PROMOTING METACOGNITION OF READING STRATEGIES IN A HIGHER EDUCATION CONTEXT IN PAKISTAN

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Abstract

To develop reading skills of students, teachers have been advised to provide metacognitive reading strategy instruction by researchers. However, previous research has provided limited understanding of how teachers could foster metacognition of reading strategies in a 'real' classroom setting. Moreover, previous research pre-supposed an a priori list of teaching practices in the lessons and did not take into account the needs of the students and the context during metacognitive reading strategy instruction. Studies facilitating metacognitive reading strategy instruction in an ESL setting are also rare. This paper reports on an action research that provides a detailed data-led understanding of how metacognition of reading strategies could be promoted in an ecologically valid university level ESL classroom setting. The study participants of this study were eight undergraduate university students. Data for the study was collected through learner diaries, interviews, think aloud protocols, note-taking, researcher journal and end of class feedback in two action research cycles over an academic year. The findings revealed that providing explicit instruction and opportunities for collaborative discussion about strategy use as well as promoting students' interest in reading helped raise students' awareness, use and regulation of reading strategies. Implications of the study are discussed.

***Keywords*:** Metacognitive Reading Strategies Instruction, explicit instruction, collaborative discussion, interest in reading, action research, tertiary

Introduction

While academic reading presents a challenge for primary level native students of English (e.g., National Assessment of Educational Progress, 2019), tertiary-level academic reading presents an even greater challenge for ESL students[1]. The interactive view of reading posits that reading is a complex problem solving process in which readers actively construct meaning by making sense of text[2]. This meaning construction of text is based on cultural and experiential background of the reader, purpose for reading and overall

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[1] Ohata, K., & Fukao, A. L2 learners' conceptions of academic reading and themselves as academic readers. *System*, 42, (2014), 81-92.

[2] Blachowicz, C. L., & Ogle, D. *Reading Comprehension: Strategies for Independent Learners*. (New York: The Guilford Press, 2008).

setting[3]. Therefore, it is not surprising that ESL students encounter more difficulties during English reading comprehension as compared to their monolingual counterparts.

Research probing into how best to enable students become effective readers found that helping students understand how to use and monitor the use of reading strategies aids comprehension[4]. In other words, comprehension instruction should foster metacognition in students[5]. Metacognitive ability is one of the characteristics of skilled L1 and L2 readers[6]. Metacognition is generally conceptualized as having two fundamental components: 1) metacognitive knowledge and 2) regulation of cognition[7]. The literature shows that metacognition can be fostered[8].

Studies that demonstrated that successful readers usually display a higher degree of metacognitive awareness and regulation 'stimulated interest in the possibility that metacognitive skills might be deliberately fostered'[9]. This, in turn, led to the design and implementation of training studies. In second language adult reading strategy research there have been a number of intervention studies that have incorporated metacognitive reading strategy instruction.

One of the earliest studies that provided explicit metacognitive instruction to L2 university level students was undertaken by Carrell[10]. The study focused on training of text-structure feature recognition and understanding with the aim to determine whether such instruction would facilitate reading comprehension in a control/experimental design. The participants were 25 high-intermediate proficiency ESL students enrolled in an intensive English program in a university in US. The participants received training for five successive one-hour sessions during a one-week period. The results indicated that the treatment group showed a significant gain in their recognition and use of the text structure while the control group did not. The study therefore indicated that the metacognitive instruction in text structure can positively impact relatively high-level second language readers' comprehension.

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[3] Block, C. C. & Pressley, M. Best practices in comprehension instruction. In L. M. Morrow, L. B. Gambrell, L and M. Pressley (Eds.) *Best Practices in Literacy Instruction* (2nd edn, pp. 111-126). (New York: The Guildford Press, 2003).

