An Empirical Study of Schema Theory and Its Application in Improving University Students' Writing Ability

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Abstract

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The final copy of this non-thesis paper has been examined by the signatures, and we confirm that both the content and the form meet acceptable presentation standards of scholarly work in the above mentioned discipline

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Abstract

The present study aimed at enhancing university students' writing ability through using schema theory. The study adopted the quasi-experimental pre-posttest experimental-control group design. The participants consisted of 58 English foreign language (EFL) students and 51 EFL professors who had taught essay writing. The students were divided into two groups: 29 students in a control group and 29 students in an experimental group. To gather the data, the researcher used pre and post- essay writing tests, interviews, and a five-point Likert scale questionnaire. The results of the study showed that there was a statistically significant difference between the performance of the experimental group and the control group on the posttest in favor of the experimental group. This indicated that applying schema theory has a positive effect on improving university students' writing ability. Finally, this study recommended that EFL teachers should encourage EFL students to share their prior experiences, knowledge, and information in the pre- writing phase in order to help them improve their writing skills.

Keywords: schema theory, schemata, semantic mapping strategy, brainstorming strategy, KWL strategy, teaching EFL writing students

ملخص الدراسة

هدفت الدراسة الحالية إلى تحسين أداء طالبات الجامعة في كتابة المقال من خلال استخدام نظرية البنية المعرفية. كما تبنت الدراسة المنهج شبه التجريبي المعروف بتصميم القياس القبلي والبعدي للمجموعتين الضابطة والتجريبية. علاوة على ذلك، تكونت عينة الدراسة من ٥٨ طالبة من طالبات اللغة الإنجليزية و ٥١ معلمة من معلمات اللغة الإنجليزية كلغة أجنبية والآتي لديهن خبرة في تدريس مادة كتابة المقال. تم تقسيم العينة إلى مجموعتين ضابطة وتجريبية بالتساوي؛ إضافةً إلى ذلك استخدمت الباحثة لجمع البيانات اختبار الكتابة القبلي والبعدي والمقابلات واستبانة على مقياس "ليكرت الخماسي". بينت نتائج الدراسة أنه يوجد فرق ذي دلالة إحصائية بين أداء المجموعة التجريبية والمجموعة الضابطة في اختبار الكتابة البعدي لصالح المجموعة التجريبية وهذا يدل على أن تطبيق نظرية البنية المعرفية له تأثير إيجابي في تطوير مهارة كتابة المقال لطالبات الجامعة. وأخيراً أوصت الدراسة الحالية: أن يشجع معلمو اللغة الإنجليزية كلغة أجنبية طلاب اللغة الإنجليزية على تبادل ومشاركة خبراتهم السابقة ومعرفتهم ومعلوماتهم في مرحلة ما قبل الكتابة لمساعدتهم في تحسين مهاراتهم الكتابية.

Dedication

This study is dedicated to my parents, Muneera and Saleh, for their prayers and endless love. I would also dedicate this work to my friend and beloved husband, Rayan, who supported and encouraged me during the phase of doing this study.

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Table of Contents

Abstract	1
Dedication	3
Acknowledgements	4
List of Tables	9
List of Figures	10
List of Abbreviations and Acronyms	11
Chapter One	12
1. The Problem and its Significance	12
1.1. Introduction	12
1.2. Context of the Problem	13
1.3. Statement of the Problem	14
1.4. Questions of the study	14
1.5. Significance of the Study	14
1.6. Purpose of the Study	14
1.7. Limitation of the Study	15
1.8. Definition of Terms	15
1.9. Organization of the Remainder of the Study	16

Chapter two	17
2. Review of Literature and Related Studies	17
2.1. Schema Theory and its Types	17
2.2. Strategies for Activating Students' Schema in Writing Classes	17
2.2.1. Brainstorming strategy	18
2.2.2. Semantic mapping strategy	19
2.2.3. What I know, What I want to know, and what I have learned Strategy (KWL)....	20
2.3. Techniques for Building Students' Schema in Writing Classes	21
2.4. Roles of the Teacher in Teaching Writing	21
2.5. Review of Related Studies	22
Chapter Three	25
3. Methodology	25
3.1. Design of the Study	25
3.2. Participants of the Study	25
3.3. Instruments	26
3.3.1. Tests.	26
3.3.2. Interviews.....	27
3.3.3. Questionnaire.	27
3.3.4. Scoring rubrics of assessing students' writing	27
3.4. Instruments Validity.....	27
3.5. Instruments Reliability	27

3.6. Procedures.....	29
Chapter Four	33
4. Data Analysis and Results of the Study	33
4.1. Results of the Study	33
4.1.1. Results related to the first research question.....	33
4.1.2. Results related to the second research question.....	35
4.1.3. Results related to the third research question.	36
Chapter Five	41
5. Discussion and Conclusion	41
5.1. Discussion of the Findings of the Study	41
5.1.1. Findings related to the first research question.	41
5.1.2. Findings related to the second research question.....	42
5.1.3. Findings related to the third research question.	42
5.2. Conclusion	43
5.3. Recommendations.....	43
5.4. Suggestions for Further Research	44
References.....	45
Appendixes	49
Appendix A.....	49
Appendix B	50
Appendix C	51

Appendix D	53
Appendix E	57
Appendix F.....	59
Appendix G.....	60
Appendix H.....	61
Appendix I	62
Appendix J	63
Appendix K.....	64
Appendix L	66
Appendix M	67
Appendix N.....	68
Appendix O.....	69
Appendix P.....	74

List of Tables

Table 1. EFL teachers' profile.	26
Table 2. Cronbach's Alpha.....	28
Table 3. The Pearson correlation coefficient	29
Table 4. The study plan of teaching writing using schema theory.	31
Table 5. Independent sample T-test Comparing the Means between the Experimental Group and the Control Group on the Pre-Test.....	33
Table 6. Independent sample T-test comparing the means between the experimental group and the control group on the Post-Test	34
Table 7. Paired sample T-test comparing the means of the experimental group on the pre- test and post-test.....	34
Table 8. Results of the questionnaire.....	37

List of Figures

Figure 1. Results of the first question.....	39
Figure 2. Results of the second question.....	39

List of Abbreviations and Acronyms

CLT: College of Languages and Translation.

EFL: English foreign language.

IMSIU: Imam Mohammad Ibn Saud Islamic University.

KWL: What I Know, What I Want to know, What I have Learned Strategy.

SM: Semantic Mapping.

TEFL: Teaching English as a Foreign Language.

Chapter One

1. The Problem and its Significance

1.1. Introduction

Writing is one of the productive skills that is used as a tool for communication as well as for reflecting students' creative and critical thinking. At the university level, teachers and professors can judge their students' levels of different cognitive skills, such as analysis, comparison, argumentation, and criticism, via their writings in the class (Hinkel, 2003). It is also considered as the most complex language skill since it can be understood as a skill of interrelated processes of pre-writing, planning, drafting, pausing, reading, revising, editing, and publishing (William, 2003 as cited in Abas & Aziz, 2017).

According to Harmer (2007), productive and receptive language skills are interrelated which means that in order to improve students' writing skill, they must be encouraged by their teachers to read extensively. Extensive reading refers to the action of reading that takes place outside the classroom and it is often done for a pleasure (Harmer, 2007). Thus, if students are motivated to read, they will acquire the receptive skill and as a result, they will be able to write efficiently. This strategy will enrich their minds with knowledge required for writing. In that case, in teaching English writing, asking students about what they know regarding a specific topic is considered as an effective technique in teaching writing (Harmer, 2007). This technique is one of the various techniques used to apply schema theory in teaching language skills.

Since university students are about 21 years old, they come to the classroom with a wide range of experiences that allow teachers to use different strategies of schema. Nunan (1993 cited in Beatty, 2010) stipulates that according to schema theory, the knowledge stored

in our minds is organized into interrelated patterns. Students can make use of available knowledge to learn the new ideas easily by fitting them into the already existing patterns. Schema theory highlights that in comprehending language, people activate relevant schemata allowing them to process and interpret new experiences quickly and efficiently. Schemata can be divided into linguistic schema, content schema, and formal schema (Carrell et al., 1988). All these types play an important role in teaching writing (Sun, 2014). Therefore, teachers should activate and enrich their students' schemata including linguistic, content, and formal schemata. This research aims to investigate the effect of schema theory in improving university students' writing ability at Imam Mohammad Ibn Saud Islamic University (IMSIU).

