The Effectiveness of Using Constructive Learning Strategies in Teaching English Language on Developing the Achievement of Grammar, Translation, and Critical Thinking Skills for the Third Grade Intermediate Students

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The study aimed to reveal the effectiveness of the integration between some constructive learning strategies in teaching a unit of the English language course to collect translation skills, using grammar, and the acquisition of critical thinking skills for intermediate third grade students in Mecca. Also, it aimed to acknowledge the statistical differences between the modified averages for the study sample groups degrees in the dimensional collecting of grammar and translation skills at the knowledge of the grammar level and using it, and at the macro level for collecting translation and grammar skills after adjusting the old collecting, as well as the knowledge of the statistical differences between the modified averages for the study sample groups in the total telemetric for the critical thinking skills after adjusting the old collecting. To achieve the study objectives, the researcher used the semi-experimental method that had several experimental groups (four groups), and applied it to a sample of intermediate third-grade students in the city of Makkah (99 students) in teaching the unit of the English language course, which is (Healthy Eating) in the second semester in 2011/2012. After using the appropriate statistical methods, the study came to a result that there are no statistically significant differences in the old implementation for the test of skills of academic achievement of grammar, translation, and critical thinking skills, and that there are statistically significant differences in the new implementation due to the four strategies. According to the results of the study, the researcher recommended a number of recommendations including: the necessity to focus on the constructive theory in teaching English language skills, the importance of expanding the use of the suggested integrative oriented and its development in the field of English language teaching, to hold an intensive training courses for teachers of the English language to train them on using the suggested integrative strategy, the emphasis on the importance of the curriculum activities which focus on the integration between the constructive learning strategies, the importance of expanding of scientific research in the field of integrative strategies, and the development of synthesis methods that combine two strategies or more.

Keywords: constructive learning, critical thinking, third grade intermediate students

Introduction

Teaching and learning of the English language in Saudi Arabia faced new directions for development

which was shown in the overall development project for the public education curricula, and the teaching English curricula had a galore luck of it and led to the need to use modern strategies, which ran from the thinking and development of learners to ensure effective teaching and learning of English as a second language from the perspective that teaching thinking has become compulsory under the information revolution. And that is through the curriculum content and the learner's training on how to think by providing a learning environment that develops his ability to be aware of how to think, and how to solve the problems he faces, which help him to draw a clear outline to his thinking, thus to make it easier to perform with high efficiency and to strengthen his ability to analyze and to think in a creative critical thinking, because thinking leads to energizing and raising the learner to learn, and contributes effectively to handling materials, school, classroom experiences that he faces, and the fulfillment of individual adaptation in the contemporary society, and the fulfillment of its goals and ambitions. Therefore, teaching and learning of English as a second language should move from the stage of knowledge to beyond the knowledge stage of meditation in knowledge, understanding, interpretation, and the discovery of its dimensions through research, investigation, and construction strategies. Studies in the use of constructive theory strategies of all kinds have shown its effectiveness in all used fields, despite the differences of many variables, samples, and temporal and spatial boundaries that have been applied by various studies.

Teaching English is to achieve a common purpose, which is to strengthen the learner's language in terms of expression and understanding, and to help him to use it good in his words, oral and written. Constructive theory "Constructivism" is considered as one of the modern theories of learning which is derived into several ways, methods, and strategies of teaching, and upon which a variety of educational models, this theory is interested in building knowledge and acquisition steps (Zaitun, 2003). The education that is based on the constructive theory, leads to smoothing the learners' meaning industry. Thus the English language teaching which is based on constructivism helps learners to understand how to learn, why they learn, how they can explain some information in a more accurate way, and that is by providing experiences and opportunities that encourage them to correct the linguistic performance, because new linguistic expertise is used to correct past experiences. This point of view differs with the idea that the teacher is only a carrier and giver of information and experiences and agrees with the idea that the learner must be a maker for this information and experiences. This is achieved when the learners are not convinced with their limited and obvious beliefs and participate in the activities that challenge their knowledge and previous expertise, and enable them to build a new understanding (Colburn, 1998). The study of Schoenfeld (1992), Fortunato and Hecht (1999), Pugalee (2004) have resulted to the effectiveness of using constructive learning strategies, and its positive role in improving the processes of teaching and learning in general and in the teaching and learning of languages in particular. This was confirmed by the study of all of Hussein (2001), and AVI (2006), and Rasha Ali Din (2007), and the orbit of Khalif (2010) who confirmed the existence of a positive relationship between the uses of constructive learning strategies and improved the performance of students in various educational aspects. So, it was necessary to develop students' thinking in English language lessons, and to improve their performance and cognitive skills by using constructive learning strategies which begin from the thinking that is a mainstay in the teaching of language, which in turn develops the learner higher-order thinking skills which include observation, measurement, classification, conclusion, induction, and forecasting, leading them to express an opinion and judgment with confidence and competence. Also, it contributes to the employment and deepens the knowledge in mind which leads to the development of their language skills, instead of memorization which will be finally forgotten.

Learners in the general education stages in general and students in the middle stage in particular suffer from the weakness of collecting grammar and translation skills in the English language, their inability to recognize the symbols and words, and the difficulty of understanding their meanings. Thus, not being able to use the English grammar correctly, especially at the end of the intermediate stage where the student has studied the English language over the past three years, he is supposed to have a good linguistic supply and to have a skill in using English grammar properly. Perhaps one of the most important reasons for this weakness is obvious shortcoming in the teaching of English language skills for students of average third grade, and after teaching English language methods and strategies for the development of thinking skills because teachers rely on traditional methods in teaching, which result in a decline in the learners motivation to acquire skills, and their inability to link the linguistic performance in the English language with thinking in a way that reveals the link between thinking and language. The development of higher-order thinking skills is an essential goal to teach and learn the language. Thus, the current study is trying to promote the level of English language teaching and link it to critical thinking by taking advantage of the theoretical structural advantages, and using its strategies in teaching the intermediate third-grade students the grammar and translation skills in English language, especially since all the previous studies that have investigated the effect of any learning strategy on constructive collecting skills in general have proven to be effective in achieving better learning.