[4] Griffith, P. L., & Ruan, J. What is metacognition and what should be its role in literacy instruction? In S. Isreal, C. Block, K. Bauserman, & K. Kinnucan-Welsch (Eds.), *Metacognition in Literacy Learning: Theory, Assessment, Instruction and Professional Development* (pp. 3-18). (Mahwah, NJ: Lawrence Erlbaum, 2005).

[5] Baker, L. Metacognition in comprehension instruction. In C. Block & M. Pressley (Eds.), *Comprehension Instruction: Research-based Best Practices* (pp. 77- 95). (New York: The Guilford Press, 2002).

[6] Sheorey, R., & Mokhtari, K. Introduction. In K. Mokhtari & R. Sheorey (Eds.), *Reading Strategies of First- and Second-Language Learners: See How They Read* (pp.1-10). (Norwood, MA: Christopher-Gordon Publishers, 2008).

[7] Harris, K. R., Santangelo, T., & Graham, S. Metacognition and strategies instruction in writing. In H. R. Waters & W. Schneider (Eds.), *Metacognition, Strategy Use and Instruction* (pp. 226-256). (New York: The Guilford Press, 2010).

[8] Baker, L., & Beall, L.C. Metacognitive processes and reading comprehension. In S. E. Israel & G.G. Duffy (Eds.), *Handbook of Research on Reading Comprehension* (pp. 373-388). (New York: Routledge, 2009).

[9] Baker, L. Metacognition in comprehension instruction: What we've learned since NRP. In C. Block & S. Parris (Eds.), *Comprehension Instruction: Research based Best Practices* (pp. 65-79). (New York: The Guilford Press, 2008).

[10] Carrell, P. L. Facilitating ESL reading by teaching text structure. *TESOL Quarterly*, *19*(4), (1985), 727-752.

Another study that examined if strategy training enhances L2 reading was carried out by Carrell et al.[11]. In this study subjects consisted of 26 ESL students enrolled in an intensive ESL program at a university in US. Of the two experimental groups formed, one received the ETR training and the other received the semantic mapping training for the total duration of four days. Strategy training was not provided to the control group, but they participated in pre- and post-test. The study showed that strategy training improved reading comprehension scores of the treatment group subjects. This made the authors conclude that second language reading pedagogy, in particular of adult ESL students in academic settings, would benefit from explicit metacognitive reading strategy instruction.

Other than investigating if metacognitive training has an impact on readers' reading comprehension, researchers involved in metacognitive training also explored if the success of instruction differs depending on ability level. For instance, Kern[12] (1989) conducted a study to investigate the effect of strategy instruction on the reading comprehension and inferential ability of third semester French students studying at a university in US. The study also aimed to determine whether the instruction was differentially effective depending upon second language reading ability. For the purposes of the study, the subjects were categorized as low-, mid-, or high-ability level based on the test scores. The 26 treatment group students received explicit instruction in reading strategy use on the recognition of sentence and discourse cohesion, and strategies of word analysis, in addition to studying the normal course content. On the other hand, the 27 control group students did not receive explicit instruction in reading strategies but covered the same course material. The results showed that the strategy-training group obtained a statistically higher gain on comprehension measure than the control group.

In all of these adult L2 studies, significant positive effects were found for the strategy training when compared with control groups or traditional approaches to instruction. These studies constitute seminal work that laid the groundwork for understanding the effect of metacognitive reading strategy instruction. However, they are restricted in that they only examine the effects from mostly quantitative results. They did not attempt to understand the changes in students' awareness and regulation of strategy use within a qualitative research framework.

