approaches. The second and third sets of data were used to strengthen the first set or statistical data.

FINDINGS

Pre- and Post-Tests of Group A

This section shows the findings from the analysis of the performances of the participants in Group A, who were taught using the product or traditional approach. Differential analysis, namely the paired t-test, was utilized to find out if there were any significant differences before (pre-test) and after (post-test) employing the product or traditional method. The differences were noted in terms of content, organization, vocabulary, language use, and mechanics.

Table 3 The t-Test Differential Analysis between the Pre-test and Post-test of the Group A in Terms of Content

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>14.73</td>
<td>-4.73</td>
<td>-13.916</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>19.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of content. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t(25) = -13.9 \), \( p = .000 \), \( d = -2.73 \). The difference is large according to Cohen’s (1992) guidelines. Therefore, the result rejects the null hypothesis.

H01 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of content.

Table 4 The t-Test Differential Analysis between the Pre-test and the Post-test of Group A in terms of Organization

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>10.65</td>
<td>-1.73</td>
<td>-10.093</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>11.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of organization. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t(25) = -10.1 \), \( p = .000 \), \( d = -1.98 \). The difference is large according to Cohen’s (1992) guidelines. Thus, the result rejects the null hypothesis.

H02 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of organization.
Table 5 The t-Test Differential Analysis between the Pre-test and the Post-test of Group A in Terms of Vocabulary

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>10.73</td>
<td>-2.89</td>
<td>-20.674</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>13.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of vocabulary. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, t(25)=20.7, p=.000, d=-4.05. The difference is large according to Cohen’s (1992) guidelines. The result rejects the null hypothesis.

H03 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of vocabulary.

Table 6 The t-Test Differential Analysis between the Pre-test and the Post-test of Group A in terms of Language Use

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>12.35</td>
<td>-1.88</td>
<td>-13.507</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>14.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of language use. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, t(25)=13.5, p=.000, d=-2.64. The difference is large according to Cohen’s (1992) guidelines. Hence, the result rejects the null hypothesis.

H04 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of language use.

Table 7 The t-Test Differential Analysis between the Pre-test and the Post-test of Group A in terms of Mechanics

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>2.19</td>
<td>-1.43</td>
<td>-14.402</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of mechanics. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, t(25)=14.4, p=.000, d=-2.82. The difference is large according to Cohen’s (1992) guidelines. The result also rejects the null hypothesis.
H05 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of mechanics.

Table 8 The t-Test Differential Analysis between the Pre-test and the Post-test of Group A in terms of the Overall Results

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>50.65</td>
<td>-1.26</td>
<td>-31.06</td>
<td>25</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>63.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows the t-test differential analysis between the performances of the participants in Group A in the pre-test and their performances in the post-test in terms of the overall results. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t(25) = -31.1, p = .000, d = -6.09 \). The difference is large according to Cohen’s (1992) guidelines. The result also rejects the null hypothesis.

H06 There are no significant differences in the performances of the participants in Group A before and after being taught using the product or traditional approach in terms of the overall results.

Pre- and Post-Tests of Group B

Using several differential analyses of the t-test, Group B participants’ performances in the six main criteria related to this study were analyzed. These criteria were content, organization, vocabulary, language use, mechanics, and the overall results to find out whether there were any significant differences between the performances of the participants in the six criteria in the pretest and their performances in the same criteria in the post-test (before and after employing the process approach).

Table 9 The t-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Group B in Terms of Content

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>15.12</td>
<td>-6.12</td>
<td>-39.179</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>21.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9 shows the t-test differential analysis between the performances of the participants of Group B in the pre-test and their performances in the post-test in terms of content. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t(24) = -39.2, p = .000, d = -7.85 \). The difference is large according to Cohen’s (1992) guidelines. Thus, the result rejects the null hypothesis.

H07 There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of content.

Table 10 The t-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Group B in Terms of Organization

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>10.04</td>
<td>-2.72</td>
<td>-14.525</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>12.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 10 shows the t-test differential analysis between the performances of the participants of Group B in the pre-test and their performances in the post-test in terms of organization. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t (24) = -14.5, p = .000, d = -2.91 \). The difference is large according to Cohen’s (1992) guidelines. Therefore, the result rejects the null hypothesis.

