The Effects of Teaching Self-regulated Learning Strategies on EFL Students' Reading Comprehension

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Abstract—The present study examined the effects of teaching self-regulated learning strategies on EFL students' reading comprehension. Upper intermediate undergraduate EFL students (N=24, each group containing 12 students) were assigned to experimental and control groups. The experimental group received training on self-regulated learning strategies and how to use these strategies in their reading comprehension course in 8 sessions, 4 weeks and 16 hours, while control group did not receive any instruction. Two parallel multiple choice TOEFL reading tests were used to measure the effects of self-regulated learning strategy training. The data was analyzed through a sample of independent sample t-test. The results of the study suggested that experimental group performed significantly better on posttest administration of the reading test.

Index Terms—self-regulated learning, L2 reading comprehension, self-regulated learning strategies, EFL learners

I. Introduction

One of the main goals of education evolution is to enhance students` capability in learning how to learn. In order to attain this goal, teachers are needed to teach students the required knowledge, skills and strategies. Students also must reserve the taught knowledge and skills helping them become skillful long-lasting learners. Learning to learn is defined as the cap ability to strive and endure in learning to adjust learner`s learning process over true and effective managing the time and information. This process is related to the self-regulated learning theory which was introduced in 1980s by Zimmerman. The process of self-regulated learning requires students` monitoring their learning strategies independent of the teacher and peers and adjusting them if necessary. Monitoring activities include checking content of study, judging learning difficulties, assessing progress and predicting learning outcomes (Cheng, 2011).

It is a multi-dimensional activity that requires an individual`s cognition, emotion, action and surroundings. Using self-regulated learning strategies, learners are able to create improved learning habits, enhance their study techniques, monitor their progress, evaluate their performance, utilize strategies to enhance the desired outcomes and assess their academic progress and learning (Zumbrun, et.al 2011).

The utilization of self-regulation to learning is known as a sophisticated process comprised the awareness and application of learning strategies further, comprehensive cognition and self-awareness (Lockee, 2008). Schunk and Rice (1998) suggest that to promote students` self-regulated learning, they must be provide with opportunities for self-reflective practices that improves their skills to monitor, evaluate and adjust their performance during learning process. These practices help students find their own learning strategies that reinforce their learning and achievement most effectively. As long as self-regulation is not a personality trait, students can manage their behaviors and affect to enhance their learning and performance (Pintrich, 1993).

A self-regulated cycle helps students enhancing their learning and perception of control over the learning process (Zimmerman, 2002). So, regarding this view point to learning process, recent research in the field of self-regulated learning has emphasized the important role of locus of control dimensions and attributions as motivational variables of self-regulated learning.

According to Peterson (1990) as cited in Tavakoli and Ebrahimi (2011), negative attributional styles are related to lower grades, vague goals, weak usage of learning strategies and lower achievement. Furthermore, students can adjust these attributes by becoming aware of them and getting guidance from the teacher. Zimmerman (2000) believes that self-regulated learners interpret the attributes for judging themselves in the field of academic tasks and enhancing their learning.

As Williams and Burden considered (1979) learning does not happen in gap and many different leaner-internal and learner-external factors such as environmental, social, political mediate in complex ways until they could be able to define learning outcomes. Furthermore, the way learners recognize the world has a great influence over their educational achievement (Salmaninodoushan, 2012a).

In general issues about language learning reading to comprehend is an important goal; a fundamental prime upon which all comprehension activities are measured using some criteria of excellence e.g. good reading comprehension,

poor reading comprehension, and comprehension failure. The concern with the issue of improving reading comprehension has also increased in recent years (Tella et.al. 2009).

