THE EFFECTIVENESS OF A TRAINING PROGRAM BASED ON META-COGNITIVE STRATEGIES ON DEVELOPING VOCABULARY ACQUISITION FOR SECONDARY STAGE SAUDI STUDENTS

Marwan Rasheed Abd-El Raheem Arafat

Abstract_The aim of the present research is to pinpoint the importance of a training program in meta-cognitive strategies on developing vocabulary acquisition of Saudi secondary school students. To achieve these objectives, the researcher developed the following tools: a suggested training program in Meta-cognitive strategies for secondary stage students, and a pre/post test in vocabulary acquisition for secondary stage students. Subjects of the study were randomly selected from among a larger population of 2rd year high school students. Two randomly classes were chosen from one government school; one was assigned as control group and the other as an experimental one. The control group and the experimental group were both be pre/post-tested using the developed vocabulary test. The experimental group underwent a five-week strategy training program. The results of the test of the hypothesis showed that there is great impact for the use of training program in Meat-cognitive strategies in linguistic vocabulary (English language vocabulary in this study for second year high school Saudi students). The study recommended that teachers should undergo on the job training courses especially English teachers in general education levels so that they can be trained on how to use Meta-cognitive strategies in educational/learning process. It was also recommended that students in the faculties of education in Saudi universities should be trained on how to use and employ Meta-cognitive strategies in planning and implementation of English language lessons and that in the methods of teaching English language or micro teaching or field practical education.

Keywords: Meta-cognition, Meta-cognitive Strategies, Vocabulary acquisition.

I. INTRODUCTION

A lot of research has been done on metacognitive strategies and strategy training. Metacognition is defined as – thinking about thinking [1]. This term was first coined by Flavell in the mid [2]. According to Byrd, Carter, and Waddoups [3], it is accounted as self-awareness of mental process. Oxford [4] believes that metacognitive strategies – provide a way for learners to coordinate their own learning process (p.136). The results of the studies on strategy description and categorization have found their implications in language classrooms in helping teachers accelerate the language learning of their students. With the expansion of language learning strategy instruction research, the question to be answered is whether training on strategies would result in improvement in language learners. A large body of research supports the positive effects of training on strategies in language learning performance [5, 4,6,7,8]. Cottrell [9] claims that through practice and instruction, learners' use of strategiescan be automatized.

II. Statement of the Problem:

The present study attempts to answer the following question:

A. What is the effectiveness of using a suggested training program in meta-cognitive strategies on developing secondary stage students' acquisition of vocabulary?

b. Are there any significant differences in the vocabulary acquisition for the secondary stage students that can be attributed to the training program?

III. Aims of the Research:

The present study attempted to:

1. Provide secondary stage students with a training program in meta-cognitive strategies.

2. Enhance secondary stage students' acquisition of vocabulary items.

3. Identify the difference between the subjects of the control and experimental groups in the scores of the achievement test of the subjects of the study.

Specifically, the research aims at:

1. Looking at the important role of meta-cognitive strategies in the language learning and teaching process.

2. Raising awareness and encouraging teachers to use meta-cognitive strategies in teaching vocabulary items on the three levels: planning, self monitoring and self evaluation.

3. Training and encouraging students to acquire vocabulary in non-traditional ways that demand from them to consciously plan, self monitor and self evaluate – the three main pillars of meta-cognition.

IV. Related Literature

A. Meta-cognitive Strategies

According to O'Malley and Chamot [10], cognitive (e.g., translating, analyzing) and metacognitive (e.g., planning, organizing) strategies are often used together, supporting each other. The assumption is that using a combination of strategies often has more impact than single strategies. As Graham [11] states, the distinctions between cognitive and metacognitive strategies are important, partly because they help us to indicate which strategies are the most important in

determining the effectiveness of learning. Graham believes that metacognitive strategies, that allow students to plan, control, and evaluate their learning, have the most central role to play in improvement of learning. Anderson [12] believes that "Developing metacognitive awareness may also lead to the development of stronger cognitive skills". Since metacognitive strategies are the focus of this study, a more detailed discussion on this topic follows.

In the 1980s and early 90s, research mainly focused on categorizing the strategies found in the studies of the previous decade. As a result, several taxonomies were proposed to classify them, including classifications of language learning strategies in general and language sub-skills strategies in particular. O'Malley and Chamot [10], for instance, have divided the strategies into three main branches: cognitive, metacognitive, and socio-affective, each of which includes lots of sub-strategies such as rehearsal, organization, summarizing, deducing and imagery. On the other hand, Oxford [4] has proposed a more comprehensive model in which six categories, classified into two groups of direct and indirect exist. The direct strategies include memory, cognitive, and compensation while indirect strategies include metacognitive, affective, and social.

