

The Effective strategies for developing reading comprehension among primary students: Males and females

¹ Rezvan saffarian, ²Bahman Gorjian

¹Sama Technical and Vocational Training College, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

²Department of TEFL, Abadan Branch, Islamic Azad University, Abadan, Iran

*Corresponding author: bahgorji@yahoo.com

Abstract-This paper investigated the effectiveness of using strategies on developing learning reading comprehension (RC) through using comprehending fiction and non-fiction. Thus 132primari students of an institution in Behbahan were examined through a RC proficiency test and then participants were selected through their homogeneous scores they received on the RC proficiency test. They were randomly divided in two experimental and control groups. During three months of instruction, experimental group was taught RC through using synonyms and opposites while the control group received some placebos on RC. Data were collected through pre and post- tests which lasted 12 sessions. Experimental group was taught English through using these strategies while the control group received some placebos. Independent Samples *t*-test was used and findings revealed that there was a significant differences between the two group since the experimental group outperformed the control in RC on the post-test phase ($p<.05$).These results suggest that EFL teachers should be encouraged to use these strategies to escalate EFL learners' reading comprehension abilities.

Key words-Synonyms, antonyms, reading comprehension, fiction, non-fiction

1.INTRODUCTION

This paper investigated the effectiveness of using effective strategies on boys and girls learners' reading comprehension. Reading skills are an important tool for students to become academically successful. When studying almost any area in the school curriculum they use texts to gain new information. Therefore, when reading a text the goal is to understand its content. It is a process that exceeds decoding, and includes comprehension processes of the word, sentence, and text level. Comprehension is the reason for reading, and vocabulary plays a significant role in comprehension (National Institute of Child Health and Human Development, 2000). A child who does not learn to read and comprehend in the early school years has severe difficulties also in studying other school subjects (Bowyer-Grane & Snowling, 2005, p. 190; McGee & Johnson, 2003, p. 49).

An important goal of literacy teaching is to awaken pupils' interest in language and literature and also give them a lasting positive attitude towards reading. Children who are motivated to read spend more time reading than their less motivated peers. Unfortunately, poor readers are often unmotivated to read. Consequently, the difference between their respective levels of reading skills becomes even more significant. The aim of literacy teaching is to support the development of pupils' ability

to read, interpret and use different texts. Each pupil should adopt a habit of evaluating and observing himself or herself as a reader. In addition, he or she should learn to select appropriate reading material for different purposes and to find information in various sources (Merisuo-Storm, 2006). Reading comprehension is a complex process: the reader constructs meaning by interacting with text using his or her previous knowledge and experience and the information that can be found in the text. The more background information related to the text the reader possesses, the easier it is for him or her to understand the text. When reading the text he or she activates the previous knowledge about the topic. Moreover, each text is unique as regards the structure of the text, its genre, vocabulary, and language. Several factors influence a reader's interaction: how easy the text is to read, how accurately it follows the conventions of its genre or structure, the language it is written in, and even the type and the size of font (Blair-Larsen & Vallance, 2004, p. 37; Pardo, 2004, p. 272–275). Reading is thinking cued by written language. A skilful reader finds – when reading fiction as well as non-fiction – several pieces of information in the text that make the understanding easier. Effective readers locate the basic facts from the text. Literal comprehension is needed when reading non-fiction but also when reading fiction. In fiction, a reader has to identify the characters and follow the events of the story. In non-fiction, a reader

needs to comprehend the topic, learn new facts related to it, and be able to find and remember important information (Scharer, Pinnell, Lyons, & Fountas, 2005, p. 25). Different types of texts are organised in different fashion. Most narrative texts follow a general structural pattern, which is often called story grammar. In contrast, expository texts have greater structural complexity. They include several patterns for instance, description, sequence, compare–contrast, cause–effect, and problem solution. Already before entering school children develop sensitivity to narrative structure. It helps them to understand stories. They take note of the setting (time, place, and characters), problems or conflicts, actions and reactions of the characters, and the story resolution as they read. However, mature comprehension includes generalization beyond the characters and the events of the story to the people and the events in real life. Expository texts are generally more demanding to comprehend because they contain many different structures. In addition, they often introduce many new concepts. Therefore, a reader needs previous knowledge on the topic to generate accurate inferences. Moreover, many children are not acquainted with non-fiction because most parents mainly read storybooks with young children (Williams, 2005, p. 7).