Despite their limitations, insights from these studies have been useful for reading teachers in enabling L2 readers to become strategic readers. Auerbach and Paxton[13], for example, designed a qualitative intervention study to apply findings of such studies to classroom practices. The study aimed at helping students explore their own L1 and L2 reading strategies and to develop decision-making processes for selecting and monitoring the use of strategies. The students, 20 in number, were part of an undergraduate ESL Course that was facilitated over one semester with four hours of instruction per week at a university

[11] Carrell, P., Pharis, B., & Liberto, J. Metacognitive strategy training for ESL reading. *TESOL Quarterly, 23*(4), (1989), 647-678.
[12] Kern, R. G. Second language reading strategy instruction: Its effects on comprehension and word inference ability. *The Modern Language Journal, 73*(2), (1989), 135-149.
[13] Auerbach, E. R., & Paxton, D. "It's Not the English Thing": Bringing reading research into the ESL classroom. *TESOL Quarterly, 31*(2), (1997), 237-261.

in US. Students were given individual assessments at the beginning and end of the course through think-aloud protocols. Students' initial reading strategies, conceptions and feelings about reading, and reading histories were also examined at the start of the course. During the course students kept journals and strategy logs, took tests and quizzes, wrote research papers about how their reading had changed during the course and participated in interviews. The study showed that students increased the number of strategies they drew from and recognized that there was no single strategy or set of strategies that worked. Overall, the study shows a possible approach to developing metacognition in concert with strategies in adult ESL learners. It also represents a departure from the quantitative focus of the earlier studies. However, like other earlier studies discussed above, this study was also conducted in US probably because of the 'Western legacy' of metacognitive reading strategy instruction[14].

Recently, however, metacognitive reading strategy instruction appears to have received academic attention in the 'East' as well. For instance, Zhang conducted two-month strategy-based reading instruction at a tertiary institution in Singapore. The participants of the study were young ESL adults from China who were required to take the English-for-academic-purposes (EAP) courses. The study had quasi-experimental design and involved a control group and an experimental group. The control group comprised of 49 students while the experimental comprised of 50 students. The study investigated students' willingness to be engaged in strategic reading and understanding of reading, and the effect of instruction on reading performance. In the study, Zhang integrated clusters of reading strategies in the reading curriculum to enrich students' metacognitive knowledge and self-regulation of reading strategies. The results of the study showed that teachers' instructional intervention brought about changes in the ESL students' comprehension and the use of reading strategies within a period of two months. The study also showed that the students did not resist the instruction and responded well to it even though they belonged to a culture where reading strategies were never taught. This made the writer conclude that 'reading teachers, working from an understanding of the prior learning culture of these students, can teach reading strategies'.[15]

Another study that provided instruction to students in the East was conducted by Kim and Cha[16]. The study assessed qualitatively the changes instruction brought about in students' metacognitive regulation during reading. In their study Kim and Cha provided metacognitive reading strategy instruction to 4 Korean university students for 15 weeks. They used think-aloud protocols for data collection and instructional purposes. Results of the study showed marked changes in the frequencies of students' regulation processes over time. Moreover, the study showed that students used strategies in more flexible and orchestrated manner as compared to the start of the study. The study, though, departed from the majority of studies that mainly focused on quantitative outcomes with respect to

[14] Zhang, L. J. Constructivist pedagogy in strategic reading instruction: Exploring pathways to learner development in the English as a second language (ESL) classroom. *Instructional Science, 36*(2), (2008), 89-116.
[15] *Ibid.,* 12
[16] Kim, H. I., & Cha, K. A. Korean learners' metacognition in reading using think-aloud procedures with a focus on regulation of cognition. *English Language Teaching, 8*(6), (2015), 178-193.

changes in metacognitive awareness and use of reading strategies, as it only focused on changes in adult ESL students' regulation of cognition.

To sum, it is evident from the above review that a growing body of research shows that metacognitive reading strategy instruction is beneficial. However, most of these studies offer only a partial view of students' experience of metacognitive reading strategy instruction by mostly centering on the quantitative outcomes of this form of instruction. The current study seeks to understand the teaching practices that could be appropriate in the context of an ecologically valid ESL classroom setting, instead of pre-supposing an a priori list of teaching practices and taking for granted the students in the lessons. For this purpose, it adopts an action research methodology that has not been utilized during metacognitive reading strategy instruction at tertiary level so far. Consequently, it deviates from the majority of metacognition research in L2 higher education setting by taking into account the needs of the students and the context during metacognitive reading strategy instruction. Arguably this provides a more holistic and nuanced depiction of what goes on in the real classroom during metacognitive reading strategy instruction as compared to the previous studies. Moreover, this study focuses on Pakistani ESL university level students who have not been afforded such an instruction to date. This study investigated the following research question:

How can metacognition of reading strategies be promoted in university level ESL students in Pakistan?

