IN THE NAME OF GOD

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Department of English Language

M.A Thesis

Improving Iranian EFL Learners' Reading Comprehension, Self-efficacy and Self-Regulatory Strategies: The Effect of Concept Mapping Instruction

Supervisor:
Dr. Saeed Ketabi

Advisor:
Dr. Shole Amiri

By:
Yaser Khajavi

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استاد راهنما :
دکتر سعید کتابی

استاد مشاور :
دکترشعله امیری

پژوهشگر:
یاسر خواجوی

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پایان نامه‌ی کارشناسی ارشد رشته‌ی آموزش زبان انگلیسی آقای یاسر خواجوی

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Abstract

The study is an attempt to contribute to research on concept mapping and its influence on self-efficacy and self-regulation of intermediate EFL students in Iran. To fulfill the aims of the study, 60 participants (21 males and 39 females) students of TEFL were selected through the Michigan Test of English Language Proficiency. Their age ranged between 19 to 23. A randomized pre-test post-test control group design with (a) concept mapping group and (b) a traditional method group was employed. Prior to the treatment, both the concept mapping group and the traditional method group were administered pre-tests in reading achievement, self-regulation, and self-efficacy. The Motivated Strategies for Learning Questionnaire MSLQ was applied to measure students' self efficacy and self regulation. The duration of treatment was ten weeks. At the conclusion of the treatment all participants again completed the achievement test as well as measures of self-regulation and self-efficacy. After controlling the effects of pre-test scores, we scored through ANCOVA that students in the concept mapping group showed greater achievement over time in reading comprehension, self-regulation strategies, and self-efficacy than students in the traditional method strategy group. The findings of this study could have some implications for students, teachers, textbook writers and curriculum developers.

Key words: Iranian EFL learners, Concept mapping, Self-efficacy, Self-regulation Strategies, Reading comprehension

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Chapter 1

Introduction

1.1. Overview

Researchers and practitioners interested in student motivation and learning in academic settings focus increasingly on the role of students' thoughts and beliefs during learning (Schunk, 2003). There are different factors involved in the process of learning and success in education. One of these important factors is L2 reading ability.

Good reading ability is the key to success in school and this is one reason why researchers try to find significant educational and psychological variables that can explain variations in reading ability and academic achievement (Swalander & Karim, 2007).

For today's college students who are required to learn a great amount of information from text either in print or digital format, structuring information from text material into meaningful knowledge has become an increasing challenge. However, this amount of information can often lead to rote memorization and short-term retention of material rather than deeper, more meaningful learning (Lambiotte & Dansereau, 1992). Many

counties are trying to include new methods and strategies in their system of education in order to improve the situation.

Every year a lot of students enter universities for pursue higher education. In Iran, English language is a compulsory course for all of them. The demands of the college classroom require a high level of reading and writing proficiency for academic discourse. In Iran, EFL teaching does not have a suitable condition e.g. reading instruction is mainly a practice of traditional learning, emphasizing grammar learning, vocabulary learning and even a mental translation from the mother tongue into the target language.

Due to this educational setting, students without the basic skills find it much difficult to survive the rigors of a course of study at the university level. All too frequently these students drop out of college to avoid an almost certain feeling of educational failure. Those who do not drop out struggle through an often frustrating period of academic probation, only to fall short of meeting university grade requirements. As such, finding ways to help students improve their English seems necessary.

1. 2. Statement of the problem

In Iran, the majority of EFL learners study and learn English to access reading materials such as scientific, medical, literary and other narrative works not readily available in Persian. Reading is considered an essential skill that all EFL learners must be proficient with if they want to succeed in advanced study where English is the prerequisite. Often many EFL readers approach a reading assignment by putting all their effort and concentration into the passages they read. The principal strategy is to slowly and carelessly read the text word by word. While reading and encountering a new word in reading, they stop reading immediately and

consult the dictionary for the meaning of the word. This reading behavior not only slows down their reading speed, but also hinders their reading comprehension. Many of them know very little about using their prior knowledge into reading because they are not familiar with the idea that the readers construct meaning from the context by "bringing their information, knowledge, emotion, experience, and culture to the printed word" (Brown, 1994, p. 284). It is this very practice of using prior knowledge that has been the most neglected strategy in the EFL reading classroom (Goodman, 1973). Faced with reading challenges among EFL learners, this study investigated whether Novak's carefully structured concept mapping processes cause Iranian EFL readers to use their background knowledge while reading English, and determined if the use of their prior knowledge is associated with the reading material and improved their overall reading comprehension.

Information is stored meaningfully when it sticks in long term memory. When one learns meaningfully, different pieces of information are related in a meaningful way. On the other end of the continuum, there is rote learning. In rote learning, new information is not linked to old information in a meaningful way.

Concept mapping was developed by Novak and his colleagues (1983) in an attempt to develop meaningful learning. Meaningful learning, according to Ausubel (1963), results when a person consciously and explicitly ties new knowledge to relevant concepts or propositions that she or he already possesses. Concept mapping is a tool for representing the interrelationships among concepts in an integrated, hierarchical manner.

