Ars Artium: An International Refereed Research Journal of English Studies and Culture
ISSNs: 2319-7889 (P); 2395-2423 (E)
Vol. 12, January 2024, pp. 42-52
Edited by Vijay Kumar Roy
https://www.arsartium.org

Benefits of Metacognitive Strategies in ESL Students' Reading Skills: A Classroom Study Based on SRL Model

*Richa Bhardwaj**

Abstract

The application of metacognitive strategies incorporated in Barry J. Zimmerman's SRL method for the task of reading by less proficient English Honours students yielded promising results in a case study undertaken in an undergraduate classroom of Haryana. The usage of metacognitive strategies for improvement in reading skills by below average less proficient ESL students remains an under researched field. This paper shows that less proficient ESL students of Haryana, a northern state of India, find reading for a semester in English Honours quite challenging. It was observed during the case study of four less proficient ESL English Honours students in a university of Haryana that when, with the motivation and guidance of the teacher, these very students were encouraged to consciously apply metacognitive strategies included in above mentioned SRL method, learning outcomes for reading proficiency significantly improved. This can be deduced to mean that the incorporation of metacognitive strategies for long reading assignments by ESL students can lead to better learning outcomes.

Keywords: Metacognitive strategies, self-regulation, cognition

Introduction

The task of reading for English Honours courses, even by less proficient ESL students in Haryana, appears to be less daunting and provides better learning outcomes when

*Professor of English, Institute of Integrated and Honours Studies, Kurukshetra University, Kurukshetra-136119, Haryana, India. Email: bhardwajricha2@gmail.com

© 2024 The Author. Published by Paragon International Publishers. Open Access Under CC BY 4.0 licence.

metacognitive strategies incorporated in Barry J. Zimmerman's SRL method are applied in the classroom. Reading for an average semester of English Honours Course, that usually has three to four papers of literature either written in English or translated into English, would routinely require a student to go through a number of dramas, poems, novels and critical material—a task which even an average or above average ESL student may find challenging. However, less proficient below average ESL students find this prospect of reading intimidating and are easily discouraged. It was observed that when, with the motivation and guidance of the teacher, these very students were encouraged to consciously apply metacognitive strategies included in above mentioned SRL method, learning outcomes for reading proficiency significantly improved. Thus the incorporation of metacognitive strategies by ESL students can lead to better learning outcomes. The paper offers a case study of four less proficient ESL English Honours students in a university of Haryana who were encouraged to incorporate metacognitive strategies for their reading assignments. The paper also includes a definition, cursory history and a brief overview of metacognition. It incorporates an overview of Zimmerman's SRL method as well.

While the role of metacognition in student learning and attainment was increasingly recognized in the last two decades of the previous century, it is quite commonsensical to assume that human beings must have given conscious thought to their own thought processes. This can loosely be defined as metacognition. Dunlosky and Metcalfe note: "In fact, the first documented success at controlling the mind to improve memory begins with a gruesome tale involving the poet Simonides (557-468 BCE), which was later told by Cicero in his *De Oratore*" (9). Thus, there is evidence of "sophisticated metacognitive knowledge" in cultures "since antiquity" (11). According to Andrew M. Colman, "Writings on metacognition can be traced back at least as far as *De Anima* and the *Parva Naturalia* of the Greek philosopher Aristotle (384-322 BC)" (456). Commenting that the search of the origins of metacognition goes beyond 20th century, Spearman observes:

> Such a cognizing of cognition itself was already announced by Plato. Aristotle likewise posited a separate power whereby, over and above actually seeing and hearing, the psyche becomes aware of doing so. . . . Much later, especial stress was laid on this power of 'reflection', as it was now called by Locke. (52–53)

While interest in metacognition is not new, most scholars and researchers by and large agree that systematic investigation in metacognition began in the 1970s (Dunlosky and Metcalfe 11; Campione 117–140).