Anderson [1] states, the use of metacognitive strategies ignites one's thinking and can lead to higher learning and better performance. Furthermore, understanding and controlling cognitive process may be one of the most essential skills that teachers can help second language learners develop. Based on previous research, Anderson has proposed five main components for metacognition. They include: 1) preparing and planning for learning, 2) selecting and using learning strategies, 3) monitoring strategy use, 4) orchestrating various strategies, and 5) evaluating strategy use and learning.

B. Language Learning Strategy Training

It has been suggested that learning strategy instruction may help learners in three ways: firstly, learning strategy instruction can help students to become better learners, secondly, skill in using learning strategies assists them in becoming independent and confident learners, and finally, they become more motivated as they begin to understand the relationship between their use of strategies and success in learning languages [13,14].

C. Vocabulary Learning

With regard to vocabulary learning, research shows that for most adult learners direct vocabulary instruction is beneficial and necessary, due to the fact that students are not able to acquire the mass of vocabulary just by meaningful reading, listening, speaking and writing. Learners can be taught explicitly how to improve their own vocabulary by teaching them appropriate vocabulary learning strategies in contrast to simply letting students learn vocabulary in their own way [15]. Ellis [16] notes that we should remember that vocabulary learning also involves the use of individual learning techniques. Ellis has also found that the growing interest in providing a description of vocabulary learning techniques and strategies aims to enhance understanding of the acquisition processes that take place in the learners' mind. Therefore a description of vocabulary learning strategies can be used as a guidance to help learners in their lexical acquisition [17].

In relation to vocabulary learning strategies, Sanaoui [18] reported that there were two approaches to vocabulary learning among students: a systematic approach and unsystematic approach. In systematic approach, learners were more organized and independent, used extensive records of lexical items, and reviewed words more often. In unsystematic approach, learners were dependent on the course, used minimal or no records of lexical items, and reviewed words little or not at all.

Coady [19], arguing on the importance of context in vocabulary learning, recommended the use of vocabulary learning strategy instruction approach to enhance lexical acquisition. The proponents of this approach (learning strategy instruction) also believe that context is the major source of vocabulary learning but they express some significant reservations about how well students can deal with context on their own. As a result, there is considerable emphasis on teaching specific learning strategies to students so that they can effectively learn from context [19].

Husltijn [20] claimed that the teaching of vocabulary learning strategies especially at the intermediate and advanced level by the use of keyword strategy would bring significant result. He added, "Modern foreign language pedagogy stresses the importance of teaching students appropriate learning and studying strategies" [20]. Parry [21] carried out a study that showed how cognitive strategies had dramatic impacts on the success or failure of students in terms of their acquisition of academic words. Altman [22] showed the significance of metacognitive awareness in the process of using words in oral communication.

Hypotheses of the Study

The first hypothesis: there are no significant differences in the pre-test and the post-test mean scores that can be attributed to the training program (this is for the experimental group).

The second hypothesis: there are no significant differences in the post-test means that can be attributed to the

training program (this is for the experimental and control groups)

VI. The tools of the study:

The tools of the study include the following:

1. The proposed training program for Meta cognitive strategies.

2. The test of linguistic vocabulary acquisition for high school students.

After reviewing variety of tools and measured upon which researchers depend to reach the required information to understand and solve problems, the researcher used the questionnaire as a tool for the study.

First: A proposed training program in meta-cognitive strategies

This program aims at developing the individual meta-cognitive skills (planning, organizing and evaluation), accompanying awareness as well as the general awareness with mental status, motivation and interaction during development of linguistic vocabulary for high school Saudi students. It is anticipated that by the end of the program the student should be able to:

• Use planning skills before and during achieving English vocabulary.

• Use organization skills during achieving English vocabulary.

• Use evaluation skills to evaluate his performance during achievement of English vocabulary.

• Use evaluation skills to evaluate his performance after achievement of English vocabulary.

• Develop awareness of the skills he practices (planning, organization and evaluation) during achievement of English vocabulary.

• Develop awareness of what his colleagues' practices of thinking skills during achievement of English vocabulary.