**H08**  There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of organization.

**Table 11** The t-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Group B in Terms of Vocabulary

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>10.44</td>
<td>-3.28</td>
<td>-22.249</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>13.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 shows the t-test differential analysis between the performances of the participants of Group B in the pre-test and their performances in the post-test in terms of vocabulary. Findings from the analysis indicate that the respondents’ post-test results had a significantly higher score than those of their pre-test, \( t (24) = -22.2, p = .000, d = -4.45 \). The difference is large according to Cohen’s (1992) guidelines. Hence, the result rejects the null hypothesis.

**H09**  There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of vocabulary.

**Table 12** The t-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Group B in Terms of Language Use

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>11.56</td>
<td>-3.24</td>
<td>-20.799</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>14.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12 shows the t-test differential analysis between the performances of the participants of group B in the pre-test and their performances in the post-test in terms of language use. Findings from the analysis indicate that the participants’ post-test results had a significantly higher score than those of their pre-test, \( t (24) = -20.8, p = .000, d = -4.16 \). The difference is large according to Cohen’s (1992) guidelines. The result also rejects the null hypothesis.

**H010**  There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of language use.

**Table 13** The t-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Group B in Terms of Mechanics

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>2.40</td>
<td>-1.48</td>
<td>-12.629</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13 shows the t-test differential analysis between the performances of the participants of Group B in the pre-test and their performances in the post-test in terms of mechanics. Findings from the analysis
Comparing the Process Approach with the Product Approach in Teaching Academic Writing to First-year Undergraduates

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indicate that the participants’ post-test results had a significantly higher score than those their pre-test, $t(24) = -12.6, p = .000, d = -2.53$. The difference is large according to Cohen’s (1992) guidelines. The result also rejects the null hypothesis.

**H011** There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of mechanics.

**Table 14** The $t$-Test Differential Analysis between the Pre-test and the Post-test of the Participants in Terms of the Overall Results

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>$t$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>49.56</td>
<td>-1.68</td>
<td>-45.179</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Posttest</td>
<td>66.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14 shows the $t$-test differential analysis between the performances of the participants of Group B in the pre-test and their performances in the post-test in terms of the overall results. Findings from the analysis indicate that the participants’ post-test had a significantly higher score than their pre-test, $t(24) = -45.2, p = .000, d = -9.04$. The difference is large according to Cohen’s (1992) guidelines. The result, once again, rejects the null hypothesis.

**H012** There are no significant differences in the performances of the participants in Group B before and after being taught using the process approach in terms of overall results.

**Differential Analysis between Group A and Group B in the Post-Test**

The following are the findings from the $t$-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in the post-test. The differences are noted in terms of content, organization, vocabulary, language use, mechanics, and the overall results.

**Table 15** The $t$-Test Differential Analysis between Group A and Group B in Terms of Content

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>$t$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>19.52</td>
<td>-1.72</td>
<td>-3.573</td>
<td>24</td>
<td>.002</td>
</tr>
<tr>
<td>Group B</td>
<td>21.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15 shows the $t$-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of content. Findings from the analysis indicate that the results of the participants in the Group B had a significantly higher score than those of the participants in Group A, $t(24) = -3.57, p = .002, d = -.72$. The difference is medium according to Cohen’s (1992) guidelines. The result rejects the null hypothesis.

**H013** There are no significant differences between performances of the participants in Group A and the performances of the participants in Group B in terms of content.

**Table 16** The $t$-Test Differential Analysis between Group A and Group B in Terms of Organization

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>$t$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>11.40</td>
<td>-1.36</td>
<td>-14.892</td>
<td>24</td>
<td>.010</td>
</tr>
<tr>
<td>Group B</td>
<td>12.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 16 shows the t-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of organization. Findings from the analysis indicate that the result of Group B had a significantly higher score than that of Group A, $t(24)=-14.89$, $p=.010$, $d=-1.72$. The difference is medium according to Cohen’s (1992) guidelines. The result rejects the null hypothesis.

H014 There are no significant differences between performances of the participants in Group A and the performances of the participants in Group B in terms of organization.

