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# **The Effectiveness of Some Metacognitive Strategies For the Development of Critical Thinking Ability of the Prep. Stage EFL Students**

**A Thesis**

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بسم الله الرحمن الرحيم

"وَقُلْ اَعْمَلُوا فَسَيَرَى اللهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ "

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## **Abstract**

The purpose of this study was to examine the effectiveness of using some metacognitive strategies for the development of critical thinking abilities of the Prep. Stage EFL students.

Two main instruments were used in this study:

- James Madison Test of Critical Thinking.
- The metacognitive Strategies Questionnaire.

Two groups were involved in the study, the experimental group which was exposed to the metacognitive strategies program and the control group which was not exposed to the program.

The two groups were pre- and post evaluated on critical thinking using James critical thinking test and the metacognitive strategies questionnaire. Data were analyzed using analysis of co- variance and,t-test.

### **The present study reached the following results:**

1. There were significant statistical differences at 0.01 level between the mean scores of the pre and post critical thinking test of the experimental group in favor of the post- tests score since the t-value was (16.46).
2. There were significant statistical differences at 0.01 level between the mean scores of the pre and post metacognitive strategies

questionnaire of the experimental group in favor of the post-tests score since the t-value was (44.85).

3. There were significant statistical differences at 0.01 level between the mean scores of the experimental and control groups on the post critical thinking test in favor of the scores of the experimental group since the t value was (19.12).
4. There were significant statistical differences at 0.01 level between the mean scores of the experimental and control groups on the post metacognitive strategies questionnaire in favor of the scores of the experimental group since the t-value was (37.08).

It was conducted that the use of students' metacognitive strategies (Planning and Questioning) has a large effect on enhancing second prep. students' critical thinking abilities.

It was recommended that teachers should motivate students to use metacognitive strategies (Planning and Questioning) while learning. It was also recommended that English language teachers should be trained to cope with current methods and techniques that encourage students to think critically.

## Table of Contents

### *Chapter One*

#### *Introduction and Research Problem*

|                                  | Page |
|----------------------------------|------|
| Introduction .....               | 1    |
| Background of the problem.....   | 7    |
| Statement of the problem.....    | 8    |
| Research Hypotheses.....         | 8    |
| Delimitations of the study ..... | 9    |
| Definition of terms .....        | 9    |
| Study procedures .....           | 12   |

### *Chapter Two*

#### *Review of literature and Related Studies*

|  |    |
|--|----|
| Introduction .....                                   | 14 |
| <u>Section I</u>                                     |    |
| Metacognition.....                                   | 14 |
| Components of Metacognition .....                    | 16 |
| Critical Thinking and metacognition .....            | 17 |
| Critical Thinking .....                              | 18 |
| 1. Different Conceptions of Critical Thinking .....  | 20 |
| Critical Thinking According to Ennis .....           | 22 |
| 2. Significance of Critical Thinking .....           | 27 |
| 3. Teaching Critical Thinking .....                  | 37 |
| a. Prerequisites for Teaching Critical Thinking..... | 36 |
| b. Classroom Environment and Critical Thinking ...   | 36 |
| c. Teacher's Role.....                               | 37 |
| d. Learners' Role .....                              | 38 |
| <u>Section II</u>                                    |    |
| Metacognitive Strategies .....                       | 38 |

|   | Page |
|---|------|
| Characteristics of Language Learning Strategies .....                   | 41   |
| Taxonomy of language learning strategies.....                           | 42   |
| Planning .....  | 45   |
| Questioning Strategy .....  | 48   |
| 1. Metacognition and Questioning .....                                  | 49   |
| The Cognitive and Metacognitive nature of<br>Questioning Strategy ..... | 50   |
| Techniques of Students' Generated Questioning .....                     | 53   |
| a. K-W-L.....   | 53   |
| b. K-W-W-L : Questioning the Known .....                                | 53   |
| c. K-W-l-Q .....  | 53   |
| d. DRTA (Directed Reading- Thinking Activity) .....                     | 54   |
| e. Reciprocal Teaching .....  | 55   |
| f. The Teach Quest and The ReQuest techniques .....                     | 56   |
| g. The request training Model .....                                     | 59   |
| Previous studies on Critical Thinking .....                             | 61   |
| Commentary.....   | 66   |

### Chapter Three

#### Methods and Procedures

|  |    |
|--|----|
| Introduction .....                     | 68 |
| Subjects.....                          | 68 |
| Research Design.....                   | 69 |
| Metacognitive Strategies Program.....  | 69 |
| 1. Objectives of the Program .....     | 70 |
| 2. Material Used in the Program.....   | 71 |
| 3. Teaching Methods .....              | 75 |
| 4. Evaluation System .....             | 78 |
| Instrumentation .....                  | 79 |
| 1. James' Critical Thinking test ..... | 79 |



|  | Page |
|--|------|
| 2. Metacognitive strategies questionnaire .....  | 84   |
| Procedures of designing the metacognitive<br>Strategies Questionnaire.....   | 85   |
| Procedures for teaching the experimental group .....   | 87   |
| Conclusion .....   | 92   |
| <b>Chapter Four</b>  |      |
| <b>Results and Discussion</b>  |      |
| Introduction .....   | 93   |
| Control and experimental groups pre program's<br>Implementation in the Critical Thinking Test.....                     | 93   |
| Control and experimental groups pre program's<br>Implementation in the Metacognitive Strategies<br>Questionnaire ..... | 95   |
| Results.....   | 96   |
| 1. The first hypothesis .....  | 96   |
| 2. The second hypothesis .....   | 99   |
| 3. The Third hypothesis .....  | 101  |
| 4. The Fourth hypothesis .....   | 104  |
| <b>Chapter Five</b>  |      |
| <b>Summary and Recommendations</b>   |      |
| Summary .....  | 106  |
| Conclusion .....   | 108  |
| Recommendations.....   | 109  |
| Suggested further Studies .....  | 110  |
| <b>References</b>  |      |
| References in English .....  | 111  |
| References in Arabic .....   | 121  |