Therefore, the problem of the current study determined that there is a noticeable weakness in the proficiency level of grammar and translation skills in English language and critical thinking skills of learners. Its roots spread from the beginning of compulsory education of the English language, necessitating the need to promote the level of the intermediate third grade in grammar, translation, and critical thinking skills in English language by taking advantage of the constructive learning strategies that have proven effective in learning and teaching, and that can enhance the learner's thinking capabilities and straighten it. It is also possible for any teacher to use it in his teaching to any material of educational subjects and with any position of the educational teaching positions.

At the global level, the field of the educational researches and studies that look into the instructional strategies has expanded; it includes the study of more than one strategy, and it focuses on the integration between two or more strategies that rely on the constructive theory hypotheses, in an attempt to explore the impact of the integration of these strategies in the results of the educated, and their attitudes. Complementary strategies vary among each other in terms of: its constituent strategies group, methods of using each of them, and the degree of independence or merger with each other, including the study of (Bonnie Day, 2001), and the study of Sungur, Tekkaya, and Geban (2001), which brought together the conceptual change and conceptual maps texts, the study of Lehman, Carter, and Kahle (1985), which combined between the conceptual map and the cognitive scheme "V" and the study of Roth and Roychoudhury (1993). Also, Okebukola (1992) studied the effect of teaching strategy which is based on the integration of conceptual maps with cooperative learning. Some studies, educational means, and teaching methods in the learning cycle stages were introduced, and Dwyer and Lopez (2001) used the computerized simulation. Also, Gerber, Brovey, and Price (2001) used the teaching technique like computer and video and collected another strategy between the strategies of conceptual map and learning cycle. Odom and Kelly (1999) carried out the new strategy in a manner involving the use of learning courses and building the conceptual maps (each separately), and distributed it on the science lessons without changing its essence and confirmed that the strategy which combined between these two methods provided learners with the necessary concepts of the studied phenomenon; it also sequentially organizes the

cognitive structure for them and helps to form meanings for the new concepts so the linking process between concepts and varied activities is done appropriately. On the Arabic level, the study of Yateem (2006) has investigated the effect of combining between the constructive teaching strategies, the learning and concepts maps courses in the students' attitudes toward science.

The current study believes that the combining between the constructive learning strategies in a true complementary manner can achieve the benefit, which is supposed to be provided by those individual strategies, and that the bulk of benefit from the advantages of such strategies lies in the used complementary way. Integration requires not only combining the three strategies, but also integrating them, that is what this study is trying to achieve, whereas Yateem's study (2006) benefited in selecting the learning course and concepts maps strategies. But it increased by KWL strategy which emphasizes the past experience, and focuses on the needs of learners and agrees with it in the used complementary way in integrating them and not only combining them. Hence, the current study was to determine the effectiveness of some constructive learning strategies (KWL, concept maps, and learning course) in teaching a unit of the English language course in collecting grammar and translation skills and gaining critical thinking skills for the intermediate third-grade students in Mecca. Thus, the study problem is determined by answering the following question: What is the effectiveness of the integration between some constructive learning strategies in teaching a unit of the English language course on the posteriori final outcome for collecting and gaining critical thinking skills for the intermediate third-grade students in Mecca?

Hypotheses of the Study

The first hypothesis: There are statistically significant differences between the modified averages for groups in the study sample in the after collecting for grammar and translation skills at the level of grammar knowledge after adjusting the past collecting.

The second hypothesis: There are statistically significant differences between the modified averages for groups in the study sample in the after collecting for grammar and translation skills at the level of using grammar after adjusting the past collecting.

The third hypothesis: There are statistically significant differences between the modified averages for groups in the study sample in the after collecting for grammar and translation skills at the level of translation after adjusting the past collecting.

The fourth hypothesis: There are statistically significant differences between the modified averages for groups in the study sample in the after total collecting for grammar and translation skills after adjusting the past collecting.

The fifth hypothesis: There are statistically significant differences between the modified averages for groups in the study sample in the after total measurement for critical thinking skills after adjusting the past measurement.

Objectives of the Study

The current study aims to:

(1) To focus on the effectiveness of using some constructive learning strategies in teaching a unit of the English language course on the final outcome posteriori for collecting translation skills and using critical thinking skills among the average third-grade students in Makkah;

(2) To focus on a statistical function differences in the after collecting of grammar and translation to the

study sample from the average third-grade students after adjusting the past collecting;

(3) To focus on the statistically function differences in gaining critical thinking skills in the study sample after adjusting the past collecting.

Importance of the Study

The current study importance is shown in the following:

- (1) Enlighten teachers with the necessary steps and methods to use constructive learning strategies;
- (2) Taking advantage of the current study results in the developing the teaching strategies in general and teaching English language strategies in particular in presenting strategies that are ranged in providing knowledge, and provoking thinking.

The Study Limits

The current study is limited to the following:

- (1) To focus on the effectiveness of using constructive learning strategies (KWL, concepts maps, and the learning cycle) to collect grammar and translation skills, and developing the critical thinking skills of the average third-grade students;
- (2) Unit (13) of the English language book on the Mediterranean scheduled third-grade students (Healthy Eating) of the second semester of the year (2011/2012).

Teaching English and constructive learning strategies:

Constructive theory (constructivism) is considered one of the modern learning theories which are derived into many ways, methods, and strategies for teaching, and it is based on a variety of educational models. This theory is interested in building knowledge and acquisition steps (Zaitun, 2003), also multiple teaching and structural learning models, which are: Learning course, the model shape(V), the realistic model, structural analysis model, Posner and his colleagues model, the learning strategy that is centered on the problem, the structural learning model. The detailed teaching model (Sabri & Taj al-Din, 2000), Fethiye Watermelon (2007, p. 315) added the strategy of (KWL) to those strategy types, concepts maps, self-wonderings, and strengthened previous knowledge and (predict, select, add, write down), modeling, collaborative learning, and (read, ask yourself, re-drafting).