It was the American developmental psychologist John Flavell, specializing in children's cognitive development, who, promoted metacognition vociferously during the early phase. Flavell had used the term metamemory for the first time in 1970. After that, pioneering research began to grow in the field. The word "meta" began to appear in new articles with increasing frequency. The climate became quite receptive for Flavell's further highly influential research. While the metacognitive approaches were put to use in various domains of psychology, attention also began to be increasingly put on an exploration of the benefits of metacognitive strategies in the field of education in the 1970s.

In his 1979 seminal essay "Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry", Flavell drew attention to the importance of metacognition, defining it as "knowledge and cognition about cognitive phenomena" (906). While Flavell was one of the pioneers, other scholars have also attempted to define metacognition. Veenman et al. regard metacognition as "… a higher-order agent overlooking and governing the cognitive system, while simultaneously being part of it" (5). Nelson refers to metacognition as "the scientific study of an individual's cognitions about his or her own cognitions" (625). Ariel suggests that the aim of metacognitive instruction is to … develop the sensitivity of students to learning situations, to heighten students' awareness of their own cognitive repertoire and the factors that affect the learning process and contribute to successful learning, to teach strategies for learning, and to develop students' capacity to regulate and monitor their activities (82).

Flavell remains a towering figure. As Dunlosky and Metcalfe comment:

> Flavell's article was particularly powerful in defining the core components of metacognition as well as offering numerous testable hypotheses for how these components might develop throughout childhood, and in turn influence the success and progress of cognitive development itself. For any aficionado of metacognition, Flavell (1979) is a must read (32).

In this article, Flavell, while drawing attention to the studies that suggest young children are quite limited in their metacognition, elaborates that metacognitive experiences are conscious cognitive or affective experiences that occur during the intellectual enterprise and concern any aspect of it—often, how well it is going.

Flavell pressed the need of finding effective ways of teaching cognitive knowledge and cognitive monitoring skills. Metacognition thus means those higher order thinking skills whereby active control is exerted over cognitive processes for better outcome. As such, it is an exciting field in educational psychology. Flavell himself had based his research on the research and theories of Jean Piaget, publishing his study *The Developmental Psychology of Jean Piaget* in 1963. Swiss psychologist Piaget's ideas were important all through the 1970s and 80s in Europe and America for inspiring changes in education, making it learner centric. In his study of Piaget, Flavell gives consideration to children having thoughts about thoughts and is stirred to analyse into detail metacognitive processes.

Flavell's lead has been taken up by a number of scholars and researchers who emphasize the importance of metacognition. There is a heightened awareness that the use of metacognitive approaches in the field of education can lead to better learning outcomes and thus students, with better supervision, can put these to practice, exerting metacognitive control over their cognitive faculties. Macaro adds that "Although it is the range and combinations of all strategies that ineffective learners lack, it is the metacognitive … strategies which seem to be the strategy types most lacking in the arsenal of less successful learners" (269). Mahdavi draws attention to the importance of metacognition for language learners:

> Metacognition currently carves a unique and successful niche in the self-regulatory phylum and its instruction is a highly flexible and an indispensable approach to language education in that more proficient language learners are more metacognitive than less proficient language learners (30).

The paper focuses on the importance of Barry J. Zimmerman's SRL method for reading skills of less proficient ESL students of English Honours in Haryana. Self-regulation and self-direction are the focal points of Zimmerman's SRL method. Zimmerman's research incorporates different aspects of self-regulated learning, including the cognitive, metacognitive and motivational processes involved in learning. His work on SRL encompasses metacognition as an important component. Zimmerman brings to the fore the significance of metacognitive processes in effective learning outcomes. His SRL model includes metacognitive process as a key-element in self-regulation. The model highlights the learners' engagement in various metacognitive activities such as setting goals, planning and reflecting on their learning in order to regulate their learning processes. It promotes an understanding of the role of metacognition in self-regulated learning. The paper explores whether ESL

students can become more effective in their language learning endeavours by following the metacognitive strategies incorporated in Zimmerman's SRL model.