## **Appendices**

### **Appendix (1)**

**The Metacognitive Strategies Questionnaire**

### **Appendix (2)**

**The Critical Thinking Test**

### **Appendix (3)**

**The passages used in the training sessions of the  
metacognitive strategies program**

### **Appendix (4)**

**A list of the jury members who judged the validity of the  
Critical Thinking test**

### **Appendix (5)**

**A list of the jury members who judged the validity of the  
Metacognitive Strategy Questionnaire**

### **Appendix (6)**

**Pre, During and Post -Reading Activities used in  
the training sessions of the Metacognitive Strategies  
Program**

**Arabic Abstract**

## *Chapter One*

### *Introduction and Research Problem*

#### **Introduction**

In a democratic society, students should be trained to critically analyse the incoming information, ideas and opinions, and not merely accept them as unquestionable facts. As pointed out by Devine (1981), critical thinking skills seem especially important for students in a democratic society where freedom of speech assures equal right to the honest advocate. Therefore, it is possible for skillful, but unprincipled speakers and writers to shape public opinions, influence voters and affect behaviors.

Therefore, the aim of providing individuals with information and knowledge should be for building intellectual and creative mentality not for storing information to recall them in exams.

Curricula should enable students to adapt to any changes that happen in the world, as well as future changes. This can be achieved by giving rise to the intellectual and creative mentality, which helps individual learners to be capable of participating in arguments and discussions so as to be well-trained to think scientifically.

Intellectual and creative mentality will also help individual learners to make suggestions, find solutions, organize and link up data.

Moreover, it enables them to recognize and relate all pieces of information, and phenomena.

Marzano, (1990) states that stuffing students' minds with information and knowledge is not the superior educational target any more. Likewise, developing thinking is not a pretended matter or a phantom but it has become a very significant goal of education, especially during the current age. Therefore, not only resolutions should be stimulated but also thinking and planning for achieving this goal.

Ebeid (1990) affirms that the process of moving from the traditional educational pattern to the critical educational pattern is a complicated process. However, it is a possible process if educators could narrow the gap between theoretical conceptions and the feasible practices in schools as well as in classes.

It is the educators' responsibility to develop student's skills and abilities which can enable him to deal with the scientific revolution outcomes and to adapt to its consequences. As Garrison, Anderson and Archer (2004), state that Critical thinking as an outcome within a specific educational context is the responsibility of a teacher as the pedagogical and content expert. As a product, critical thinking is, perhaps, best judged through individual educational assignments. The difficulty of assessing critical thinking as a product is that it is a complex and (only indirectly) accessible cognitive process.

However, and most relevant here, from a process perspective it is assumed that acquiring critical thinking skills would be greatly assisted by understanding the process. Moreover, it is assumed that facilitating the process of higher-order online learning could be assisted through the use of a tool to assess critical discourse and reflection.

Ebeid (1990) also says that developing learners' abilities can be achieved by giving great attention to the learner as the center of the educational process. Besides, changing the way of thinking since the early age will help in thinking and searching for information and using it in daily life.

Accordingly, the goal of efficient learning is not just for understanding a certain subject and calling it back, but it should be for enlarging and expanding one's experience. Marzano, (1990) also emphasizes that extending one's experience will not be achieved spontaneously, but through critical thinking and motivation which are not available in the acquisition method. Critical thinking and motivation can be fulfilled through -searching and testing information.

Preparing the student to adapt to live in a rapidly changing society requires giving attention to help him/her learn by experience and to train them to solve problems that they may confront. This can be carried out if we begin to think highly of developing the students' thinking skills and to find out potential energies and help them adapt to the environment where they live.

In this age there is a need for critical thinkers who have higher order thinking skills. Therefore, there is a need for improving the student's critical thinking skills in all grades lately.

Educators emphasize the importance of learning styles which help the learners' creative abilities. Also, they help learners to engage in critical thinking skills and procedures in all different life aspects. Furthermore, the emphasis should be on tackling, constructing the information and to find out the phenomena and connections this information have.

Recent approaches corroborate that efficient learning requires the learner's awareness of the following:-

- Techniques and strategies which can be used for acquiring information.
- Methods used for tackling the information.
- Procedures used to handle the activities which can be done during the learning process and which can help in generating creative ideas.
- Integrating the newly acquired experiences with the previous experiences.

**Metacognitive strategies as tools for developing critical thinking skills:**

“Metacognition is "Enhancing (a) metacognitive awareness of what one believes and how one knows and (b) metastrategic

control in application of the strategies that process new information. The use of metacognitive strategies helps students to "think about their thinking" before, during, and after they read."(Gooden, Carreker, Thornhill, and Joshy, 2007)

Metacognitive strategies contribute to enhancing the learner's awareness of the critical thinking processes in which learners engage during learning and also to intensify ability to monitor these critical thinking processes.

Willingham (2007) states that students can learn then use metacognitive strategies to steer their thoughts in more productive directions. Also helping students become better at regulating their thought was one of the goals of the critical thinking program. He sees that these programs' modest benefit is likely due to teaching students to effectively use metacognitive strategies.

Metacognitive strategies promote the learner to generate several ideas to solve a problem and to deduce hidden meanings concepts and perceptions, and then to use hidden meanings to find appropriate solutions to the problems that they may confront in daily life. They also have a significant role in developing the self monitoring and planning skills during the learning process.

Gilbert (1992) points out that teachers are committed to change their instruction, such as using materials differently, observing students more frequently, questioning students, asking