Table 17 The t-Test Differential Analysis between Group A and Group B in Terms of Vocabulary

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>13.68</td>
<td>-.04</td>
<td>-.128</td>
<td>24</td>
<td>.900</td>
</tr>
<tr>
<td>Group B</td>
<td>13.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17 shows the t-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of vocabulary. Findings from the analysis indicate that there is no significant difference between the result of Group A and that of Group B, $t(24)=-.13$, $p=.900$, $d=-.03$. The result accepts the null hypothesis.

H015 There are no significant differences between performances of the participants in Group A and the performances of the participants in Group B in terms of vocabulary.

Table 18 The t-Test Differential Analysis between Group A and Group B in Terms of Language Use

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>14.24</td>
<td>-.56</td>
<td>-1.307</td>
<td>24</td>
<td>.204</td>
</tr>
<tr>
<td>Group B</td>
<td>14.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18 shows the t-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of language use. Findings from the analysis indicate that there is no significant difference between the results of the participants in Group A and those of the participants in Group B, $t(24)=-1.31$, $p=.204$, $d=-.26$. The result accepts the null hypothesis.

Table 19 The t-Test Differential Analysis between Group A and Group B in Terms of Mechanics

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>2.64</td>
<td>-1.24</td>
<td>-12.659</td>
<td>24</td>
<td>.011</td>
</tr>
<tr>
<td>Group B</td>
<td>3.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19 shows the t-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of mechanics. Findings from the analysis indicate that the results of the participants in Group B had a significantly higher score than those of the participants in Group A, $t(24)=-12.66$, $p=.011$, $d=-1.72$. The difference is medium according to Cohen’s (1992) guidelines. The result rejects the null hypothesis.
H016 There are no significant differences between performances of the participants in Group A and the performances of the participants in Group B in terms of language use.

**Table 20** The t-Test Differential Analysis between Group A and Group B in Terms of the Overall Results

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Mean diff.</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>63.48</td>
<td>-2.92</td>
<td>-2.010</td>
<td>24</td>
<td>.049</td>
</tr>
<tr>
<td>Group B</td>
<td>66.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20 shows the t-test differential analysis between the performances of the participants in Group A and the performances of the participants in Group B in terms of the overall results. Findings from the analysis indicate that the results of the participants of Group B had a significantly higher score than those of the participants in Group A, $t(24)=-2.01, p=.049, d=-1.72$. The difference is medium according to Cohen’s (1992) guidelines. The result rejects the null hypothesis.

H017 There are no significant differences between performances of the participants in Group A and the performances of the participants in Group B in terms of the overall results.

**Data from Observations of the Composing Behaviors**

*Observation of the Composing Behaviors of Participants of the Product Approach (Group A)*

During the Pre-Test

Several participants were seen scribbling on their drafts while the others began to write their essays right away. Although they were advised to read up and bring materials for their content, only a few of them did so. There were participants who brought only thesauruses and dictionaries but there were several who did not bother to bring anything except some papers to write the essay on. These were the ones who wrote and stopped and wrote again on the same paper or on a new sheet of paper. While some of the participants were seen discussing with their friends, others were asking their friends to provide them with specific words or to correct their sentences or to correct the spelling of words or their grammar that they were unsure of. No one bothered to edit or revise anybody’s work before handing in their work.

During the Post-Test

A few of the participants brought different kinds of materials ranging from magazine and journal articles to newspaper clippings to books. They also brought dictionaries, thesauruses, their notes and handouts that were given to them during the treatment sessions. Participants were seen writing back and forth. Sometimes, the participants were seen reading the materials while others consulted their friends for the accuracy of their grammar and vocabulary. Then, they continued writing their essays. A few participants were seen to go forth and back amidst their writing. Most of the participants carried out proofreading of their own essays before they submitted their essays to the instructor.

*Observation of the Composing Behaviors of the Participants of the Process Approach (Group B)*

During the Pre-Test

A few of the participants were seen scribbling on their drafts while the others embarked almost immediately on their essays. Although they were advised to read up and bring materials for their content, only some of them did so. There were participants who brought only thesauruses and dictionaries but there were several who did not bother to bring anything except some papers to write the essay on. These were the ones who
wrote and stopped and wrote again on the same paper or on a new sheet of paper. While some of the participants were seen discussing with their friends, others were asking their friends to provide them with specific words or to correct their sentences or to correct the spelling of words or their grammar that they were unsure of. No one bothered to edit or revise anybody’s work before handing in their work.

