

APPLICATION OF READING STRATEGIES THROUGH NEWSPAPER TO DEVELOP THE READING ABILITY OF ENGINEERING STUDENTS

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The aim of this study is to find out the effect of newspaper reading on the reading ability of L2 learners in engineering colleges using appropriate strategies. To validate this study a null hypothesis was formulated: Newspaper reading through proper reading strategies does not enhance significantly the reading proficiency of L2 learners in engineering colleges. To examine this hypothesis, the study used a Quasi-experimental design. A total of 54 students took part in this study with 27 students each in experimental and control group. The students in the experimental group were exposed to the newspaper reading with major focus on reading strategies while the students in the control group received the conventional method of reading. At the beginning and end of the study a reading comprehension test was conducted similar to the end semester pattern. The pre-test and post-test results indicated that newspaper reading applied with proper reading strategies enhanced the reading ability of L2 learners significantly.

Keywords: reading strategies; L2 learners; newspaper reading; reading ability; reading comprehension.

Introduction

Reading

The influence of English language all over the world is obvious and in many developing countries, the challenge it poses to the upcoming generation is always evident. On one side the art of speaking in English is the need of the hour and on the other side the rest of the skills (listening, reading and writing) have its share according to their needs. On this line, reading is one of the fundamental skills in school, colleges and life. It is a foundation for a child's success in school and, indeed, throughout life. Without the ability to read well, opportunities for personal fulfilment and job success inevitably will be lost (Anderson, Hiebert, Scott, & Wilkinson, 1985). In addition, citizens of modern societies need to be skilled and fluent readers in order to be successful in their professional and academic careers (Grabe, 2009; Grabe & Stoller, 2002). In spite of its importance, reading poses a tough challenge to the student community. The ever-increasing demand for high levels of literacy in our technological society makes this problem even more pressing (Snow, Burns, & Griffin, 1998).

In India, one of the basic aspects of engineering college syllabus is to develop the English reading proficiency of the students. Reading proficiency can be

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described as more than simply the ability to decode the written words in the text; it is also the active creation of meaning in an interactive process between information in a text and the reader's knowledge (Glenn Ole Hellekjær, 2009). Especially in on-campus recruitment, competitive examination like UPSC and also in IELTS, TOEFL English is tested in terms of reading. It is clear that at tertiary level, to be proficient in reading has become one of the requirements for engineering students in order to exchange ideas and information in the current era. Besides, technical reports, letters and official records are written in English which is used in normal business communication among all engineering professionals. Owing to these kinds of situations the engineers in India are to certainly come across the challenge of reading English documents. Also once an engineer progresses beyond entry level, he or she spends a good deal of time reading technical material, analyzing it, and responding to it (Charlene M. Spretnak, 1983). Therefore, in order to facilitate engineering learning and to keep pace with the latest trends in the field of science and technology, students require an adequate level of reading and comprehension skills in English (Priya Sasidharan, 2012).

Reading is the interactive processes of creating meaning from the print. When students approach reading passively, they are not likely to engage in the very processes needed to gather meaning from text. (Judith A. Scott, Elfrieda H. Hisebert, Richard C. Anderson, 1988). Likewise, when the reading process is hindered by the reader's imperfect knowledge of the language being read; the reader is often unable to make the necessary guesses or predictions. Also she/he will use wrong clues, or make wrong associations. (Antar Abdellah, 2013). These factors ultimately lead to poor reading proficiency, thereby hindering their academic progresses. Hence it is one of the essential factors to provide the students with purposeful reading strategies. Despite various kinds of studies being conducted to improve student's reading comprehension skills, the strategies and reading material applied in engineering curriculum among EFL engineering students stands uncertain.

Literature Review

This section deals with reading strategies and their use and the newspaper based second the newspaper based second language learning.

