A Think-aloud Protocols Investigation of Saudi English Major Students' Writing Revision Strategies in L1 (Arabic) and L2 (English)

Eid Alhaisoni[1]

[1] Department of English, University of Ha'il, Saudi Arabia

Correspondence: Dr. Eid Alhaisoni, Department of English, University of Ha'il, Saudi Arabia. E-mail: eid.alhaisoni@uoh.edu.sa

Abstract

This study investigates the writing revision strategies used by 16 Saudi English as foreign language (EFL) students. Two research methods were employed. First, think-aloud reporting was used to gain insightinto the thought processes utilized by the students, and to study the revision strategies that Saudi maleuniversity students make use of while writing compositions in L1 Arabic and L2 English. Second, a semi-structured interview was conducted with the aim of supporting the think-aloud data. Analysis of the think-aloud sessions and the interviews revealed that most of the time, strategies were used more frequently when students wrote in English rather than when they wrote in Arabic. In addition, it was found thatin general, specific strategies used when writing in Arabic were also used when writing and vice versa.

Keywords: writing strategies (WS), writing revision strategies (WRS), and writing process (WP)

1. Introduction

What writing revision strategies (WRS) do Saudi male English major studentsemploywhen writing compositions in L1 Arabic and L2 English? This question was the central focus of this study. It has been my experienceas a professor of English as a foreign language, that the majority of students have difficultywithwriting composition, and the reasons may be three-fold. One, a lack of experience using the English language; two, a low level of writing/language proficiency; andthree, poor use of writing strategies. The present study aims to explore WRSin a new context and therefore contribute to the field of L1 and L2 writing. It will consider a comprehensive range of WRS by using two research methods (think aloud and interview), which will provide the L1and L2 literature with crucial information on the use of writing strategies. The primary purposes of this study are to describe and analyze both the writing revision strategies that undergraduate Saudi male EFL students use while writing in L1 and L2 and the possible influence the L1 writing process has on the L2 writing process and vice versa.

This study is of particular significance within the Saudi males EFL context since only one empirical study has looked at the writing composition processes of Saudi males and the writing strategies they use either in Arabic or English. Generally, most of the research that has been done so far on the writing skills of Arabic speaking students learning English as a second or a foreign language has concentrated on the product of writing, with the exception of a limited number of studies in the middle East which looked at one particular aspect of Arabs' writing processes, namely revision (Alam, 1993) and the use of Arabic when writing in English (Al-Semari, 1993).

2. Literature Review

2.1 Writing in Saudi Schools

Broadly speaking, within the Saudi educational system, teaching writing in general, and the process in particular, is neglected in courses that teach both L1 and L2 writing. In other words, the weak L1 and L2 writing skills of Saudi studentscan be attributed to the inadequate teaching and training they receive in the subject in both their native language and EFL in Saudi Arabia. El-sayed, 1983, argued that the problems contributing to the poor quality of Arabic-speaking students' English writing comes from many sources, one of which is the way the teaching of English writing is organized. Compared with many other Arab countries, the method of teaching EFL writing in Saudi Arabia although different is not better.

The teaching methods EFL teachers usually use are more concerned with the structure. Vocabulary and grammar, according to Aljamhoor (1996), are the main concern in teaching English writing in Saudi Arabia. He stated that

"Teaching English writing in Saudi schoolsis based on the belief that those students who learn more vocabulary will be good writers. As a result, students are required to memorize a great deal of vocabulary in order to speak, read, listen, and write in English, but little emphasis is placed on other important writing skills, such as planning, and organization" (p. 16).

In most Arab countries adult learners who have successfully learned English grammar rules are unable to use them productively and communicatively because they cannot utilize their intellectual understanding of the language in communicative situations (El-daly, 1991 cited in Aljamhoor, 1996). This problem exists in Saudi schools, where teachers, who are the source of knowledge, teach grammar, vocabulary and organization, ignoring other essential aspects of writing that learners must know beyond those basic skills. El-daly (1991 in Aljamhoor, 1996), in a study explaining the problem of emphasizing grammar and vocabulary, stated "English was considered an academic course like 'history', 'geography', or 'social studies'. Our main task [as students] was to memorize a lot of grammatical rules, a lot of vocabulary and structures with a view to passing the course and moving ahead to the next level" (p. 3).

In terms of the dominant pedagogical approach which is still grammar translation, there are not sufficient opportunities for writing instruction. The reason that grammar translation is still the dominant approach is that, for the most part, the teachers of English themselves may have a low level of proficiency in the language. Alnofal (2003) stated that Saudi students in general give little attention to how they approach the act of writing in both L1 and L2 respectively. Rather their attention is directed more toward the service aspects of writing, such as grammatical structure, spelling and word choice. He believes that this common phenomenon can be attributed to the way Saudi students are taught to write in both L1 and L2. This researcher agrees with that point, based on experience teaching Saudi students who study English as a foreign language (EFL), and after considering the results of a variety of studies conducted on Saudi ESL/EFL students (Al-Hozaimi, 1993; Alsemeri, 1993; Aljamhoor, 1996; Jouhari, 1996).