These maps should not simply list information from text randomly, or even in a linear fashion. Rather, concept maps should depict the structure of knowledge in propositional statements that illustrate the relationships among the concepts in a map (Novak, 1981).

This technique is an effective learning strategy that precipitates meaningful learning in child (Roth & Roychoudhury, 1993; Stice & Alvarez, 1987; McClure & Bell, 1990; Novak & Gowin, 1984). "It is a graphic organizational technique designed to help individuals and groups, explain and explore their knowledge and understanding of a topic" (Hay & Kinchin, 2006, p.130). "Novak and Gowin first introduced concept mapping in 1984 to facilitate the process of meaningful learning" (Clayton, 2006, p. 197).

Concept mapping is a powerful learning strategy, which allows for depiction of both the interrelationships among the elements of contents and relationship between new and prior knowledge. Concept mapping has positive effects on various learning outcomes as well (Novak & Cañas, 2006). Another contribution of Concept Maps is to facilitate collaborative learning (Magntorn & Helldén, 2006).

These maps are visual representations of students' interpretation of a situation. "Students create maps by linking previously acquired knowledge with newly obtained concepts, forming valid relational propositions. Construction of a theoretically correct map requires students' active involvement in organizing and analyzing data, correlating appropriate information, and synthesizing ideas. This dynamic engagement facilitates meaningful learning" (Kotsowich & Wood, 2007, p. 226).

Heinz-Fry and Novak (1990) suggest that meaningful learning is facilitated because concepts are seen not as isolated entities, but as existing

in a network of relationships. Furthermore, Chularut & DeBacker (2001) propose that the benefits of concept mapping extend beyond achievement gains to include positive effects on achievement-related variables such as academic self-regulation and self-efficacy.

Chularut & DeBacker (2001) suggest that instruction in concept mapping fosters self-regulation. Self-regulation refers to the degree to which individuals become cognitively, motivationally, and behaviorally active participants in their own learning processes (Zimmerman, 1986). Instruction in strategy use is an effective means of promoting self-regulation (Schunk, 1986). Strategies such as concept mapping help students attend to tasks, focus on important features, organize material, and maintain a productive psychological climate for learning (Weinstein & Mayer, 1986).

Chularut & DeBacker (2001) believe that students would enter the mapping activities with the goal of illustrating interrelationships among concepts on the map. This proximal and challenging goal would support students in organizing their efforts as they completed their concept maps. Furthermore, as the students worked on their concept maps, they would employ self-regulatory strategies to acquire information needed to complete the map, and to monitor their progress in completing the concept map. Through self-monitoring students would know which parts of their concept maps were working well and which parts needed improvement. In the course of the mapping activity, students would clarify their understanding and be alerted to confusion or gaps in their comprehension. Finally, as students gained proficiency in concept mapping, they would perceive that they were making progress toward their goal of learning from the English-

language text, and their self-efficacy for learning from an English-language text would increase.

The positive effect of concept mapping on different skills has been shown in many studies (Talebinezhad &Mousapour, 2007, Hularut & DeBacker 2001, Roth & Roychoudhury, 1993; Stice & Alvarez, 1987,McClure & Bell, 1990; Novak & Gowin, 1984). But there are two gaps in the literature. First the number of studies which have been done on the effect of concept mapping on learning along with self-efficacy and self-regulation is limited. Second, the studies done on Iranian EFL learners are rare.

The present study is an attempt to contribute to research on concept maps and their influence on self-efficacy and self-regulation of students in an EFL context.

1.3. Objectives of the study

The purpose of this study is to investigate the effectiveness of concept mapping as a cognitive strategy for learning in English, self efficacy and self-regulation among EFL students in Iran. Specifically, this study compares EFL students in a concept mapping condition to EFL students in an individual study plus discussion condition, taking the level of English proficiency into account, on three variables:1) achievement when learning from English-language text, 2)self-regulation, and 3) self-efficacy for learning from English-language text.

1.4. Research Questions

The present study strives to answer the following questions:

1. Do students in the concept mapping group show better reading achievement than students in the individual study plus discussion strategy group?

2. Do students in the concept mapping group show better self regulation than students in the individual study plus discussion group?

3. Do students in the concept mapping group show better self-efficacy than students in the individual study plus discussion group?

1.5. Significance of the study

During past few decades, numerous studies have been conducted to maximize students' learning and achievement in academic setting. Different factors are effective in students' success or a failure in academic studies. One of the factors which seem to affect students' success in learning is English language. English language plays an important role in academic success of every student due to the fact that most of the scientific texts are written in English. This makes it necessary for students to have a good command of English to be able to use scientific and up to date resources. It goes without saying that reading ability of students is of a great importance in using these resources. In Iran, the most prevalent method of instruction for reading comprehension is self study and discussion. This instructional practice is very traditional, characterized by questioning students about text content, with little explicit attention to the strategic aspects of processing and comprehending text. This method