Steps of preparing the content of the program:

The preparation of the content of the program passed through the following steps:

1. Review of literature, references , and periodicals in Arabic and foreign literature and heritage that are related with:

 Types of learning in training programs so as to used in the design of learning situations;

 Programs of learning thinking skills, where as what can be applied for learning cognitive thinking skills can be applied for Meta cognitive thinking skills.

 Principles and basics of Meta cognitive learning so as to take Meta cognitive principles and basics into consideration when designing the program.

 Achievement of English vocabulary so as to collect as much as possible number of general vocabulary that are not related with particular academic content and their achievement does not require retrieving specific information.

2. Determine the vocabulary of the specific language that can be presented in the sessions of the program and determining the vocabulary and the accompanying programs that are assigned to the students as homework, and considering many conditions for selection of the vocabulary items, chief among them are:

 That their achievement don't depend on insight or immediate realization f relations but they require many steps that the student should process mentally in order to acquire them , because these vocabulary items will be achieved in group setting.

 The language vocabulary should be clear, realistic and able to attract student interest and attention in a way that ensure to some extend his motivation to acquire it.

 The vocabulary items should be free as much as possible from learning and previous experiences

3. Distribute these vocabulary items in a suitable way on program sessions that will be conducted in the context of collaborative groups of three students so as to increase the chances of interaction for the individual in the groups during the period of the session.

4- Prepare group of special work sheets for all sessions in term of one work sheet for each group. Then, the students record their ideas and work plans they have proposed to achieve English vocabulary that they have been asked to achieve in the session. It should be noticed that each student in the group should have a pen with different color than the rest of his group members so as to determine the relative weight for participation of each student after the finishing of the session.

5- Prepare group of homework sheet that the student are asked after each session and they will be evaluated in the coming session.

6- Setting initial timetable for the session according to their contents and activities.

7- Prepare session evaluation form and program evaluation form as whole.

8- Presenting the training program in its final form, work sheets, home work sheets and evaluation forms to group of expert referees in the field of curricula and English language teaching methods so as to present their views on the content of the program, technical methods, supplementary activities and the used methods.

9- Modifying the program according to the views of the referees and preparing the final form of the program.

The final form of the program was prepared and it consisted of two major units that comprised five training levels. The

application of the program took (two and half months) in term of 13 sessions that took (25) periods, the time of the period lasts for (45) minutes for one group. The study sample is distributed into two parts: The first part consisted of four groups which will have session on Monday of each week, and the second part consists of other three groups which will have session on Wednesday of each week and that in the final form after excluding the spoiled papers that are not abide with attending the sessions of the program and the post application of the tools. The two parts united after the tenth session.

Description of the context in the lesson:

The students are divided into non homogenous groups. The students were divided into groups from the first session and that according to the following steps:

• The students are asked to form initial groups so that they consist of three students according to their interests, where each student considers many alternatives.

• Re distribution of the groups according to: their scores in the prior application of the study tools, where the researcher classified the students according to their scores on the study tools. That was done to test the acquisition of linguistic vocabulary as priority in distribution as (high/ moderate / low) - and possibility that suit the interests of the students from other hand where as the three levels (high/ moderate / low) will be in the group.

• The groups were announced and the students were asked in each group to agree on the name of the group as whole and assign a number for each student that range from (1:3) so as to be labeled and recognized by all students.

Authentication of lesson progress in the session of the program:

In order to achieve the collaborative context, there should be many elements (individual responsibility, face to face interaction, mutual dependency, social skills and group work processing). These elements have been fulfilled through:

 At the beginning of the session work sheets are distributed (one for each group). All participants are alerted to write their ideas with pens of different colors than that of the rest of the colleagues.

 During the session , each group is asked to collect three linguistic vocabulary that are shown , where each student in the group choose linguistic vocabulary and will be responsible for achieving it with the help of his colleagues and thus (individual responsibility) will be realized.

 The student who achieve the vocabulary item thinks on it with a loud voice and following the instructions that are given to him , whereas the two listening students actively monitor the thinking pattern of the speaking student , they

ask questions for him and interpretation of what he say and do and thus (face to face) interaction will be fulfilled. In case he commits any irrational error , they feedback him and when he keeps silent , they remind him to speak, and in case of his inability they present ideas where as each student test his linguistic vocabulary in a loud voice in front of all in the work sheet , using his pen thus (mutual dependency) is realized. The achievement of linguistic vocabulary will be rewarded for all and not particular individual.