In fact, in terms of writing proficiency, the goals stipulatethe ability to produce a connected passage of up to a full page on a subject of descriptive or discursive nature, but for a variety of reasons, this goal is not being met. An additional factor concerns the students themselves. Saudi EFL students, in this researcher's experience, are less enthusiastic about learning English and the majority of students lack the motivation to improve their proficiency.

It is in the context ofthe above discussion that thisresearcher believes very little attention is given to the teaching methodology of the writing process in English in Saudi Arabia. Most, if not all, of the sources related to the teaching of English writing that this researcher reviewed showeda neglect of writing as a process. Instead, recommendations presented with the intent of helping L1 teachers of writing,are limited to guidelines that encourage producing good quality pieces of writing.

2.2 Writing Strategies

An important aspect of any research on the writing process is the recognition of writing strategies. The term strategy has been defined by many professionals under different names. Rubin, (1981) for example, defined strategy as: "operations or steps used by a learner to facilitate the acquisition, storage, retrieval and use of information" (p. 5). Stern, (1983) on the other hand, stated that "in our view strategy is best reserved for general tendencies or overall characteristics of the approach employed by the language learner, leaving learning techniques as the term to refer to particular forms of observable learning behavior, more or less consciously employed by the learner" (p. 405). However, these days, this nomenclature is not usually followed.The present tendency among researchersis to use the term strategy for specific behaviors. Further, Cohen (1998) defines strategies as "processes which are consciously selected by learners and which may result in actions taken to enhance the learning or the use of a second or foreign language, through the storage, retention, recall, and application of information about the language". For the purposes of this study then, strategy is definedas a series of actions, methods, steps and techniques employed by a learner behaviorally or mentally, and more or less consciously, to facilitate their processing, retrieving, and using of information.

Writing strategy is defined by Cornaire and Raymond (1994) cited in Beare, S. 2000, as a plan of action or a conscious intervention in dealing with the task for the purpose of problem solving or reaching a goal. Further, Leki (1995) discusses writing strategies as the kind of actions that writers undertake to produce a written text (e.g. rereading the text several times). More recently, Kieft et al. (2006) define the writing strategy of an individual as the way that person tends to organize cognitive activities such as planning, formulating, and reviewing.

2.3 Writing Revision Strategies

Among the various proposals made to define and study writing revision strategies, the one made by Flower,

Hayes, Schriver, Stratman, and Carey (1986) is undeniably the most precise. These authors give a more complex description of the «reviewing» process, previously thought to be composed of only two sub-processes («evaluate» and «revise»; Flower & Hayes, 1981), by breaking down the process into four components and by further specifying the kind of knowledge the revision activity involves and generates. They grant a more important role to the reviser's selection of what knowledge to apply and what strategic choices to make as he/she a) defines the task, b) evaluates the text and defines the encountered problem, c) selects a strategy involving either going back to the preceding processes or going on to modify the text, and d) modifies the text either by revising it or rewriting it.

From a functional standpoint, the above sub-processes of revision are organized hierarchically. Each of the four steps required to make a correction is necessarily subordinate to the preceding one. The reviser can nevertheless decide not to go on to the next step, and restart the sequence at any one of the higher-order sub-processes. This process-sequencing flexibility accounts for the functional variants so fully described by Flower et al. (1986).

In order to revise, writers must have, and if not build, a representation of what they consider to be involved in evaluating and improving a text. They must plan what they are going to do by specifying:

- The goals to be reached (for instance, revise to make the text clearer).

- The characteristics of the text to be examined (for instance, revise the local or global aspects of the text).

- The means that can be used to reach the defined goals (for instance, correct the text several times in succession).

Flower et al. (1986) attribute a clearly metacognitive role to the notion of task definition.

Indeed, this definition serves as the control manager for the sequencing of complex subprocesses by setting the goals, constraints, and criteria required to guide the entire revising activity. These authors make an inventory of the various «definitions of the task» that revisers of differing degrees of expertise can verbalize, and thus ascertain that experts have more meta-knowledge and knowledge likely to promote the setting of objectives like «check for correct meaning, text length, and text type», or «check the number, density, and complexity of the problems and errors in the to-be improved text», etc. The scope of an experts' processing unit is the entire text, whereas that of novices is the sentence at this point, Flower et al.

2.4 Research Questions

The main questions of concern to the researcher are:

1. What are the WRS that Saudi male undergraduate EFL students use when they write in Arabic (L1) and English (L2)?

2. What are the similarities or differences in frequency between the WRS Saudi male undergraduate EFL students apply when writing in L1 and L2?

3. Methods

3.1 Participants

The participants of the study were 16Saudi male third-year students majoring in English in the Department of English, at the College of Art at the University of Ha'il, Saudi Arabia. They were selected randomly, subject to willingness to participate in the current study.