Reading Strategies and their Use

Strategy is derived from the Greek word *strategia* meaning 'generalship'; it is also called as 'a plan of action designed to achieve a long-term overall aim'. (Online Oxford Dictionary, 2014). Reading strategies are considered to be deliberate, conscious actions, identifiable to the agent and to others by intentions and selected goals (Paris, Lipton & Wixson, 1983). Research in second/foreign language (L2) reading suggests that effective reading strategies can be taught and that students

benefit from such instruction. Strategy training as it relates to L2 reading means that successful reading mainly depends on appropriate strategy use and that learners can improve their reading comprehension by being trained to use effective reading strategies. (Thomas S C Farrell, 2001). Hence the use of appropriate reading strategies should be exposed to students to help them enhance their comprehension of a reading text and make them become better readers (Noli Maishara Nordin, Sabariah Md. Rashid, Sharifah Intan Safina Syed Zubir & Roslan Sadjirind, 2013). Also it has been demonstrated that effective readers were more aware of strategy use than less effective readers (Mokhtari & Reichard, 2002). This indicates that students have to be effective strategic users to be a competent reader. In brief, effective strategies should be used by the students to comprehend the meaning of any given text. In addition, the current general agreement in the literature regarding the understanding of reading strategies is that strategies are conscious processes that are executed for a purpose (Choo, Eng, & Ahmad, 2012; Carrell, Gajdusek, & Wise, 1998).

In general reading strategies are differentiated as top-down, global reading strategies or bottom-up, local reading strategies as it appears in L2 research studies. (Abbott, 2006; Barnett, 1988; Block, 1986, 1992; Carrell, 1989; Young & Oxford, 1997). Top-down strategies are the strategies where the readers anticipate the main idea, construct a goal for reading, and self-monitor the reading process (Block, 1986, 1992; Cheng, 1998). As well the strategies that readers use to interpret specific linguistic units are called bottom-up strategies (Block, 1986, 1992). Next in line comes a further set of strategies, cognitive and metacognitive (Phakiti, 2003a, 2003b; Purpura, 1998) based on the L1 research of Flavell (1979a). Cognitive strategies aid the reader in constructing meaning from the text. Metacognitive strategies are strategies that function to monitor or regulate cognitive strategies (Devine, 1993; Flavell, 1981). Also Flavell (1979b) argued that metacognitive knowledge consists of knowledge of self, knowledge of aspects of the task, and knowledge of strategy use. Based on the purposes like supervising, paraphrasing, establishing coherence in a text, supporting and test taking, a list of reading strategies were derived (Anderson, Bachman, Perkins, and Cohen 1991).

The above mentioned studies on reading strategies reflect the ways and characteristics of varied strategies being applied. What has been largely under-researched is reading strategies used in tasks that integrate newspaper reading in an engineering curriculum.

Newspaper Reading

Newspaper is considered to be the one of the cheapest forms of print media. It can be effectively used in classrooms as a resource material for reading purpose. The newspaper, which has proved to be an excellent source of instructional material for secondary remedial readers, is adaptable to a variety of teaching strategies (Lehr and Harris, 1989). Also, a gradual habit can be developed among the students

to read the newspaper in English. As most of the reading passages given in the text book are related to the real world situation. These passages are either from e-resources or from the newspapers belonging to different countries around the world. In that case, newspaper directly serves the purpose and also generates a kind of interest among the students to read in English. Lindsay Clandfield and Duncan Foord (2006) stated that newspapers are much more current than course-books, they make an excellent springboard for lessons, and they feature different types of language (narratives, stories, letters, advertising, reports, etc.). Also studies have explored the use of newspaper articles to develop students' reading skills in senior high school (Bndaka & Eleni 2007). Hence, Newspapers are useful tool in the EFL classroom for improving reading skills and enhancing students' knowledge of current affairs. (Peter Grundy, 1993)

Questions of Study

The main question is "How effective will be the reading proficiency of L2 learners through newspaper using appropriate strategies?"

The other sub questions are as follows:

1. What is the effect of newspapers on the reading proficiency of L2 learners?
2. What is the effect of reading strategies on the reading proficiency of L2 learners using newspaper?

Hypotheses of the Study

1. Newspaper reading combined with reading strategies does not enhance significantly the reading proficiency of L2 learners in engineering colleges.

Method

Design

The quasi-experimental approach was employed to evaluate students' reading proficiency in engineering colleges after the application of reading strategies through newspaper in comparison with the traditional lecture based teaching strategy. Two different branches were chosen for experimental and control group to avoid transmission of treatment between the groups. Also the students were given a brief introduction about the study and its importance and also their role.

Sample and Setting

This study was conducted at Anna University, Chennai, India. The course 'Technical English' was a mandatory subject in the first year of the engineering curriculum. Twenty-seven (27) students from the mechanical engineering course took part in the control group and twenty-seven (27) students from the civil engineering course were in the experimental group.