Zimmerman, who has written extensively on motivation and self-regulated learning, seems to take a lead from Flavell, who, in "Metacognitive Aspects of Problem Solving", speaks of "active monitoring and consequent regulation and orchestration" of cognitive processes "in the service of some concrete goal or objective" (232). Here Flavell establishes a clear affinity between self-regulated learning and metacognition. Indeed, as Burke comments, the other phrase that can be used for metacognitive strategies is "self-directional skills" (151).

Zimmerman's research primarily pertains to self-regulated learning and motivation in education and also has a significant impact on the field of educational psychology. It has underlined importance of educational interventions that give impetus to students' self-regulated learning skills, thereby improving their academic achievement. His work paved the path to better understanding of the role of self-regulation in learners becoming more effective in their learning. In his article "Becoming a Self-Regulated Learner: An Overview", Zimmerman divides self-regulated learning into three phases. This is known as Zimmerman's cyclic SRL model. The three phases described are: the forethought phase, the performance monitoring phase and the self-reflection phase (64-70).

During the forethought phase, the learner devotes time to self-assessment before setting goals and strategic planning and self-motivates. Goal setting requires an analysis of the task at hand. Goal setting itself necessitates a learner to have basic understanding of information. Once goals are set, learners need to plan specific strategies for achieving those goals. A learner's beliefs about self-efficacy are important here. A teacher can foster the learner's self-efficacy by suggesting appropriate goals and learning tasks according to his/her level. And the improvement anticipated. Zimmerman and Campillo elaborate that during performance monitoring phase, learning takes place while the planned strategy is implemented while being monitored. There are two aspects of performance phase; they are: self-control and self-observation. Self-control involves attention focusing and ignoring distractions. ("Motivating Self-Regulated Problem Solvers"). In self-observation process of second phase, a learner tracks his/her own performance and the outcome. In "Self-monitoring during Collegiate Studying" Zimmerman observes:

> Formal self-monitoring systems are planned and structured efforts to report the incidence of specific responses and keep easily interpreted

> records. . . . The selective focus and organized structure of formal self-monitoring instruments can be of particular benefit to novices because this focus and structure helps them to self-evaluate and self-regulate their learning through the eyes of an expert. (20)

In the last self-reflection phase, a learner himself/herself evaluates the learning outcomes. Zimmerman and Campillo point out two processes of self-reflection phase: self-judgement and self-reaction. ("Motivating Self-Regulated Problem Solvers"). A learner's self-reaction may reflect feelings of self-satisfaction or it may be defensive, depending on the outcome. Adaptive reactions which lead to modification of strategy are best reactions. Similarly, self-judgements that lead to the realization of a wrong strategy choice retain motivation.

The above detailed insights regarding metacognitive strategies incorporated in Zimmerman's SRL model are applied for a case study involving below average less proficient ESL English Honours students in a university of Haryana during the academic session 2020-21.

Case Background

As mentioned above, the case involves four less proficient students of final year B. A. English Honours. The gender of the students was not taken into consideration for the study. The students shared a broadly similar socio-cultural background. They roughly belonged to the age group of 19 to 20 years. All the four students had studied English as a subject during their school years at least from fifth grade. Even then, their proficiency in reading the language was not adequate to the task now in hand. A given semester of B.A. English Honours requires reading of novels, dramas, poems and discursive writing. With their less than adequate reading skills, the students felt overwhelmed with the prospect of studying so much. At the same time, they displayed a will to improve their reading skill with the motivation of the teacher.

Application of Zimmerman's Cyclical Self-Regulated Learning (SRL) Model:

Zimmerman's cyclical SRL model explained above was tested on the four students' reading skills. This model consists of three phases: forethought phase, performance monitoring phase and self-reflection phase. Each phase of the model involves specific metacognitive strategies that were put to use by the students.