 During the achievement of the students for the linguistic vocabulary, the skill of exchange of ideas will be realized, and the roles will be alternated where each student looks to his colleagues until they perform their roles. Also the skill of (trust building) will be fulfilled through the expression of each student about his vies and ideas very clearly and present them to his colleagues and therefore many (social skills) will be realized.

 At the end of the session work sheets are submitted and the relative weight for participation of each student will be shown through the used colors. Also, the form of the session evaluation is distributed for the session in which the student evaluates himself from one hand and his group from the other hand, then this will be discussed in the following session and therefore (processing group work) will be achieved.

Third: Linguistic vocabulary test (English language vocabulary) for high school students:

The tool of the study is represented in linguistic vocabulary test (English language vocabulary). The steps of preparation of this test passed through the following points:

A. Objective of the test: This test aims at measuring linguistic vocabulary (English language vocabulary) for the first year high school students (study sample).

B. Formulation of the test items: The items of the test are set in hierarchal way and in terms of putting the question or the concept at the top of the hierarchy and under it there are the following levels: what is required by the question in the form of bank gaps where the student is asked to fill them , and these gaps are related with the question or the concept in the form of lines or arrows in which linking or guiding words are written to the student so as to help him to answer the question.

C. Test validity: The test is shown in its initial form to the same group of referees so as to show their views about the soundness of the test items and the correctness of their formulation and suitability for first year high school students. The referees presented some remarks about the formulation of some questions because they include more than one idea and the necessity for presence of guiding

words to explain what is needed from the student in some questions. Accordingly, some questions have been modified according to the remarks of the referees.

D. Test experimentation: The test is applied in its initial form on sample of (40) students from first year high school in order to determine:

• Test time: It has been shown that the sufficient test time for the students to answer all questions is (40) minutes.

• Test reliability: The test reliability is calculated by Cord Richardson's method and it shown to be (0.89) and this indicates for high degree of reliability.

E. The final form of the test: The total number of the test questions in their final form reached (50) questions and therefore the maximum test score is (50) and the minimum test score equals zero.

Experimental design of the study:

1. Selection of the study sample: Four classes from first year high schools in Taif have been selected so that they represent the two experimental groups. The following table shows the characteristics of the study sample.

Table 1
Characteristics of the study sample

Group	No
Experimental	49
Control	34
Total	83

2. Equivalence of the two groups (control and experimental): The equivalence of the two control and experimental groups have been confirmed in terms of the following variables: Achievement in English language:

The differences between the average scores of the two groups (control and experimental) in the achievement of the student in the first year in English language is calculated, the results are shown in the following table.

Table 2
Arithmetic means , standard deviations and (T) value for the results of the first year students' achievement in the subject of English language for two groups (Control and experimental)

Group	No	Total score	Arithmetic mean	Standard deviation	(T) value	Statistical relevance
Control	34	50	29.79		0.18	Not relevant
Experimental	49	50	29.47			

It can be seen from table (2) that there are not statistical differences between the experimental and control groups, that is the two groups are equivalent in this variable.

B- Prior linguistic vocabulary test (English language vocabulary):

The linguistic vocabulary test (English language vocabulary) is applied for the two groups of the research at the beginning of the second term in order to recognize the degree of the equivalence of the two research group in this variable. The following table shows the results of the prior application.

Table 3
Arithmetic means, standard deviations and (T) value for the results of prior application of the study tool on the control and experimental group

Group	No	Total score	Arithmetic mean	Standard deviation	(T) value	Statistical relevance
Control	34	47	2.21	1.51	0.407	Not relevant
Experimental	49	47	2.41	2.61		

It can be seen from table (3) that there are not any statistical relevance between the experimental and control groups of the research in the prior test of linguistic vocabulary (English language vocabulary), which confirm that the two experimental and control groups are equivalent in this variable.

3- Teaching of the program:

After the researcher finished the prior application of the linguistic vocabulary test (English language vocabulary), it had been agreed with the English language teacher and in coordination with the school principals to implement the experiment. The teacher agreed to conduct the experiment, and many meetings had been conducted with him on how to utilize Meta cognitive strategies in teaching English language. After checking his competency for these strategies in teaching English language, he is asked to write any observations about the students during implementation of this experiment. As far as the control group is concerned, it has studied the program in terms of traditional method. The experiment is implemented in the second term for the academic year of 1434 H / 2013. And during the follow up of the researcher for how the teacher implemented the teaching of the program, he noticed that the students of the experimental group have faced difficulty in learning some strategies, but after that the students became highly interested and ready to learn these strategies, rather they showed remarkable interaction and positive participation during the teaching of the program.