2. REVIEW OF LITERATURE

Good readers use *comprehension strategies* to support the construction of meaning. A reader may use these strategies consciously or they may have become automatic with practice. The use of a *meta-cognitive strategy* is activated by the reader's assessment of his or her own cognitive state. For instance, when reading a text on an unfamiliar topic the reader slows down. Skilful comprehenders often skim the text before reading it. They make predictions about it based on their *previous knowledge*. When reading, they pay special attention to the sections of the text that are essential for their purpose or particularly difficult. The other parts of the text they read more quickly and with less care. While reading they *respond to the text, ask questions, create mental images* representing the meaning of the text, and *interpret the text*. After reading they continue to reflect on the text. They *review it and possibly reread* the text parts that seem especially important to their purpose or that they did not understand sufficiently well (Pressley, 2002, p. 297). Parker and Hurry (2007, p. 311–313) argue that many teachers do not have explicit knowledge of the key reading comprehension strategies. Direct oral questioning seems to be the dominant strategy for teaching reading comprehension. Often this kind of directive questioning produces predictable correct answers. More infrequent are teachers' questions that assist children to develop more elaborated ideas. Even if the range of teachers' questions is wide and appropriate children's role is too passive.

Good comprehenders read fiction and non-fiction. They use their knowledge of text structure to effectively and strategically process the text. They have developed this knowledge from reading texts of different genres. Reading different genres and text formats affords

opportunities for strategy use, enhances understanding of how words work, and provides bases for discussion and meaning negotiation. Good readers construct and revise meaning while reading and also monitor their comprehension. If they have difficulties in understanding the text because of insufficient background information, difficulty of words, or unfamiliar text structure, they know many strategies to use, and are also able to select appropriate strategies (McLaughlin, 2006, p. 6–7). Because, there are a great variety of written materials available the act of comprehension is very sophisticated. Introducing pupils to many different texts prepares them for understanding more complex texts and complex issues in the future. Comprehension strategies are necessary for a reader because they can provide access to knowledge that is beyond his or her personal experience. Students that use cognitive strategies, such as previewing, activating prior knowledge, predicting, making connections, monitoring, organising, summarising, questioning, and visualising, are likely to comprehend and to be able to remember more of what they read. Researchers suggest that using such strategies helps pupils to become meta-cognitive readers. To become a skilful comprehender, a reader needs to decide which strategies to use depending on the content of the text and its level of difficulty. When reading a difficult text, the reader needs to consciously direct the process of meaning construction (Barton & Sawyer, 2003, p. 334–336; Bimmel & van Schooten, 2004, p. 86; Dougherty Stahl, 2004, p. 598; McLaughlin, 2006, p. 6).

When reading informational texts there are four key elements that are central to comprehension processes: prior knowledge, inferential reasoning, self-regulation, and affective variables connected to efficacy and motivation. The readers with *prior knowledge* of the topic and the structure of an informational text are most able to mentally organize and remember the ideas the text provides. *Inferential reasoning* refers to a reader's ability to read between lines. He or she makes connections that are not clearly expressed in the text. Inferential reasoning is an essential factor of skilled reading. A reader with sufficient prior knowledge of the topic makes more inferences than a less knowledgeable reader to make his or her comprehension easier. The term *self-regulated reading* refers to self-questioning and repair processes. Skilful readers are consciously aware of efficient information-seeking processes. They control these processes by choosing alternative strategies when others do not work. In contrast, less skilful readers are unsure of other strategies that might work when one strategy fails. Reader's *aims, beliefs, and attitudes* towards reading may also influence how he or she uses cognitive reading strategies (Coiro & Dobler, 2007, p. 218–219).

Written language is lexically richer than spoken language, and gradually young readers start reading texts that contain many words that are not part of their oral vocabulary. It is a demanding task for a child to *derive the meaning of an unknown word from the written context*. The complexity of the word is a crucial factor. If the word is related to a known concept it may be a simple synonym. However, the word can refer to unfamiliar concepts. Additionally, the difficulty of deriving the

meaning of a word from the context is connected to the concreteness of the unfamiliar concept. Furthermore, the complexity of deriving word meaning from context is also influenced by the nature of the context. Contexts do not necessarily reveal the full meaning of a word, even when explicit clues are present. Sometimes the context is even misleading (Fukkink, 2005, p. 24; Goerss, Beck, & McKeown, 1999, p. 153).

