Self-Regulated Learning and Reading Comprehension: Implications for Reading Instruction

By

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Abstract

This study aimed at investigating effect of a suggested program based on self-regulated learning strategies on 50 third-year English majors' mastery of some reading comprehension skills at the Faculty of Education, Assiut University. Participants were equally divided into control and experimental groups. The study adopted quasi-experimental methodology where the researcher developed the following instruments for research purposes: self-regulated learning program, reading comprehension test, and interview. Data collection process included both quantitative and qualitative techniques. Results were analyzed and findings revealed there was no statistically significant difference between the mean scores of both groups in the pre-administration of the reading comprehension test. However, there were significant differences between control and experimental groups' means in the reading post-test, favoring the experimental group.

Keywords: Self-regulated learning, reading instruction, teaching English as a foreign language, metacognition, applied linguistics
1. Introduction

Literacy is crucial for human life. It is the means whereby people can communicate and exchange information in different fields. A literate community is a dynamic community in which people have access to share knowledge, communicate effectively and indulge in different aspects of social dialogue. It is hence the significance of learning the basic form of literacy, i.e. reading.

Reading, in this concern, is vital for engaging in the worldwide society of literacy and knowledge. That is why governments all over the world exert much effort on reading and literacy programs. For instance, Zimmerman (2012), hinting at the vitality of reading, pointed that poor reading comprehension skills or the failure to keep on reading is a pathway to failure. Reading is by no means unlimited to just alphabet learning or passing exams at school levels, but it has to do with one’s daily needs. Such needs may range from simple reading a telephone number or skimming a sign for an important address to reading textbooks at college level.

Nevertheless, the domain of teaching reading still witnesses a wide range of problems that may range from text-related issues (such as readability) to teaching methods and students’ readiness and motivation for reading. Irujo (2007, 6) indicated that —Reading comprehension instruction for English language learners (ELLs) needs to be modified to address their needs.‖ Additionally, August and Shanahan (2006) indicated that instruction in the key components of reading is necessary, but not sufficient. That is to say, teaching reading has to be more student-centered, taking into consideration students’ different reading abilities and interests, comprehension and individual abilities.
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The idea of students’ integration in the process of teaching reading highlights an old concept that first emerged in the psychology field, particularly in the educational psychology. It is the concept of self-regulation which is, as a start, an approach that includes a number of interconnected cognitive and metacognitive strategies that aim at helping students self-control their thoughts, feelings and mental processes to understand study materials. Zimmerman (1989a, 329) pointed out that —In general, students can be described as self-regulated to the degree that they are metacognitively, motivationally and behaviorally active participants in their own learning process. It is a concept that highlights the modern pedagogical principle that the student is the center of the learning process. Since teachers have to give a wider space for students to think, try, practice and learn new knowledge and skills, researchers in different fields have spotted more light on self-regulation and how it can be applied in the field of pedagogy and teaching methods.

Ma Ping (2012) clarified that since the 1980s, a number of researchers have embraced the concept of self-regulated learning (SRL) into teaching practices and methods. There is a body of literature in this regard including models of the SRL-based teaching that were designed in order to adopt and integrate the theoretical conceptions of self-regulation into practice teaching.

Furthermore, Nilson (2013) mentioned that the roots of self-regulated learning date back to social cognitive theorists who investigated how children could achieve self-control. In this regard, self-regulated learning can be viewed as a multi-dimensional activity that involves cognitive, metacognitive, emotional and behavioral activities as for the learner so that it confirms the principle of students’ independence in learning.
The majority of self-regulated learning models centered on the self-control processes right from beginning a learning task until self-evaluation. In their social cognitive models of self-regulation, researchers such as Zimmerman and Schunk (2011), being prominent figures in the self-regulated learning sub-field, discussed separate phases of self-regulation: The first phase is forethought and planning, where the individual plans his or her motivational beliefs, values and activities. The second is the performance phase that involves monitoring of both performance and motivation in order for learners to control the learning determinants such as distractions. The third phase is reflection where learners have to judge their learning and self-evaluate their learning goals and outcomes based on some performance standards.