The teaching of experimental program lasted for a month in terms of five period per week and the duration of each period is (45) minutes.

Post application of the study tool: After completing the teaching of the program for the two groups of the research, the researcher with the help of the teacher who implemented the experiment applied the post linguistic vocabulary test (English language vocabulary) on the research groups.

VII. Results and Discussion

A. Testing the first hypothesis:

This hypothesis states that "the level of linguistic vocabulary (English language vocabulary) for first year high school Saudi students who studied English language vocabulary by using Meta cognitive strategies program does not reach the minimum level of competency which is (80%).

To test the validity of this hypothesis, the average scores of the experimental group members in the post linguistic test (English language vocabulary) is calculated and it equaled to (29.76) with standard deviation totaling (7.91). Also, the hypothetical arithmetic mean which correspond the percentage (80%) is calculated as follows:

Corresponding hypothetical means =

Total score of the test x 80 /100 = 47x80/100 = 37.6

To calculate the relevance of differences between the actual and hypothetical means, (T) test is used for one sample as follows: [23].

By conducting statistical processing, the value of (T) is equals to 9.45 and it's statistically relevant on a level less than (0.01). Therefore, these results show that there are fundamental differences between the level of linguistic vocabulary (English language vocabulary) and the two hypothetical and actual average that is in favor of the hypothetical mean, and this signifies that the members of the experimental group did not reach the level of required hypothesis , the arithmetic means, standard deviations and (T) value for the scores of the students of two control and experimental groups in the post linguistic vocabulary test (

competence which is (80%), and this result confirm the validity of the first hypothesis of the study.

This result can be attributed to:

- The time period in which the members of experimental group are trained on the use of linguistic vocabulary (English language vocabulary) during their study for the experimental unit is not sufficient so that their thinking reach the level of competence in acquisition of vocabulary which is 80%

- Lack of prior students training on the use of Meta cognitive strategies that are proposed for the members of the experimental group, although the Meta cognitive strategies that are used with member of the experimental group have greatly improved in enhancing the level of vocabulary acquisition, and that is indicated in their means in the prior and post linguistic vocabulary tests (English language vocabulary), as well as what is confirmed by the test of validity for the study hypothesis.

B. Testing the validity of the first hypothesis:

The second hypothesis of the study states that "there are statistical differences on the level of relevance ($\alpha \geq 0.05$) between the students of the experimental and control groups in the post test of linguistic vocabulary (English language vocabulary) and that in favor of the students of the experimental group.

To check the validity of this English language vocabulary) are calculated . Table (4) shows these results.

Table 4

Arithmetic means, standard deviations and (T) value for the results of the post application of linguistic vocabulary test (English language vocabulary) in the control and experimental groups

Group	No	Mean	Standard deviation	(T) value	Level of relevance
Experimental	49	28	7.46	8.21	Relevant on 0.01
Control	34	15.85	5.19		

It is clear from table (4) that there are no statistical differences between the average scores of the students of experimental group and that of their peer in the control group n the post application of the linguistic vocabulary test (English language vocabulary), and that in favor of the students of the experimental group. Therefore, the second hypothesis of the research is being accepted.

This means that the teaching of the program my using Meta cognitive strategies contribute in linguistic vocabulary (English language vocabulary) for the students for a better level that the traditional methods used in teaching English language. To know the effectiveness of the proposed training program in developing linguistic vocabulary (English language vocabulary) for first year high school students, the researcher calculated the size of the impact of the independent variable on the dependent variable as follows:

C. Size of impact:

The researcher used Etta Square "2η "to determine the size of the independent variable effect which is the impact of the training program in meta-cognitive strategies on dependent variable that is represented in acquisition of linguistic vocabulary (English language vocabulary).   The value of "2η " can be calculated after calculating the value of (t) by using the equation:

$$\text{"2η"} = \frac{t^2}{t^2 + df} \quad [24]$$

Where as " t2 " is the square of (T) value, dF is the degrees of freedom and them calculating the value of (d) which expresses the size of effect by suing the equation:

$$[24] \quad d = \frac{\sqrt{\eta^2}\, 2}{\sqrt{1 - \eta^2}}$$

By using the statistical methods to calculate the value of 2 ŋ and (d), the results are presented as shown in the following table:

Table 5
corresponding value of (d) and the size of effect (η2) value of

Independent factor	Dependent factor	Value of Etta ($η^2$)	Value of (d)	Amount of the effect size
Training program in meta cognitive strategies	Linguistic vocabulary (English language vocabulary)	0.53	2.26	Great

*Value of (d) = 0.2 (the size of impact is minimum), value of (d) = 0.5 (the size of impact is moderate), the vale of (d) = 0.8 (the size of impact is great).