Strategies that a reader uses when deriving the meaning of a new word from written context are defined as purposeful and situated (context-related) sequences of activities. Which strategies a reader adopts depends on interactions among four factors. The first of these factors is the number of unfamiliar words in the text. The second is reader's interest: does he or she want to gain a more extensive vocabulary or only find out what the words in this particular text mean. The third is related to the task in hand: whether the reader's goal is to comprehend the text or learn new words. The fourth factor is related to the learning context: for instance, if the reader studies in language or science class. On average, skilful readers and readers of high verbal ability tend to use more advanced strategies than young readers and readers of low verbal ability (van Daalen-Kapteijns, Elshout-Mohr, & de Glopper, 2001, p. 147-148).

3. METHOD

3.1. Participants

The study was initiated with two goals in mind. One purpose was to investigate *how pupils' reading comprehension skills develop during the first six school years*. The second goal was to determine *if there are differences in the development of girls' and boys' reading comprehension skills*. The study observed the development of the pupils in six classes from the beginning of first grade, when the children were six or seven years old, to the end of the sixth grade. In the beginning of first grade in these classes there were 132 pupils – 73 girls and 59 boys. Learning EFL selected in a private language institutions in Behbahan. The constraints of time, number of institution available, and the participants were selected through non-random judgment sampling. The learners whose scores fell one standard deviation above and below the mean were selected.

The pupils' reading skills were measured at the end of the first, the second and the sixth school year. The reading tests for first and second grade included reading aloud, soundlessly and reading comprehension tasks, and the reading test for sixth grade measured pupils' ability to comprehend fiction and non-fiction texts. Their ages were ranged from eight to ten. Then, they were divided in two experimental and control groups i.e. each included 44 participants. Their level was judged through their scores on the pre-test administration as pre intermediate level. Experimental group received these effective strategies, while the control group was taught through some placebos.

3.2. Instrumentation

The instruments used in this study were a teacher-made reading comprehension (RC) test including 50 multiple choice items, determining the learners' level and their reading proficiency as well as their RC knowledge at the pre-test stage at beginning of the treatment period. Thus the homogeneity test was used as the pre-test. Its reliability value was estimated through Cronbach's Alpha as ($\alpha = .76$). The post-test was used to assess learners' RC after the treatment period. It was an RC teacher-made test including 50 multiple-choice items and was designed based on the materials they were taught throughout the treatment period. The reliability of the post-test was calculated as ($\alpha = .86$) respectively. Both experimental and control groups participated in the test administration. Independent Samples *t*-test was used to evaluate the effect of multisensory techniques on learners' RC. Cronbach's alpha, a measure of internal consistency, was for the initial test .88.

3.3. Procedure

The pupils' reading skills were measured at the end of the first, the second and the sixth school year. The reading tests for first and second grade included reading aloud, soundlessly and reading comprehension tasks, and the reading test for sixth grade measured pupils' ability to comprehend fiction and non-fiction texts. A teacher made RC pre-test was administered to 132 pre-intermediate EFL learners in a language private school in Behbahan, Iran. Then 60 learners whose scores were one standard deviation (SD.) below and one SD above the mean were selected and divided in two groups of control and experimental randomly. The pre-test Data were collected and analyzed through descriptive and inferential statistics. The Independent Samples *t*-test was run to show any significant differences between the two groups indicated their level as pre-intermediate learners. Each group included 30 participants and received the same materials with different techniques. The experimental group was taught through these effective strategies but the control group will receive some RC placebos. Data were collected and analyzed through descriptive and inferential statistics. The Independent Samples *t*-test was run to show any significant differences between the two groups.

4. RESULTS

This chapter presents the results of the data analysis of the two groups in the study. In addition, it describes the findings of the whole stage of the experiment. For the purpose of this study descriptive and inferential statistics were utilized to analyze the data. In doing so, first of all the data collected from both groups performances on the pre-test, post-test and then the results of each groups were separately submitted to statistical Independent Samples *t*-test to find out whether effective strategies had any impact on participants' reading comprehension acquisition. There proved to be great differences in

pupils' reading skills. In the reading aloud test the time that the pupils needed for the reading task varied from 50 seconds to 350 seconds, and while reading they made 0–29 errors.