Self-regulation includes a set of strategies that can be applied to a plethora of settings. As for such strategies, Banisaeid and Huang (2014, 243) stated that —self-regulation includes learning different strategies: metacognitive strategies (how to set goals, evaluate, plan and monitor one’s learning) as well as some affective factors such motivation and self-efficacy. Strategies of self-regulation are directed to help learners develop their abilities to control their motivation, attribution beliefs and cognitive and metacognitive abilities in order to make sense of what they study. Consequently, the acquisition and use of self-regulated learning strategies (SRLSs) is expected to create more strategic, self-directed and successful learners. Based on such a claim, many self-regulated learning models are being suggested as teaching interventions that aimed at investigating the effect of using such self-regulated learning strategies on students’ achievement, comprehension and some psychological concepts such as self-efficacy and self-concept.
As far as teaching reading is concerned, a plethora of research provides a proof for the validity and effectiveness of teaching reading through self-regulation. In his study, Kumi-Yeboah (2012) found that self-regulated processes promote the basic reading skills in a social studies content. In addition, a study by Ghanizadeh (2012) investigated the relationship among Iranian English majors' self-regulation, critical thinking ability and their language achievement. The study found that English majors' self-regulation can predict about 53% of their language achievement while their critical thinking ability tends to predict about 28% of achievement. Furthermore, Antoniou and Souvenir (2007) investigated using self-regulated learning to foster reading comprehension and help students with learning disabilities (LDs) to overcome reading difficulties. The study revealed that teaching reading strategies and guiding students towards self-regulated learning strategies are promising approaches to foster reading comprehension for students with learning disabilities. In sum, such studies are just a hint at what research has found about the validity of self-regulated learning strategies in teaching contexts, especially with respect to the variety of school or college curricula.

On the other side, reading comprehension has a central position in the domain of language teaching. Comprehension is mainly the process of deriving meaning from a connected text, a process that involves lexical knowledge as well as thinking and reasoning. Comprehension is thus the goal that a reader tries to achieve where he/she has to exert great effort. Good readers usually follow a number of what is called comprehension strategies. In this regard, Harvey and Goudvis (2000) mentioned that the reader begins to construct meaning by previewing the text. During reading, comprehension is built through predicting what is coming next in a piece of paper, inferring, making connections with the text and summarizing questions that arise. After reading, deeper meaning is constructed through reviewing, rereading portions of the text, discussion
and thoughtful reflection. During each of these phases, the reader relates
the text to his/her own life experiences. There are various approaches to
teaching reading; for example, one approach deals with reading
holistically while the other tends to approach thinking ability and their
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There are various approaches to teaching reading; for example, one approach deals with reading holistically while the other tends to approach reading in a more segmented manner. In view of the above, it is reasonable to adopt a new teaching methodology in the light of an approach that fosters students’ independence and motivation. This is the teacher’s role: to be open-minded toward students’ issues and to give them time and effort to take their personal needs and interests into consideration in language classes. As a consequence, here is the significance of self-regulated learning with its wide range of reading strategies.

2. Definition of terms

2.1. Self-regulated learning:

Zimmerman and Schunk (2011, 1) defined Self-regulated learning as “the processes whereby learners personally activate and sustain cognitions, affects, and behaviors that are systematically oriented toward the attainment of personal goals.” It is a set of learning mental and executive plans and activities that the learner can use in order to master the whole reading process under the guidance and support of the teacher right from goal setting and planning to goal achievement.

2.2. Reading Comprehension

Woolley (2011) defined reading comprehension as a complex process of making meaning from the text where the goal is then to gain a general understanding of the details in the text rather than understanding every word in isolation.