Method

Research Design

The current study is rooted in the action research tradition which simultaneously focuses 'on action and research'[17]. Action research is 'practitioner driven'[18] and is therefore regarded as 'a form of practitioner research'[19]. With regard to language teachers, action research is viewed as a way to 'bridge the gulf between researchers and teachers and to encourage teachers to adopt an investigative stance towards their own classroom practices'[20]. Inclusion of teachers in the enterprise of research is regarded as the strength of action research since teachers are more involved in and experienced with their contexts than outside researchers[21]. The current study comprised of two action research cycles spanned over four months each.

[17] Burns, A. Action research: an evolving paradigm? *Language Teaching, 38*(2), (2005), 57-74.
[18] Nunan, D., & Bailey, K. M. *Exploring Second Language Classroom Research: A Comprehensive Guide.* (Australia: HEINLE CENGAGE learning, 2009).
[19] Borg, S. Language teacher research engagement. *Language Teaching, 43*(4), (2010), 391-429.
[20] Burns, A. Action research and second language teacher education. In J. Richards & A. Burns (Eds.), *The Cambridge Guide to Second Language Teacher Education* (pp 289-297). (Cambridge: Cambridge University Press, 2009).
[21] Burns, A. *Collaborative action research for English Language Teachers.* (Cambridge: Cambridge University Press, 1999).

Research Sample

The study was carried out in a public sector university of Pakistan. The participants of the both action research cycles comprised of first year Bachelor of Arts (BA) students from a department from the Faculty of Science. The group for the first cycle comprised of 30 Pakistani students, 7 male and 23 female, while the second group had 26 students altogether, 5 male and 21 female. The entire groups that ranged in age 19-20 were invited to take part in the study. However, four participating students from each group were selected for the in-depth data collection. These students represented different proficiency levels in reading. Reading proficiency was operationalized in terms of the grades obtained on the University of Warwick's English Language Test. In the first cycle, Saba scored A grade, Furqan scored B grade, Khadija scored C grade and Ali scored D grade. In the second cycle, Marium scored B grade, Rida scored C grade, Nida scored D grade and Sarah scored E grade. (This paper uses pseudonyms to protect the anonymity of the students).

Research Instrument and Procedure

This study employed multiple methods for data collection. The interviews and think-aloud protocols (TAP) were conducted at the beginning, middle and end of the study. SORS questionnaire, learner diaries, researcher journal and end-of-the-class feedback were the additional data sources in the study. The strategies of prediction, activating prior knowledge, skimming, scanning and identifying the main ideas were introduced during the study.

Findings

This section brings together the findings regarding the process that was undertaken to provide metacognitive reading strategy instruction in Cycle 1 and Cycle 2 to establish the instructional practices that formed the basis for the lessons in the study. However, given the qualitative action research design of the study, this section does not draw any conclusions with regard to which instructional practice was particularly effective in promoting metacognition of reading strategies in students. Rather, it discusses the instructional practices employed during the study. These instructional practices were providing explicit instruction, creating opportunities for student collaborative discussions about strategy use, and creating students' interest in reading.

Providing explicit instruction

The research indicates that explicit instruction enhances students' strategic and metacognitive awareness[22]. In the current study, explicit instruction was provided to foster metacognitive knowledge and metacognitive regulation in students. The main features of explicit instruction utilized during the study included discussion of the declarative, procedural and conditional knowledge associated with the strategies; teacher modelling or think alouds; and guided and independent practice. Declarative knowledge is the

[22] Dole, J. A., Brown, K. J., & Trathen, W. The effect of strategy instruction on the comprehension performance of at-risk students. *Reading Research Quarterly*, *31*(1), (1996), 62-88.

knowledge about what strategies are[23]. *Procedural knowledge* includes knowing the procedure for performance and use of the cognitive strategies[24]. *Conditional knowledge* includes 'knowing *when* and *why* to apply various actions'[25].

