International Journal of Educational Investigations 2016 (January), Vol.3, No.1: 1-9
Available online @ www.ijeionline.com ISSN: 2410-3446

The Effects of Reciprocal Teaching on Reading Comprehension: With a Focus on Law Terms

Ali Badri[1]*, and Abbas Badri[2]

1. Department of Law, Payame Noor University, Tehran, Iran.
2. English Teaching Department, Payame Noor University, Tehran, Iran.
*Corresponding Author: alibadri1022@gmail.com

Abstract **–** The present study investigated the effects of reciprocal teaching on reading comprehension. The texts administered to the participants were from a text book called 'A Level and a Level Law'. Two intact groups were randomly chosen from 140 participants. They were assigned into a control and an experimental group with 16 students in each. Four chapters were taught during a semester to both groups. Both groups received reading comprehension instruction except that the subjects in the experimental group were also given reciprocal teaching tactics. The instruments used in this study included two tests as the pre-test and post-test. Results indicated a significant improvement in the reading scores of the subjects in the experimental group. The researchers assume that, first, strategies are teachable, and second they are very effective in developing reading comprehension. The researchers suggest applying the tactics in order to improve other skills, especially listening skill.

Keywords**:** reciprocal teaching, reading comprehension, cognitive apprenticeship

I. INTRODUCTION

Over the centuries, apprenticeships have proved to be an effective form of education (Collins, Brown, & Holum, 1991; Collins, Brown & Newman, 1989). By working alongside a master and perhaps other apprentices, young people have learned many skills, trades crafts. Apprenticeships are powerful teaching and learning chances and can be beneficial to both master and apprentice. A more knowledgeable person provides guides, models, demonstrations, and corrections, as well as affinity with the other people that is motivating. Collins, Brown & Newman (1989) argue that, the cognitive apprenticeship model is based on constructivist ideas about learning. It focuses on the active involvement of pupils in the instructional process and on the development of metacognition. This model combines effective elements of instruction-psychological models such as reciprocal teaching, procedural facilitation and modeling. An example of a cognitive apprenticeship is reciprocal teaching. Reciprocal teaching refers to an instructional activity in which students become the teacher in small group during reading sessions. Teachers model, then help students learn to guide group discussions using four strategies: summarizing, question generating, clarifying, and predicting. Once students have

learned the strategies, they take turns assuming the role of teacher in leading a dialogue about what has been read (Palincsar, 1986; Palincsar & Brown, 1984, 1989).

II. LITERATURE REVIEW

A. Reading Comprehension vs. Reading Strategies

Celce-Murcia (2001) defines reading comprehension as 'the ability to read-taking general comprehension as the example-requires that the reader draw information from a text and combine it with information and expectations that the reader already has. This interaction of information is a common way to explain reading comprehension (Celce-Murcia, 2001, P. 188). Reading strategies on the other hands is defined as 'plans for solving problems encountered in constructing meaning' (Duffy, 1993, P. 232). They range from bottom-up vocabulary strategies, such as looking up an unknown word in the dictionary, to more complicated processes, such as connecting what is being read to the reader's background knowledge (Richards & Renandya, 2002, P. 287).

B. The Importance of Reading Comprehension Strategies

Until the 1980s, students were seldom provided with any help in reading comprehension. In a class study, Durkin (1979) observed 4,469 minutes of reading instruction in grade 4 and found that only 20 minutes of this time were spent in teaching students how to comprehend what they were reading. Durkin (1979) found that teachers spent almost all of the instructional time asking students questions, but they spent little time teaching students comprehension strategies they could use to answer the questions. Duffy, Lanier, and Roehler (1980) noted a similar lack of comprehension instruction in elementary classrooms: 'There is little evidence of instruction of any kind … Seldom does one observe teaching in which a teacher presents a skill, a strategy, or a process to pupils, shows them how to do it, provides assistance as they initiate attempts to perform the task and assures that they can be successful'. As a result of these astonishing findings, investigators developed and taught students to use specific cognitive strategies that were designed to help them perform higher-level operations in reading. Palincsar and Brown (1984) referred to these strategies as “comprehension-fostering” activities.