During Post-Test

All the participants brought many kinds of materials ranging from magazine and journal articles to newspaper clippings to books. They also brought dictionaries, thesauruses, their notes and handouts that were given to them during the treatment sessions. The process of writing could be seen taking place in stages that are interactive, overlapping and recursive. During the pre-writing stage, the participants were seen reading the materials and making notes while others discussed and exchanged opinions with their friends. Then, they constructed outlines before they started writing their essays. Based on the outline, they wrote their drafts and stopped to refer to materials or their friends or to discuss with their friends. A few participants were seen to go forth and back amidst their writing. Although revision and edition were done throughout the entire process of writing the final drafts, the participants still carried out peer revising and proofreading before they submitted their essays to the instructor.

Analyses of Materials and Drafts in the Participants’ Folders

Analysis of materials and Drafts of Participants of the Product Approach (Group A)

Pre-test Materials and Drafts

Three participants brought articles retrieved from the internet, four brought magazine articles and one brought newspaper clippings. No one brought any books except three who brought either a dictionary or thesaurus. Eight participants had more than one draft in their folder. Three of the drafts were trial and error sheets of the participants’ essays; two were drafts containing content points while the remainders were midway-abandoned essays. Not a single outline was found in any of the participants’ folders. There were no peer revised or edited drafts. All revision and edition were undertaken by individual participant himself or herself.

Post-Test Materials and Drafts

All the participants brought more than one kind of material. Seventeen participants brought magazine or journal articles; nineteen brought articles retrieved from the internet; sixteen brought newspaper clippings; and twenty brought photocopied pages of books and encyclopedias. Twenty-four participants brought either a dictionary or a thesaurus. Only fifteen participants had more than one draft in their folders. Five of the drafts were trial and error sheets of the participants’ essays; six were drafts containing content points while the remainders were midway-abandoned essays. Not a single outline was found in any of the participants’ folders. There was no peer revised or edited drafts. All revision and edition were undertaken by individual participant himself or herself.

Analysis of Materials and Drafts of Participants of the Process Approach (Group B)

Pre-Test Materials and Drafts

Five participants brought articles taken retrieved from the internet, two brought magazine articles and two brought newspaper clippings. No one brought any books except five who brought either a dictionary or thesaurus. Twelve participants had more than one draft in their folder. Four of the drafts were trial and error sheets of the participants’ essays; six were drafts containing content points while the remainders were midway-abandoned essays. Not a single outline was found in any of the participants’ folders. There was no peer revised or edited drafts. All revision and edition were undertaken by individual participant himself or herself.
Post-Test Materials and Drafts

All the participants brought more than one kind of material. Twenty-one participants brought magazine or journal articles; twenty brought articles retrieved from the internet; fifteen brought newspaper clippings; and twenty-four brought photocopied pages of books and encyclopedias. Ten participants brought either a dictionary or a thesaurus. All the participants had more than one draft in their folders. Each of them had draft showing brainstorming of content points; outline; first draft; a second draft; peer conferencing draft; his/her own revised or edited draft; and peer revised or edited draft.

DISCUSSIONS

First and foremost, the study found that the participants in both groups showed improvements in the post-test in all of the criteria tested, namely content, organization, vocabulary, language use, mechanics, and the overall results. This finding is logical and realistic because it proves that all approaches have their own strengths and weaknesses. As there are many types of students and many styles of learning, there bound to be some students who would benefit from one or the other of these approaches because they are developed with the purpose of achieving their objective, that is, to teach writing. This objective can be achieved through the organized interaction of teachers, learners and materials in the classroom (Richards and Rodgers, 2001). To provide an example of what is meant by this in terms of activities - the product approach uses different activity types and arrangements from the ones employed in the process approach. Different activity type may demand different arrangement and grouping of learners. Therefore, a teacher who utilizes activities that focus on the product approach will find a way to teach writing and at the same time capitalizes on accuracy. On the other hand, a teacher who employs activities that focus on the process approach will also find a way to teach writing but one that capitalizes on fluency (Baroudy, 2008). This explains why different students can benefit from different approach and why the participants in Group A and Group B showed improvement in the post-test in all the criteria tested in this study (Reid, 1984; Zamel, 1985; Raimes, 1985, 1991; Susser, 1994).