3.2 Instruments

3.2.1 Think Aloud

Think-aloud reporting was used in this study to gain insights into what goes on in the student writer's mind and to study the complex processes and strategies that Saudi male college students use while composing in both languages.

3.2.1.1 Procedure

Initially the researcher explained the think-aloud procedure to the 16 chosen subjects as a group, how it works, and how effective it is in obtaining information from verbalized behavior during composition writing. An introduction to the think-aloud while composing concept was provided for the subjects as used in previous EFL studies (e.g., Arndt, 1987; Pennington and So, 1993; Raimes, 1985, 1987). The subjects listened to others who had been audio recorded during a reading task in order to guess the meaning of some unknown words. The researcher chose this kind of practice so it would be different from the method used during the actual study as normally the practice task is not identical to the one used during the study. This prevents influencing, the students on anything that they might report on later. After that, the researcher asked the subjects to take part in a

brief think-aloud session as part of the practice. The aim of this introduction was to make the subjects aware of how to perform the think-aloud task as a way of eliciting information which would be needed to investigate their writing strategies when writing in Arabic and English as a foreign language.

In the same week,a writing session was held where the students wereasked to write about a topic in English. The next week, they were asked towrite about a topic in Arabic. The purpose behind instructing the subjects to write the L2 essay first was based on the fact that the impact of L1 on L2 is well established in the literature whereas the impact of L2 on L1 is generally thought to be relatively less pronounced.

Subjectswere placed into eight groups in order to counterbalance a "topic effect". The first subject in the first group wrote topic one in English and topic two in Arabic while the second subject wrote topic two in English and topic one in Arabic. The same procedure was followed with the other groups. Think aloud writing sessions were conducted in a quiet room and the subjects performed the writing sessions individually, following a schedule that the researcher made up according to when the subjects were available. The schedule provided a clear picture of which assigned student would come, at what time, on which day, and enabled the researcher to make good use of time. In the writing room, a table and a chair were set up, and two pens and sufficient paper were provided. Also, subjects were provided with a tape recorder to turn on as soon as the writer started the task. The subjects were directed to externalize and verbalize their thoughts and composing activities as much as possible.

They were told that they could use which ever language (or a mixture of both) they felt more comfortable with and in which they found it easierto verbalize their thoughts. The researcher also, told the subjects that an hour and half would be provided for each writing task. In order to minimize any distractions to the fluidity of the writing process and to simulate how students usually write when doing an exam, no preparation or dictionaries were provided. Additionally, students were allowed to ask the researcher any questions except about procedure. Students who wanted to revise their essays on the same draft were asked to write in a different colored ink so that revisions could be easily differentiated from original writings. Moreover, subjects were instructed not to erase text that they did not intend to use, simply to cross once through anything they did not need.

Each time, before the think-aloud protocol started, the researcher reminded each student what to do by reading the think-aloud instructions and the assigned topic. Once, the actual writing session started, the researcher sat at the back of the room and reminded students to speak out when it was felt that the subject stopped verbalizing. After each writing session, all drafts and notes were collected.

3.2.1.2 Writing Topics for the Think-aloud Session

All students were required to write on specific topics which were chosen by the researcher who was concerned about assigning topics that the subjects would know something about, in the belief that topics related to the subjects personally and their country would motivate the subjects to get involved in their writing. Each of the topics assigned in the L2 and L1 sessions were descriptive in nature. The topics were as follows:

Topic one: "In everybody's life there are happy moments; describe a happy moment in your life."

Topic two: "Describe your favorite city, town, or village"

The choice of these particular topics was based on researcher knowledge that these topics would both be interesting to the students and that subjects shared the same educational background and had similar prior knowledge of both topics. Also, the researcher had in mind to give the subjects topics that they had not written about recently.This was confirmed with the subjects' teachers so as to preclude writing from memory. In addition, the choice of descriptive prose over argumentative writing was made in order to help the subject write more freely, and so that they could more easily generate ideas, encouraging them to write fluently and think aloud with ease. The purpose of the writing was not specified in the writing prompts nor was the target reading audience, since this would not normally be done for regular writing tasks and it was in fact a study objective to determine to what extent the subjects were concerned about these rhetorical issues.

Both topics were presented as non-fiction and in both tasks the content was left non-specificso the writers could enjoy some freedom of choice.

3.2.1.3 Transcription of Think-aloud Protocols

Each writer's audio-tapes were transcribed in order to create a hard copy of the think-aloud sessions. The think-aloud tapes were transcribed in the language(s) that the subjects used to externalize their thought during the writing process.

3.2.1.4 Developing an Adapted Coding System

Prior to developing a coding system for use in the study, the researcher read numerous studies on think-aloud

reporting for the analysis of writing so as to examine the purpose of the studies, the theoretical underpinning of the investigations, and the subsequent rationales for the coding system. The coding scheme developed for L1 writers by Perl (1979) and later modified for EFL writers by researchers such as Arndt (1987), Rashid (1996), El Mortaji (2001), El-Aswad (2002), Junju (2004) were good sources for the development of a coding system and shed light on a variety of WRS.