Due to the nature of the language that related to thinking directly it was one of the deepest and most important methods of learning and teaching it to raise the level of acquiring its skills for students. The learner is put in the place of the researcher and explorer; so teaching the language is considered a fertility specialty for the development of diverse thinking methods. The development of thinking is one of the most important objectives of teaching and learning of the language of any kind. Because language is a fertile specialty to develop the thinking skills; due to its ability to increase thinking challenging the mind while confronting many phenomena and natural and vital events. Mazrato (2004) mentioned that the student exercises thinking during practicing active learning which includes knowledge and skill operations that can be shown in observation, reproduction, classification, organization, design, and other cognitive and processes skills (27); it is necessary to diverse in using the teaching methods and strategies that serve the linguistic material nature; the researcher has gone from there to use KWL strategy, the concept map and individual and integrated learning course to develop grammar, translation, and critical thinking skills in English language rapporteur third grade average; those constructive strategies seek to develop thinking for students, and contribute to develop and follow-up understanding, and the employment of knowledge by linking it to their lives; therefore, there is a consensus

between the objectives of these strategies and what teaching language seeks to achieve. Also, doing educational activities and the diversity in teaching methods and strategies has a great importance in the realms of innovation and discovery and development of all types of thinking.

KWL Strategy

It is considered one of the constructive learning strategies, each of Olayan (2005), and Abu Gado and Novell (2007) agreed that this strategy was discovered by Donnaogle in 1986 in America. It is known by its capacity of use and flexibility; so that the teacher can adapt with it to suit the nature of the teaching position and the quality of students. It is also known by specific mentality procedures that seek adjustment, surveillance, command, and control. Each of Olayan (2005), Alhasry (2006), and Obujado and Novell (2007) agreed that this strategy consists of three things: (1) K: What do we know? (2) W: What do we want to learn? (3) L: What have we learned? Olayan (2005) added that in addition to these three steps devised by Donaogle, Carr adds the information summary, so it is a preliminary strategy that reminds the students of what they know about the subject, writes down what they want to know, and then records what they have learned, with a summary of what has been learned. It leads to thinking, and contributes to achieve many educational goals. Kiev and Alberg (1995), swartz (2001), and AVI (2006) think that it contributes to instill confidence in the hearts of students, and give them the opportunity to express themselves, give them enough time to think and reach the correct answers, turn their attention to the self-thinking, upgrade to advanced levels of thinking, and teach them how to be distinguished intellectuals in their thinking. And by that, it helps the learner to move from the known to the unknown, and enables talented students to put their awareness in what they know and to do the tasks required from them according to the standard methods.

That is what the studies of KWL strategy, concepts maps, and the learning course are achieving. They provide the learner with a variety of practical activities including display, connectivity, conclusion, organization and realization of relations, which leads it to criticism and judgment.

Concept Maps Strategy

In this strategy, the concepts are arranged in a pyramidal sequential order, so the concepts that are most general and comprehensive are at the top of the pyramid, and the concepts that are the most specific are at the pyramid base, then the horizontal or vertical relationships links between these concepts that are clarified. Mister (2000) pointed out that the concepts maps are based on Ausubel theory (p. 207). Novak and Gowin use Ausubel ideas which are related to the meaningful reception learning in inventing teaching strategy using the concepts maps, so real integration with the cognitive structure of the learner happen to the new information, and then the importance of the previous information of the learner, which Ausubel considered the crucial factor.

Kalick (2003) stressed that the concepts maps work on building brain habits that are associated with brainstorming and graphical regulator; they facilitate four brain habits: questioning and problem solving, data collection using all senses, thinking in the way of thinking, and listening with understating and sympathy. Amer (2009) considered that the concepts maps integrate between visual presentations and cognitive skills and patterns, because they encourage learners to see and talk about their thinking, and to enhance their knowledge.

All methodological steps to build any concept map whatever its kind or learning subject is all the same in accordance to what khataibah (2005) and Nador (2009) agreed on. The first step is to select a subject, to choose key words and to put lines under them, then to classify the concepts into general and particular, after reading the text and taking out the concepts from it. After that the concepts that are related classified; the most general

concepts placed at the top of the map followed by the less degree in the next level, then the concepts are arranged in two rows such as two-dimensional symmetrical path map, and the concepts that are related to each other are linked by lines. After writing the connecting words, which connect between these concepts on the lines, the map gets revised to ensure its validity for teaching.

Clarke (1991), Piercy (1997) and Al-Hosary (2006) mentioned that the concept maps classify things and situations, define the main idea, organize the concept, and link between concepts groups, things, and events, achieve the meaningful learning, help to evaluate understanding level for the students and to develop the highest thinking abilities for them. It also regulates the cognitive framework in an integrated pattern, and it is an effective way to retain knowledge and not to forget it (Beydogan & Bayindir, 2010). Study shows the effectiveness of using the concepts maps in teaching linguistic grammar compared to usual manner, especially in understanding abstract linguistic grammar and explaining the relations between the sentences and giving examples on the different linguistic grammar for the students.

Learning Cycle Strategy

Al-kasbany (2008) defines it as a teaching method that derives its philosophical framework from Piaget ideas in cognitive development and depends on the equal activity for each of the teacher and the students through three stages: exploration in which the learners learn new ideas through their works and activities, concept introduction in which the learners face new concepts that have a direct relation to the discovered subjects in the first stage, and concept application in which the learners practice using the new concepts in a new sequences. This strategy helps the learners to build concepts and develop their concept structure. Thus, it is linked to the strategy of concept maps closely, and resemble with it in some steps. There were numerous studies that investigated the effectiveness of a strategy session of learning in the development of learning and thinking; some of them used learning cycle in a subject that it is hard to be learned in another strategy (Hemler & King, 1996; Walters & Sunal, 1999; Lavoie, 1999; Beiseherz, Dantonio, & Richardson, 2000; Cavallo & Dunphy, 2002) and the results showed positive effect on the students marks. The students gained scientific concept, and their scientific and critical thinking developed after using learning cycle.