1.2. Context of the Problem

Since writing skill is complex, students of College of Languages and Translation (CLT) in IMSIU encounter a number of difficulties in the writing courses. These difficulties involve difficulties in grammar, finding the appropriate vocabulary for a particular expression, writing the correct spelling of some words, and organizing ideas that are related to a certain topic (Fareed, et al., 2016). Unfortunately, teachers do not find a successful method to teach writing to university students. It has been suggested that schema theory can be used in teaching writing to overpass all these obstacles (Sun, 2014). Many studies were conducted to prove that schema is a successful theory that can be used to improve students' receptive skills. On the other hand, two studies were conducted in Chinese universities to examine the effectiveness of using schema theory in improving students' productive skills. Thus, in this research, different strategies such as semantic mapping, brainstorming, what I Know, what I want to know, what I have learned (KWL) strategy, and asking students to share their own experiences were used to activate student's schema in Collage of Language

and Translation, and to determine whether or not schema is a successful method that can be used to improve students' writing ability.

1.3. Statement of the Problem

The problem of the current study is demonstrated in university students' poor level in writing. This weakness may be attributed to lack of the methods and techniques that are designed to improve EFL students writing ability. Therefore, this study sought to find an answer to the following questions.

1.4. Questions of the study

- 1.4.1.** Does activating background knowledge or schemata related to a certain topic have a significant effect on university students' writing ability?
- 1.4.2.** From EFL teachers' perspectives, what is the most beneficial and effective type of schema that students should be enriched with in writing classrooms?
- 1.4.3.** To what extent do EFL teachers apply schema theory to writing classes?

1.5. Significance of the Study

The present Study is the first study in IMSIU about the impact of schema theory in improving university students' writing ability. In fact, conducting a study to examine the positive effect of schema theory in improving students' productive skills might be useful for academicians in the field of education for different reasons. It might provide them with various ways and strategies to activate students' schemata in productive skills. It might also help EFL teachers and professors through presenting ways of building students' content, linguistic, and formal schema.

1.6. Purpose of the Study

This study is aimed at measuring whether students who are taught using schema theory gain better achievement or not in writing performance than those who are taught using the

regular method of teaching writing. It also aimed to figure out the most effective and important type of schema that students should be enriched with in writing classrooms. Moreover, the current study sought to explore the degree of applying schema theory to writing classes in CLT at IMSIU.

1.7. Limitation of the Study

This study investigated only the influence of schema theory in improving students' writing skill in 2019. The participants of this study were restricted to female students of CLT in IMSIU. In other words, the study was limited to two classes of third year university students which were randomly chosen. In addition, the interviews and questionnaire were also restricted to female teachers of College of Languages and Translation in IMSIU.

1.8. Definition of Terms

1.8.1. Schema: according to Bartlett (1932 cited in Anderson & Pearson ,1984). schema refers to an active organization of past experiences, prior knowledge, and information that are stored in the student's mind.

1.8.2. Schema theory: "is a theory that highlighted that in comprehending language people activate relevant schemata allowing them to process and interpret new experiences quickly and efficiently" (Richards & Schmidt, 2010).

1.8.3. Schemata: the plural form of schema is schemata. According to Bartlett (1932 cited in Carrell, et al., 1988), Schemata refer to the previously acquired knowledge.

1.8.4. Semantic mapping strategy: "is a pre-writing strategy in which a visual representation of ideas in a text or conceptual relationships within a text is used to assist with the reading of a text. The semantic map may be teacher or student generated" (Richards & Schmidt, 2010).

1.8.5. Brainstorming strategy: “(in teaching writing) brainstorming is a prewriting strategy in which a student or group of students write down as many thoughts as possible on a topic without paying attention to organization, sentence structure or spelling. Brainstorming serves to gather ideas, viewpoints, or ideas related to a writing topic and is said to help the writer produce ideas” (Richards & Schmidt, 2010).

1.8.6. What I Know, what I want to know, what I have learned strategy: KWL is a strategy that is used as a way of motivating students’ thinking skill as well as recalling students’ prior knowledge (Herlina, et al., 2013).

1.9. Organization of the Remainder of the Study

Chapter one outlines the problem and its significance. The following chapters present the researcher’s efforts to explore the questions raised in the introduction. Chapter two presents the review of literature and related studies. Chapter three describes the design of the study that was adopted by the researcher as well as the instruments that were used to collect and analyze the data. Chapter four discusses the results of the study after collecting and analyzing the data. Lastly, chapter five presents the discussion of the findings of the study and the recommendations which were suggested by the researcher.

Chapter two

2. Review of Literature and Related Studies

2.1. Schema Theory and its Types

Schema theory was developed by the psychologist Frederic Bartlett in 1932. Bartlett proposed that people have schemas, or unconscious mental structures, that represent their stored knowledge about the things they have encountered in the world, including background knowledge and information, experiences, and ideas that are organized and stored in memory (Gonzalez & Wille, 2013). Schema theory plays an important role in language teaching because it can help teachers know what additional background information their students may need to complete an assignment (Cook, 1997).

Schema can be divided into three types: content schema, linguistic, and formal schema (Carrell et al., 1988). Content schema refers to the background knowledge about a particular content. It includes prior knowledge about a certain topic, people, culture, and experiences. On the other hand, formal schema refers to the background knowledge of the structure of the language existing in someone's mind. This includes knowledge of styles of writing and using cohesive devices and connectors. Another fundamental type of schema theory is linguistic schema which refers to a student's language and linguistic competence, including background knowledge of vocabulary, grammar, and phonetics (Carrell et al., 1988).

2.2. Strategies for Activating Students' Schema in Writing Classes

Various strategies can be used to activate students' schema in writing classes such as brainstorming, semantic mapping, KWL strategy.

2.2.1. Brainstorming strategy.

Sabarun (2015) described brainstorming as a strategy whereby students create a list of ideas and thoughts related to a particular topic. It is also considered as a creative thinking exercise that can be used with individuals, pairs, and groups as needed. However, Astuti (2013) added that brainstorming can be done through cooperative learning methods in which students can work in groups to gather as much information as they can. When the teachers plan to apply brainstorming strategy to groups, they must ensure that every student participates and shares ideas with the group. Indeed, Crawford, et al., (2005) agreed that Students who practice brainstorming in the pre-writing stage are likely to improve their creative thinking skills.

Brainstorming strategy can be used to activate students' content, linguistic, and formal schema. The teacher can activate students' content schema by asking them to write down their experiences regarding a particular topic. Students' Formal schema can be activated by asking students to make a list of prepositions of place that they have already know. To activate students' linguistic schema, the teacher can ask them to write down all the possible phrases that can be used as alternatives to a particular concept.

As they practice brainstorming, students should use the following steps to improve their writing ability. The first step is to formulate a list through brainstorming. In this phase, students come up with as many words and ideas as they can about a particular topic. In the next step, students edit their lists and look critically to what fits and what should be omitted when writing about the assigned topic. This is also the place to remind students that being a good editor involves correcting ungrammatical sentences and checking spelling (Ifanc, 2010). Thereafter, the students need to organize all their ideas into an outline. The outline should consist of a title, thesis statement, and all their workable ideas for the topic. Finally, students

write their essays based on their ideas in the outline (Sabarun, 2015). Thus, using brainstorming strategies requires introducing the techniques to students, assigning them a topic with a time limit for the assignment, and encouraging them to share their ideas with other students (Crawford et al., 2005).

2.2.2. Semantic mapping strategy.

In writing classrooms, Semantic mapping (SM), mind map, and graphic organizer are alternative names used to describe a diagram that is used by a student to represent their ideas in an organized fashion (Suyanto, 2010). Mah (2011), Stipulates that SM is a strategy used in the pre-writing stage to activate students' schema and previous experiences. SM and brainstorming are similar, but they differ from each other in terms of their presentation. Whereas with brainstorming, students try to think of many as ideas as they can about a topic, in SM, students focus on the relationship between the ideas—how they are related to each other and the topic. In the SM strategy, students are asked to link new ideas with their existing schemas and experiences (Johnson et al., 1986).