II. LITERATURE REVIEW

A. Self-regulated Learning

Zimmerman and Schunk (2008) defined self-regulated learning (SRL) as feelings, actions and thoughts that are self-generated and directed regularly toward the achievement of students' goals (Zimmerman & Schunk, 2008). Also, as Zimmerman (1989) states "self-regulated learning refers to learning that occur when individuals are metacognitively, motivationally, and behaviorally active participants in their own learning process" (Zimmerman, 1989, p. 329). As Boekaerts (1999) stated "self-regulated learning is a powerful construct in that it allows describe various components that are part of successful learning". As the idea of self-regulated learning began to receive considerable attention from educational psychologists, different theories were proposed by them to address what absolutely is meant by the term "self-regulated learning" and also to identify its components.

Research on self-regulation of academic learning and performance developed two decades ago to answer the question of how students become master of their own learning processes. In contrast to measures of mental ability or academic performance skills, as Soureshjani (2011) states "self-regulated learning refers to self-regulation learning (SRL) refers to the self-directive processes and self-beliefs that enable learners to transform their mental abilities, such as verbal aptitude, in to an academic performance skill" (Pintrich 2002 Cited in Soureshjani 2011).

SRL is an aggressive process students employ in order to enhance and learn academic skills such as set their goals, select and display strategies and self-controlling the effectiveness, alternatively as a conscious activity appears to students as a result of impersonal forces. Although SRL was viewed as primarily considerable during personally directed forms of learning, such as seeking help from peers, parents and teachers. The main issue is whether a learner presents personal initiative, insistence, and adaptive skill. These proactive attributes of learners arise from helpful motivational feelings and beliefs besides metacognitive strategies (Zimmerman, 2008).

In addition to its distinctive effects on the learner, SRL has deep implications for teacher-learner interaction. SRL learners are not only passive, but they are very active in a manner that they are able to know their own strengths and weaknesses and when needed to seek and access information which is conduct to learning (Zimmerman, 2002).

Nowadays self-regulated learning has become an important factor in research and a large number of studies have been undergone about self-regulation. Aksan (2008) in her research conducted on a descriptive study: epistemological beliefs and self-regulated learning. She concluded that self-regulated skills facilitate selecting appropriate learning strategies for students. Consequently, it is needed that students recognize how they are learning and how this learning is appeared.

B. Reading Comprehension

Reading comprehension as a skill is of paramount in second and foreign language classrooms. It is considered as an enjoyable activity transfer much information. Also it is a means that the learners by which can enhance their knowledge (Rivers, 1981). Alderson defines reading as "an enjoyable, intense, private activity, from which much pleasure can be derived, and in which one can become totally absorbed" (Alderson, 2000, P.8). It is a process by which the relevant knowledge will be activated and related language skills will be accomplished by an exchange of information. It is required that reader focuses attention on reading materials and integrates the previous acquired knowledge and skills to comprehend what someone else has written (Shahmohammadi, 2011).

However, reading is always purposeful. It is an integral part of the daily life, assumed to be an activity that everyone do. The reason for reading depends on its purpose (Berardo, 2006). The goal of reading is read for meaning or recreate the writer`s meaning. By definition, reading involves comprehension. When readers are not comprehended, they are not reading. So, regarding this definition, reading for the purpose of improving pronunciation, practicing grammatical forms, and studying vocabulary do not constitute reading because they are not engaged comprehension (Chastain, 1988).

The ultimate goal of reading is that students learn to interact with the reading productively so as to determine meaning.

Nature of Second Language Reading

Reading is attended as primary source of comprehensible input. According to Ahmadi Gilakjani et.al (2012) we considered reading as an interactive process mediated between the reader and the text. The fundamental concept is that the reader reorganizes the available information in the text not only based on the knowledge achieved from the text but also from the prior knowledge of the reader.

Scholars mention reading as an active process and refer to interaction of different constituent of skills in concurrent operation; of these cognitive skills` interaction resulted in fluent reading comprehension. Reading concerns both lower-level identification skills automatically and rapidly and higher level comprehension or interpretation skills (Hernandez, 2003). It is a receptive one in that the reader is receiving a message from the writer. As Chastain (1988) writes "recent researchers in reading describe the reading process in a way that implies an active reader intent upon using their background knowledge and skills to recreate the writer`s intended meaning" (Chastain 1988, P. 216).