Considering the importance of KWL strategy, map concept and the cycle of learning have been targeted by many of the previous studies. The most important of these studies (Donnelly, 1996), which aimed to identify the effectiveness of the strategy (KWL) is to instill higher-order thinking, and to improve academic performance. The researcher used semi experimental method on a sample of university students studying sciences in Florida State, and the results of the study showed the superiority of the experimental group to the control group. Then came the Olayan study (2005) a theoretical study targeted KWL strategy in reading teaching, and came to define its concept and its implementation steps; it also showed the importance of education in the learning and building knowledge and thinking. In the same year, Zainab Al-Shammary's study (2005) investigated the impact of using self- table strategy in developing reading comprehension in Article and literature course with the intermediate first-grade students, and the result was the superiority of the experimental group to the control group in comprehending the article and the literature course. After that Al-Habashneh (2006) held a study aimed to investigate the effect of teaching using individual learning and collaborative learning based on conceptual maps strategy in expression writing and in students trends in the basic stages in Jordan and so, and the study showed that there is a statistically significant differences between the average performance of students in the three groups in the expression writing for the benefit of the two

experimental groups separately. Then Rasha Ali Din (2007) held a study aimed to identify the effectiveness of the use of strategies (KWL), self-questioning, and thinking aloud. She used semi-experimental method on the sociology unity for second and third secondary grade, and consisted of study tools in achievement test and critic thinking test, and the results showed the superiority of the experimental group to the control group.

In the same year, Suhaimi (2007) held a study, which revealed the effectiveness of teaching using concept maps in academic achievement among the sixth grade students in Qunfudah Province, Saudi Arabia, and it used the grade test as a tool. The study found the presence of statistically significant differences between the average degrees of the two groups of the study in the dimensional application of the grade test for the experimental group benefit. Also, Hafez (2007) study's results showed the effectiveness of a program based on the five-year learning cycle in the development of alphabetic writing skills for the primary school students.

A study that Hlepea (2010) did about the effectiveness of the learning cycle in developing rhetorical concepts learning on Azhari first secondary grade students. Then Muhanna (1431) held a study, which aimed to investigate the effect of using cognitive maps in developing the skill of writing medium "Hamza" for the intermediate third grade students in the city of Riyadh, Saudi Arabia. The study was a quasi-experimental approach, applied to a sample of 30 students; it used the grade test which was used before and after, sooner and postponed. And its results showed improvement in writing "AlHamza" for the third grade students sooner and postponed. Blue (1432) study also found the effective use of learning cycle strategy in teaching the fifth-grade students in developing primary collection of knowledge growth and gaining written expression skills and social skills.

Critical Thinking

Critical thinking was considered as one of the educational issues, which educators and psychologists started to give it great attention in recent decades, as one of the important keys to ensure effective cognitive development, which allowed an individual using the maximum mental energies to interact positively with its environment, and to face the conditions of life, and meet the conditions of life in which interests intertwined and demands increased, and achieve success and adapt to developments in this life. Taimeh (2007) suggested that an individual who has the ability to think critically is independent in his thinking, and able to make sound decisions in his life (p. 42). Jarwan (2007) added that critical thinking requires skills in the use of the rules of logic and reasoning, and requires judgment on the part of the individual who exercises, which involves a set of thinking skills that can be practiced and finely mastered (p. 26).

There are four essential elements for the thinking process to be successful: a qualified effective teacher, which represents the most important elements of the success of the process of the desired thinking, incentive learning environment to provoke thinking, such as the diversity and multiplicity of methods and strategies of teaching, and educational activities to suit individual differences. This is what the current study seeks to achieve through the integration between constructivist learning strategies to develop critical thinking skills and translation rules to the intermediate the third grade student, due to the importance of critical thinking skills and the need to improve its skills, and the language and thought are linked closely. The production of the operative language attempting, many of Arab and foreign studies and research have focused on developing critical thinking skills through the teaching of the language; where a study (Atwell, 1994) reached that the writing and thinking processes are linked to each other, and cannot be separated. Then Hussein (2001) study aimed to submit a proposed strategy for developing some critical thinking skills through literary texts at the junior high

school students. Also, pugalee (2004) held a study showing that there is a statistically significant difference in favor of the experimental group in thinking and in oral and writing performance. In a study conducted by the Falak Khalif (2010) aimed to investigate the effect of a training program based on the trend of operations in writing. A study sample consisted of 55 female students from the intermediate third grade. It has resulted in the existence of a statistically significant difference between the average performances of the third grade students on the paragraphs of the dimensional testing of critical thinking for the experimental group.

Application Procedures for the Study

The Curriculum

To answer the study question and test the hypothesis, the researcher used semi-experimental approach, which aims to verify the effectiveness of the integration between constructivist learning strategies (concept map strategy , KWL strategy and learning cycle strategy) in the development of grammar and translation skills of the third-grade students and the development of critical thinking skills in the field of conclusion, discrimination, drawing conclusions ,interpreting the results and evaluation. The semi-experimental approach with multiple experimental groups was used according to the following schedule:

Table 1

Semi-experimental Design of Study

	KWL	Concept maps	Learning cycle	Complementary strategy
Using grammar and translation skills test	$O_1A_1X1O_2A_2$	$O_1A_1X2O_2A_2$	$O_1A_1X3O_2A_2$	
Critical thinking skills test.				$O_1A_1X4O_2A_2$

Notes. X1: an experimental treatment for KWL strategy; X2: experimental treatment for conceptual map strategy; X3: experimental treatment for learning cycle strategy; X4: experimental treatment of integrative strategy. O1: previous grades test; O2: posttest dimensional grades test. A1: previous critical thinking test; A2: posttest critical thinking test.