AL Johani (2004) argues that students must be motivated to engage with pre-writing activities. She said that using prewriting strategies, such as SM, can help students practice their receptive skill in writing class. This gives them the opportunity to share their ideas with the entire class and to benefit from each other's ideas.

SM strategy can be used to activate students' content, linguistic, and formal schema. The teacher can activate students' content schema by asking students in groups or individually to draw a diagram and write what they know about a certain topic. Students' Formal schema can be activated by asking them to fill in the diagram with as many cohesive devises and connectors as they can. Finally, to activate students' linguistic schema, the

teacher can ask them to write into the semantic map all the words that describe a certain concept.

To apply SM strategy, students should follow a number of steps. First, the teacher writes the title of the topic in the center of the semantic map. Next, the teacher asks the students to share their ideas related to that topic. The teacher also sets up a time-limited group task for the students. In addition, the teacher may assign an essay based on the students' semantic map (Crawford et al., 2005).

2.2.3. What I know, What I want to know, and what I have learned Strategy (KWL).

What I know, what I want to know, and what I have learned (KWL) strategy is a prewriting strategy that can be used to guide students through a text or other information. It can also be used as a way to motivate students to use their thinking skills and to recall their knowledge of assigned topics (Herlina et al., 2013). Many studies have been conducted to examine the usefulness of the KWL strategy in writing classrooms. For example, Herlina et al. (2013) showed that the KWL technique exerts a positive effect on improving writing content, vocabulary, and language use.

In addition, Ogle (1989) stipulated that to apply the KWL strategy, the teacher must first introduce the topic of the lesson to the students. The teacher could either provide students with a graphical organizer KWL table or ask them to create a KWL table by themselves. Next, the teacher asks students to brainstorm and write down what they know about the topic in the first column and what they want to know in the second column. The teacher then adds new ideas that are useful for building their schemas. Finally, students are asked to write down what they learned about the topic. Thereafter, the teacher asks students to write an essay about that topic based on their KWL table.

2.3. Techniques for Building Students' Schema in Writing Classes

EFL teachers should enrich their students with appropriate schemata in order to help them improve their writing skills. Carrell (1988 as cited in Cailing, 2016) stated that it is essential to build students' linguistic schema because if they lack the appropriate knowledge of language, they won't be able to write, translate, and read. Nevertheless, others, such as Sun (2014) also argued that it is important to build students' content, linguistic, and formal schema. Moreover, Sun pointed out that the combination of all types of schema plays an important role in improving writing performance. Therefore, teachers should build up students' content, linguistic, and formal schema in writing classes.

According to Ifanc (2010), teachers can build their students' formal schema by providing a list of contrasting connectives to use in writing an argumentative essay and a list of steps for writing a poem, novel, or essay. In that case, the teacher can encourage students to connect their existing knowledge with new knowledge. Paton and Wilkins (2009) agreed that oral communication plays an important role in building students' content and linguistic schema. When students work cooperatively in groups and share what they know with each other, they learn from each other and build their schema with the help of their collective store of knowledge.

Teachers can enrich their students' linguistic schema by providing them with a list of vocabulary words that can be used to write their essay. Another important tool for building up student schema is the internet. Teachers can encourage their students to use the internet to deepen their knowledge of a particular topic to enrich their content schemas (Sun, 2014).

2.4. Roles of the Teacher in Teaching Writing

There is a general agreement that the major and fundamental role a teacher plays in the classroom is to teach knowledge to students. Other roles the teacher needs to adopt include being a motivator, manager, resource person, and feedback organizer (Harmer, 2007).

When students are motivated, they are able to achieve their learning goals. Thus, the teacher should help students increase their level of motivation by providing information, books, online references, and techniques to assist with their tasks (Harmer, 2007). According to Scarino and Liddicoat (2009), before providing any resource to the students, however, the teacher should critically examine that resource, pay attention to its main aims, what it presents to the students, and in what ways it might be useful.

Archana and Usha Rani (2016) stated that the most important and significant role the teacher can play is in class management. To have a manageable classroom, the teacher has to perform certain duties such as giving the students task instructions, managing the time for the task, and overseeing the discussion when the task has been completed. This role helps the teacher achieve goals easily and successfully (Archana & Usha Rani, 2016).

Another role the teacher needs to adopt is being a feedback provider (Harmer, 2007). Zainuddin (2004) proved that giving positive feedback to students has a significant effect on improving their writing performance. Therefore, Zainuddin suggested that providing feedback to students is an important role that teachers should undertake in their writing classes.

It is evident that teachers undertake many other roles in the classroom. They create a comfortable environment for their students, observe them while they are completing a task, and listen to them when they share about their experiences (Harmer, 2007).

2.5. Review of Related Studies

Sun (2014) investigated the usefulness of schema theory in teaching college-level English writing. The study sample consisted of 67 male and 53 female students from Qingdao University in China. The researcher used pre and posttests, a questionnaire, and an interview to collect data. Students in the experimental and control groups were given a pretest before being exposed to the experimental treatment. Schema theory instruction was given to the

experimental group only. Later, a posttest was given to both groups to examine the difference in their writing performance. Based on the analysis of the collected data, Sun (2014) found that students in the experimental group did better in the posttest than those in the control group. He insisted that to activate and build student schema, there must be a combination of content, formal, and linguistic schemas to improve students' writing ability and to motivate them to write efficiently. Thus, Sun (2014) suggested that teachers should enrich students' schema to let them improve their writing skills.

Cailing (2016) conducted a study in china to examine the effect of Schema theory on the Improvement of the College Students' English Writing. The participants were 120 male and female students from Henan Polytechnic University. In this study, the researcher collected data through pretests, posttests as well as personal interviews. Students were placed randomly into an experimental group and a control group. Both groups took essay writing tests that were served as the pretest and posttest. Whereas the experimental group was taught using the SM strategy only, the control group was taught using the regular method of teaching writing. The results of the pretest and posttest showed that activating students' background knowledge using SM had a positive impact on writing performance. The findings revealed that activating students' content, linguistic, and formal schemas would be effective in improving their writing ability. According to the analysis of the interview, the students in the experimental group had positive attitudes toward schema theory. From their perspective, applying schema theory was important in that it provided them with a supportive learning environment in which the instructor and students can interface with each other throughout the performance of a task. Moreover, it helped the students think of many words related to that topic. This strategy makes writing easy. Therefore, Cailing (2016) proved that schema theory is the best theory to improve student writing performance.

The current study differs from previous studies in that the researcher used more than one schema strategy to activate the student's background knowledge as much as possible. Furthermore, this study is an attempt to determine the most effective and important type of schema that students should be enriched with in writing classes.

Chapter Three

3. Methodology

3.1. Design of the Study

The study investigated the effectiveness of using schema theory in improving students' writing ability. To collect data, the researcher employed the quasi- experimental design called the nonequivalent group design, which uses experimental and control groups as well as pre- and posttests during the course of investigation. Both groups were chosen randomly, although participants were not assigned randomly to the two groups. (Creswell, 2014). The participants in the experimental group were taught using schema theory, whereas participants in the control group were not taught using that theory. The researcher used a mixed methods approach in this study, meaning the researcher used pre-posttests, a questionnaire, and interviews to collect and analyze data.

3.2. Participants of the Study

The participants included 58 third-year students who study writing skill and 51 EFL teachers who teach writing skill to undergraduates, all recruited from CLT at IMSIU. Students were divided into experimental and control groups, each of which consisted of 29 students. Teachers took part separately in formal interviews. Table 1 presents information about EFL teachers who were interviewed.

Table 1

EFL teachers' profile.

No	Name	Degree	Major	Gender	Years of Experience in teaching writing
1.	Rasha Durgham	PhD	Applied linguistics	Female	8
2.	Hanan Alharbi	PhD	Applied linguistics	Female	5
3.	Firyal Almajhad	MA	Linguistics	Female	11
4.	Safa Mahmoud	PhD	Applied linguistics	Female	8
5.	Fayrooz Albuhti	PhD	Applied linguistics	Female	2
6.	Mona tebidi	PhD	Applied linguistics	Female	1
7.	Ashwag Aldaghiri	PhD	Applied linguistics	Female	1
8.	Mona Alwasedi	MA	Linguistics	Female	1
9.	Tahani Alshahrani	PhD	Applied linguistics	Female	1

3.3. Instruments

3.3.1. Tests.

To answer the first question, the researcher used pretests and posttests to investigate whether activating background knowledge or schemata related to a certain topic has a significant effect on university students' writing ability or not. Those tests were taken from the effective academic writing book (Davis and Liss, 2012). Samples of the pre and post-test are presented in Appendices A and B.