C. Reciprocal Teaching

Palincsar (1986) defines reciprocal teaching as 'a dialogue between teachers and students in which participants take turns assuming the role of teacher'. The teacher or a student leads a dialogue that is structured in terms of four strategies: Summarizing, asking question, clarifying, and predicting. At first the teacher introduces all four strategies, perhaps focusing on one strategy each day. The introduction explains each strategy and the teacher models it. Next students have time to practice and receive feedback from the teacher on using the strategy. As students become

more depth with each strategy for understanding text, the teacher gradually shifts onto them the responsibility to lead the discussion.

The goal of reciprocal teaching is to help students understand and think deeply about what they read (Palincsar, 1986; Palincsar & Brown, 1984, 1989). The dialogue is structured by the use of four strategies: These are tactics that skilled readers apply almost automatically, but weak readers seldom do- or they don't know how. To use the tactics effectively, poor readers need direct instructions, modeling, and practice in actual reading situations. These tactics are elaborated in detail below:

Summarizing provides the opportunity to identify and integrate the most important information in the text. Text can be summarized across sentences, across paragraphs, and across the passage as a whole. When the students first begin the reciprocal teaching procedure, their efforts are generally focused at the sentence and paragraph levels. As they become more proficient, they are able to integrate at the paragraph and passage levels.

Asking question reinforces the summarizing strategy and carries the learner one more step along in the comprehension activity. When students generate questions, they first identify the kind of information that is significant enough to provide the substance for a question. They then pose this information in question form and self-test to ascertain that they can indeed answer their own question. Question generating is a flexible strategy to the extent that students can be taught and encouraged to generate questions at many levels. For example, some school situations require that students master supporting detail information; others require that the students be able to infer or apply new information from text.

Clarifying is an activity that is particularly important when working with students who have a history of comprehension difficulty. These students may believe that the purpose of reading is pronouncing the words correctly. When the students are asked to clarify, their attention is called to the fact that there may be many reasons why text is difficult to understand (e.g., new vocabulary, unclear reference words, and unfamiliar and perhaps difficult concepts). They are taught to be alert to the effects of such impediments to comprehension and to take the necessary measures to restore meaning (e.g., reread, ask for help).

Predicting occurs when students hypothesize what the author will discuss next in the text. In order to do this successfully, students must activate the relevant background knowledge that they already possess regarding the topic. The students have a purpose for reading: to confirm or disprove their hypotheses. Furthermore, the opportunity has been created for the students to link the new knowledge they will encounter in the text with the knowledge they already possess. The predicting strategy also facilitates use of text structure as students learn that headings, subheadings, and questions imbedded in the text are useful means of anticipating what might occur next.

In brief, each of these strategies was selected as a means of aiding students to construct meaning from text as well as a means of monitoring their reading to ensure that they in fact understand the text.

D. Research on Reciprocal Teaching

For the past five years, Palincsar and Brown (1984) have conducted a series of studies to determine the effectiveness of reciprocal teaching. The initial studies were conducted by adult tutors working with middle school students in pairs and by teachers working with their small reading groups averaging five in number. The students were identified to decode fairly adequately but comprehend very poorly. Typically they perform at least two years below grade level on standardized measures of comprehension. Instruction took place over a period of 20 consecutive school days. The effectiveness was evaluated by having the students read passages about 450 to 500 words in length and answer 10 comprehension questions from recall. The students completed five of these passages before reciprocal teaching instruction began and one during each day of instruction. Performance on these assessment passages indicated that all but one of the experimental students achieved criterion performance, which we identified as 70 percent accuracy for four out of five consecutive days.

These results were in contrast to the group of control students, none of whom achieved criterion performance. In addition, qualitative changes were observed in the dialogue that occurred daily. For example, the experimental students functioned more independently of the teachers and improved the quality of their summaries over time. In addition, students' ability to write summaries, predict the kinds of questions teachers and tests ask, and detect incongruities in text improved. Finally, these improvements were reflected in the regular classroom as the experimental students' percentile rankings went from 20 to 50 and above on texts administered in social studies and science classes.