The researchers (e.g. Paris et al.[26]; Duffy et al.[27]; Gunning[28]) emphasize that teachers should offer explanation of the declarative, procedural and conditional knowledge associated with using the strategies during metacognitive reading strategy instruction. Providing teacher explanation is considered essential since it produces awareness of reading strategies in students[29]. However, in this study direct explanation to students about how, when, where to use strategies was not provided. Rather, students were provided with opportunities to actively construct this metacognitive knowledge associated with using the strategies. To stimulate and to guide their discovery of metacognitive knowledge, an instructional aid called the SEM (see Table 1) was utilized during the study. The SEM was developed by Schraw [30] with the aim of scaffolding development of metacognitive knowledge in students. Schraw suggested that while using the SEM teachers could ask students to complete each row of the matrix either individually or in a group over the course of the school year. In this study, however, the SEM was used to help students reflect about strategy use both individually and as small groups. SEM was also used to facilitate whole class discussions on the metacognitive knowledge associated with using the strategies introduced. Specifically, during Cycle 1 and Cycle 2 whenever a new strategy was introduced students were asked to fill in the SEM individually. Once students had filled it in, they were encouraged to share what they had written with a peer. This was followed by a whole class discussion and reflection on the what, how, when and why of strategy use (i.e., declarative, procedural and conditional knowledge). This particular procedure was followed in the lessons for two reasons. First, I thought this could stimulate students to think deeply about the types of metacognitive knowledge which might help them retain the information related to strategy use. Pressley et al. [31] point out that 'when through their own actions students develop knowledge about strategies, and about when and how to deploy them, they have an opportunity to acquire a deep, personal understanding of the intellectual processes being acquired. This thorough understanding promotes access to and application of what has been learned'. Other researchers (e.g.

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[23] Paris, S. G., Lipson, M. Y., & Wixon, K. K. Becoming a strategic reader. *Contemporary Educational Psychology, 8*(3), (1983), 293-316.
[24] Pintrich, P. R., Wolfers, C.A., & Baxter, G. P. Assessing metacognition and self-regulated learning. In G. Schrwa & J. Impara (Eds.), *Issues in the Measurement of Metacognition* (pp. 43-97). (Lincoln, NE: Buros Institute of Mental Measurements, University of Nebraska, 2000).
[25] [26] Paris, S. G., Lipson, M. Y., & Wixon, K. K. Becoming a strategic reader. *Contemporary Educational Psychology, 8*(3), (1983), 293-316.

[27] Duffy, G. G., Roehler, L. R., Sivan, E., Rackliffe, G., Book, C., Meloth, M. S., Vavrus, L. G., Wesselman, R., Putnam, J., & Bassiri, D. Effects of explaining the reasoning associated with using reading strategies. *Reading Research Quarterly, 22*(3), (1987), 347-368.
[28] Gunning, T. G. *Assessing and Correcting Reading and Writing Difficulties* (2 ed.). (Boston: Allyn and Bacon, 2002).
[29] Roehler, L. R., & Duffy, G.G. Direct explanation of comprehension processes. In G. G. Duffy, L. R. Roeher & J. Mason (Eds.), *Comprehension Instruction: Perspectives and Suggestions* (pp. 265-280). (New York: Longman, 1984).
[30] Schraw, G. Promoting general metacognitive awareness. *Instructional Science, 26*(1-2), (1998), 113–125.
[31] Pressley, M., Harris, K.R., & Marks, M.B. But good strategy instructors are constructivist! *Educational Psychology Review, 4*(1), (1992), 3-31.