The Study Variables

The variables in the study include: the independent variable which is the experimental variable; the constructivist learning strategies (concept map, KWL, and learning cycle) as whole and single. The dependent variable is the collection of knowledge of using the skills of translation and grammar in the English language and critical thinking skills.

The Study Population and Its Sample

The researcher used the regular random sample method. Four intermediate schools were chosen in Mecca in a randomly regularly way, and it covered all the educational centers in Mecca (east, west, north, and center), choosing a classroom from the third grade from all the chosen schools. The first experimental group is from Al-Yamamah School and they are 25 students; the second experimental group is from Ibn al-Qayyim school and they are 26 students; the third experimental group is from Zaid bin Haritha School and they are 24 students, and the fourth experimental group is from Jerusalem school and they are 24 students. This was done at random distribution. The sample volume was 99 students. So the study society is represented in the entire third grade student in Mecca.

The Study Tools

Its building, setting, and its applications procedures are as followes. The first is the grade test for the grammar and translation.

The grade test for translation skills and using grammar preparation has been through many stages:

(1) Identifying the test's purpose which is the education collection measurements for the third grade students in the second semester in the unit of (healthy eating) in the level of using and knowing translation grammar;

(2) Preparing the properties table for the grade test, which will show the percentage for each of the six cognitive levels, and the percentage of the relative weighs is distributed on the elements of the test;

(3) Framing the elements of the test in its initial state, on a multiple choice format, and initially the words count was 75 words, and then putting the test instructions, and how to deal with the answers: Where each correct answer is graded one mark, and a zero of the wrong answer;

(4) Displaying the test on a number of arbitrators specialists in the field to verify the apparent honesty, where arbitrators confirm how the test is reasonable and appropriate for the individual himself, also how the test is linked to the measured variables, as the content veracity has been verified which is the extent of the test items representation for the content to be measured, and the agreement extent between the weight ratios. They confirm its validity to measure the study subject from the inside and from the outside, and their opinions are taken under consideration and they make adjustments that are subjected by them, whom agree on deleting five sections. The grade test number has become 70 in knowing and using grammar test;

(5) The tests was tested on a sample of 25 third grade students from outside of the current sample to calculate the easiness and difficulty and excellence factors, and the words that have an easiness factor between 0.3–0.8 were accepted, and so were the words of excellence factor above 0.3. And according to the excellence factor, five sections were omitted. And according to the opinions of the judges and the excellence, easiness, and difficulty factors, the numbers of words became 60 in its final state .and the time for test was agreed to be 35 minutes;

(6) Measuring the stability coefficient; by using the re-applying method where it reached (0.781), and by using the Alfa Cronbach method, where stability coefficient reached (0.92) which was a percentage/rate that led us to consider completing the study.

Table 2

Cronbach's Alpha Reliability Coefficient for Achievement Test

Sub-standards	Cronbach's Alpha	Number of paragraphs
Translation	0.69	12
Grammar knowledge	0.81	34
Grammar use	0.82	14
Total	0.92	60

The second is critical thinking test.

The preparation of critical thinking test in the English language has gone through many stages:

(1) Identifying the goal of the critical thinking test: aims to measure the ability of the average third-grade students to think critically;

(2) Identifying the critical thinking skills: Where five basic skills were identified in the light of the model (Watson & Glasser, 1994, pp. 9-10) which is based on the following skills: Conclusion, assumptions, the ability to draw conclusions and interpret the results, the ability to evaluate arguments, the researcher stated every skill with a sub-skill, and thus the critical thinking test phrases became 60 phrases that are related to some scientific

issues related to the topics of the English language at the average third-grade students in the first semester through the search for alternatives related to these themes in the light of the specified skills in the model, and determine the best alternatives in the light of the facts and information provided;

(3) Generating alternatives: the researcher relied on the views of specialists and research literature and measurement in the same field to generate the majority of the proposed alternatives which were shown in three proposed alternatives for each phrase, to be trade-offs among the alternatives offered by the test in order to select the most appropriate alternative. That was after scrutinized reading, in the light of the facts and provided information on the subject, allowing the student to criticize, to balance, and to express an opinion;

(4) Designing the test by providing special instructions to answer its paragraphs, and then showing problems in the light of the raised issues in the English language topics, followed by the submission of three alternatives to solve the problem; where the student chooses the alternative that he believes is the best, these alternatives degrees have been estimated in the scale according to the alternative to (3.2, 1) so that the best alternative takes three degrees, while the alternative is given at least one degree;

(5) Displaying critical thinking test on a number of arbitrators to express their opinions and proposals on the clarity of his words, its accurate formulation, and the appropriateness of skills for students of third grade average, The arbitrators proposed to amend certain terms and proposed alternatives; to become clearer, after taking the views of the arbitrators, after deletion and modification, the critical thinking scale became 51 phrases in its final image;

(6) Trying critical thinking test on an experimental sample consists of 25 students from the third grade average, from outside the study sample; to test how steady the critical thinking test is, by using the re-experiment it has reached (.782), and using Cronbach alfa equation, the overall steady factories have reached (0.891), which will lead us to use the scale, as was the appropriate time to answer the critical thinking test, which reached an average of 40/D.