Many students struggle with determining the main ideas and themes of the text as well as combining similar ideas, and synthesising them into a coherent whole (Zhang, Wu, Wei & Wang, 2011). Often they just repeat most of the text or give a very vague statement. It seemed that the pupils had not had practice enough in summarising and therefore many of them failed in doing it. Several pupils who had performed considerable well in previous sections of the test had succeeded poorly in summarising the text. Consequently, while the correlation between the results of the story text comprehension and the newspaper text comprehension section was strong ($r = .51$, $p = .000$), the correlations between them and the results of the summarising section ($r = .34$, $p = .000$; $r = .39$, $p = .000$) were not as high. It was obvious that the pupils had more experience in answering questions than in finding main ideas in a text. The results support the findings of Parker and Hurry (2007, p. 311–313) who argue that many teachers do not have explicit knowledge of the key reading comprehension strategies. Direct oral questioning seems to be the dominant strategy for teaching reading comprehension (Gorjian, Pazhakh, & Naghizadeh, 2012). The pupils scores in sixth grade were also compared with the scores they had in the initial test. Although at the end of the sixth school year only 60 per cent of the pupils were the same pupils as the pupils at the beginning of the first school year, the results suggest that the level of a school starter's school readiness still in many cases had a notable effect on his or her reading comprehension skills in sixth grade. There was a considerable correlation between the performance in the initial test and in the sixth grade reading comprehension test ($r = .55$, $p = .000$, $r^2 = .30$). According to the results of a stepwise regression analysis, the general and the auditory section of the initial test were the best predictors of the pupil's reading comprehension skills at the end of sixth grade ($r = .51$, $p = .000$). However, as the R Square ($r^2 = .26$) shows, in sixth grade they accounted only for 26 per cent of the variance.

5. DISCUSSION AND CONCLUSION

The results of the study show that during the first two school years there were great differences in the pupils' reading fluency, reading comprehension skills, and vocabulary (Gorjian, Alipour, & Saffarian, 2012). Furthermore, it seemed that the level of a school starter's school readiness had a strong effect on his or her reading skills still after two school years. After six years in school some pupils still had great difficulties in comprehending different texts. The results also suggest that several pupils who had poor reading comprehension skills in second grade were still struggling comprehenders at the end of sixth grade (Zhang, Wang, Wu, & Huo, 2011). However, next autumn they moved to secondary school and there they need good reading comprehension skills to be able to acquire new information independently. It was also very interesting to notice how different readers the boys and the girls were. It appeared that when reading a story

the girls were more sensitive and understood the characters' personalities and feelings more easily than the boys. In addition, they also paid attention to the surroundings in which the story characters lived. The boys seemed to focus their attention more to the events of the story. Although the girls, as a group, succeeded better than the boys in all the tests there were also girls whose marks were poor. Especially these girls and several boys need support in learning reading comprehension strategies. It is also essential to start to teach reading comprehension strategies as early as possible. In addition, a considerable time should be spent in teaching vocabulary. Moreover, the pupils need to be taught how the text context helps to understand the meaning of an unfamiliar word. They should learn what kind of clues a text can provide and how to find those clues (Gorjian, Pazhakh, & Parang, 2012). The results of the study showed that deriving the meaning of an unknown word from the written context is very difficult. It seems that the pupils had not had enough practice in it because they often produced a meaning for a word that it has in some other context. In addition, more time should be spent in summarising texts (Zhang, & Wu, 2011a). Summarising is a demanding task and needs a lot of practice. Many pupils could not discriminate the main ideas and the trivial ideas in the text. Findings showed that observed t was greater than t critical in both stories, so the null hypothesis on the lack of effective strategies impact on learners' RC was rejected. There was a significant difference between both control and experimental groups in the post-test. Thus the experimental group outperformed the control one, through using these strategies at the pre intermediate level of private institutions in Iran. In the review of literature section, a number of studies support the results of the study.

REFERENCES

- [1]Barton, J., & Sawyer, D.M. Our students are ready for this: Comprehension instruction in the elementary school. *The Reading Teacher*, 57 (4), (2003). 334–347.
- [2]Bimmel, P., & van Schooten, E. The relationship between strategic reading activities and reading comprehension. *L1 – Educational Studies in Language and Literature* 4 (1), (2004). 85–102.
- [3]Blair-Larsen, S.M., & Vallance, K.M. Comprehension instruction in a balanced reading classroom. In S.M. Blair-Larsen & K.A. Williams (Eds.), *The Balanced Reading Program: Helping All Students Achieve Success* (pp.37-52). Newark, DE: International Reading Association. (2004).
- [4]Bowyer-Grane, C., & Snowling, M.J. Assessing children's inference generation: What do tests of reading comprehension measure? *British Journal of Educational Psychology*, 75 (2), (2005). 189–201.
- [5]Coiro, J., & Dobler, E. Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research, Quarterly*, 42 (2), (2007). 214-257.
- [6]Dougherty Stahl, K.A. Proof, practice, and promise: Comprehension strategy instruction in the primary grades. *The Reading Teacher*, 57 (7), (2004). 598–609.