Gagne & Brown[32]) have also emphasized that guided discovery produces understanding and greater involvement in students. Second, in keeping with Poplin's [33] criticism that strategy instruction prefers the learner to be a passive recipient of instruction, I did not want to 'provide' students with metacognitive knowledge associated with the strategy use. Rather, I wanted students to 'produce' metacognitive knowledge. By doing so I aligned myself with the cognitive perspective of language learning that view the learner as 'an active participant in the learning process' [34] and 'places great responsibility on the learner' [35]. As Larsen-Freeman [36] argues, rightly in my view, the learner is not 'merely a passive recipient' and learning is not merely a 'unilateral process…dependent on some benevolent, skilful, more proficient interlocutor'. Thus, in the learning process I wanted students to become thinking participants. However, in consideration with Vygotsky's [37] sociocultural view of learning students were also provided with opportunities to discuss what they had written in the SEM with peers as well.

Findings of the study show that students from both the cycles benefitted from thinking how, where and why strategies are used in different ways. For instance, Furqan in Cycle 1 thought that filling in the SEM helped students to 'think thoroughly' and gain procedural knowledge associated with the strategies, whereas Nida in Cycle 2 thought that reflecting on the what, why and how of the strategies helped her set and achieve goals as it fostered her interest in reading and helped her remain focused. These findings reveal that there existed a sense from the students that they appreciated thinking about metacognitive knowledge associated with using the strategies.

Table 1 Strategy evaluation matrix (Schraw 1998: 120)

Strategy	**How to Use**	**When to Use**	**Why to Use**
Skim	Search for heading, highlighted words, previews, summaries	Prior to reading an extended text	Provides conceptual overview, helps to focus one's attention

[32] Gagne, R. M., & Brown, L. T. Some factors in the programming of conceptual learning. *Journal of Experimental Psychology, 62*(4), (1961), 313-321.
[33] Poplin, M. S. Holistic/constructivist Principles of the Teaching/Learning Process Implications for the Field of Learning Disabilities. *Journal of Learning Disabilities, 21*(7), (1988), 401-416.
[34] Williams, M., & Burden, R. L. *Psychology for Language Teachers: A Social Constructivist Approach*. (Cambridge: Cambridge University Press, 1997).
[35] Bialystok, E. Achieving proficiency in a second language: A processing description. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood-Smith & M. Swain (Eds.), *Foreign/Second Language Pedagogy Research* (pp. 63-78). (Clevedon: Multilingual Matters, 1991).
[36] Larsen-Freeman, D. Individual cognitive/affective learner contributions and differential success in second language acquisition. In M. Breen (Ed.), *Learner Contributions to Language Learning* (pp. 12-23). (Harlow: Longman, 2001).
[37] Vygotsky, L. Interaction between learning and development. *Readings on the Development of Children, 23*(3), (1978), 34-41.

These findings illustrate that the instructional approach utilized during the study helped transfer the responsibility of thinking about the metacognitive knowledge associated with using the strategies to the students. Overall, this finding also supports the usefulness of thinking about declarative, procedural and conditional knowledge of strategies. However, it suggests that teachers of my and may be other contexts can encourage students to think about the what, how, when and why of strategy use, rather than offering explanations as has been done by a number of previous L2 researchers who provided metacognitive reading strategy instruction such as Carrell[38]. Involving students in constructing metacognitive knowledge in a structured and scaffolded context could help counter the objection of Poplin[39] and other constructivist educators towards strategy instruction who contended that explicit strategy instruction is mechanistic.