A starting point for the identification of WRS used was a theoretical anticipation of what the transcripts would reveal so verbalization were listened more than nine times in order to ensure accuracy of the verbal protocols. After that, each transcript was reviewed one by one several times and what was inferred to be individual strategies were identified and written down.All protocols were examinedmore than 14 times.

Two weeks later, each protocol was examined twice more to ensure all potential strategies had been identified.In order to categorize the strategies, all the coded strategies were written down, each on an individual card. Eighteen AWRS from the Arabic writings and 17 EWRS from the English writings were identified. Each coded strategy was validated as unique by asking a contrast question, "is thisastrategy and if it is, is it different from the last one?" Consequently, 14 AWRS and 3 EWRS emerged. The researcher was then able to develop a list of strategies, and apply them to the data. To corroborate content coding, a sample of the protocols (two students' protocols for each language, Arabic, English) was checked by an expert coder.

3.2.1.5 Counting the Strategies

After the protocols of the 16 subjects (in both languages) were coded, the frequency of utilisation of each individual strategy was calculated by counting occurrence of each strategy listed in the classification scheme for each subject, including the number of times each strategy was repeated. By giving every strategy used a score of one and strategies that had not been used a zeroscore, the number of *strategy type* used by each subject one or more times was counted and recorded. For example, if the student used a strategy but rehearsed it many times, it was counted as one type. This yielded a total number of strategies for each subject which represented the size of their strategy repertoire. The frequency of use of each strategy *(as tokens)* was calculated for each protocol by counting the total number of occurrences of each strategy. This included counting where the same strategy was repeated. Based on the students' protocols, a number of 14AWRS, and 13 EWRS were identified.

3.2.1.6 Interjudge Reliability

The researcher thought it would be ideal to find another person who knows about learner strategies in general and think-aloud protocol analysis in particular. Therefore, he contacted a Professor of Applied Linguistics in the same department where the researcher works. The researcher explained to him the purpose of his research and provided him with a copy of the detailed strategies and pointed out what each strategy involved using examples from different protocols. Also, he answered all the questions raised and responded to the remarks made to satisfy the coder's curiosity. Finally, we went over our strategy classification scheme together to make sure that each strategy was clearly stated and defined. Since the rater said that he did not need any further training on how to code strategies, four protocols of four subjects were given to him. To ensure complete understanding, we provided him with the list of instructions as follows:

1.   Please make sure that you understand each writing strategy and its definition before you start coding.

2.   Protocols typed in italics means that the participant thought aloud in Arabic. Segments typed in a regular font meant the student thought aloud in English. Three or four dots indicate that the participant paused for a while.

3.   Read the protocol of each sentence/phrase and then please decide whether a certain segment of the protocol is a strategy or not.

4.   Write the strategies you identify in the right hand column and underline the segment(s) of the protocol which identifies the strategy you have indicated. If you cannot identify the strategy for a particular word, phrase or sentence or have any doubts, write a question mark or just leave it blank.

5.   Make sure that each strategy you identify fits the definition given in our list of the writing strategies. If, however, you identify a *new* strategy not included in our list, write the strategy name and underline it.

6.   If any protocol is not very clear, please contact me.

7.   Please take your time and kindly double-check your coding.

(Adopted from Mushait, 2003)

The independent coder returned the four protocols for the four subjects after coding them six weeks later. He identified a total of 230 writing strategy tokens used by the four subjects, (see Table 1). A total of 205 tokens of writing revision strategies were coded the same as ours. To find out how much agreement was found, we

contrasted his coding with ours. We obtained an overall 83.67 per cent agreement between our coding and those of the independent coder. The maximum agreement was 87.50%per cent and the minimum was 77.96%per cent. Having judged that the agreement rate was acceptable, we coded the rest of the data.

$$\frac{\text{Number of strategies placed in the same category by both judges}}{\text{Number of strategies tokens coded by the researcher}} \times 100$$

The overall agreement is 205 ÷ 245) × 100 = 83.67%

Table 1. Interjudge reliability

Subjects	Number of strategies coded by the researcher	Number of strategies coded by the independent rater	Total agreement between the researcher and the rater	
1	70	67	58	82.85%
2	59	52	46	77.96%
3	48	46	42	87.50%
4	68	65	59	86.76%
Total	**245**	**230**	**205**	**83.67%**

3.3 Interview

Semi-structured interviews were also used at the end of the think-aloud sessions for two reasons. First, it is a supplementary instrument to the main instrument which is the introspective think-aloud reporting. It triangulates the data sources for the investigated variable and therefore increases the reliability and validity of the gathered data and its outcome. Second, I also employed interviews to help clearing up any ambiguity and confusion found in the think aloud protocols. The questions were open ended and the responses were taped for later transcription.

3.4 Quantitative Analysis of Think-aloud Data

The quantitative analysis with SPSS (Statistical Package for Social Science) involved descriptive statistics for frequency counts of 14AWRS and 13EWRS in 8 protocols in each language. Frequencies, percentages, mean values and standard deviations were computed to capture the similarities and/or differences between the two languages (Arabic vs English) in the employment of different strategies. TheWilcoxon test was used to see if there was a significant difference between the two languages.