It is clear from table (5) that the size of the effect of the independent factor (training program in Meta cognitive strategies) on the dependent factor: linguistic vocabulary (English language vocabulary) is great, because the value of (d) is greater than (0.8). This result can be interpreted on the basis of the fact that the value of (2η) = 53% of the total variation of the dependent variable: linguistic vocabulary (English language vocabulary) is due to the independent variable (training program in Meta cognitive strategies).

From tables (4) and (5), the value of (T) is statistically relevant as well as the size of the impact of the independent variable (training program in Meta cognitive strategies) is great on the dependent variable: linguistic vocabulary (English language vocabulary). This indicates the effectiveness of using training program in Meta cognitive strategies on development of linguistic vocabulary (English language vocabulary) for first year high school students. These strategies are better than the traditional methods used in acquisition of English language vocabulary.

Interpreting results of hypothesis:

It is clear from the results of the test of the hypothesis that there is great impact for the use of training program in Meat-cognitive strategies in linguistic vocabulary (English language vocabulary in this study for second year high school Saudi students) and these results clearly answer the third question of the study.

These results can be attributed to the following:

The use of some Meta-cognitive strategies such as brain storming, question generation, reformulation of ideas and summarization of information during the study of members of experimental group for the proposed training program provided many opportunities for these students to:

Deal with the content of the program through undertaking mental process that are related to the understanding of this content in efficient way and thus their learning will be effective and they can play a vital role in educational process.

Meta cognitive strategies are used in thinking and contemplation for acquiring linguistic vocabulary, practicing multiple mental activities and this in turn helps in understanding knowledge and information that are included in the proposed educational program in this study comprehensively and in terms of excerpts in which all relationships between these knowledge and information are made clear. The view in this way is considered excellent for the student because he used to consider topics in a partial vision, and that in turn helps in development of linguistic vocabulary.

Designing systems by themselves during the course of the program and this has clear impact on the development of linguistic vocabulary.

As regards whether there an agreement or disagreement of the study results with the results of previous researches and studies, it has been previously shown that in the limit of the researcher's knowledge there is not any previous study conducted that attempted to link between the use of training program in Meta- cognitive strategies and development of linguistic vocabulary (English language vocabulary). But in general there is substantial impact for the use of Meta-cognitive strategies in development of students' achievement for linguistic vocabulary.

It is clear that the results of this study are consistent with other studies [5,6,7,8,4] that stressed the importance of learning strategy instruction. This study also finds support in Graham's [11] study who believes that meta-cognitive strategies, that allow students to plan, control, and evaluate their learning, have the most central role to play in improvement of learning. Finally, the findings of this study are supported by Anderson [1] who states that the use of meta-cognitive strategies ignites one's thinking and can lead to higher learning and better performance.

VIII. Recommendations and Suggestions

In the light of the findings of the study and within its limits and methodology, the following recommendations and suggestions can be presented:

First, recommendations:

1. The results of the first hypothesis showed that the level of linguistic vocabulary (English language vocabulary) for the students of the study sample does not reach the level of competence which is (80%). In the light of this result, we recommend for the necessity to train the students continuously on the use of linguistic vocabulary (English language vocabulary) and that through Meta-cognitive

strategies used by the teachers to improve the level of the students in developing their linguistic vocabulary.

2. The result of the test of the first hypothesis indicated that there is great impact for using Meta cognitive strategies on the development of linguistic vocabulary (English language vocabulary) for the members of the study sample and according to these results , we recommend the following:

- Conduct on the job training courses for the teachers especially English teachers in general education levels so that they can be trained on how to use Meta cognitive strategies in educational / learning process.

- Training the students in the faculties of education in Saudi universities on how to use and employ Meta-cognitive strategies in planning and implementation of English language lessons and that in the methods of teaching English language or micro teaching or field practical education.

- There is necessity for the teachers to concentrate during their teaching of English language on the use of Meta cognitive strategies due to the great impact of these strategies in improving the level of students in linguistic vocabulary (English language vocabulary).