In the Technical English course, students need to take reading comprehension test in their end semester examination which comprises of thirty-two marks out of hundred. The reading comprehension test part consists of two questions. The first question consists of three reading passages. The first passage with a total of 400 words and a reading vocabulary exercise with 8 multiple choice questions. The second passage with a total of 120 words and a reading vocabulary exercise with 4 multiple choice questions. The third part consists of a table based passage with 4 multiple choice questions. The second question consists of two passages with a total of 400 words each. The students can choose any one passage of their choice and answer accordingly. It comprises of a reading vocabulary exercise with 4 fill in the blanks, 4 match the following and 4 open ended questions.

Two assessments were conducted in this study. In the initial stage of the study, a reading proficiency test was conducted for both the groups, by giving a regular question paper prepared by one of the colleagues in the department. The exam paper similar to the end semester question pattern contained two questions with the first question being a compulsory one and the other being an optional type. Each question carried sixteen marks and totally the exam paper set was for thirty-two marks. After the training period which spanned for 25 hours in ten weeks, both the groups were tested again with a similar type of reading comprehension as a post test. The idea behind for using the similar kind of reading comprehension was to make sure that the comparison between the post and pre-test was done without any complications.

Materials and Procedures

The students had a text book, *Mindscales*, which had been provided by the university. However, as per the study newspaper articles were used to develop the tests. Therefore, sixteen newspaper articles which would cover the end semester pattern were selected. The newspaper articles were selected based on the students presumed interest and for their readability. The experimental group was exposed to the following procedures of the experiment:

1. Brief idea about the newspaper and its importance.
2. Topics which were divided into different categories such as headlines, city and state news, national, international, sports, cinema and business.
3. Choice to pick up and read the article every week under the supervision of the teacher.
4. Proper guidance by the teachers so that they follow the strategies accordingly.
5. To answer the given questions accordingly based on the articles they read.

Strategic Training Procedure

The major reading strategies namely, cognitive processing, global, local and metacognitive strategies were used in this study.

Before the training started, the students were given a passage for about 600 words to read. The main purpose of this task was to elicit the strategies which the students were already aware. While reading, they were given a sheet with a list of strategies and were asked to tick the appropriate strategies they employed while reading the passage.

In the practice sessions, the teacher modeled and practiced the above mentioned strategies that were planned to apply in this study. Firstly, the teacher set a goal before the reading task, i.e., to read an article and answer the following questions appropriately. Secondly, the teacher applied the cognitive strategy like slow reading, breaking the lexical items into parts using phonological cues, rereading the word, rereading the phrase/sentence, rereading the passage. Thirdly, the global strategies were applied by the teacher. He demonstrated skimming for gist, asking questions for ideas of the article, recognizing the text structure to identify the topic sentence and the details in following sentences of the topic, identifying and summarizing the main ideas, responding to the text with personal experience and opinions. Also, the teacher modeled local strategies like reading the questions first, guessing the meanings based on cognates in English, using dictionaries etc. Finally the teacher demonstrated the metacognitive strategies with samples like recognizing lack of comprehension, confirming understanding etc.

In the initial stages of the training, the students were motivated to participate in the reading tasks, though as expected it took some time for the students to get familiarized with the strategies. However, the students gradually picked up the strategies and tried to apply it in their reading tasks. Some students understood their goal and read the articles with great care and attention. Students applied the slow reading process; reread the passage for clear understanding of the content. Also they applied the global strategies thereby skimming the paragraph, asking questions and summarizing the main ideas. Many students used metacognitive strategies wherever necessary and tried to enhance their reading process. Local strategies were also used appropriately to enhance their reading. The following nine newspaper articles were taught in the same procedure.