3.3.2. Interviews.

To answer the second question, the researcher interviewed EFL teachers about the most useful and effective type of schema to employ when teaching writing. A sample of the interview questions is presented in Appendix C.

3.3.3. Questionnaire.

To answer the third research question, the researcher administrated a questionnaire to 51 EFL teachers who teach writing in CLT at IMSIU. The questionnaire assessed teachers' level of awareness of schema theory and the degree to which they applied schema theory in their classes. The questionnaire is presented in Appendix D.

3.3.4. Scoring rubrics of assessing students' writing.

In this study, the researcher rated students' essays using scoring rubrics that assessed their writing. Appendix E includes the rating standards which were adapted from Jacobs et al. (1981).

3.4. Instruments Validity

Tests, interview questions, and the questionnaire were submitted to specialized jury members for comments and suggested modifications to ensure the validity of the research instruments. Appendix F includes a list of the the specialized jury members who took part in this study to measure the validity of the research instruments.

3.5. Instruments Reliability

After measuring the validity of the research instruments, the researcher distributed the questionnaire to 37 EFL teachers to measure its reliability. The EFL teachers who took part in the pilot study were not included in the final study. Because the questionnaire consisted of 15 close-ended items with a 5-point Likert scale (*Strongly Disagree – Disagree -*

Neutral- Agree - Strongly Agree), and two open-ended questions, the researcher used two methods to assess the questionnaire's reliability. To determine the reliability of the 15 close-ended items, the researcher used an SPSS program to calculate Cronbach's alpha. The results of the questionnaire analysis are shown in Table 2.

Table 2

Cronbach's Alpha for each domain in the questionnaire.

Domains	No. of Items	Cronbach's Alpha
A. Teaching practices concerning activating schema in writing classes.	6	0.746
B. Type of Techniques and activities employed by teachers for activating and building students' schema in the classroom.	7	0.762
C. Teacher's perceptions of the effectiveness of activating student's schema in writing classes.	2	0.816
Total	15	0.766

An instrument is considered reliable when the Cronbach's alpha for all items is higher than 0.70 (Tavakol and Dennick, 2011). As shown in Table 2, the alpha score for the total items in the questionnaire was 0.76, indicating that the questionnaire had an acceptable degree of reliability.

To measure the reliability of the two open-ended questions, the researcher used the interrater reliability method. The researcher did this by correcting EFL teachers' answers to the two open-ended questions and then asking a colleague to correct the same answers. The Pearson correlation coefficients of measurement reliability for the two open-ended questions are presented in the following table.

Table 3

The Pearson correlation coefficient for the two open-ended questions

No. of Questions	N	Pearson Correlation	Sig. (2-tailed)
Q1. To what degree do you activate your students' background knowledge in writing classes?	37	0.773	0.000
Q2. What is the most strategy do you use in order to apply schema theory and activate your students' existing knowledge?	37	0.543	0.009

As shown in Table 3, the Pearson correlation coefficient of measurement reliability for the first question was 0.77, whereas the degree of reliability for the second question was 0.54. This means that the open-ended questions used in this study had a high degree of reliability (Gravetter and Wallnau, 2013).

3.6. Procedures

The experiment spanned three weeks (seven lectures) in an undergraduate-level summer writing course. During the first lecture, the researcher asked students in both the experimental group and the control group to write a well-developed, five-paragraph classification essay on a certain topic; this exercise served as a pretest to ensure that both groups were equivalent. A sample of a student's pretest is presented in Appendix G. With teachers' permission, the researcher then taught the students by herself to ensure that the theory was applied effectively and accurately. The researcher used various schematic strategies, such as semantic mapping, KWL, and brainstorming, but only with the experimental group.

As shown in Table 4, the researcher followed this plan during subsequent lectures. During the second lecture, the researcher introduced the topic of the lesson, which was the organization of a classification essay, and provided students with a KWL chart, which

consisted of three columns. The researcher asked students to divide into groups and brainstorm what they knew about the classification essay; they recorded this information in the first column of the chart. In the second column, the researcher asked students to record what they wanted to know about the classification essay. Based on their responses, the researcher then explained unfamiliar ideas that were needed for building their schema. Finally, the researcher asked students to write down what they learned about the classification essay in the third column of the chart.

During the third lecture, the researcher introduced the main elements of the classification essay and explained the correct way to write a classification essay. The researcher then asked students to divide into groups and choose a topic to represent in a semantic map; the semantic map had to include the purpose of the essay, the audience, the single principle of the essay, multiple categories of that principle, the thesis statement, and various phrasal verbs that could be used in writing a classification essay. After that, the researcher asked students to create an outline for their topic and think of as many ideas as they could that related to that topic. Once they had a list of related ideas, students then had to edit the list by looking critically at what should be mentioned and what should be omitted. Finally, the researcher asked students to write individual essays based on that outline.

As shown in Table 4, the researcher activated students' schemata at the beginning of lecture four by asking them to transfer certain descriptive data into a bar graph, as presented in Appendix L. Then, in lecture five, the researcher gave students a bar graph and asked them to translate that graph into descriptive data. The researcher also had students draw a map and establish all possible logical orders in classifying an idea into multiple categories. Finally, in lecture six, the researcher introduced gerunds by giving students several sentences (as shown in Appendix N) and asking them to determine the gerunds' parts of speech (e.g., whether they

were verbs or nouns). This exercise was intended to activate students' prior knowledge of gerunds.

Table 4

The study plan of teaching writing using schema theory.

Lecture (2 hours)	Lesson	Strategies Used
First Lecture	Pretest (40min)	-----
Second Lecture	The organization of a classification essay.	KWL strategy ^a
Third Lecture	Main elements of the classification essay.	Brainstorming and SM strategy ^b
Fourth Lecture	Use of a bar graph to classify a certain point.	Brainstorming strategy ^c
Fifth Lecture	Analyzing a bar graph into descriptive data and establishing a logical order in classifying an idea into multiple categories	Brainstorming strategy ^d
Sixth lecture	Use of gerunds, causative verbs, and infinitives.	Brainstorming strategy ^e
Seventh lecture	Post-test (40min)	-----

^a see Appendix H. ^b see Appendix I, J, and K. ^c see Appendix L. ^d see Appendix M. ^e see Appendix N

After three weeks, the researcher administered posttests to both the experimental group and the control group to determine whether there was a significant difference between the groups' performances. A sample of a student's posttest is presented in Appendix O. The

researcher evaluated students' essays using scoring rubrics that assessed their writing. The researcher then analyzed their pre- and posttest scores using the SPSS program and compared the mean scores, standard derivations, and t-values of both groups.

After finishing the experiment, the researcher interviewed teachers who taught writing skills. Nine EFL teachers took part in these interviews. The researcher asked them about the most useful kind of schema to employ when teaching writing. The researcher also gave 51 EFL teachers a questionnaire that assessed the degree to which schema theory was applied in writing classes at IMSIU.

Chapter Four

4. Data Analysis and Results of the Study

4.1. Results of the Study

4.1.1. Results related to the first research question.

The first research question which was “Does activating background knowledge or schemata related to a certain topic have a significant effect on university students’ writing ability?”. To answer this question, a comparison between the experimental and the control group was made using the t-tests for independent samples to investigate whether there is a significant difference between the experimental and the control group before applying schema theory (Gravetter and Wallnau, 2013). The results of the comparison on the pretest are shown in table 5.

Table 5

Independent sample T-test Comparing the Means between the Experimental Group and the Control Group on the Pretest

Group	N	Mean	Std. Deviation	T-test			
				DF	T	Sig.	Level of Significance
Control	29	9.8276	4.31003	56	0.334	0.740	Not Significant
Experimental	29	10.1724	3.51597				

Table 5 shows that the mean of the control group is 9.8276, whereas the mean of the experimental group is 10.1724, indicating a little difference was between the means of the experimental and control groups. Moreover, because the level of the significance is 0.740 which is higher than 0.05, it is evident that both groups were equivalent before conducting

the experiment. This indicates no significant difference was between the experimental and the control group.