Reading comprehension is assumed to be the ability to construct meaning before, after and during reading through linking reader`s background knowledge and the presented information by the author in the context. It is constructing an acceptable accurate meaning by making the connection between what has been read to what the readers already know and think about all of this information until it is recognized (Ahmadi Gilani, et.al 2012).

Generally there are two types of reading comprehension: intensive and extensive. These two types will be explained in the following section.

-Extensive reading: according to Hedge (2005), extensive reading is scanning and skimming activities and reading large quantity of materials. It is aimed at obtaining the gist to facilitate reading comprehension. According to Richards and Schmidt (2002) extensive reading is reading abundantly in order to reach to a general understanding of what is read. Despite the variations available in the ways in which an extensive reading program is administered, it shares the fundamental assumption that students are expected to read a relatively large amount of text while enjoying reading.

Extensive reading is aimed at developing good reading habits, building up knowledge of vocabulary and structure, and encouraging a desire for reading (Richards and Schmidt, 2002). Researches show that extensive reading is effective in increasing reading speed and comprehension. It is appears to lead to substantial vocabulary learning and learners show their development in spelling and vocabulary knowledge. It is also reported that extensive reading enhance students` affective domain such as motivation and attitude to read (Yueh Shen, 2008).

Intensive reading is reading in details to recognize and understand the meaning of the words and definition of passage. This kind of reading emphasizes the syntactic and semantic forms of the text, details within the structure, in order to understand the literal meaning and implications (Day, 2003). According to Hedge (2005), in intensive reading, students read the text to identify the writer`s objectives, it is as reading carefully and slowly to recognize the details. According to her, intensive reading activities in the classroom are intended to train students in the strategies needed for successful reading. They involve careful study of texts and familiarize students with features of written English.

Hafiz and Tudor (1989) considered that intensive reading generally contains a lower speed and supports a higher degree of understanding in order to improve and refine the skills for word study, enhance passive vocabulary, reinforce skills related to sentence structure, increase active vocabulary. The pedagogical value of extensive reading is the assumption that exposing students to large quantities of meaningful and interacting second language materials in long term will produce beneficial effects on learners` command of the L2.

III. METHOD

A. Participants

The participants of this study were24 male and female upper-intermediate EFL students at BA level at Islamic Azad University, Dezfool branch, Iran. For the purpose of research, students whose scores were within the range of one standard deviation above the mean and one standard deviation below the mean were selected as participants. So 24 male and female of these participants were selected for this study. The participants' mean age was 20-24 in this study.

B. Instruments

In order to conduct the purpose of the present study four measuring instruments were used, namely, a language proficiency test; two samples of reading test; self-regulated learning questionnaire provided data for this research. Finally, the data has been analyzed SPSS version 19.0 software.

1. Language Proficiency Test

In order to homogenize the participants, a language proficiency test -- a TOEFL test -- was used. This test was a sample of original TOEFL test (1995) consisting 140 multiple choice items. 50 items were for listening, 40 items for structure and 50 items for vocabulary and reading.

2. Reading TOEFL Test

A standard reading test was used for determining their reading proficiency level before the treatment period as pretest and its second administration as post test to determine their reading comprehension level after the treatment. The reading test was a sample of TOEFL practice reading test in the form of multiple choice item consisting of 25 items and its parallel form for the posttest.

C. Procedure

In order to conduct this research, to begin with a sample of TOEFL test was administered among 45 selected intact groups of male and female EFL students in third semester at BA level in order to be homogenized according to their general proficiency. Among them 24 students that their score match the required cut score, were selected as participants of this study. After dividing the participants in to experimental and control group the reading TOEFL test was administered. Then, the treatment was executed just for experimental group. After the treatment, the posttest administration of the aforementioned reading test was done. The participants were assured that their identities and responses would be kept confidential.