4. Discussion

According to the classifications developed for this study, reviewing strategies are divided into two subprocesses: first, are actual reviewing strategies and second are strategies used to aid reviewing. Table 2 shows actual reviewing strategies used by Saudi male students when writing in Arabic and in English.

4.1 Actual Reviewing Strategies

Table 2. Actual reviewing strategies

AWS&EWS	Descriptive statistics				Inferential statistics	
	Arabic composition		English composition			
	Mean	SD	Mean	SD	z	p
1. Edit after each sentence.	.299	.436	2.38	3.07	-2.02	.043
2. Edit after each paragraph.	.512	.577	1.16	1.12	-2.02	..043
3. Edit only after writing the whole passage.	.256	.358	0	0	-1.60	.109
4. Revise what has been written after each sentence.	.791	.692	2.35	1.98	-2.02	.043
5. Revise what has been written after each paragraph.	.562	.665	.297	.460	-.527	.612
6. Revise what has been written after writing the whole passage.	.258	.491	.208	.395	-.365	.715
7. Focus on content when revising.	3.40	2.94	6.32	.909	-2.38	.017
8. Focus on organization when revising.	4.22	3.32	7.80	1.34	-2.38	.017
9. Focus on finding more appropriate words or phrases (Substitution).	.902	.478	3.04	3.16	-2.10	.036
10. Delete whole or partial sentences or paragraph.	.217	.449	1.45	1.30	-2.20	.027
11. Rearrange sentences and paragraph.	.329	.372	.630	.702	-.676	.499
12. Add some words, sentences or paragraphs.	1.65	1.02	2.95	2.21	-1.40	.161
13. Give reasons for changes	.463	.415	.881	.714	-1.35	.179

Table 2 shows similarities in rank orderand the correlation between the meanis significant (r= .494, p< .001). Some strategies were used more when writing in Arabic (strategies 3, 5, 6). It is also evident that global editing and revision (i.e. strategies 3, 6) is less disfavoured in L1 than in L2. This result could have been influenced by the fact that is notably easier to write in L1 than in L2. The rank order of the mean frequency in each language is as follows:

In English: 8 > 7   > 9   > 12   > 1 > 4 > 10 > 2 > 13 > 11 > 5 > 6 > 3

In Arabic: 8 > 7   > 12   > 9   > 4 > 5 > 2 > 13 > 11 > 1 > 6 > 3 > 10

Analysis of the data revealed that focusing on organization when revising, and focusing on content when revising occur first and second respectively in frequency among all the strategies used in both Arabic and English, (means= 4.22, and, 3.40 and SD= 3.32, SD= 2.94; means= 7.80; 6.32, and SD= 1.34; .909). This echoes the findings of Al-Semari, 1993; and Rashid, 1996, El-Aswad, 2002, who found that their students pay a lot of attention not only to organization but also to content when revising L1 compositions. Intervieweesreported that they focus on the organization of the content to be sure that the order of the content is fluid and to avoid conflicting ideas. These findings coincide with other L2 English studies including El-Semari, 1993. Furthermore, in a study of Spanish students,Gaskill, (1986) reported revisions involving breaks in existing paragraphs to produce new ones, the movement of a paragraph from one location to another or the joining of two previously separate paragraphs. On the other hand, this pattern is inconsistent with El-Aswad, 2002, who found that the Arab subjects did not focus on the organization of the content, and attributed that to the fact that they were either not used to doing so, or were unable to change or add anything to their written texts. Additionally, it is reported that the teaching of writing is worse in Libya than Saudi Arabia.

We can see from the focus of organization and content revision strategies that Saudi male students feel that to produce a good essay and convey their ideas clearly it is necessary to revise the content of the essay before handing it in. This is in line with Beach's (1976) study on L1 English writers, where extensive revision is defined as "one in which the writer substantially changed the content or form of the previous draft" (p. 160). In addition, Al-Semari, 1993, found that his Saudi subjects were concerned about the content of their essays when revising. Victori, (1999) also found that most of her Spanish subjects claimed that when they revised their essays they focused on content in order to make sure that they were on the right track in terms of writing coherently, using the most appropriate expressions, and to avoid repeating words.

The third most frequently used revision strategy in Arabic is adding words, sentences or paragraphs (mean= 1.65 and SD 1.02). This strategy came in forth in frequently in English (mean= 2.95 and SD= 2.21). While focus on finding more appropriate words or phrases was found to be the 3rd most frequently used strategy in English with a mean frequency of 3.04 and SD 3.16, it was 4th in Arabic (mean= .902 and SD= .478). This parallels the findings of other studies (e.g., Zamel, 1983; Li, 1999) which found that subjects added words and sentences when revising and explained that it is important to add information or words to help clarify the concept more clear.