The idea behind modeling of strategies was to make the students use a wide range of strategies from recognizing the meaning of the words to understand the concept of the passage. The students were regularly monitored in terms of how they used the strategies while reading. As mentioned the students responded to the given checklist by ticking the appropriate strategies which they had applied while reading the articles. The main idea behind the checklist was to know clearly, how much a student has got involved in the reading exercise. Fig 1 indicates that, out of

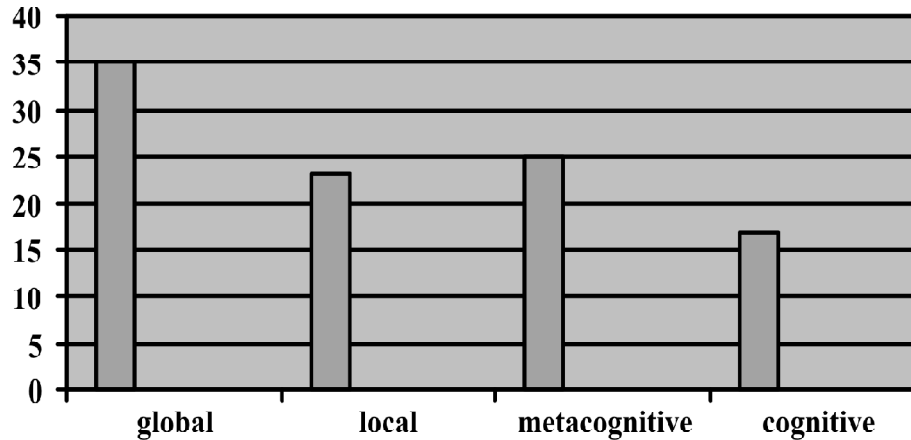


Figure 1

4 strategies 35% of global strategy, 23% of local, 25% of metacognitive and 17% of cognitive processing were applied respectively by the students during their practice sessions.

Qualitative Data Analysis

To figure out the answers to the research questions, the mean and the standard deviation were calculated. The t and F tests were probably the two most commonly used inferential statistics (Kratwohl, 1998; Vogt, 2007). To make a comparison between the two means, the t-test is used. The current study employed the independent t-test to compare the pre-test scores of both the control and experimental group.

As mentioned in table 1 it is clear that the mean of the scores has been increased after the practice session. In the pre-test the mean of the score is 11.35 and in the post-test the mean of the score is 13.44. From this it is understood that there is an improvement in the reading proficiency of the students.

TABLE 1: DESCRIPTIVE STATISTICS OF THE PRE-TEST AND POST-TEST OF THE EXPERIMENTAL GROUP

	<i>N</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Pre-test	27	16.00	8.00	21.00	11.35	3.43
Post-test	27	22.00	8.00	24.00	13.44	4.23

From table 2 it is evident that the significance of the results between pre-test and post-test is 0.04 which is lower than 0.05. This indicates that the practice was effective and students' scores have been increased in the post-test.

TABLE 2: PAIRED SAMPLE T-TEST OF READING PROFICIENCY OF THE EXPERIMENTAL GROUP

		<i>Paired differences</i>					<i>T</i>	<i>Df</i>	<i>Sig.</i>
		<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>	<i>95% confidence interval of the difference</i>				
					<i>Lower</i>	<i>Upper</i>			
Pair 1	Pre-test – post test	3.04	6.23	.96	-6.00796	-.04671	-3.22	40	0.04

In table 3, descriptive statistics of the reading proficiency of the students is given clearly. It is evident that the mean of the scores has not changed significantly between the pre-test and post-test period. It shows that there is no much impact on the control group with the traditional based teaching of reading comprehension.

TABLE 3: DESCRIPTIVE STATISTICS AND PAIRED SAMPLE T-TEST OF THE CONTROL GROUP

	<i>N</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Pre-test	27	16.00	9.00	20.00	10.23	2.43
Post-test	27	22.00	8.00	19.00	10.54	2.05

According to table 4 the compared t-test of the control group scores indicates that there is no significant development in the reading proficiency. The significance between the pre-test and post-test is 0.56 which is bigger than 0.05. It shows that the traditional lecture based teaching of reading comprehension has not made any impact on the participants' reading proficiency.

TABLE 4: PAIRED SAMPLE T-TEST OF READING COMPREHENSION TEST RELATED TO THE CONTROL GROUP

		<i>Paired differences</i>					<i>T</i>	<i>df</i>	<i>Sig.</i>
		<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>	<i>95% confidence interval of the difference</i>				
					<i>Lower</i>	<i>Upper</i>			
Pair 1	Pre-test – post test	-.44	3.23	.65	-1.05566	.77456	-.570	45	0.56

Feedback From L2 Engineering Students

Engineering students initially had a fear about the study. As per the syllabus they had to learn all the four skills to accomplish good grades in the subject. This led to an imbalance in terms of attention and focus on all four skills. They performed

well in certain skills in which they had a hold and interest. While taking the whole class in concern, most of the student did pay little attention to the reading skill.