After conducting the experiment, the researcher conducted the independent samples t-test to make a comparison between the mean of the experimental group and the control group on the posttest as well as to examine any statistically significant difference between the experimental and the control groups on the posttest essay writing test. Table 6 shows the results of the performance of both groups on the posttest.

Table 6

Independent sample T-test comparing the means between the experimental group and the control group on the Post-Test

Group	N	Mean	Std. Deviation	T-test			
				DF	T	Sig.	Level of Significance
Control	29	12.1552	4.01582	56	7.058	0.00**	Significant
Experimental	29	17.7931	1.54265				

** Significance at $\alpha \leq 0.05$

Table 6 reveals that a significant difference between the mean scores of the experimental and control groups because the mean of the control group is 12.2, whereas the mean of the experimental group is 17.8, which is greater than that of the control group. Furthermore, the level of significance is 0.00, which is less than 0.05, indicating that schema theory had a positive effect on improving university students' writing ability.

In addition, a paired sample t-test was conducted to examine any statistically significant difference between the means of the scores of the experimental group on the pre- and posttests. The results of the experimental group performance on the pre and posttests are shown in Table 7.

Table 7

Paired sample T-test comparing the means of the experimental group on the pretest and posttest.

Experimental Group	N	Mean	Std. Deviation	T-test			
				DF	T	Sig.	Level of Significance
Pre- Test	29	10.1724	3.51597	28	14.205	0.00**	Significant
Post-Test	29	17.7931	1.54265				

** Significance at $\alpha \leq 0.05$

Looking at the means of the experimental group on the pretest and on the posttest, it is clear that there is a statistically significant between the performance of the experimental group on the pre and posttests. In addition, the significance level is less than 0.05, which indicates that the performance of the experimental group was improved due to the application of schema theory. Therefore, it is evident that the application of schema theory has an effect on improving students' writing skill.

4.1.2. Results related to the second research question.

The second research question which was "From EFL teachers' perspectives, what is the most beneficial and effective type of schema that students should be enriched with in writing classrooms?". To answer this question, Teachers were interviewed and their responses analyzed along with their answers to the questionnaire. The results showed that most EFL teachers agreed that all types of schema are important to enrich students with in writing classes. The teachers claimed that content, linguistic, and formal schema are interrelated such that a writer must have knowledge of language, structure, and content to write an essay. They also argued that, according to the scoring rubrics for assessing students' writing, a student's writing ability is evaluated in terms of the content, organization, grammar, vocabulary, language, and mechanics. Therefore, students should be presented with

all types of schemas in writing classes because all are required in writing an essay as well as being essential for evaluation (Jacob et al., 1981).

EFL teachers in CLT at IMSIU stated that they build up their students' content schema by asking them to watch videos that address a particular topic. The results of the questionnaire showed that 76.5% of the EFL teachers use group discussion strategies to enrich students' content schema before asking them to write an essay. Another way of building up students' content schema is by guiding them to educational content websites. Among the teachers, 74.5% ask their students to access educational websites designed to improve language learning skills and enrich students' content schema. When it comes to linguistic schema, 82.4% of the EFL teachers provide their students with a list of vocabulary words to enrich their linguistic schema, and 72.6% provide their students with a list of cohesive devices and connectors to enrich their formal schema.

Some EFL teachers argued that content schema is the most important and effective type of schema for students in writing classes. They claimed that good writing depends mainly on content because content has the highest rubric score in the assessment of student writing (Jacob et al., 1981). However, students' writings are also evaluated in terms of other criteria and therefore, teachers should build up their students' content, linguistic, and formal schema in writing classes.

4.1.3. Results related to the third research question.

The third research question which was "to what extent do EFL teachers apply schema theory to writing classes?". To answer this question, the researcher distributed a questionnaire to 51 EFL professors who are teaching writing in CLT at IMSIU. The results of the questionnaire are provided in table 8.

Table 8

Results of the questionnaire.

Statements	Frequency/ present				
	Strongly agree	Agree	undecided	Disagree	Strongly disagree
1. I have a clear idea about the role of schema theory in language learning and teaching.	8 15.7 %	18 35.3 %	13 25.5 %	11 21.6 %	1 2 %
2. I have a clear idea of how to apply schema theory-based strategies in my writing class.	5 9.8%	14 27.5%	13 25.5%	17 33.3%	2 3.9
3. I apply schema theory- based strategies to activate students' schema in my writing class.	5 9.8%	11 21.6%	18 35.3%	14 27.9%	3 5.9%
4. I activate my students' background knowledge about certain topics to teach new information easily.	29 56.8%	19 37.3%	3 5.9%	0 0.0%	0 0.0%
5. I ask my students to share their experiences with their colleagues about a certain topic.	23 45.1%	23 45.1%	2 3.9%	3 5.9%	0 0.0%
6. I use activities that integrate writing with reading such asking students to read a model of an argumentative essay before writing their own essay.	23 45.1%	21 41.2%	5 9.8%	2 3.9%	0 0.0%
7. I use brainstorming strategy to activate students' ideas before writing.	25 49%	23 45.1%	3 5.9%	0 0.0%	0 0.0%
8. I use the know, want to know, learn (KWL) strategy in teaching writing.	7 13.7%	12 23.5%	23 45.1%	8 15.7%	1 2%
9. I ask my students to draw graphic organizers or semantic mapping before writing an essay to increase their understanding of that topic.	15 29.4%	23 45.1%	11 21.6%	2 3.9%	0 0.0%
10. I provide my students with different vocabulary to enrich their linguistic	19	23	7	2	0

schemata in order to help them to write better.	37.3%	45.1%	13.7%	3.9%	0.0%
I provide my students with various cohesive devices and connectors to enrich their formal schema.	13 25.5%	24 47.1%	8 15.7%	6 11.8%	0 0.0%
12. I use group discussion strategy before asking them to write an essay to enrich my students' content schema.	15 29.4%	24 47.1%	9 17.6%	3 5.9%	0 0.0%
13. I ask my students to access different educational websites, that are designed to improve language learners, to enrich their content schemata.	15 29.4%	23 45.1%	5 9.8%	8 15.7%	0 0.0%
14. I found that the KWL strategy is useful in improving students' writing skills.	6 11.8%	18 35.3%	27 52.9%	0 0.0%	0 0.0%
15. I think activating students' prior knowledge helps them understand new information better.	32 62.7%	18 35.3%	1 2%	0 0.0%	0 0.0%

The results of EFL teachers' responses showed that 51% of them have a clear idea about the role of schema theory in language learning and teaching. In response to the second statement "I have a clear idea of how to apply schema theory-based strategies and activities in my writing class," only 37.3% of the EFL teachers indicated that they have enough knowledge to use schema theory-based strategies in their writing classes.

Although only 31.4% of EFL teachers apply schema theory-based strategies to activate their students' schemas in their writing classes, 94.1% of the teachers agreed that activating their students' background knowledge about topics helps them teach new information easily. As shown in Table 8, 90.2% of the EFL teachers let their students share their prior experiences in class as a way of activating their knowledge. Similarly, 86.3% of the EFL teachers use activities that integrate writing with reading such as asking students to

read an argumentative essay before writing their own essay. This indicates that the majority of the EFL teachers apply schema theory in their writing classes, however unconsciously.

Those teachers who apply schema theory in their writing classes use a number of strategies to activate their students' schemas. As shown in Table 8, whereas 94.1 % of the EFL teachers use brainstorming strategies to activate students' ideas before writing, 69.5% of them apply SM strategies by asking their students to create graphic organizers or semantic maps before writing an essay to increase their understanding of the topic. A KWL strategy is used by only 37.2% of the EFL teachers to activate their students' schemas, even though 47.1% believed that the strategy is useful in improving student writing skills. Finally, 98% of the EFL teachers agreed that activating students' prior knowledge helps them understand new information better. It is thus evident that according to EFL teachers, schema theory has a positive effect on improving students' writing skills.