Differences between Arabic and English exist in the least-frequently used strategies. In the case of AWS this includes deleting whole or partial sentences or paragraphs, editing only after writing the whole passage, and revising what has been written after writing the whole passage. These findings are consistent with Al-Semari, 1993, El-Aswad, 2002.

With respect to EWRS, less-frequently used revision strategies include, partial editing only after writing the whole passage which was not used at all,revising what has been written after writing the whole passage, revising what has been written after each paragraph, and rearranging sentences and paragraphs. This is in line with findings from El-Aswad's 2002.

A comparison between the two languages was made, the findings of which are presented in Table 2. The results show that there are divergences of frequency in the adoption of revision strategies by all subjects between the two languages (Arabicand English). For example, while strategies 3, 5, 6, were found to be used more frequently in Arabic than in English though not significantly so, the rest of the strategies were found to be used in English more frequently than in Arabic. Significant differences were found between the two languages in the use of four strategies (Strategies 7, 8, 9, 10) In addition;three strategies (Strategies 1, 2, 4) were borderline as can be seen in Table 2. The above discussion confirms RH 1 which predicted that students would use editing strategies more in L2 than in L1 (z= -2.201, p= .028). Also, RH 2: students revise more during L2 writing than during the L1 writing, was also confirmed (z=-2.380, p=.017). These statistics were arrived at by calculating the mean of the incidence of editing strategies (strategies 1, 2), and the mean of revision strategies (strategies 4, 5, 6, 7, 8, 9, 10, 11, 12), Table 2. The two languages were then compared in the use of editing strategies and revision strategies and it was found that revision strategies were used more frequently in English (mean = 2.78, SD .788) than in

Arabic (mean = 1.37, SD .862). The same is true for editing strategies (means= 1.77; .406; and SD 1.93; .354, for English and Arabic respectively).

4.2 Strategies Used to Aid Reviewing: (SAREV)

Table 3. Strategies done to aid reviewing

AWS&EWS	Descriptive statistics				Inferential statistics	
	Arabic composition		English composition			
	Mean	SD	Mean	SD	z	p
1. Read what was written to aid next bit of revision	5.30	2.55	11.6	6.91	-2.100	.036
2. Assess + or – what was written	.728	.341	1.92	.905	-2.521	.012

Table 3 indicates that there was a consistent pattern between the two languages in the use of these strategies used to aid revision.The rank order in terms of their mean frequency is identical in both languages: 1 > 2

Reading what was written to aid the next bit of revision was found to be used most frequently in Arabic as well as in English with a mean frequency of 5.30; 11.61, and SD 2.55; 6.91, respectively. In fact, this strategy was found to be the most-frequently used strategy of all writing strategies in both Arabic and English and confirmed RH 4. Other studies also supported this finding specifically El Mortaji and 2002; El-Aswad, 2002.

Both strategies were used more than twice as much in English as Arabic, however, and both differences were significant.Assessing + or – what was written was found to be the lesser used strategy in this subcategory in both languages. This is in line with the findings of Junju, 2004.

In summary, as is shown in Table 1and 2, the answers to RQs 1 and 2 indicate that Saudi male EFL students used Arabic/English AWRSs as well as EWRS, however, there were differences between the two languages in the use of these strategies. AWRSs/EWRSs were found to be used more frequently in English than in Arabic, except three strategies (strategies 3, 5, 6 in Table 1) which were found to be used more frequently in Arabic than in English, though the differences were not significant. This could be because Saudi male students are L2 learners thus feel the need to review their essays and focus on specific aspects of language when they write in L2 more than in L1 to ensure competency in meaning and use of the language.

5. Conclusion

The present study investigated the WRS of Saudi male third-year English major students. It was intended to reveal the actual relationship between revision strategies in L1 and L2. The results revealed that most of the strategies were found to be used more frequently in English than in Arabic. A major similarity was that, in general, those strategies which were found to be mostly used in Arabic were also used most in English as well and vice versa. It could be noted that there is a 'floor effect': the more frequent a strategy, the more likely the language difference will be significant. Where strategies are very infrequent in both languages there is not much scope for a significant difference.

The findings of the study showed that Saudi female students differed in their writing styles and used different revision strategies to produce a text. The think-aloud results supported this as subject 7 use the strategy of focusing on content when revising 3 times, on the other hand subject 6 used it 13 times. Additionally, they had no clear sense of the strategies that may be effective or ineffective as had been illustrated from the interview for Q 15 as subject 13 said: *"In fact, I use some strategies such as focus on content when revising but I don't know if they are useful strategies. I used to use them"*. The teaching of Arabic composition writing in Saudi Arabia, to the best of the researcher's knowledge, is still product-based/oriented in general and the training of strategies is not yet common in writing instruction. The teaching of Arabic composition writing should involve clear instruction about the writing process so that the students can be aware of their own writing style and learn to know when more attention should be paid to revision and in what situations rehearsal need more emphasis.