When the same instructional procedure was implemented in larger classes with groups ranging in size from 8 to 18, 71 percent of the students achieved criterion performance as opposed to 29 percent of the control students who were involved in individualized skill instruction. Furthermore, teachers observed fewer behavior problems in their reciprocal teaching groups than in their control groups.

E. Research Question and Hypothesis

Q1: Does reciprocal teaching as an example of cognitive apprenticeship have any significant effects on improving Iranian EFL on reading comprehension?

To reveal the purpose of this study, the researchers tried to find the confirmation or rejection of null hypothesis presented here:

Ho1: The reciprocal teaching doesn't have any significant effects on improving Iranian EFL on reading comprehension?

III. METHODOLOGY

A. Participants

The participants of this study comprised 140 female EFL language learners at the intermediate level studying English at Payame Noor University in Kangavar, Iran. They ranged from 18 to 32 years old. The classes were conducted in the afternoon once a week and 90 minutes a session.

B. Instruments

Two instruments were utilized to collect the data in the present study: Reading comprehension tests as the pre-test and the post-test of the study. In order to ensure the reliability of the pre-test and post-test, the researchers used coefficient Alpha reliability analysis, and according the formulae, the reliability was nearly 0.71 and .073 respectively.

C. Procedures

In summary, the present study was a quantitative research and a quasi- experimental design, because the researchers selected intact groups randomly but he did not choose all the members randomly.

After selecting the whole population, all participants were given pre-test of reading comprehension. The passages were extracted from a text book called ‘A Level and a Level Law’. The questions were in the form of the multiple choices; the next phase of the experiment started with some treatment sessions that included reciprocal instruction to experimental group and reading and answering comprehension questions to the control group. After the treatment sessions came to an end, reading comprehension test was utilized as the post test of the study. Finally, the results of both pretest and posttest were compared for data analysis.

How to use reciprocal teaching

Before Reciprocal Teaching can be used successfully by your students, they need to have been taught and had time to practice the four strategies that are used in reciprocal teaching (summarizing, questioning, predicting, clarifying).

One way to get students prepared to use reciprocal teaching: is to put students in groups of four. Distribute one note card to the heads of the groups identifying each person's unique role: Summarizer, questioner, clarifier, and predictor. Have students read a few paragraphs of the

assigned text selection. Encourage them to use note-taking strategies such as selective underlining or sticky-notes to help them better prepare for their role in the discussion.

At the given stopping point, the *Summarizer* will highlight the key ideas up to this point in the reading. The *questioner* will then pose questions about the selection: unclear parts, puzzling information, and connections to other concepts already learned. The *Clarifier* will address confusing parts and attempt to answer the questions that were just posed. And finally, the *Predictor* can offer predictions about what the author will tell the group next or, if it's a literary selection, the predictor might suggest what the next events in the story will be.

The roles in the group then switch one person to the right, and the next selection is read. Students repeat the process using their new roles. This continues until the entire selection is read. Throughout the process, the teacher's role is to guide and nurture the students' ability to use the four strategies successfully within the small group. The teacher's role is lessened as students develop skill.

IV. Results

This study was an attempt to investigate the effect of reciprocal teaching on reading improvement on LAW students at Payame Noor University in Kangavar, Iran. To fulfill the purpose of the study, descriptive statistics (means, standard deviations, and frequency counts) and inferential statistics (independent sample t-test) were applied.

The present study tried to answer the question raised about the effects of reciprocal teaching on reading comprehension.

Table 1: Descriptive Statistics for two groups in post-test

	N	Range	Minimum	Maximum	Mean	Std. Deviation
control	16	5.00	8.00	13.00	11.0625	1.34009
experimental	16	6.00	8.00	14.00	11.1875	1.75950
Valid N (listwise)	16					

Table 1 provides useful descriptive statistics for two groups. The data include the mean, the standard deviation, and the range. As you can see the mean for experimental group is 11.18, while the mean for control group is 11.06.

Table 2: Output of the Independent Pair t-test analysis for two groups in pre-test

		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
control	Equal variances assumed	1.31	.26	-.226	30	.823	-.12500	.55293	-1.25	1.004
	Equal variances not assumed			-.226	28.0	.823	-.12500	.55293	-1.25	1.007

Table 2 indicates the output of the Independent Pair t-test analysis and whether there is any significant difference between the means of two independent groups in pre-test. Since you can see in this table the significance level is 0.82 (p=0.82) which is above 0.05, therefore, there is not statistically significant differences between groups, i.e., the null hypothesis could not be rejected.