D. The Design of the Study

The present study is experimental since it aims to determine the effects of teaching self-regulated learning strategies on students` reading comprehension through a period of treatment effects, and also it is quasi-experimental since the participants are selected from an intact group of the students and then assigned randomly in to experimental and control group.

IV. RESULTS AND DISCUSSION

The objective of the present study was to determine whether teaching self-regulated learning strategies have any effects on students` reading comprehension, and to be able to meet the objective of the study, collected data were analyzed in the form of descriptive and inferential statistics.

A. Descriptive Statistics of the TOEFL Test

The participants of this study were homogenized through a TOEFL test. The results of descriptive statistics of the TOEFL test is presented in table 4.1. According to the results of the table, the mean of the scores was 66.57, and the standard deviation was 10.34. So, in order to have a homogenous sample, 24 students were chosen whose scores fall within the range of one standard deviation above the mean and one standard deviation below the mean.

TABLE 4.1.
DESCRIPTIVE STATISTICS OF THE TOEFL TEST

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
TOEFL.	45	50.00	80.00	66.5778	10.34076
Valid N (listwise)	45				

B. Testing the Null Hypothesis

To verify or reject the null hypotheses of the study, the researcher intended to conduct independent sample t-test between the mean scores of the participants in pretest and posttest administration. Table 4.3 and 4.4 show the results of independent sample t-test between control and experimental groups in pretest and posttest

Table 4.3 shows the independent sample t-test between the groups` scores in pretest. As the table depict the significant level of the mean scores in pretest is at the level of 0.602 which is higher than the alpha level (0.05). So, there is no significant difference between the mean scores of the experimental and control group in pretest administration of the reading test.

TABLE4.3
INDEPENDENT SAMPLE T-TEST BETWEEN CONTROL AND EXPERIMENTAL GROUPS IN PRETEST

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ReadingSRL Contrl	Equal variances assumed	.113	.740	.529	22	.602	.41667	.78777	-1.21707	2.05040
	Equal variances not assumed			.529	21.950	.602	.41667	.78777	-1.21728	2.05062

Table 4.4 demonstrates the independent sample t-test between the mean scores of the students in the experimental and control groups in posttest administration of the reading test. Based on the data represented in this table it can be seen that the significant level of the mean scores is 0.015 being smaller than the alpha level (0.05). So, it can be concluded that there is significant difference between the mean score of the students at the posttest administration of the reading test; consequently, it can be judged that the null hypothesis is rejected

TABLE4.4
INDEPENDENT SAMPLE T-TEST BETWEEN CONTROL AND EXPERIMENTAL GROUPS IN POSTTEST

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Readingpost	Equal variances assumed	.028	.869	2.624	22	.015	1.91667	.73038	.40194	3.43139
	Equal variances not assumed			2.624	21.484	.016	1.91667	.73038	.39983	3.43350

In the abundance of literature upon self-regulated learning and achievement especially in reading comprehension, a number of researches which the results of this study are in line with can be found. The emphasis on the crucial role of self-regulated learning strategies (Zimmerman, 2002; Schunk & Rice, 1998) and reading comprehension in education is obvious in the related literature upon both, especially when Wolverton (2008) consider that students who use SRL strategies are more successful in academic work and developmental reading.

Protontep (2008) in his study investigated students` self-regulated learning strategies and English reading comprehension in an extensive reading program. The students were divided in to lower and upper level according to their reading comprehension pre-test scores. The findings of his study showed that there were significant differences between students` English reading comprehension per-test and post-test scores especially for the lower level group. Also, findings from the self-regulated learning interview schedule indicated that students reported frequently using metacognitive and performance regulation strategies. In addition, from the students` verbal protocols of reading, they reported using self-regulated learning strategies in the performance or volitional control phase more than often in the forethought or self-reflection phases.