As a language skill, it is a receptive skill that enables learners to acquire language input (e.g. new vocabulary and syntactic patterns) and covers a wide range of skills of getting information from a written text, passing by different levels of comprehension: from direct to inferential, critical, and creative reading.
3. Objective of the Study

This study aimed at:

1. identifying the effect of using a self-regulated learning program on English majors' mastery of some reading comprehension skills.

4. Question of the study

The current study was an attempt to answer one main question:

1- What is the effect of using a suggested program based on self-regulated learning on third-year English majors' mastery of some reading comprehension skills?

5. Hypotheses of the study

To answer this question, the researcher proposed the following hypotheses:

1- There would be no statistically significant difference between the mean scores of the control and experimental group on the pre-administration of the reading comprehension test.

2- There would be a statistically significant difference between the mean scores of the control and experimental group on the post-administration of the reading comprehension test, favoring the experimental group.

3- There would be a statistically significant difference between the mean scores of the experimental group on the pre-post administrations of the reading comprehension test, favoring the post-administration.

6. Delimitations of the study

The current study was limited to:

1. a sample of 50 third-year English majors at the Faculty of Education at Assiut University (the researcher’s place of work).
2. the suggested program with the following self-regulation strategies: goal-setting and planning, activating prior knowledge, self-monitoring, self-motivation, organizing and transforming, note-taking, visualizing and questioning—based on the agreement ratios of jury members. These strategies represent a continuous chain of the strategies that could be applied to reading comprehension, and

3. the following reading comprehension skills: skimming for the gist, scanning for details, guessing the meaning of unfamiliar words, drawing inferences, drawing conclusions, infer the author's purpose, distinguish facts from opinions, suggest an alternative end to a story/event and add other details to support the main idea—based on the agreement ratios of jury members. A body of literature also indicate that these reading comprehension skills are among that most important ones required for developing students’ comprehensive reading ability. The researcher also intended that this list would cover a wide range of reading comprehension skills that, in turn, reflect the different reading comprehension levels from direct or literal reading to creative reading.

7. Design & Methodology

The present study adopted the quasi-experimental design; one experimental group was taught using the suggested program and pre-post reading comprehension test and were administered.

8. Tools of the study

The following materials and instruments were designed for research purposes:

1. a suggested self-regulated learning program, (prepared by the researcher)
2. a pre-post reading comprehension test (prepared by the researcher)
3. a semi-structured interview (prepared by the researcher).

9. Participants

A sample of 25 third-year English majors were randomly selected to represent the experimental group and another 25 students to represent the control group. The two groups study reading in the course of their academic preparation and were expected to acquire some basic reading competence required for participating in the suggested self-regulated learning program.

10. Procedures

To answer the major question of the study: —What is the effect of using a suggested program based on self-regulated learning on third-year English majors’ mastery of some reading comprehension skills?—, the following procedures were followed:

1. preparing the reading program along with the measurement instruments: the reading test and interview,
2. presenting all the instruments to a jury panel for making suitable modifications,
3. modifying the instruments (the program, test and interview) based on the jury’s instructions and recommendations,
4. piloting the instruments (the program and test only) for obtaining psychometric characteristics-namely, reliability, consistency, easiness, difficulty and discrimination indexes as well as test time.
5. modifying the program and test in the light of the pilot administration,
6. pre-administering the test on both control and experimental groups to identify students' levels on reading comprehension before the program implementation,

6. implementation of the program by teaching reading based on the specified set of self-regulated learning strategies to the experimental group students to help develop their reading comprehension skills through modeling of the self-regulated learning strategies, guided practice and independent practice,

7. post- administering the reading test on both groups,

8. after presenting the interview to a jury panel for modification, then interviewing only the experimental group students to have an insight into how they benefit from the program, if any,

9. collecting and analyzing data statistically (both quantitatively and qualitatively) using SPSS, and

10. finally, interpreting the results and providing conclusions and recommendations of the study for further research.

11. Results

The study revealed the following findings:

1- "T" test results of the control and experimental groups on the pre-administration of the reading comprehension test indicated no statistically significant difference between the mean scores of the two groups.