- [7]Fukkink, R.G. Deriving word meaning from written context: a process analysis. *Learning and Instruction*, 15 (1), (2005). 23–43.
- [8]Goerss, B.L., Beck, I.L., & McKeown, M.G. (1999). Increasing remedial students' ability to derive word meaning from context. *Reading Psychology*, 20 (2), 151–175.
- [9] Gorjian, B., Pazhakh, A. R., & Parang, K. An investigation on the effect of critical thinking (CT) instructions on Iranian EFL learners' descriptive writing: A case of gender study. *Advances in Asian Social Science*, 1(1), (2012), 114-118.
- [10] Gorjian, B., Pazhakh, A. R., & Naghizadeh, M. Comparative study of conjunctive adverbials (CAs) in native researchers' (NRs) and non-native researchers' (NNRs) experimental articles. *Advances in Asian Social Science*, 1(2), (2012), 224-247.
- [11] Gorjian, B., Alipour, M., & Saffarian, R. The effect of multisensory techniques on reading comprehension among pre-intermediate EFL learners: The case of gender. *Advances in Asian Social Science*, 1(2), (2012), 192-196.
- [12]McGee, A. & Johnson, H. The effect of inference training on skilled and less skilled comprehenders. *Educational Psychology*, 23 (1), (2003). 49–59.
- [13]McLaughlin, M. *Guided comprehension in the primary grades*. Newark, DE: International Reading Association. (2006).
- [14]Merisuo-Storm, T. Girls and boys like to read and write different texts. *Scandinavian Journal of Educational Research*, 50 (2), (2006). 111–125.
- [15]Pardo, L.S. What every teacher needs to know about comprehension. *The Reading Teacher*, 58 (3), (2004). 272–280.
- [16]Parker, M., & Hurry, J. (2007). Teachers' use of questioning and modelling comprehension skills in primary classrooms. *Educational Review*, 59 (3), 299–314.
- [17]Pressley, M. Metacognition and self-regulated comprehension. In A.E. Farstrup & S.J. Samuels (Eds.), *What Research Has to Say About Reading Instruction* (3rd ed.) (pp. 291–309). Newark: International Reading Association. (2002).
- [18]Scharer, P.L., Pinnell, G.S., Lyons, C., & Fountas, I. Becoming an engaged reader. *Educational Leadership*, 63 (2), (2005). 24–26.
- [19]Van Daalen-Kapteijns, M., Elshout-Mohr, M., & de Glopper, K. Deriving the meaning of unknown words from multiple contexts. *Language Learning*, 51 (1), (2001). 145–181.
- [20]Williams, J.P. Instruction in reading comprehension for primary-grade students: A focus on text structure. *The Journal of Special Education*, 39 (1), (2005). 6–18.
- [21] Zhang, Y, Wang, S. L. Wu, L & Huo, Y. Multi-channel diffusion tensor image registration via adaptive chaotic PSO. *Journal of Computers*, 6 (4), (2011), pp. 825-829.
- [22] Zhang, Y, Wu, L, Wei, G, & Wang, S, L. A novel algorithm for all pairs shortest path problem based on matrix multiplication and pulse coupled neural network. *Digital Signal Processing*, 21 (4), (2011), pp. 517-521.
- [23] Zhang, Y & Wu, L. Crop Classification by forward neural network with adaptive chaotic particle swarm optimization. *Sensors*, 11 (5), (2011 a), pp. 4721-4743.
- [24] Zhang, Y & Wu, L. A novel algorithm for APSP problem via a simplified delay pulse coupled neural network. *Journal of Computational Information Systems*, 7 (3), (2011 b), pp. 737-744.

Vitae



Bahman Gorjian obtained his PhD in TEFL from Research and Science Center of Khurasgan University in Isfahan Province. In 2006, he was appointed Assistant Professor at TEFL Department, Abadan Branch, Islamic Azad University, Abadan, Khuzestan Province, Iran. He is currently working within several research areas covering TEFL, applied linguistics, psycholinguistics, individual differences and teaching and testing EFL. He can be reached at:

bahgorji@yahoo.com

Cell phone: 00989161310917