On comparing the performances of the participants in the two groups, however, the study found that the participants in Group B showed more improvements in terms of content, organization, mechanics, and the overall results in the post-test than the participants in Group A. This indicates that the process approach has contributed towards the improvement of scores of the participants in Group B in these criteria. There are a number of reasons why the researcher makes this assertion. Firstly, in terms of content, the participants of Group B had been thoroughly trained to research for information, as from the beginning stage when they were selecting their topics for writing to the final stage when they were revising their drafts. They were encouraged to constantly upgrade and refine their texts in terms of ideas (content) as well as language use. As evident here, the participants went back and forth while they were writing until they were satisfied with the end product. This proves that the claims of many researchers mentioned earlier like Spack (1988), Shih (1986), Flower and Hayes (1981), and Perl (1980) are also true of the process approach. The process approach mimics the recursive nature of the natural writing process which provides the participants with the opportunity to revise and improve their content. The product approach is also recursive but instead of using the opportunity to revise and improve their content the participants of Group A used it to display their abilities to produce clear exposition (Hyland, 2002). Apart from the amount of time spent composing, they were allowed to research for information. In fact, they were taught various efficient ways of finding information. They were taught to obtain ideas through brainstorming techniques like listing, clustering, and free writing; and also through library and internet searches. Brainstorming, according to Ariza Martinez (2005), helps students to generate many ideas or words that are related to their topic. These are some of the proofs that that the process approach to teaching writing does teach writing explicitly which is in contrast to the claim made by Baxter, Hughes and Tight (1998); De Lyser (2003); and Antoniou and Moriarty (2008). Perhaps, the participants in Group A did not score better than the participants in Group B in terms of content because their product were not coached to research for information. They were not to use strategies like brainstorming, library or internet searches. They were left to devise their own ways of finding information. When the participants in Group B were busy revising and improving their content, the participants in Group A were busy attending to their language use and accuracy (Raimes, 1985, 1991; Susser, 1994; Zamel, 1985;
Reid, 1984). In other words, they were wrapped up in demonstrating their knowledge of forms and their awareness of the system of rules to create their texts (Hyland, 2002, p.7).

Other than that, another reason why the participants of Group B scored better marks in terms of content at the post-test is the way they expressed their content. These participants were taught how to write a thesis statement and topic sentences. They were coached to develop their thesis statements and topic sentences adequately with substantive details. The participants of Group B were explicitly instructed to write and develop their thesis statement and topic sentences during class lessons in the fourth and fifth weeks. This was one of the strategies used in the process approach to help the participants in Group B to learn to write academic texts. The participants in the Group A learnt to develop their thesis statement and topic sentences through controlled, guided and lastly free writing (Zamel, 1976, 1982, 1983; Susser, 1994). Such a method only instills fear and uncertainty in the participants when they are finally allowed to write on their own. This, at the same time, proves that the use of strategies helps students to write better (as alleged by Cameron, Nairn, and Higgings (2009); Santangelo, Harris, and Graham, 2010; and Weisendanger, Perry, and Braun, 2011). The skills needed to write and develop a thesis and topic sentences are paramount in academic writing because without a good thesis and topic sentences the text loses its focus and direction, and if the thesis and topic sentences are inadequately or improperly developed, the text also loses its conciseness.