The reasons cited by the students were lack of interest, no proper guidance, fear of facing difficulty, new vocabulary etc. Hence this study did play a major part in developing their reading skills evading all the reasons and making them a better reader. The reading strategies motivated the students to read English and take it seriously in future. As Yasar said, *“In the beginning, the reading activities were difficult but gradually I was able to understand the meaning of the article”*. Also to add on *“At first it was boring. Later when I understood the strategies, I felt easy and interesting to read the articles (Meher Nisha).”*

When students were given freedom to choose the articles of their own, they volunteered to read articles. *“I developed a sort self-motivation and self-interest to read the articles as an option to choose articles was given (Viji).”* At the end of the study the students reading pace improved a lot and it was visible at the classrooms when they were given the regular reading activities. *“I felt a change in pace while reading the articles and I improved my reading speed. This helps me to understand an article in a shorter period of time (Arun).”* Apart from reading the newspaper articles through strategies, the students benefitted variedly like improving their general English language, general awareness. *“Because of this reading activity we come across a lot of information, improve our English language and vocabulary (Ishwarya).”* The study gave an ever lasting impact on the students with some students planning to apply their acquired language ability from this study in other skills. *“I plan to continue this reading activity during my semester holidays. Now I have the capacity to understand the article in English. I plan to write all my exams in English from the next semester (Priya).”*

Discussion

The ultimate purpose of this study was to compare the effectiveness of important reading strategies, (cognitive processing, global, local and metacognitive strategies) and traditional lecture-based teaching strategy. The experimental group which was taught reading strategies performed better than the control group in the post test. This reflects the positive effect of the reading strategies employed by the students in the reading comprehension test. The study was designed to overcome some of the pedagogic limitations the engineering students faced during their school and college period in terms of reading. Most importantly, the students were given the much needed exposure about the importance of reading and the habit to cultivate the reading strategies.

At the time of practice session, students were given a checklist to mark the strategies they applied while reading the comprehension. The much applied strategies in decreasing order are global, local, metacognitive and cognitive strategies. The output from this study clearly displays that 35% of global strategies

were applied most of the times by the students to figure out the answers for the reading comprehension questions. It helped them to find out the main ideas, predict the answers and concept of the comprehension, using contextual clues, deciding what to read. Also, some students did struggle to apply this strategy as they were low proficient when compared to other students who applied it successfully.

17% of cognitive strategies applied by the students in the practice session did help them to perform better in the post test. But not much of students did really retain the knowledge of applying it in the post test to score even better. This shows that students did face some challenge in applying this strategy. Especially the knowledge of guessing the words from the context, inferring the meaning from the text clues, word association, word-word by translation were not achieved by the students.

Besides 23% of local strategies were implemented by the students at the time of practice session. Students received appropriate aid through this strategy and certainly this was useful to them to score better than the control group. Items like breaking words into smaller parts, using knowledge of syntactic structures, looking for specific details and paraphrasing were concentrated during the practice session.

25% of metacognitive strategies were applied by the students. This is one of the most important strategies as they guided them to better reading results. Items like self-monitoring, self-correction and time management did help them a lot. Also they volunteered with special interest to learn these factors so that they could implement it appropriately without any problem in reading.

Conclusion

The major tool used in this study was the newspaper articles to improve engineering students' reading proficiency of those who were enrolled in the engineering course. Through quasi-experimental design, the results demonstrated that the various reading strategies practiced by the students produced a better effect on students' reading proficiency of newspaper articles than the traditional lecture-based teaching strategy. The students in this study have also improved their proficiency level in reading to interpret the newspaper articles, process the reading information. Also students gained hands-on experience in applying appropriate strategies wherever necessary while reading.

This study has provided evidence of how EFL learners read newspapers and how the strategies influence positively on their reading. In an era where reading is the need of the hour, students find it boring and tough to read text books. The use of newspapers has certainly generated enough interest among the students. Also through this study it is understood how students approach newspaper articles. The findings of this study imply that students can be best helped improve their reading proficiency and help them prepare to reach the upcoming requirements of their century.

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