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The Effect of Using Electronic Mind Mapping on Developing First Secondary Stage Students' EFL Critical Reading Skills

A thesis

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Abstract

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By

Eman Mohamed Fathy Zaki

This study investigated the effect of using electronic mind mapping on developing first year secondary stage students' EFL critical reading skills. A randomly selected group of the first year secondary stage students (N=40) received training throughout a proposed program based on using electronic mind mapping for developing critical reading skills. A pre-posttest was designed and applied to the group before and after the implementation of the proposed program. The test aimed to determine to what extent the first- year secondary school students master the five main critical reading skills and their sub-skills. The obtained data were statistically analyzed using SPSS program. Results of the study indicated that electronic mind mapping has an effective influence on promoting EFL critical reading skills. The study recommended that critical reading skills need to be developed in early stages. In addition, curriculum designers should make use of the visual thinking strategies in displaying the subject matter and evoking EFL students to visualize their thoughts in order to develop thinking visually and critically. Further research should investigate the effect of using electronic mind mapping in online courses, and comparing the effect of teacher-centered mind mapping versus student-centered mind mapping.

Key words: EFL critical reading, e- mind mapping

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Chapter One
The Problem

Chapter one: Background and Problem

Introduction:

The information revolution created by the Internet and the rapid development of the technology, in addition to the findings of the brain-based research, imply that educators should come up with new ideas concerning curricula. It is necessary to boost students' creativity, evoke them to use their brain capacity more fully and benefit from their untapped mental potentials. Therefore, education should not depend on memorization and rote learning. Consequently, these premises, elicit building up knowledge, seeking, finding and applying it, in order to know how to learn, communicate, and think critically. Appropriately, learners should be able to solve problems, select from alternatives and make decisions. Besides, developing critical thinking skills involves both teachers and learners as they are brought together into sharing the responsibility for constructing effective learning outcomes.

Teaching students how to think critically helps students deepen their learning experience, enables them to comprehend the world around them, achieve their potential, provide them with the tools necessary to make the right decisions, and encourage creativity so that students will be able to provide better solutions to current and future problems. Therefore, the educational systems that currently exist should teach students not to think by requiring them to learn facts that will be regurgitated on tests rather than teaching them to question; and by cultivating their natural curiosity (Michelle, 2008). Students need to be able to process the vast amount of information available in today's digital world. To do so, they need to be able to find information, assess its validity, critically evaluate it, and use it appropriately.

Context of the Problem:

Thinking critically integrates new knowledge or learning into past experiences and enables learners to link theory to practice. Besides, critical thinking skills are important because they enable students to deal effectively with social, scientific, and practical problems. Students should be able to

solve problems and make effective decisions. So educators should engage students in the learning process, and instructors should think of students as users of information rather than receivers of information, that is the first step towards the instructional system reform (Shakirova, 2007).

Furthermore, a student who has been taught to read critically raises vital questions and problems, formulates them clearly and precisely; gathers and assesses relevant information, uses abstract ideas to interpret them effectively, comes to well-reasoned conclusions and solutions, tests them against relevant criteria and standards, thinks open-mindedly within alternative systems of thought, recognizes and assesses their assumptions, implications, and practical consequences, and communicates effectively with others in figuring out solutions to complex problems (Scriven & Paul, 2008).Therefore, there is no more central issue of education than thinking; it can be developed and integrated into the process of foreign language learning and teaching, in other words, learners can learn how to critically produce and receive information through language.

Teaching a language, according to Halpern (2002), should be for helping students learn how to think, as there is a relationship between language and thought; besides, mind, thought, and language, to be developed, it is simply impossible to separate one from the other. Therefore, new learning outcomes are required, such as critical reading, to be included as a focus of educational practice (Halonen & Smith, 2008).

Critical thinking has been referred to as metacognition or the process of thinking about thinking (Templar, 2006). In addition, critical thinking is broadly seen as the kind of logical thinking that helps students ask probing questions. It is the ability to assess reasons properly, to weigh the relevant evidence, or to identify fallacious arguments. It is the ability to analyze and make sense of, or interpret all forms of situations or information, so that the conclusions drawn from our interpretations will be sound.

In addition, the goals of critical thinking and of lifelong learning should appear frequently in the current educational reform in many societies across the globe; accordingly, if students are to learn to think, they should be

encouraged to ask critical questions. So teachers should employ classroom strategies that produce active rather than passive learners (Mason, 2008). Consequently, Enoch (2008) pointed out that critical thinking is an important educational goal because learning to think critically develops meaningful understanding and allows students to cope up with the technological changes.

Therefore, a focus on teaching students how to think critically seems to be obligatory in order to improve the effective and rational thinking of students (Auburn, 2008). It is important to teach students to think critically for several reasons. The first, the change is the only constant in this world, consequently, educators should develop students learning in a way to keep up with such changes. The second, it is known that theories and knowledge have been modified and even changed which makes it useless to fill the learners' minds with old mere facts or depending on memorizing isolated bits of information; but, according to Appleby (2006), the most important aim is to teach them how to think critically.

Education should give prominence to teach learners critical reading skills, Fahim and Bagheri (2012) emphasized that critical thinking is teachable, it is not the same as intelligence, it should be taught to be improved. They investigated the effectiveness of Socrates' Questioning on developing critical thinking in language institutes and recommended some techniques and strategies to enable both teachers and students to implement critical thinking in Iranian language classrooms. They introduced different types of questions, teachers can ask. This can evoke student to generate new ways of thinking such as:

- Why do you say that?
- What would be an example?
- What do you think causes this to happen? Why?
- What would be an alternative?
- Why is it the best?
- How are... and... similar?
- What generalizations can you make?
- How does... affect...? (P.1124)

Khatib (2012) examined the efficacy of literary and non-literary texts in English as a foreign language classes on developing critical thinking skills as an important element in EFL classes. The findings of the study revealed that literary texts involve learners in problem-solving tasks which require analysis, synthesis and evaluation. In addition, these texts can increase the learners' motivation. Besides, these texts require imaginative and creative thinking, in addition, they are rich in reasoning and inference, consequently, these texts improve learners' critical thinking ability. That means, reading literary texts in English as a foreign language is an efficient way to develop critical reading skills. Additionally, he found that critical reading is considered as a reading to look for ways of thinking about the text and to take charge of our thinking while reading; in addition, EFL critical reading is an active reading where the readers are not simply receiving the facts and knowledge in the text, but they try to form their own opinions and viewpoints about what they read from the text.

Accordingly, critical thinking results in critical reading. You can think critically about a text (critical thinking) only if you have understood it (critical reading). In addition, we may choose to accept or reject a fact, but we should know why; that requires the reader to identify the real reasons for agreement or disagreement, and to be able to understand and respect the different perspectives; that is called a critical reading (Kurland, 2010).

Critical reading is what turns raw ideas into reasonable arguments. In addition, Brown and Rutter (2004) stated that "thinking critically while reading accelerates the rate of learning and the ability to select, assess and use information effectively so that understanding what is being read grows" p 9. Critical thinking is positively correlated with reading strategies such as cognitive, meta-cognitive, and compensation strategies; and that improves English foreign language proficiency. Mohammadi, et al. (2012) stated:

Because of the significant role of critical thinking in developing effective language learning, it needs to be promoted among language learners. So, enhancing learners' critical thinking can be considered as one of the language teachers' tasks. This study recommended that "language