Again, going back to the data analysis tables it is obvious that the results of this study are in line with the abovementioned fact that students who learn self-regulated learning strategies are more powerful in academic achievement especially in reading comprehension.

At the end, it is important to emphasize that like any other research this research experience some limitations and delimitations; therefore, any conclusion, must be made cautiously and interpreted in the light of those limitations and delimitations that the researcher had in conducting the research (Khaki, 2013). The researcher also hopes that the results of this study will be useful for learners, teachers, material developers, curriculum designers, and policy makers to create an atmosphere that is suitable for language teaching and learning and leads the learners to achieve their goals in learning and enhancing their reading comprehension skill.

V. CONCLUSION

In this study the effects of teaching self-regulated learning strategies on EFL learners reading comprehension was investigated. As the results indicated there is statistically significant difference between mean scores of the two experimental and control group in posttest administration of the reading test (P=.016<.05). So, it can be concluded that teaching self-regulated learning strategies have effects on EFL learners reading comprehension. Therefore, it can be concluded that teaching self-regulated learning strategies have statistically significant effect on students` reading comprehension, and the null hypothesis, teaching self-regulated learning strategies have statistically no significant effects on students` reading comprehension, was rejected.

Pedagogical Implications

The findings of the present study can help teachers to teach reading comprehension more effectively as an important skill, and using teaching self-regulated learning strategies as an effective factor in developing reading comprehension and also general achievement. Besides teachers, syllabus designers can use the findings of this study in providing materials which contain proper contents to language learners and teachers, design exercises and deploy these strategies to achieve their goals which is reading comprehension. They should provide handbooks for teachers which contain guidelines for efficient teaching through strategies. This will lead teachers to teach effectively and learners to be more independent and lifelong in the language learning process. The above-mentioned conclusion derived from the present study should encourage teacher educators, administrators, and policy makers to take advantage of the effects of teaching self-regulated learning strategies by providing EFL teachers with preparation programs and experiences that help them enhance their teaching methods and strategies in their teaching especially in teaching reading comprehension (Nejabati, 2014).

REFERENCES

[1] Ahmadi Gilakjani, M.R., Nizam Ismail, H., & Pourhossein Gilakjani, A. (2012). Impact of teaching reading strategy on students` reading comprehension proficiency. *The international journal of language learning and applied linguistics world,23*(1), 78-95.

[2] Aksan, N. (2009). A descriptive study epistemological beliefs and self-regulated learning. *Proccedia Social and Behavioral Sciences, 54(*1), 896-901.

[3] Alderson, J.Ch. (2005). Assessing reading. Cambridge, Cambridge University Press.

[4] Berardo, S.A. (2006). The use of authentic materials in the teaching of reading. *The reading matrix,* 60-69.

[5] Boekaerts, M. (1999). Self-regulated learning : where we are today. *International of educational research, 23(1),* 445-457

[6] .Cazen, A. M. (2012). Self-regulated learning strategies: predictor of academic achievement. *Precedia Social and Behavioral sciences, 33(2),* 104-108.Cheng, E. (2011). The role of self-regulation in enhancing learning performance. *International journal of research and review.*

[7] Chastain, K. (1988). Developing second language skills, theory and practice. United States of America: Harcourt Brace Jovanovich, Inc.

[8] Cheng, E.C. (2011). The role of self-regulated learning in enhancing learning performance. *The International Journal of Research and Review, 6 (1),* 1-16.

[9]   Day, R. (2003). What is extensive reading? *Teacher Talk.*21, 1-3.

[10] Hedge,T.(2000). Teaching and learning in the language classroom. Oxford,Oxford University Press.

[11] Hernandez, A. (2003). Making content instruction accessible for English language learners. *International Reading Association.* 2, 125-149.

[12] Khaki,sh. (2013). The Relationship between Learner Autonomy and Willingness to Communicate (WTC) in Iranian EFL Learners. *International Journal of Applied Linguistics & English Literature,* 2(5).