The study steps applications are:

(1) Interviewing English language teachers in the selected schools, choosing the teachers who expresses interest and desire to participate in the application of the study, and teaching selected strategies, and train them according to classes and subjects that they teach;

(2) Applying each of the achievement test, and the test of critical thinking on the study groups before teaching, in order to determine the level of students in each of translation skills and the use of grammar and critical thinking skills;

(3) Teaching the subjects of the (Healthy Eating) unit by using (KWL) strategy in teaching the skills of translation and by grammars for the students of the first experimental group, teaching the students of the second experimental group by using concept maps, and teaching the students of the third group by using the strategy of the learning cycle;

(4) Applying the integrative strategy on the students of the forth experimental group as the following:

a. Concluding the lesson's topic by determining the previous concepts that are associated with it, then reviewing these concepts and writing them down in a KWL scheme;

b. Performing exploratory activities through cooperative groups to determine what concepts could be learnt from these activities and then writing them down in a KWL scheme. Because the completion of the concepts maps with the learning cycles starts form this step, which leads to new concepts;

c. Determining these new concepts and clarifying their meanings by search and review, then drawing the relations among these concepts in a concepts map;

d. Testing other applications on the concepts by performing expansionist activities, and concluding what has been learnt from and writing it down in a KWL scheme;

e. Discussing what has been learnt and summarizing it.

The following Figure 1 summarizes the steps of the integrative merge among the chosen strategies of the constructive learning:

Figure 1. Integrative strategies scheme (researcher's preparation).

The Study Results and Discussion

Before checking on the hypotheses of the study, one-sample Kolmogorov-Smirnov test has been applied to it to check on the moderation of the normal distribution. The following Table 3 shows the check on result.

Table 3

Homogeneity of Study Groups

Homogeneity of the tendency of the "after" values		Homogeneity of the tendency of the "before" values		Standard deviation		Average		Variables	
Significance	F	Significance	F	After	Before	After	Before		
0.801 g.d	0.9	0.234 g.d	1.392	0.7	1.7	11.5	2.4	KWL	Acknowledging grammars
				0.4	1.9	11.8	2.0	Concept map	
				0.6	2.9	11.7	2.0	Learning cycle	
				0.3	1.4	12.9	2.4	Integration	
0.526 g.d	0.406	0.090 g.d	7.2	1.8	7.4	32.6	4.3	KWL	Using grammars
				1.4	7.0	32.6	4.0	Concept map	

0.303 g.d	1.081	0.730 g.d	0.120	1.6	7.7	32.3	5.2	Learning cycle	Translation
				0.7	3.8	37.0	5.3	Integration	
				2.5	4.4	12.0	2.00	KWL	
				0.8	2.4	12.1	8.0	Concept map	
0.366 g.d	0.830	0.590 g.d	0.294	1.1	3.1	12.3	9.2	Learning cycle	Total
				3.1	0.8	15.2	9.7	Integration	
				6.2	2.2	56.1	8.7	KWL	
				6.8	1.1	56.6	8.0	Concept map	
0.084 g.d	1.26	0.24 g.d	1.029	6.9	3.3	56.3	9.2	Learning cycle	Critical thinking
				9.2	6.0	64.8	9.7	Integration	
				0.8	2.4	12.1	2.0	KWL	
				1.4	7.0	32.6	4.0	Concept map	
				0.6	2.9	11.7	2.0	Learning cycle	
				0.3	1.4	12.9	2.4	Integration	

The table shows that the values of the statistical significance are more than 0.05, which indicates that the distribution is moderate. And the parametric statistic such as contrast accompanying analysis can be used for testing the hypotheses.

First hypothesis. There are differences among the groups of the study sample in the “after” values achievement of the translation and the grammar skills. These differences have a statistical significance and are showed after adjusting the “before” values. The researcher used the contrast analysis (ANACOVA) to check on this hypothesis and to find the differences if there is any in the scholastic achievement of the translation and the grammar skills on the level of acknowledging the grammars. The following Table 4 shows the results of the contrast analysis:

Table 4

Statistical Differences Groups of Study Samples in Grammars Examination

Change source	Squares summation	Freedom levels	Squares average	F value	Significance level
“Before” application	0.787	1	0.787	3.081	0.082
Strategies	4.315	3	1.43	5.631	0.01
Mistake	24.52	96			
Average summation	29.990	103			

The table shows that there are no statistical differences in the “before” application for the scholastic achievement on the grammar and translation acknowledging level. Also, the table shows that there are statistical differences in the “after” application because of the four strategies. F value became 5.631 on the 0.01 statistical significance level, which is less than 0.05. “after” values analysis was performed to know the directions of the differences by using Scheffe’e test because there are differences in the “after” values that showed after neutralizing the influence of the “After” application. The following table shows the directions of the differences.

Table 5

Statistical Differences Groups of Study Samples in Grammars Examination

Strategy	Averages differences	Standard mistake	Significance Possibility
KWL	Concept map	0.302	0.147
	Learning cycle	0.128	0.145

	integration	0.385(*)	0.146	0.010
Concept map	KWL	0.302	0.147	0.053
	Learning cycle	0.173	0.146	0.238
	integration	0.083(*)	0.147	0.004
Learning cycle	KWL	0.128	0.145	0.377
	Concept map	0.173	0.146	0.238
	integration	*0.256	0.145	0.009
Integration * significance on 0.05	KWL	*0.385	0.146	0.010
	Concept map	*0.083	0.147	0.004
	Learning cycle	*0.256	0.145	0.009

Table 5 shows that there is statistical difference among the groups that are educated using the strategies of constructive learning, KWL, concept map, learning cycle, and integration strategy. This difference is showed at significance values that are less than 0.05 and its values are 0.009, 0.004, and 0.010, which indicates that using the strategies all together is more effective than relying on one strategy.

Second hypothesis. There are differences among the groups of the study sample in the “after” values achievement of the translation and the grammar skills. These differences have a statistical significance and are showed after adjusting the “before” values. The researcher used the contrast accompanying analysis test to check on this hypotheses and to calculate the differences among the four strategies in impacting the scholastic achievement of the grammars and the translation skills.

The following Table 6 shows the statistical differences:

Table 6

Statistical Differences Among Study Samples in Testing Grammars and Translation

Change source	Squares summation	Freedom level	Squares averages	F value	Significance level
“Before” application	0.93	1	0.93	0.44	0.57
Strategies	23.013	3	7.67	3.62	0.01
Mistake	203.42	96			
Average summation	243.52	103			

Table 6 shows that there are no statistical differences in the “before” application of the grammars and translation skills on the level of using the grammar, and it shows that there are statistical differences in the “after” application because of the four strategies. The calculated F value became 3.62 on the 0.01 significance level, which is less than 0.05. Dimensional analysis was performed to know the direction of the differences using scheffe’e test because there are differences in the “after” application that revealed after neutralizing the influence of the “before” application.