The scores of the participants in Group B for organization at the post-test are higher than those of the participants in Group A for the same criterion because the process approach to teaching writing advocates the use of strategies (Al Husseini, 2014; Weisendanger, Perry, & Braun, 2011; Keen, 2010; Cameron, Nairn, & Higgings, 2009; Santangelo, Harris, & Graham, 2007; and Flowerdew, 2005) in this case, outlining. Outlining enables participants in Group B to organize their ideas in the form of an outline. An outline helps them to think logically besides ensuring that their points are well-organized and adequately supported. It also gives the participants many opportunities to revise it as new ideas occur and changes are made. Furthermore, there are also other beneficial recommendations that are put forth by these researchers that are upheld and practiced by the process approach. Al Husseini (2014) and Cameron, Nairn and Higgings (2009), for example, recommend that students be provided with procedural know-how and what goes on in the process of writing. Weisendanger, Perry, and Braun (2011) and Santangelo, Harris, and Graham (2007), on the other hand, propose that students be given varying amount of gradually reduced teacher support. Then, there is Keen (2010) who maintains that students can produce peer assessments which are quite accurate and some students may combine peer assessments, judgments and recommendations with goals attained from their knowledge of writers’ motivation or assessment criteria or of both, to create strategies for enhancing drafts of their writing. Flowerdew (2005) and Al Husseini (2014) believe that students should use some complex strategies and skills which they have learnt in content classes to write academic texts.

The third criterion in which the participants in Group B had scored better than the participants in Group A is mechanics. The reason for this is because the former were required to do a lot of reading up when they were selecting their topic, researching for information and doing their outlines. When the participants were involved in the first two mentioned activities, they had unconsciously registered the conventions governing the technical aspects of writing, including spelling, punctuation, capitalization, and abbreviations. Unconsciousness is the part of mental life that does not ordinarily enter an individual's awareness yet may influence his behavior and perception. This is like the case where ESL/EFL students are encouraged to read so that they can improve their vocabulary and grammar of the language they are learning. In doing their outlines, once again the participants in Group B had the chances to revise their use of mechanics. Thus, all these are again the proofs of the beneficial use of strategies (Al Husseini, 2014; Weisendanger, Perry, & Braun, 2011; Keen, 2010; Cameron, Nairn, & Higgings, 2009; Santangelo, Harris, & Graham, 2007; and Flowerdew, 2005). The higher scores in the overall results obtained by the participants in Group B were typical because of their higher score in the three aspects of writing which were content, organization, and mechanics that were discussed earlier.

There is no difference in the participants’ marks in both groups for vocabulary and language use at the post-test because they had been taught and encouraged to constantly upgrade and refine their essays in terms of vocabulary and language use during all the stages in the treatment sessions. This was especially true in the case of the participants of Group A who had been taught using the product approach. The product approach pays great attention on students’ langue (Hyland, 2002, p.7) and therefore, made the participants in Group A more conscious of their language use and vocabulary after all, they were expected to display their abilities to produce clear exposition (Hyland, 2002). In the case of the process approach, the
improvement in vocabulary and language use at the post-test indicated how the participants in Group B had benefitted from reading or researching for topics and ideas as well as from activities like revising and editing which they were taught to do during the treatment session. Besides that, this also shows that the process approach resembles the real composing process which is recursive (Friedlander, 1990; Flower and Hayes, 1981). Thus, what Perl (1980) says about the success of writing greatly depends on the recursive quality of composing is indeed true here. The observation made by the researcher during the post-test also reveals that the participants went back and forth while they were writing until they were satisfied with the end product, hence, providing the evidence that the process approach is in line with Mather and Jaffe’s (2002) claim that writing is a process that consists of stages that are interactive, overlapping and recursive. It also proves the truth of what White and Arndt (1991) said about humans. According to White and Arndt (1991), humans do not think in a linear manner but writing is linear and because of this a writer needs to know how to match his thoughts to his intended messages in an appropriate manner. This is because many ideas only emerge once they have begun to write and that was why the participants retracted and revised, and made alterations in words or structures they had used before they moved forward to proceed with their writing. The process approach acknowledges this process of creating meaning through generating, constructing, and improving one’s idea. In other words, the process approach mimics the recursive nature of the natural writing process, thus providing the participants with the opportunity to revise and improve their content as well as language use, hence higher marks for their overall results. Therefore, this is another indication that the recursive quality of composing is vital in ensuring the success of the writing as noted by Perl (1980). In addition, the instructor using the process approach in this study helped and encouraged the participants to do peer-editing by using a thesaurus, through the use of proofreading symbols and an editing strategy (Mather and Jaffe, 2002). Unsurprisingly, when analyses of the participants’ drafts were done, they showed that the participants were able to produce peer assessments that were accurate which they were instructed to use to redraft their essays (Keen, 2010). In a way, the positive reinforcement given by the facilitative rather than the teacher-like authoritarian nature of the instructor in the process approach helped to foster the participants’ belief in their ability to improve (Santangelo, Harris, and Graham, 2007).