2- There was no statistically significant difference between the mean scores of the control and experimental groups on the post-administration of the test on the first, second, third, fourth, fifth, sixth, and seventh skill.
3- There was a statistically significant difference at 0.01 level of significance between the mean scores of the control and experimental groups on the post-administration of the test on the eighth and ninth skills. Additionally, there seems to be a statistical significance at the same level of 0.01 between the means scores of both groups on the test as a whole.

4- It was observable that there was no statistically significant difference between the mean scores of the experimental group students on the pre-post administrations of the test for the first seven skills (the same as the previous result).

5- There was a statistically significant difference between the mean scores of the experimental group students on the pre-post administrations of the test for the last two skills (eighth and ninth) as well as the total test score.

6- Students did not master the following skills: skimming for the main idea, scanning for specific information, guessing the meaning of unfamiliar words, deducing the author's purpose, and drawing inferences—where their mastery percentages were somewhat below the prespecified mastery level of 80%.

7- Similarly, although students' mastery percentages of the following skills were approximately near the mastery level, they did not master skills like: drawing conclusions and adding details to support the main idea.

8- Additionally, students' total test score was lower the specified mastery level (65%).

9- Students mastered two skills of the specified reading comprehension skills-namely, distinguishing facts from opinions and suggesting an alternative end to a story/event.
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Table (1): Differences of the mean scores of the control and experimental groups in the post-administration of the reading comprehension test

<table>
<thead>
<tr>
<th>Skills</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Df</th>
<th>t value</th>
<th>Eta square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skimming for the main idea</td>
<td>Control posttest</td>
<td>25</td>
<td>.48</td>
<td>1.45</td>
<td>48</td>
<td>-1.34</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.00</td>
<td>1.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning for a specific piece of information</td>
<td>Control posttest</td>
<td>25</td>
<td>.28</td>
<td>1.62</td>
<td>48</td>
<td>-0.97</td>
<td>0.02</td>
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<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.76</td>
<td>1.86</td>
<td></td>
<td></td>
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<tr>
<td>Guessing the meaning of unknown words</td>
<td>Control posttest</td>
<td>25</td>
<td>.08</td>
<td>1.68</td>
<td>48</td>
<td>-1.29</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.64</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing inference</td>
<td>Control posttest</td>
<td>25</td>
<td>.84</td>
<td>1.63</td>
<td>48</td>
<td>-0.18</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.92</td>
<td>1.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing conclusions</td>
<td>Control posttest</td>
<td>25</td>
<td>.48</td>
<td>1.66</td>
<td>48</td>
<td>-0.18</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.56</td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deducing the author's purpose</td>
<td>Control posttest</td>
<td>25</td>
<td>.44</td>
<td>1.78</td>
<td>48</td>
<td>0.16</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.36</td>
<td>1.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distinguishing facts from opinions</td>
<td>Control posttest</td>
<td>25</td>
<td>.80</td>
<td>1.29</td>
<td>48</td>
<td>-0.23</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.88</td>
<td>1.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggesting an alternative end to a story/event</td>
<td>Control posttest</td>
<td>25</td>
<td>.94</td>
<td>1.36</td>
<td>48</td>
<td>-5.33**</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.54</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adding other details to support the main idea</td>
<td>Control posttest</td>
<td>25</td>
<td>.84</td>
<td>1.16</td>
<td>48</td>
<td>-9.58**</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>.62</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total scores of the reading comprehension test</td>
<td>Control posttest</td>
<td>25</td>
<td>8.18</td>
<td>7.88</td>
<td>48</td>
<td>-2.89**</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Experimental posttest</td>
<td>25</td>
<td>4.28</td>
<td>7.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure (1): Differences of the experimental and control group students’ mean scores in the post-administration of the reading comprehension test

Figure (2): Differences of the mean scores of the experimental group in the pre-post administrations of the reading comprehension test


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