Table 7

Differences Direction Among Averages Levels in “After” Application of Grammars and Translation

Strategy	Averages differences	Standard mistake	Significance possibility
KWL	Concept map	0.25	0.411
	Learning map	0.282	0.403
	Integration	1.077(*)	0.407
Concept map	KWL	0.25	0.411
	Learning cycle	0.307	0.407
	Integration	1.052(*)	0.411

Learning cycle	KWL	0.282	0.403	0.921
	Concept map	0.307	0.407	0.904
	Integration	1.359(*)	0.403	0.013
Integration	KWL	1.077(*)	0.407	0.009
	Concept map	1.052(*)	0.411	0.005
	Learning cycle	1.359(*)	0.403	0.013

Table 7 shows that there is a statistical difference among the groups that are educated using the strategies of constructive learning, KWL, concept map, learning cycle, and integration strategy. For the group that was educated by using the integration strategy the significance value is less than 0.05 and its values are 0.009, 0.005, and 0.013, which indicates that using the strategies all together is more effective than relying on one strategy.

Third hypothesis. There are statistical differences among the adjusted averages of the groups of the study samples in the “after” achievement of the grammars and translation skills on the translation level; these differences are revealed after adjusting the “before” achievement. The researcher used contrast analysis test (ANACOVA) to check on this hypotheses and to find the differences if there is any among the groups of the study samples in the scholastic achievement of the grammar and translation skills on the translation level. The following Table 8 shows the statistical differences:

Table 8

Statistical Differences Among Study Samples Groups in Grammar and Translation

Change source	Squares summation	Freedom levels	Squares average	F value	Significance level
“Before” application	10.636	1	10.636	4.58	0.061
Strategies	26.70	3	8.90	3.83	0.01
Mistake	222.50	96			
Average Summation	271.529	103			

Table 8 shows that there are no statistical differences in the “before” application of the scholastic achievement on the translation level and it shows that there are statistical differences in the “after” application because of the four strategies. The calculated F value became 3.83 on the 0.01 statistical level, which is less than 0.05. And because there are differences in the “after” application that is revealed after neutralizing the influence of the before application, dimensional analysis is performed to know the direction of the differences by using Scheffe’e test on the significance of the differences. The following Table 9 shows the test’s results:

Table 9

Differences Direction Among Averages Levels of Study Samples Groups in “After” Application of Grammar and Translation Test (Translation)

Strategy	Differences among averages	Standard mistake	Significance possibility
KWL	Concept map	0.957	0.438
	Learning cycle	0.336	0.429
	Integration	1.308(*)	0.433
Concept map	KWL	0.957	0.438
	Learning cycle	0.621	0.434
	Integration	(*)0.351	0.438

Learning cycle	KWL	0.336	0.429	0.893
	Concept map	0.621	0.434	0.565
	Integration	0.972(*)	0.429	0.001
Integration	KWL	1.308(*)	0.433	0.033
	Concept map	0.351(*)	0.438	0.007
	Learning cycle	0.972(*)	0.429	0.001

Table 9 showed that there are statistical differences between the groups that were educated by using the strategies of constructive learning, KWL, concept map, learning cycle and the integration strategy. The significance levels for the group that was educated using the integration strategy is less than (0.05), and its values are (0.001, 0.007, 0.033) Which indicates that using the strategies all together is effective more than relying on one strategy.

Forth hypothesis. There are statistical differences among the adjusted averages of the groups of the study samples in the overall “After” achievement of the grammar and translation skills after adjusting the “Before” achievement. The researcher used the contrast analysis (ANACOVA) to check on this hypothesis and to find the differences if there is any among the groups of the study samples in the overall scholastic achievement of the grammar and translation skills. The following table the statistical differences:

Table 10

Statistical Differences Among Study Samples Groups in Scholastic Achievement of Grammar and Translation Test

Change source	Squares summation	Freedom levels	Squares average	F value	Significance level
“Before” application	12.11	1	12.11	1.65	0.13
Strategy	110.704	3	36.90	5.05	0.01
Mistake	701.47	96	7.30		
Average summation	901.37	103			

Table 10 shows that there are no statistical differences in the “before” application of the overall scholastic achievement test of the grammar and translation skill, while it shows that there are statistical differences in the “after” application of the scholastic achievement because of the four strategies. The calculated F value became 5.05 in the 0.01 statistical significance level, which is less than 0.05. This result agrees with the results of the previous studies as the following:

(1) This result confirms the results of many previous studies that revealed the effectiveness of the chosen constructive learning strategies;

(2) This result agrees with the results of many previous global studies that used the method of combining two or more strategies such as the studies of the following researchers: Lehman, Carter, and Kahle (1985); Roth and Roychoudhury (1993); Odom and Kelly (1999); Bonnier Day (2001); Sungur, Tekkaya, and Geban (2001); Okebukola (1992), Dwyer and Lopez (2001), Gerber, Brovey, and Price (2001), Al-Yateem study, and Arabian study.

In the field of using KWL, this result agreed with the results of Alian’s study (2005), which used the KWL strategy in teaching reading and noted the study’s educational importance in achieving and building knowledge and thinking. Also, this result agreed with the results of Zainab Al-Shinbary’s study, which showed the excellence of the female students, middle first grade students, of the experimental group. This excellence was showed in comprehending the literature course and the literary texts. This result agreed also with the results of

Rasha Ali Aldeen's study (2007), which showed the excellence of the experimental group.