Secondly, suggestions:

To integrate the exerted effort in this study, the researcher recommends that the future researches and studies should focus on:

1. The study of the impact of Meta-cognitive strategies on other variables such as creative thinking, critical thinking and trends towards English language.

2. Studying the tendencies of English language teachers towards using Meta- cognitive strategies in education and learning.

3. Developing proposed program for training English language teachers on the use of Meta cognitive strategies in teaching and learning of English langue and checking its effectiveness.

4. Studying the level of achievement of linguistic vocabulary (English language vocabulary) for the students of the different educational levels.

REFERENCES

[1] Anderson, N. J. (2002a). The role of metacognition in second language teaching and learning. ERIC Digest. Education Resources Information Center.

[2] Flavell, J. H. (1976). Metacognitive aspects of problem solving. In L.B. Resnick (Ed.), The nature of intelligence. Hillsdale, NJ: Erlbaum.

[3] Byrd, E. H., Carter, E. C., & Waddoups, S. D. (2001). Taking control of your college reading and learning. Orlando, FL: Harcourt College Publishers.

[4] Oxford, R. (1990a). Language learning strategies: What every teacher should know. New York: Newbury House. [-14-].

[5] Carrell, P.L., Pharis, B.G. & Liberto, J.C. (1989). Metacognitive strategy training for ESL reading. TESOL Quarterly, 23, 647-678.

[6] Oxford, R. (1990b). Styles, strategies, and aptitude: Connections for language learning. In Parry, T.S. and C.W. Stansfield (Eds.) Language aptitude reconsidered. Englewood Cliffs: Prentice Hall Regents.

[7] Oxford, R. (1996). Employing a questionnaire to assess the use of language learning strategies. Applied Language Learning, 7:1&2, 25-45.

[8] Oxford, R., Crookall, D., Cohen, A., Lavine, R., Nyikos, M., & Sutter, W. (1990). Strategy training for language learners: Six situational case studies and a training model. Foreign Language Annals, 22, 197-216.

[9] Cottrell, S. (1999). The study skills handbook. London: Macmillan Press.

[10] O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge: Cambridge University Press.

[11] Graham, S. (1997). Effective Language Learning. Clevedon, Avon: Multilingual Matters.

[12] Anderson, N.J. (2002b).Using Telescopes, Microscopes, and Kaleidoscopes to Put Metacongnition into Perspective. TESOL Matters, 12 (4), 2002.

[13] Chamot, A. U., & Kupper, L. (1989). Learning strategies in foreign language instruction. Foreign Language Annals, 22, 13-24.

[14] Chamot, A. U., & O'Malley, J. M. (1994). Language learner and learning strategies. In N. C. Ellis (Ed.), Implicit and explicit learning of languages (pp. 371-392). London: Academic.

[15] Brown, T. S. & Perry, F.L. (1991). A comparison of three learning strategies for ESL vocabulary acquisition. TESOL Quarterly, 25, 655-70.

[16] Ellis, R. (1985). Sources of variability in interlanguage. Applied Linguistics, 6, 118-131.

[17] Ellis, R. (1995). Modified oral input and the acquisition of word meaning. Applied Linguistics, 16, 409-441.

[18] Sanaoui, R. (1995). Adult learners' approaches to learning vocabulary in second language. The Modern Language Journal, 79, 15-28.

[19] Coady, J. (1997). L2 vocabulary acquisition through extensive reading. In J. Coady & T. Huckin (Eds.), Second language vocabulary acquisition (pp. 225-237). Cambridge: Cambridge University Press. [-13-]

[20] Hulstijn, J. (1997). Mnemonic methods in foreign language vocabulary learning: Theoretical considerations and pedagogical implications. In J. Coady, & T.

[21] Parry, K. (1997). Vocabulary and comprehension: Two portraits. In J. Coady, & T. Huckin. Second language vocabulary acquisition (pp. 55-68). Cambridge: Cambridge University Press.

[22] Altman, R. (1997). Oral production of vocabulary: A case study. In J. Coady, & T. Huckin, Second language vocabulary acquisi6ion. (pp. 69-97). Cambridge: Cambridge University Press.

[23] Afana (1998) Levels of Critical Thinking for Students of Faculty of Education in the Islamic University- Gaza, Journal of Palestinian Educational Researches and Studies, 1st edition, May, 1998.