Last but not least, the collaborative nature of the process approach needs to be commended here for it is indeed a very beneficial feature of the approach. Many of the activities in the process approach in this study involved discussion and collaboration in an effort to make writing a more positive and effective experience (Holmes, 2004). This study also reveals that brainstorming was very helpful in generating many ideas or words that were related to a specific topic that proved to be a catalyst for vocabulary development and that many participants who were weak in writing who had participated in this study liked the process writing positive, motivating and collaborative atmosphere (Ariza Martinez, 2005). Hence, not only EFL and ESL writing classes should make use of the process approach but academic writing classes should also do the same because it is found successful (Onozawa, 2010).

**CONCLUSION**

The process approach as found by this study had encouraged and enlivened the recursiveness of natural writing and helped the participants to perform better in their writing especially content-wise. This suggests that teachers should encourage their student writers to revise and refine their ideas even in the stage when they are writing when their final draft so that they can produce a good academic text. Another way of putting this is teachers should always encourage their students to develop the best work they can possibly produce. One of the reasons why the participants performed better in their content, hence, the overall results at the post-test is because they were taught new ways to thoroughly search for ideas to include in their essays. This indicates that teachers need to acquaint their students with various means of obtaining information. Undergraduates need to write comprehensive academic texts within their own disciplines so that they can obtain better grades in their CGPAs. Thus, there is no better way to start teaching undergraduates how to write a comprehensive academic text than to teach them how to research comprehensively for their subject matter. In this way, not only will they accumulate knowledge in the subject matter, but they will also improve their language skills.

Another reason why the participants did better in terms of content indirectly implies that undergraduates need to be taught and coached on how to write a thesis statement and topic sentences as well as how to develop them. Teachers should not only analyze these statements but guide their development.
as well with the hope that their students can imitate and learn to do these difficult tasks on their own. Academic writing is not about the accuracy of language but about the fluency of it. The importance of correctness of form is undeniable, but the ability to get the message across is even more significant in academic writing. So, teachers should insist on accuracy but should not be preoccupied or obsessed by it to the point where they overlook a student's brilliant subject-matter and skills to write academic text

Limitations of the Study

Due to the intensiveness of the instruction and monitoring at every step of the way in producing an academic text through the product and process approaches, only two groups consisting of 51 participants was involved in this study. Secondly, the participants selected were only Bachelor of Education (TESL) students. Thirdly, due to the setting of the class schedule and courses offered for that semester, the participants were the only ones who were taking the Academic Writing Skills course in UNISEL. These are the reasons why the selection of the method of sampling was that of convenience sampling rather than that of random sampling. Therefore, the findings of this research cannot be generalized to all students undertaking similar or different programs in UNISEL or other universities.

Recommendations for Future Research

The sample size of this research was only 51 students of Bachelor of Education (TESL) in University of Selangor. Furthermore, due to some restrictions in this study, random sampling was not possible, instead convenience sampling was selected. Therefore, the findings of this research cannot be generalized to students of all institutions of higher learning in Malaysia or elsewhere. As such, for the purpose of generalization of the findings, a larger scale research involving a bigger sample size from various programs and institutions of higher learning is suggested for future studies. In addition, it is suggested that future studies could explore employing a more robust sampling methodology.

Other than that, there were only five components of the written essays were assessed, namely, content, organization, vocabulary, language use and mechanics. This study did not assess the ability of students in citing information from other sources and writing references specifically. This could be another area to dwell upon in future research for this type of writing as citation and referencing are important parts of writing an academic text.

The ability to write an academic text should be developed not only at tertiary level but should start with students at school level. As writing folios is part of the evaluation of students’ performance in schools in subjects like history, geography and living skills, it is appropriate to teach students in school how to write academic texts. Therefore, it is suggested that the use of the process approach to teach academic writing in schools could also be experimented by future researchers.

REFERENCES