In the field of using the strategy of the learning cycle, this result agreed with the results of the study of Dantonio and Richardson, Beiseherz and Hemler, Patterson and Merwin (2002), Walters and Sunal (1999), Cavallo and Dunphy (2002), and King (1996).

In the field of teaching the Arabic language, this result agreed with the results of Hafeth's study, which is about the effectiveness of a program that is based on the fivefold learning cycle that is used in developing the alphabetic writing skills for the primary school students. And the result agreed with the results of Halabeya's study (2010), which revealed the effectiveness of the learning cycle in developing the rhetorical concepts for Al-Azhary first grade secondary students. Also, this result agreed with the results of Al-Azraq's study, which showed the effectiveness of using the learning cycle strategy in teaching the fifth grade students the grammar, and its effectiveness in gaining the skills of expression writing and social skills.

Fifth hypothesis. There are statistical differences among the adjusted averages of the study samples groups in the "after" measuring of the critical thinking skills. The researcher used the accompanying contrast analysis to check on this hypotheses and to calculate the differences among the four strategies in influencing the critical thinking on the overall level of the "after" measuring after steadying the "before" measuring. The following Table 11 shows the statistical differences:

Table 11

Statistical Differences Among Study Samples Groups in "Before" Measuring of Critical Thinking

Change source	Some of squares	Freedom levels	Squares average	F value	Significance level
"Before" application	92.97	1	92.97	32.38	0.133
Strategies	167.19	3	55.73	19.41	0.01
Mistake	275.62	96	2.87		
Average	634.99	103			

Table 11 shows that there are no statistical differences in the "before" application of the critical thinking on the overall level among the four strategies. The calculated F value became 19.41 on the 0.01 statistical significance level, which is less than 0.05. Because there are differences in the "after" application after neutralizing the influence if the "before" application, dimensional analysis was performed to know the direction of the differences by using Scheffe's test. The following table shows the differences among the averages levels:

Table 12

Differences Among Averages Levels in "Before" Application of Critical Thinking

Strategy		Averages differences	Standard mistake	Significance possibility
KWL	Concept map	(*)1.995	0.544	0.005
	Learning cycle	0.662	0.534	0.674
	Integration	(*)3.269	0.539	0.000
Concept map	KWL	(*)1.995	0.544	0.005
	Learning cycle	2.658	0.539	0.090
	Integration	(*)1.274	0.544	0.007
Learning cycle	KWL	0.662	0.534	0.674
	Concept map	2.658	0.539	.0.090
	Integration	(*)3.932	0.534	0.000
Integration	KWL	(*)3.269	0.539	0.000

Concept map	(*)1.274	0.544	0.007
Learning cycle	(*)3.932	0.534	0.000

Table 12 shows that there is statistical difference among the groups that are being taught by using the strategies of the constructive learning, which are KWL, concept map, learning cycle, and integration strategy. For the group that is educated by using the integration strategy, the significance values are less than 0.05 and they are 0.000, 0.007, and 0.000, which indicates that using the strategies all together is more effective than relying on one strategy. This result agrees with the results of Lafy (2000) and Husain (1422) study, which aimed at developing the skills of the critical thinking through the literary texts. Also, this result agrees with the results of Ismeal's study (1994), which focuses on developing the skills of the critical thinking through guided reading. And this result agrees with the results of Otum's study (2004), which aimed at revealing the focusing of the Arabic language books on its teachers and on the skills of the critical thinking. It also agrees with the results of (Pugalee, 2004) study, which showed the strong relation between the skills of thinking and expression, and which showed the statistical differences of the experimental group in thinking and in the oral and writing performance. This result agrees also with the results of (Atwell, 1994) the study, which showed that writing and thinking are two processes that are connected to each other, and it showed that the students who have bad expression writing skills are facing problems in gaining the studying and thinking skills. It agrees with the results of (Parker & Gerber, 2000) and (Lavoie, 1999) studies, which showed the effectiveness of the learning cycle in developing achievement and the scientific critical thinking. Finally, this result agrees with the results of Falak Khleif's study (2010), which showed the statistical difference among the performance of the female middle third grade students on the "after" test of the critical thinking. The experimental group was better.

Recommendations

Focusing on the constructive theory and on the importance of using the chosen integrated method in teaching the English language is necessary.

Creating intensified practicing courses for the English language teachers to practice them on using the suggested integration strategy, which includes drawing a concept map, and to practice them on using KWL strategy and the leaning cycle to achieve the most effective education for the English language skills is necessary.

Considering the results of the time being study when preparing the educational subjects and courses is necessary. And including the curricula by some activities that focus on the completion of the constructive learning strategies is necessary. These activities are about drawing concepts maps and KWL tables, also, including the curricula by the steps of the learning cycle, which are used to build developed curricula.

Expanding the scientific research in the field of the integration strategies is necessary. And there is a necessity of developing the methods that combine two strategies or more, and assuring that this path gives positive results in the field of developing researches and educational studies.

Developing the teacher's guide that is prepared by the time being study is necessary. And it is beneficial from the developed teacher's guide in activating the path of the strategies completion in teaching English language in specific and other subjects in general.

Suggestions

According to the study's results, the researcher suggests the following:

- (1) Conduct research projects on the effectiveness of integration between learning strategies in the

education of other English language skills in various stages of education in Saudi Arabia;

(2) Conduct a comparison scientific study between the teachers of English on the reality of using constructivist learning strategies in the various stages of education;

(3) Conduct a correcting scientific study to determine the extent of acknowledging teaching skills of English language teachers according to the constructive learning, and to determine their need for learning according to the study result;

(4) Conduct a scientific study to find the effectiveness of a training program for the English language teachers to gain the skills of the constructive learning.

Conclusion

Using constructive learning proved to be effective in teaching critical thinking skills. Nowadays, it is essential to teach students these skills and get rid of traditional teaching which based on memorization. Students are more involved in using technology and are aware of all developments in the world around them, so it is no more accepted to teach them using traditional way. Besides, students need to be taught through new effective strategies such as constructive learning.

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