The teaching of L1 writing in public schools in Saudi Arabia starts in the third grade and ends by the end of the twelfth grade. Even during the nine years of one-class-a-week instruction, L1 writing is regarded as a course in which no student can fail. Many teachers and students do not give writing class the attention it deserves. Therefore, it is essential for the educational policy-makers in Saudi Arabia to consider the following four measures in order to ensure improvement in the practice of teaching L1 writing and how it is perceived by

educators and students.

First, the teaching of the L1 writing should be taken more seriously, and educators should always emphasize the fact that writing is a core course and that it can be failed. Second, L1 writing teachers should be offered in-service training in the teaching of L1 writing. Third, the teaching of L1 writing should not end at the twelfth grade, but should continue to the sixteenth grade (end of university/college). To put it differently, this study found that the EFL participants practised little L1 writing after they had started learning L2 writing at the college level. Therefore, it is very important to give the L2 learners, mainly at the early stages, the chance to write in L1 frequently as this will maintain and develop their cognitive skills in writing in both L2 and L1. Finally, the researcher highly recommends establishing local and regional associations that work as a medium to organize and facilitate increasing the awareness of L1 writing among students. This could be done by publishing their writings and holding regular meetings to discuss matters related to writing in general. Therefore, a good L1 writing program should not only include instruction about the writing process, but also the training of effective writing strategies. Teachers need to teach students "how to deal with the text of the question and their own emerging text, how to generate ideas on a topic, how to rehearse ideas, and how to consider the options prior to devising a plan for organizing their ideas". Students need to learn, too, "how to rescan their text and which questions to ask to revise and edit more effectively" (Raimes, 1987, p. 460).

With regard to English writing instruction and as in L1, it was apparent in the present study that these subjects varied in their writing styles and used different revision strategies to produce a text.Although foreign language teaching has become much more process-oriented during the last few years (Wolff, 2000), the teaching of English writing in Saudi Arabia, to the best of the researcher's knowledgeis still product-based/oriented in general and the training of strategies is not yet common in writing instruction. It is about time that composition teachers in Saudi Arabia focus on the process of writing as well as product. In other words, the teaching of EFL writing should involved clear instructions about the writing process so that the students can be aware of their own writing style and learn to know when more attention should be paid to revision and in what situations rehearsal need more emphasis. This seems to imply they should be taught to manage their strategies better. I.e. decide when to do this, when to do that. That is Flower & Hayes 'monitoring' or O'Malley &Chamot 'metacognitive'. Teachers should have different attitude. After all, books on teaching process writing like White and Arndt recommend also leaving editing for the language to the end, not after each sentence, so as not to interrupt the flow of ideas.

One of the significant implications of this study is that teachers should be aware of individual differences between their students in their writing and should therefore try to use different approaches to meet their different needs at schools as well as colleges. In order to do that and as a first step, teachers should encourage peer feedback and get their students interested in each others' writing. They have to try and arrange as many tutorial sessions as possible so the students can learn to talk openly about their writing and discuss it with others. In these tutorial sessions it could be positive and beneficial to put poor writers with good ones, so that the former can learn from the latter some good approaches and strategies, and attempt to adopt them.

It has been found that students' mother tongue is the main resource when they write in L2 (English). Friendlander(1990) claimed that considering the language proficiency and the writing ability of EFL students at earlier stages preparatory and secondary schools a limited use of L1 and translation, is acceptable and necessary in order to facilitate the students understanding of and familiarisation with L2 rhetoric and conventions at the time of text generation. The students' protocols showed that students differed in reliance on their mother tongue according to their writing proficiency. For example, good writers use it to generate ideas and organize the writing, while poor writers use it mainly to deal with language problems such as vocabulary and sometimes to retrieve content. Qi, 1998, argued that "it would be extremely misleading to advise our L2 students to refrain from using their L1 in L2 performance" (p. 429) while the mother tongue may be best used to plan and straighten out the ideas and organize the writing (e.g., Frienlander, 19990; Kobayashi and Rinnert, 1992). Hence, the mother tongue in the writing process could be both a friend and a foe for EFL writers. Thereupon, the use of L1 should be reduced gradually as the students start pick up and learn more English, and one should assist them to employ L2 more frequently instead of L1.

Finally, there should be co-ordination between college writing courses and pre-college writing curricula in both L1 and L2. College staff and pre-college teachers would ideally be encouraged to meet and discuss the writing problems encountered by their students, try to settle on the causes of these problems and hint the best solutions to help their students write properly in both languages

5.1 Limitations of the Study

The present study, like all studies, has its limitations. Firstly, the think-aloud protocol in this study focused only

on the WRS of the students when they worked on a descriptive essay. Therefore, it does not explain all the aspects of the WRS of L1/EFL writers in all modes of L1 or EFL writing. Secondly, this study cannot examine the changes over time in the WRS or the adoption of WRSs as a result of writing instruction. Thirdly, there was no attempt to measure effectiveness/successfulness of strategy use, only frequency of use. We cannot tell for example if high and low proficient students who use the same strategy use it equally effectively. Lastly, like all questionnaires, think-aloud and interview studies, it is unable to throw light on the (presumably large) part of the WRS which is automatic and performed below the level of conscious awareness.