Table 3: Descriptive data for two groups in post-test

	N	Range	Minimum	Maximum	Mean	Std. Deviation
control	16	4.00	11.00	15.00	13.3750	1.20416
experimental	16	5.00	14.00	19.00	16.3125	1.49304
Valid N (listwise)	16					

Table 3 shows useful descriptive statistics for two groups. The data include the mean, the standard deviation, and the variance. As you can see the mean for experimental group is 16.31, but the mean for control group is 13.37.

Table 4: Output of the Independent Pair t-test analysis for two groups in post-test.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		z	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
reciprocal	Equal variances assumed	.815	.374	-6.12	30	.000	-2.937	.4795	-3.916	-1.958
	Equal variances not assumed			-6.12	28.7	.000	-2.937	.4795	-3.918	-1.956

Table 4 provides data about the output of the Independent Pair t-test analysis and whether there is any statistically significant difference between the means of two independent groups in post-test. Since you can see in this table the significance level is .000 (p=.000) which is below 0.05, therefore, there is statistically significant difference between groups, and the null hypothesis could be rejected. It means that reciprocal teaching instruction was effective.

V. DISCUSSION/CONCLUSION

This study investigated the effects of reciprocal teaching on augmenting reading comprehension of Iranian EFL learners. The research question addressed in the present study was whether reciprocal teaching can lead Iranian EFL learners to greater increase in L2 reading comprehension or not. To analyze the data the researchers used pre-test and post test scores on reading comprehension test and he ran independent T-test (based on SPSS version 22) for this study. Results displayed an increase in students' performance in reading comprehension due to the effect of reciprocal teaching. The most important feature of the tactics was that it involved meaning-focused language use. Learners used all language resources to enable them to work together to put together a satisfactory outcome.

It encourages students to think about their own thought process during reading. It helps students learn to be actively involved and monitor their comprehension as they read. It teaches students to ask questions during reading and helps make the text more comprehensible. The above were achieved in a student-centered manner. Palincsar and Brown (1984) claimed that, the experimental students functioned more independently of the teachers and improved the quality of their summaries over time.

Regarding to prediction strategies, the researchers found that (1) the prediction phase led into a reading activity which mirrored the way we read in real life, and (2) it gave students a reason to engage with the reading text- they really wanted to figure it out for themselves and stayed very focused.

Regarding to the summarizing tactic, the researchers assume that this strategy helped learners to organize their information, to review, and finally to form a metacognitive knowledge in order to best summarize the text.

REFERENCES

Brown, A. L., & Palincsar, A. S. (1989). Guided, cooperative learning and individual knowledge acquisition. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 393–451). Mahwah, NJ: Erlbaum.

Collins, A., Brown, J. S., & Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator,* 15(3), 38-39.

Collins, A., Brown, J. S., & Newman, S.E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L. B. Resnick (ED.), *knowing, learning, and instruction: Essays in honor of Robert Galser*. Hillsdale, NJ: Lawrence Earlbaum.

Duffy, G. (1993). Rethinking strategy instruction: Four teachers' development and their low achievers' understanding. *Elementary School Journal*, 93, 231-247.

Duffy, G., Lanier, J. E., & Roehler, L. R. (1980). *On the need to consider instructional practice when looking for instructional implications*. Paper presented at the Reading Expository Materials, University of Wisconsin–Madison.

Durkin, D. (1979). What classroom observations reveal about reading comprehension. *Reading Research Quarterly, 14*, 581–544.

Celce– Murcia, M.. (2001). Teaching English as a second or foreign Language. Third Edition.

Palincsar, A. S. (1986). The role of dialogue in providing scaffolded instruction. In J. Levin & M. Pressley (ED.), *Educational Psychologist,* 21 (Special issue on learning strategies), 73-98.

Palinscar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 2*, 117–175.

Richards, J. C., & Willy A. Renandya, (2002). Methodology in language teaching: *An Anthology of Current practice*. (ED.), Cambridge University Press.