Phase1: Forethought:

Essential components of this phase were self-assessment before setting goals and strategic planning. Constant interaction with students, routinely held group-discussions in the class room and class tests helped the teacher identify the four students that were to be part of this study. The students had nearly the same level of reading ability and could be classified as less proficient in their reading skills. The British Literature paper in the vi semester required reading of Aldous Huxley's novel *Brave New World* and the modernist poet T. S. Eliot's poems. The students were also required to go through critical material and notes provided in the class room. With the suggestion of the teacher this phase was divided loosely into following sub-phases, while the students utilized various metacognitive strategies:

a) **Self-Assessment:** It was suggested to the students to devote some time for assessing their own reading-skills before setting down to the task of reading. A few questions were posed in order to help students approach the task more effectively. They were asked to identify the areas of their strengths and weakness. They were also asked to assess their current language proficiency levels. A common complaint was students' feeling of deficiency because of their limited vocabulary and lack of experience of reading lengthy books.

b) **Goal-Setting and Task Analysis:** It was collaboratively decided to focus on the syllabus of the semester for reading assignments. Instead of plunging into the whole novel at one go, the teacher identified thematically more relevant chapters and passages to begin with. In this manner the daunting prospect of reading a book such as *Brave New World* that contained nearly sixty-four thousand words was brought within manageable limit. The students felt more in control because now the strategy was put in place that they could focus on specific parts. The cumbersome task of reading wholesale was broken down into achievable sub-parts. Similarly, more relevant parts of the critical material provided to the students were marked. Since the focus was on improving reading skills, goals included improvement in comprehension, increased reading speed and vocabulary building.

c) **Self-Motivation:** The breakdown of a complex task into parts and the setting of clear goals itself promoted motivation. Clarity regarding goals and manageable reading assignments fostered a sense of self-efficacy in students.

Phase 2: Performance Monitoring:

There are two main components of performance monitoring phase: self-control and self-monitoring. During this phase, pre-thought strategies were applied.

a) **Self-Control:** Students were guided regarding some self-control metacognitive strategies such as attention focusing, importance of mnemonic aids like creation of vivid mental pictures and the need of avoiding distractions while studying. The strategy of avoiding distractions was put to practice with will power and a gentle reminder by the teacher to keep electronic gadgets like mobile phone switched off. Instead, the use of hard copy of dictionaries was recommended. Attention focusing was facilitated, as students were guided to adopt the task-strategy of breaking down the reading assignment into manageable parts and to arrange it either chronologically or conceptually, as the situation demanded. They could exert self-control as they were required to read marked passages for each reading assignment. Use of mnemonic reading aids engaged students in metacognitive processes and helped them acquire a better sense of control. During their reading assignments, students could create associations, mental images and acronyms when they came across unfamiliar words—a useful way of increasing and retaining vocabulary. Similarly, they could visualize scenes, characters and concepts which aided better comprehension. For students of literature, it certainly meant an exciting and engaging way of improving reading-skills. Grouping of related ideas together also led to better understanding and promoted urge for reading more.

b) **Self-Monitoring:** Zimmerman's emphasis on self-monitoring was impressed upon the students in the second phase. Students metacognitively resorted to self-observation while undertaking their reading assignments during the performance phase. They kept a record of various aspects of performance of their reading assignments in their journal. These performance aspects were measured on four counts: time spent on reading assignment, number of pages read and the level of comprehension achieved which was reflected in oral/ written tests taken by the teacher. Clear demarcation of passages and parts for reading assignment during the forethought phase facilitated self-monitoring during the second phase. Students addressed questions like: "Do I understand what I'm reading?" or: "Am I using effective reading strategies?" This meta-awareness, which is a meta-cognitive strategy, of a student's realization of the

level of his reading effectiveness led to adjustment of strategies. When the meaning of a word was not clear from context, for example, the students resorted to opening dictionary.

Self-Reflection Phase:

The two processes of the third phase are: self-judgement and self-reaction.

a) **Self-Judgement:** During this part of the third phase, students judged their own performance, measuring their present reading-comprehension ability with their prior reading skills. They asked themselves whether they felt more confident about their comprehension powers or not and experienced an increase in their vocabulary or not. They answered in yes to both the points and felt better equipped to further tackle more reading assignments.

b) **Self-Reaction:** The students' self-reactions as to the improvement in their reading skills were recorded in journals by them. These self-reactions were partly based on the positive results of oral and written tests conducted by the teacher. The reactions also derived from students' own evaluation of their reading-comprehension skills. As the reactions were positive, they fostered students' self-efficacy beliefs and faith in the metacognitive strategies adopted for reading assignments.