In addition, the results of the two open-ended questions are provided in Figures 1 and 2.

Figure 1. Results of the first question

Figure 1. Results of the second question

As shown in Figure 1, over half of the EFL teachers activate their students' background knowledge in every writing class. They stipulated that activating students' schemas is a crucial step in teaching students to write good essays. The teachers agreed that without sufficient background knowledge, the students would not be able to write efficiently. Therefore, EFL teachers should apply schema theory by activating their students' background knowledge.

Whereas in the study a quarter of the EFL teachers said they activate their students' knowledge in most of their writing classes, 16% apply this theory in only some of their writing classes. Furthermore, 6% of the teachers stated that they never apply schema theory in their writing classes. They likely do not have a clear idea about how to apply schema theory in teaching writing to university students and are not adequately trained in how to use it.

Those teachers who do apply schema theory in their writing classes are using brainstorming, SM, and KWL strategies. As shown in Figure 2, 76% of EFL teachers use brainstorming to apply schema theory and activate their students' existing knowledge. SM strategy is used by 14% of EFL teachers, and the KWL strategy is used by only 4%.

Chapter Five

5. Discussion and Conclusion

5.1. Discussion of the Findings of the Study

The aim of this empirical study was to investigate whether or not there is a significant effect of schema theory in improving university students' writing performance. This study also aimed to figure out the most effective type of schema students should be enriched with in writing classes. Another fundamental objective was to investigate the degree of utilizing schema theory strategy in CLT at IMSIU. The researcher used mixed method to collect data in order to answer the three research questions.

5.1.1. Findings related to the first research question.

The findings regarding the first research question, which was “Does activating background knowledge or schemata related to a certain topic have a significant effect on university students' writing ability?”, revealed that applying schema theory in writing classes has a significant effect in improving university students' writing ability. As it is illustrated in appendix 8 which includes a sample of a student's posttest essay, it is obvious that the student's writing performance, including the content, language, organization, vocabulary, grammar, and mechanics, improved effectively. In that case, it is evident that activating students' prior knowledge helps them improve their writing skill. This shows that the findings of the current study were consistent with the previous studies of Cailing (2016) and Sun (2014) that were conducted in Chinese universities. Furthermore, activating students' schema helped them build a new schema if their schema were specifically activated in groups. To put it simply, in writing classes, students should be encouraged to share their previous knowledge, experiences, and information in groups in order to let other students build their new schemata from their classmates' existing knowledge.

5.1.2. Findings related to the second research question.

The findings regarding the second research question, which was “From EFL teachers’ perspectives, what is the most beneficial and effective type of schema that students should be enriched with in writing classrooms?” revealed that EFL teachers believe that students should be enriched with a combination of all types of schema in writing classes. This means that content, formal, and linguistic schema should be integrated in writing classes since they are interrelated and that each type depends on other types of schema. This shows that the findings of this study were inconsistent with the finding of Carrell (1988) who claims that linguistic schema is the most important type of schema that students should be enriched with. On the other hand, it is obvious that the findings of the current study agreed with the finding of Sun (2014) who insists on the importance of enriching EFL students with all types of schema in writing classes to improve their writing skill. Therefore, EFL teachers should be encouraged to motivate their students to access various websites in order to gain different types of knowledge such as knowledge of the structure of the language, the linguistic competence, the content of a certain topic. Moreover, EFL teachers should activate their students’ schema in groups in order to let other students build a new schema from other students’ existing schema. This technique will help them improve their writing performance. Accordingly, students should acquire new content, formal, and linguistic schema whether extensively or intensively.

5.1.3. Findings related to the third research question.

The findings regarding the third research question, which was “To what extent do EFL teachers apply schema theory to writing classes?”, reveal that most EFL teachers in CLT apply schema theory-based strategies but not to the desired degree. Most of EFL teachers use only the brainstorming strategy in order to apply schema theory. Therefore, teachers need to make use of several schematic strategies in teaching writing such as SM and KWL strategies.

This can be done through conducting and organizing workshops that are designed for the sake of widening teachers' knowledge of teaching writhing as well as for training EFL teachers about how to apply schema theory in teaching writing.

5.2. Conclusion

The current study investigated the effect of schema theory on improving university students' writing performance. At the same time, the study aimed to explore the most effective type of schema that university students should be enriched with in writing classrooms. It also sought to explore the degree of applying schema theory to writing classes in CLT at IMSIU. Based on the findings of the study, it could be concluded that the application of schema theory has a positive effect on improving students' writing skill. However, EFL teachers in CLT at IMSIU apply schema theory in their writing classes but not to the desired degree of application. Furthermore, the findings of the study emphasized that according to EFL teachers' perspectives, students of CLT should be enriched with a combination of linguistic, content, and formal schema since they are interrelated.

5.3. Recommendations

Based on the findings of the present study, the following recommendations are suggested.

1. EFL teachers need to take into consideration the positive effect of schema theory in improving university students' writing ability.
2. EFL teachers should make use of different schema theory strategies including brainstorming, semantic mapping, and KWL strategy in order to activate their students' existing knowledge.
3. EFL teachers are recommended to build up a new schema for their students by making a combination of all types of schema in writing classrooms.

4. EFL teachers are recommended to attend various conferences/ workshops which are related to language pedagogy in order to widen their knowledge of teaching writing skill.
5. EFL teachers should encourage their students to share their prior knowledge before asking them to write an essay.
6. EFL teachers should be encouraged to attend workshops which are designed to train teachers in the application of schema theory in writing classrooms.

5.4. Suggestions for Further Research

After conducting the current study, the researcher recommended some suggestions for further studies.

1. Replicating the current study on a large number of male and female participants in order to generalize the findings.
2. While the current study was applied to university students, it is recommended to conduct a research about schema theory and its application in improving the writing skill among students of other educational levels.
3. Further research is also needed to explore the effect of schema theory on improving speaking, reading, or listening skills.
4. Since the current study investigated the application of schema theory in improving students' writing at IMSIU, there is a need to conduct the same study at other universities in Saudi Arabia.
5. Further research is also needed to compare the effect of activating different types of schema on improving students' writing performance.

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Appendixes

Appendix A

Pre-test

Dear students, this test was designed to identify the effect of schema theory in improving students' writing skill.

Q) Write a well-developed 5 paragraph Classification essay on only one of the following topics:

- What types of websites do you often visit to improve your English language proficiency?
- What are the abilities and skills that effective teacher should possess?
- Various learning resources you are using to gain knowledge.

When writing your essay:

- Write your essay in 40 minutes.

Appendix B

Posttest

Dear students, this test was designed to identify the effect of schema theory in improving students' writing skill.

Q) Write a well-developed 5 paragraph Classification essay on only one of the following topics:

- Different English courses you have taken: translation, linguistics, and literature.
- Different types of media: television, internet, film, newspaper, and books.
- Various methods of transportations: boats, cars, planes, trains, and buses.

When writing your essay:

- You should get benefit from the pre- writing strategy that has been used. “KWL, Brainstorming, or Semantic mapping”.
- Write your essay in 40 minutes.

Appendix C

Interview questions

Aim: This interview will be carried out with EFL teachers in order to investigate the most useful and effective type of schema that students should be enriched with in writing classrooms according to their perspectives.

I would like to ask for your permission to record this conversation.

Instructions

- First, the recording will be kept confidential.
- Second, if at any time you would like me to switch the recorder off, please let me know and I will do.
- Third, the recording of the interview will be transcribed and analyzed.

Do I have your permission to begin recording our discussion? I have 8 questions to ask you today.

- 1) How long have you taught writing as a subject to university students?
- 2) Do you have a clear idea about the concept schema theory?
- 3) Do you have any idea of the types of schema that can be applied to teach writing skill?
- 4) Do you use some schematic strategies such as brainstorming, semantic mapping, predicting, and asking questions in teaching writing?
- 5) From your point of view, which type of schema is the most helpful and important to enrich your students with in writing classrooms?

- 6) Why do you think that this type is the most helpful and important to enrich your students with in the writing classrooms?
- 7) How do you enrich your students with this type?
- 8) Is there anything you want to add concerning teaching writing to university students?