References

Alam, M. M. (1993). The use of Arabic in the composing processes of Arab university students writing in English. Unpublished PhD thesis, Indiana University of Pennsylvania, Indiana, PA.

Aljamhoor, A. A. (1986). The English writing process of two Saudi graduate students before and after ESL instruction. Unpublished PhD thesis, Michigan State University, East Lansing, MI.

Alnofal, A. (2003). Arabic first language writing and English second language writing processes: a comparative study. Unpublished PhD thesis, the University of Kansas.

Al-Semari, O. (1993). Saudi students' revising strategies in Arabic and English essays. Unpublished PhD thesis, Michigan State University, East Lansing, MI.

Arndt, V. (1987). Six writers in search of texts: a protocol based study of L1 and L2 writing. *ELT Journal, 41,* 257-266. http://dx.doi.org/10.1093/elt/41.4.257

Beach, R. (1976). Self-evaluation strategies of extensive revisers and non-revisers. *College Composition and Communication*, *27*,160-164. http://dx.doi.org/10.2307/356982

Beare, S. (2000). Differences in content generating and planning processes of adult L1 and L2 proficient writers. Unpublished PhD thesis, Faculty of Education, University of Ottawa, National library of Canada, Canada.

Cohen, A. D. (1998). *Strategies in learning and using a second language*. New York: Addison Wesley Longman.

El-Aswad, A. (2002). A study of the L1 and L2 writing processes and strategies of Arab learners with special refrences to third-year Libyan university students. Unpublished PhD thesis, University of Newcastle, Newcastle University library, UK.

El-Mortaji. (2001). Writing ability and strategies in two discourse types: A cognitive study of multilingual Moroccan university students writing in Arabic (L1) and English (L3). Unpublished PhD thesis, University of Essex, UK.

El-Sayed, A. (1992). Arabic rhetoric and its influence on the English writings of Arab university students. *Indiana Journal of Applied Linguistics*, *18*(2), 43-65.

Flower, L., & Hayes, J. (1981a). A cognitive process theory of writing. *College Composition and Communication*, *33*, 365-387. http://dx.doi.org/10.2307/356600

Flower, L., & Hayes, J. (1981b). Plans that guide the composing process. In Frederiksen, C., & J. Dominic (eds.), *Writing: The nature, development and teaching of written communication* (Volum 2, 39-58). Hillsdale, NJ: Lawrence Erlbaum.

Flower, L., Hayes, J., Carey, L., Schriver, K., & Stratman, J. (1986). Detection diagnosis, and the strategies of revision. *College Composition and Communication*, *37*(1), 16-55.

Gaskill, W. (1986). Revising in Spanish and English as a second language: a process oriented study of composition. Unpublished PhD thesis, University of California, Los Angeles.

Jouhari, A. A. (1996). A process approach for teaching English composition at a Saudi university: Six case study. Unpublished PhD thesis, Indiana University of Pennsylvania, Indiana, PA.

Junju, W. (2004). *An investigation of the writing processes of Chinese EFL learners: subprocesses, strategies and the role of the mother tongue*. Ann Arbor: UMI.

Kieft, M., Rijlaarsdam, G., & Den Berg, H. (2006). Writing as learning tool: Testing the role of students' writing strategies. *European Journal of Psychology of Education*, *XXI*(1), 17-34.

Leki, I. (1995). Coping strategies of ESL students in writing tasks across the curriculum. *TESOL Quarterly*, *29*(2), 235-260. http://dx.doi.org/10.2307/3587624

Li, J. (1999). Revision strategies in English-second-language Academic writing. Unpublished MA thesis,

Queen's University, Ontario, Canada.

Pennington, M. C., & So, S. (1993). Comparing writing process and product across two languages: A study of 6 Singaporean university student writers. *Journal of Second Language Writing*, *2*(1), 41-64.

Perl, S. (1979). The composing process of unskilled college writers. *Research on the Teaching of English*, *13*, 317-336.

Rashid, R. (1996). The composing processes and strategies of four adult undergraduate level native Malay speakers of ESL/EFL: composition, English as a second language. Unpublished PhD thesis. Ohio State University.

Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly*, *19*(2), 229-258.

Raimes, A. (1987). Language proficiency, writing ability, and composition strategies: A study of ESL college student writers. *Language Learning*, *37*, 439-468.

Rubin, J. (1981). Study of cognitive processes in second language learning. *AppliedLinguistics, 2*, 117-131. http://dx.doi.org/10.1093/applin/2.2.117

Stern, H. (1983). *Fundamental concepts of Language teaching*. OUP.

Victori, M. (1999). An analysis of writing knowledge in EFL composing: a case study of two effective and two less effective writers. *System*, *27*(4), 537-555.

Zamel, V. (1983). The composing processes of advance ESL students: six case studies. *TESOL Quarterly*, *17*(2), 165-187. http://dx.doi.org/10.2307/3586647