Conclusion

As all English teachers vouchsafe, good reading skills are the basis of ESL learning. The importance of metacognition for the field of education has drawn considerable interest of researchers. The findings have been implemented in the field of education generally. However, the importance of metacognitive strategies for ESL students remains an under-researched area. The paper establishes the importance of metacognitive strategies by using Zimmerman's SRL model for improving reading skills of ESL students in a university of Haryana. It shows that metacognition is important in second language learning. The paper establishes that with the guidance of teacher, ESL students can develop metacognitive and self-regulation skills which enable them to improve their reading skills. The findings can be of great use for English language teachers of Haryana and elsewhere for improving reading skills of ESL students. As such, the results offer a viable, evidence-based way that can be explored further for improving reading-skills of ESL students.

Works Cited

Ariel, A. *Education of Children and Adolescents with Learning Disabilities.* Merrill Pub. Co.,1992.

Burke, J. "Teaching English Language Arts in a 'Flat' World." *Adolescent Literacy: Turning Promise into Practice*, edited by G. Kylene Beers, Heinemann, 2007, pp. 149-165.

Campione, J. C. "Metacognitive Components of Instructional Research with Problem Learners." *Metacognition, Motivation, and Understanding*, edited by F. E. Weinert and R. H. Kluwe, Lawrence Erlbaum, 1987, pp. 117-140.

Colman, Andrew M. "Metacognition." *A Dictionary of Psychology* (4 ed.), Oxford UP, 2015.

Dunlosky, J., and J. Metcalfe. *Metacognition.* Sage Publications, 2009.

Flavell, J. H. "Metacognitive Aspects of Problem Solving." *The Nature of Intelligence*, edited by L. B. Resnick, Lawrence Erlbaum, 1976, pp. 231-23.

_____. "Metacognition and Cognitive Monitoring: A New Area of Cognitive–Developmental Inquiry." *American Psychologist*, vol. 34, no. 10, 1979, pp. 906-11.

Georghiades, Petros. "From the General to the Situated: Three Decades of Metacognition." *International Journal of Science Education*, vol. 26, no. 3, 2004, pp. 365-383.

Macaro, E. *Learning Strategies in Foreign and Second Language Classrooms*. Continuum, 2001.

Mahdavi, Mohsen. "An Overview: Metacognition in Education." *International Journal of Multidisciplinary and Current Research*, vol. 2, May/June 2014, pp. 529-535.

Nelson, T. O. "Cognition versus Metacognition." *The Nature of Cognition*, edited by R.J. Sternberg, MIT Press, 1999, pp. 625–641.

Spearman, C. *The Nature of Intelligence and the Principles of Cognition*. Macmillan, 1923.

Veenman, M., et al. "Metacognition and Learning: Conceptual and Methodological Considerations." *Metacognition Learning*, vol. 1, no. 1, 2006, pp. 3–14. https://doi.org/ 10.1007/s11409-006-6893-0.

Zimmerman, B. J. "Becoming a Self-Regulated Learner: An Overview." *Theory Into Practice*, vol. 41, no. 2, 2002, pp. 64-70. https://doi.org/10.1207/s15430421tip4102 2.

Zimmerman, B. J., and A. S. Paulsen. "Self-monitoring during Collegiate Studying: An Invaluable Tool for Academic Self-regulation." *New Directions in College Teaching and Learning: Understanding Self-regulated Learning*, edited by P. Pintrich, no. 63, Fall, Jossey-Bass, Inc, 1995, pp. 13–27.

Zimmerman, B. J., and M. Campillo. "Motivating Self-Regulated Problem Solvers." *The Psychology of Problem Solving*, edited by Janet E. Davidson and Robert J. Sternberg, Cambridge UP, 2003, pp. 233-262.

❑❑❑