Appendix D
Teachers' questionnaire

Dear professors,

The following questionnaire has been designed to

- 1) Investigate the degree of using schema theory in teaching writing to students of College of Language and Translation.
- 2) Investigate EFL university staff members' perceptions of using schema theory based activities in EFL teaching and learning context.
- 3) Determine the relationship between staff members' perceptions of the usefulness of schema theory based activities and using them in their current teaching practices.

Please read each statement carefully and tick the cell that applies to you.

Personal information

Name.....

Major.....

Academic Degree.....

No	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A- Teaching practices concerning activating schema in writing classes						
1.	I have a clear idea about the role of schema theory in language learning and teaching.					
2.	I have a clear idea of how to apply schema theory based strategies in my writing class					

3.	I apply schema theory based strategies to activate students schema in my writing class.					
4.	I activate my students' background knowledge about certain topics to teach new information easily.					
5.	I ask my students to share their experiences with their colleagues about a certain topic.					
6.	I use activities that integrate writing with reading such asking students to read a model of an argumentative essay before writing their own essay.					

B- Type of Techniques and activities employed by teachers for activating and building students' schema in the classroom.

1.	I use brainstorming strategy to activate students' ideas before writing.					
2.	I use KWL strategy in teaching writing.					
3.	I ask my students to draw graphic organizers or semantic mapping before writing an essay to increase their understanding of that topic.					

4.	I provide my students with different vocabulary to enrich their linguistic schemata in order to help them to write better.					
5.	I provide my students with various cohesive devices and connectors to enrich their formal schema.					
6.	I use group discussion strategy before asking them to write an essay to enrich my students' content schema.					
7.	I ask my students to access different educational website, that are designed to improve language learners, to enrich their content schemata.					

C- Teacher's perceptions of the effectiveness of activating schema in writing class

1.	I found that the KWL strategy is useful in improving students' writing skill.					
2.	I think activating students' prior knowledge help them to understand the new information better.					

Q1) To what degree do you activate your students' background knowledge in writing classes?

[illegible]

Q2) What is the most strategy do you use in order to apply schema theory and activate your students' existing knowledge?

This image shows a full page of white paper with ten horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and extend across the entire width of the page. There is no text or other markings on the paper.

Appendix E

Scoring Rubrics of Assessing Students' Writing

Writing Components	Score value	Level and description of criteria
Content	30-27	EXCELLENT TO VERY GOOD: • knowledgeable • substantive development of thesis • relevant to assigned topic.
	26-22	GOOD TO AVERAGE: • sure knowledge of subject • adequate range • limited development of thesis • mostly relevant to topic but lacks detail.
	21-17	FAIR TO POOR: • limited knowledge of subject • little substance inadequate development of topic.
	16-13	VERY POOR: • does not show knowledge of subject • non-substantive • not pertinent • or not enough to evaluate.
Organization	20-18	EXCELLENT TO VERY GOOD: • fluent expression • ideas clearly stated/ supported • succinct • well-organized • logical sequencing • cohesive.
	17-14	GOOD TO AVERAGE: • somewhat choppy • loosely organized but main ideas stand out • limited support • logical but incomplete sequencing.
	13-10	FAIR TO POOR: • non-fluent • ideas confused or disconnected • lacks logical sequencing and development.
	9-7	VERY POOR: • does not communicate • no organization clearly stated/supported • or not enough to evaluate.
Vocabulary	20-18	EXCELLENT TO VERY GOOD: • sophisticated range • effective word/idiom choice and usage • word form mastery • appropriate register.
	17-14	GOOD TO AVERAGE: • adequate range • occasional errors of word/idiom form, choice and usage but meaning not obscured.
	13-10	FAIR TO POOR: • limited range • frequent errors of word/idiom form, choice, usage but meaning confused or obscured.
	9-7	VERY POOR: • essentially translation • little knowledge of English vocabulary, idioms, word form • or not enough to evaluate.

Language	25-22	<p>EXCELLENT TO VERY GOOD: •effective, complex constructions. •few errors of agreement, tense, number, word order/function, articles, pronouns, and prepositions.</p> <p>GOOD TO AVERAGE: •effective but simple constructions •minor problems in complex constructions •several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions, but meaning seldom obscured.</p> <p>FAIR TO POOR: •major problems in simple/complex constructions •frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions •meaning confused or obscured.</p> <p>VERY POOR: •virtually no mastery of sentence construction rules •dominated by errors. •does not communicate •or not enough to evaluate.</p>
	21-18	
	17-11	
	10-5	
Mechanics	5	<p>EXCELLENT TO VERY GOOD: •demonstrates mastery of conventions •few errors of spelling, punctuation, capitalization, and paragraphing.</p> <p>GOOD TO AVERAGE: •occasional errors of spelling, punctuation, capitalization, paragraphing, but meaning not obscured.</p> <p>FAIR TO POOR: •frequent errors of spelling, punctuation, capitalization, and paragraphing •poor handwriting. •meaning confused or obscured.</p> <p>VERY POOR: •no mastery of conventions dominated by errors of spelling, punctuation, capitalization, and paragraphing •handwriting illegible •or not enough to evaluate.</p>
	4	
	3	
	2	

(Adapted from (H. Jacobs et al., 1981) the composition profile in testing ESL writing (as cited in Reid, 1993).

Appendix F
Jury members list

No	Name	Degree	Major	University
1.	Enas Alshaikh	Assistant professor	linguistics	Imam Mohammed Bin Saud Islamic University
2.	Fayrooz Albuhti	Assistant professor	Applied linguistics	Imam Mohammed Bin Saud Islamic University
3.	Safa abdulhaleem	Associate professor	Applied linguistics	Imam Mohammed Bin Saud Islamic University
4.	Fatima Farid	Assistant professor	Curriculum and methods of TEFL	Majmaah University
5.	Nehal Helmy	Assistant professor	Applied linguistics	Imam Mohammed Bin Saud Islamic University

Appendix G

A sample of a student's pre-test

Helpful Resources

Nowadays, there are many resources to get any informations you want. There are many resources to get benefit from it. One of the resources is the books. Also, the internet. There are some applications such as abcd translation.

^{SP} One of good resources ^{lang} are the books. There are many typis of books ^{easy} that made the way to find any information. There are alot typis that could help the old person or the kids. The informations in the books are true. There is no lie or ~~chang~~ changing in the informations.

The biggest resource, and ~~all~~ all of people get knowledge from it is the internet. There are alot of websites that have alot of informations, and you could get benefit from it. There are websites that suit all the ^{lang} ages. The informations in the internet could be true or false.

These days, the applications are more popular than another resources. There are ~~atlot~~ many kinds of applications that suit with your reourment. Also, there are ^{varities} ~~varities~~ of languages in any application that help any ~~native~~ person to use it.

Finally, there are many resources that help the person to get the knowledge from their ^{helpful} ~~helpful~~ ~~kind~~ kinds of the resources such as books, internet and some applications. Having one of these resources can help you when you face any question.

Appendix H
Applying KWL strategy

KWL Strategy

- First, write down what you know and what you want to know about the classification essay.
- Second, try to write what did you learn about the classification essay.

What I know	What I want to know	What I learned
<p>- How to organize things into categories and give examples.</p> <p>- Sample essay.</p>	<p>- How to write in a good way.</p> <p>- Know the strategies.</p>	<p>- Now The elements of classification essay</p> <p>-</p> <p>عبد الحميد محمد الجبر في العام صديق العتيق</p>

توقيع المشرف/
د. محمد بن إبراهيم الاحمد

Appendix I

Applying SM strategy

- مع الاستعداد
 - بجوي الاستعداد
 - سارا الكاري
 - ملاك اجابر

Appendix J

Applying SM strategy

Identify the groups that have the most extreme differences between and among them. Notice similarities and differences between and among them.

classification

Essay Tradition

Information is organized into meaningful categories or groups and each follows a single/unifying principle

Rahaf Alomair

Appendix K

Applying Brainstorming strategy. 'Writing Outline'

Q) Choose one of the following topics and write down as many ideas as possible which are related to that topic.

- Several abilities and talents you possess that will make you a successful candidate for a post graduate program in college of language and translation.
- Different sources of protein: animal and plant protein.
- ① - Successful steps to get a suitable job in the job market.