[13] Lockee, E. (2008). Motivation through conscious goal setting. *Applied and Preventive psychology,* 21 (5), 117-124.

[14] Nejabati, N. (2014). The Effect of Locus of Control Training on EFL Students' Reading Comprehension", *International Journal of English Language Education*, 2014.

[15] Pintrich, P.R. (1993). The role of motivation in promoting and sustaining self- regulated learning. *International journal of Educational Research,* 31(2), 459-470.

[16] Pintrich, P.R., & de Groot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 1, 33-50.

[17] Pintrich, P.R., Smith, D.A.F., Garcia, T.,& McKeachie.W.J. (1991). A manual for the use of motivated strategies for learning questionnaire. *National Center for Research to Improve Postsecondary Teaching and Learning.* 53(3), 801-813.

[18] Protentep, S. (2008). Self-regulated learning by Thai university students in EFL extensive reading program. *Journal of Humanities.*2, (1), 26-37.

[19] Richards, J.C., & Schmit, R. (2002). Longman dictionary of language teaching and applied linguistics. UK: Longman group.

[20] Rivers, W.M. (1981). Teaching Foreign-Language Skills. The University of CHICAGO Press.

[21] Salmaninodoushan, M.A. (2012). The impact of locus of control on language achievement. *International Journal of Language Studies, 6,* 123-130.

[22] Shahmohammadi, N. (2011). The effects of gender based materials on reading comprehension. *International Journal of Human Resource studies,* 2, 10-14.

[23] Schunk ., D.H., & Rice, J.M. (1998). Learning goals and children`s reading comprehension. *Journal of Reading Behavior,* 21, 279-293.

[24] Soureshjani, K. (2011). Self-Regulation and Motivation reconsideration through Persian EFL Learners' Writing Achievement. *Journal of Research Humanities*, 11, 55-80.

[25] Tavakolizadeh ,J., & Ebrahimiqavam, S. (2011). Effects of teaching of self-regulated learning strategies in attribution styles in students. *Journal of Research and in Educational Psychology*.9 (3), 1087-1102.

[26] Tella, A., Tella, A., & Adeniyi, O. (2009). Locus of control, interest in schooling, self-efficacy and academic achievement. *Cypriot Journal of Educational Sciences,* 168-182.

[27] Williams, M., & Burden,R. (1997). Psychology for language teachers. Cambridge: Cambridge University Press.

[28] Wolverton, L. (2008). Self-regulated learning strategies of successful developmental reading students (PhD dissertation). Capella University, Minnesota, United States.

[29] Yeuhshen, M. (2008). Reading EFL learners´ responses to extensive reading: survey and pedagogical application. *Reading Matrix.*8, (2), 111-123.

[30] Zimmerman, B.J., & Schunk, D.H. (1997). Social origins of self-regulatory Competence. *Educational psychologist,* 32(1), 195-208.

[31] Zimmerman, B, J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81,329-339.

[32] Zimmerman, B.J. (2002). Becoming self-regulated learner: an overview. *Theory into practice journal,* 41(2), 317-325.

[33] Zimmerman, B.J. (2008). Investigating self-regulated and motivation: historical background, methodological development, and future prospect. *American Educational research Journal*, 45(3), 166-185. doi: 10.3102/0002831207312909.

[34] Zimmerman, B. J., & Schunk, D. H. (2008). Motivation: An essential dimension of self- regulated learning. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self -regulated learning: Theory, research, and applications* (pp. 1−30). New York: Laurence Erlbaum.

[35] Zumbrunn, sh., Tadlock, J., Roberts, E. (2011). Encouraging self-regulated learning in the classroom: a review of the literature. *Metropolitan Educational Research Center.10*, 1-28.

[36] Zusho, A., Pintrich, P.R., & Coppola, B. (2003). Skill and will: the role of motivation and cognition. *International Journal of Science Education, 25(1)*, 1081-1094.

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