I. Introduction

Nowadays having a job became essential.
Finding a suitable job comes with many struggles.
People need to prepare for their future in order
to secure themselves. ✓

Thesis Statement ^{Job}

① A suitable job comes with four main steps which
are graduating with a degree, getting soft skills
courses, leaving CV copies at companies, preparing
for an up coming interview. ✓

II. Body

Your thesis is well structured

1. First paragraph

The first step for getting a suitable

② job is having a proper education. Without
a degree there is no chance of getting a
good job. ✓

excellent! You stated your categories in a logical
order -

③

2. Second paragraph

↔ After graduating with a degree it is a must to take courses that will develop your skills. For example, if a student applies for a job without any previous experience, he or she will find difficulty in the job.

④

3. Third Paragraph

↔ One of the important steps for applying for a job is leaving a copy of your CV every where possible. Therefore, your chances of getting a job will increase. ✓

III. Conclusion

In conclusion, The more you organize your steps the more you will find it an easier experience. The perfect job will take time; therefore, be patient and do not rush it. ✓

I really enjoyed reading your draft. you applied all elements of the classification essay. Therefore, your Essay can be

Students Name:

سارا، لاجاري، فلاك، اجابر

⑤ Considered as a model of the classification essay.

↔ The last step for getting a job is preparing for the interview. Appearance is important as how you look might affect the managers' judgment. Moreover, prepare your speech and do a little research about the company you are going to.

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[Signature]

Scanned with
CamScanner

Appendix L

Applying brainstorming strategy

Brainstorming

Draw a Bar Graph to present your data:

Source

- 1- According to College of language and translation There are four areas of study in English Language. Those areas can be classified into translation, linguistics, literature, and TESL.

- 2- In College of language and translation, students are studying different English courses that can grouped as follow:

In Translation, they are taking 4 courses

In linguistics, they are taking 9 courses

In literature, they are taking 9 courses

In TESL, they are taking only 2 courses

Different English fields

نوف الأحمري
هتون العريفي
نورة الأحمري
ورود المطيري
ديما المنصور

Appendix M

Applying brainstorming strategy

Read the bar graph below. Paraphrase the graph on a separate piece of paper. Include the title, what is being measured, and the most significant findings.

*Skills of job applicant
at Acme Company*

According to skills of job applicant at Acme Company, Experience, Thinking skills, and technical skills show almost similar percentage from 11 to 25. The highest skills in the graph are the basic skills and personal qualities in fact, the basic skill and experience have the most noticeable difference regarding scores.

Appendix N

Applying brainstorming strategy

Use your prior knowledge to answer the following questions

Q) First, Identify the part of speech of the underlined words. Write N if it is a noun, and V if it is a verb.

Q) Second, Write S if the word is a subject, O if the word is an object, and V if the word is a verb.

1) Noura won't go with us. She is studying for her exam.

2) Mona is reading a story.

3) Reading recent studies which are related to your major will help you to widen your knowledge.

4) Noura and Sara enjoy reading books.

عربى
فتوى العرب
أروى الخاصة
هتون

Appendix O

A sample of student's post-test

Applying Semantic Mapping strategy

شماره ۱۰۰

- First, in 10 minutes, Draw a semantic mapping. Write your topic in the center of the semantic map.
- Second, your semantic mapping should include the purpose of your essay, your audience, your single principle, multiple categories of that principle, your thesis statement, different phrasal verbs you can use them in writing a classification essay, and the most important ideas you are going to include in you essay.
- Try to organize your ideas and show the relationship between these ideas.

Applying Brainstorming strategy. 'Writing Outline'

Q) Choose one of the following topics and write down as many ideas as possible which are related to that topic.

- Different English courses you have taken: ¹translation, ²linguistics, and ³literature.
- Different types of media: television, internet, film, newspaper, and books.
- Various methods of transportations: boats, cars, planes, trains, and buses.

Write your outline in 20 minutes.

I. Introduction

Many students are confused about studying English.
You can find a lot of an interesting courses. Every subjects have
their importance. The

Thesis Statement

There are many different types of an English courses.
Such as, translation, linguistic and literature.

II. Body**1. First Point** Translation

The most important course in English is translation. We can
define translation by saying that translation is the process of
translation words or texts from one language into another. Also, there are
many kinds of translation like culture translation, Islamic translation

2. Second Point linguistics are the scientific study of language.

It is an important course after translation. students prefer linguistic more than literature because, it is depend on understanding more than memorizing. Also, it helps the students to understanding English language unlike literature.

3. Third Point However, literature is the less kind of English courses that students are choosing that the others.
It forces them to study the subjects that they do not

interested in. In addition, there is no much benefits to spend many years to focus in study them. However, literature divides into four main kinds.

They are poetry, prose, drama and novel

III. Conclusion

Finally, English courses are more easy and interesting.

Many student will get the benefit from studying them.

The translation are the number one than the linguistic then the literature.

Handwritten signature or mark.

حيا محمد المحيبي

Posttest

Write a well-developed 5 paragraph Classification essay on only one of the following topics:

- Different English courses you have taken: translation, linguistics, and literature.
- Different types of media: television, internet, film, newspaper, and books.
- Various methods of transportations: boats, cars, planes, trains, and buses.

When writing your essay:

- You should get benefit from the pre- writing strategy that has been used. (KWL, Brainstorming, or Semantic mapping).
- Write your essay in 40 minutes.

English Courses

* source: King Saud University
 * principle: English courses

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 د. محمد بن إبراهيم الاحيدب

[Handwritten signature]

Nowadays, many students are ^{very} confused about studying English because ^{of} the ^{SP} varities sections on it. You can find alot of intersting Courses. Each subject has it's own importance, and each one ^{is} different from ^{the} other. There are many chithrents typs of English Courses such as, Translation, Linguistic and Literature.

^{That} According to Saueel univercity, Translation is the highest subject ^{was} taken among students. There are many ^{translation} typs of translation such as, cultural, Islamic, literary. Many people handle this course because it helps in jobs future unlike linguistics and literature.

Linguistics ^{is} are the scientific study of language. It is an important course after translation. Students prefer linguistic more than literature because it depends on understanding more than memorizing. Also, it helps students to understanding English language unlike literature.

However, literature is the smallest section in English that students prefer it. ^{It} ^{refers to what} leads the students to study unintersting subjects. Moreover, there isn't ^{no} any benefit in studying literature even in future. Also, it divides into three main sections which are; poetry, novel, and drama that ^{is} what make it difficult for students.

Finally, English courses are difflerence from each others. Each one has it's feature. Many students can enjoy in learning any section of English courses, but the highest and important course is translation.

Appendix P

Facilitating researcher's task

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

KINGDOM OF SAUDI ARABIA
MINISTRY OF EDUCATION
AL-IMAM MUHAMMAD IBN SAUD ISLAMIC UNIVERSITY
VICE-PRESIDENT FOR
GRADUATE STUDIES & RESEARCH

المملكة العربية السعودية
وزارة التعليم
جامعة الإمام محمد بن سعود الإسلامية
وكيل الجامعة للدراسات العليا والبحوث

الموضوع: تسهيل مهمة الدارس: سارة صالح عبدالرحمن اليوسف

حفظه الله

سعادة عميد كلية اللغات والترجمة

سلام عليكم ورحمة الله وبركاته .. أما بعد :

فأشير إلى رغبة الدارس بكلية اللغات والترجمة بجامعة الإمام محمد ابن سعود الإسلامية: سارة صالح عبدالرحمن اليوسف في إجراء دراسة بعنوان " **An Empirical Study of Schema Theory and Its Application in Improving University Students' Writing Ability** ". استكمالاً لمتطلبات الحصول على درجة الماجستير باللغة الانجليزية.

ونظراً لأن موضوع البحث يتطلب إجراء دراسة ميدانية والحصول على بيانات علمية وإحصائية لذا أمل تسهيل مهمة مقدم الطلب/ سارة صالح عبدالرحمن اليوسف لتطبيق أداة الدراسة وتزويده بالبيانات اللازمة. والله يحفظكم ويرعاكم.

والسلام عليكم ورحمة الله وبركاته.

وكيل الجامعة

للدراستات العليا والبحث العلمي

د. محمود بن سليمان آل محمود