In keeping with the explicit instructional practice, during the study students were also provided with guidance as to how to build their metacognitive knowledge of the use of strategies by modeling the strategies I introduced during the lessons. Teacher modeling makes 'visible to students the very complex and obscure nature of using strategies while reading'[40]. To engage students cognitively during teacher modeling, they were asked to perform certain tasks. For instance, prior to performing modeling students were asked to take a note of the strategies I used while reading. They were also asked to note down where, when and how I used strategies during teacher modeling. At the end of teacher modeling students were also asked to point out where in the text I had used the strategies mentioned by them and to explain how I used them. To the best of my knowledge, researchers have not engaged students during teacher modeling using the tasks I used during the study. Hudson [41] adapted eight steps proposed by Wilhelm [42] in using think aloud techniques to teach strategies. The activities this study used during think aloud were different from these steps. Findings of the study reveal that the students from both Cycle 1 and Cycle 2 valued teacher modeling as it built their procedural and conditional knowledge of the strategies. Findings also show that one of the participating students in Cycle 1 reported that teacher modeling developed her awareness of how to think during reading. These findings are in line with Ivey and Broaddus's [43] contention that teacher modeling could provide scaffolding to understanding. Moreover, these findings correlate with previous studies which recommend teacher modeling during metacognitive reading strategy instruction. For instance, in a recent study that used teacher modeling to introduce reading strategies to students, Massey [44] reported that her students gained knowledge of the strategies. The author suggests that teacher modeling could be used as instructional tool to scaffold comprehension awareness. Likewise, Kim and Cha[45] recommend using

[38] Carrell, P. L. Facilitating ESL reading by teaching text structure. *TESOL Quarterly*, *19*(4), (1985), 727-752.
[39] Poplin, M. S. Holistic/constructivist Principles of the Teaching/Learning Process Implications for the Field of Learning Disabilities. *Journal of Learning Disabilities, 21*(7), (1988), 401-416.
[40] Almasi, J. F. *Teaching Strategic Processes in Reading*. (New York: The Guilford Press, 2003)
[41] Hudson, T. *Teaching Second Language Reading*. (Oxford: Oxford University Press, 2007).
[42] Wilhelm, J. D. *Improving Comprehension with Think-aloud Strategies*. (New York: Scholastic Inc, 2001).
[43] Ivey, G., & Broaddus, K. "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, *36*(4), (2001), 350-377.
[44] Massey, D. D. A comprehension checklist: What if it doesn't make sense? *The Reading Teacher*, *57*(1), (2003), 81-84.
[45] Kim, H. I., & Cha, K. A. Korean learners' metacognition in reading using think-aloud procedures with a focus on regulation of cognition. *English Language Teaching, 8*(6), (2015), 178-193.

think aloud as instructional tool. Their study showed that teacher modeling was effective in promoting the participants' regulation of cognition. Overall, the findings of the study suggest that contextually plausible application of the practice of teacher modeling could bear positive results in an ESL university level context.

Creating opportunities for collaborative discussion about strategy use

The literature on metacognition suggests that teachers should let the 'students teach each other about reading and studying processes'[46]. In the current study, students of Cycle 1 and Cycle 2 were provided with multiple opportunities to engage in collaborative discussions about strategy use. For instance, students were provided with opportunities to verbalize during a collaborative think aloud the strategies they used during reading. Findings reveal that the students in Cycle 1 reported that the 'other' had played a significant role in raising their awareness of reading strategies during the think aloud activity. In addition, the findings show that most of the students in Cycle 1 thought that the think aloud had given them an opportunity to become aware of the strategies used by another student. Moreover, the findings show that one of the participating students in Cycle 2 reported that she became aware of how she used the strategies during think aloud. These findings corroborate the idea of Pintrich[47] who argues that the discourse about cognition among students help them become more aware of their own metacognitive knowledge as well as their own strategies for learning and thinking. They also support the idea of Almasi and Hart [48] who suggest that verbalizing and sharing thought processes used while reading enable students to become metacognitively aware while reading and to evaluate their reading progress.

Overall, these findings support existing L1 literature in providing further evidence of the usefulness of combining the elements of think aloud with collaboration (e.g. Palincsar & Brown[49]; Anderson & Roit[50]). Moreover, it lends credibility to the usefulness and appropriateness of collaborative think aloud in an ESL setting. That is, it highlights the important role collaborative think aloud could play to scaffold ESL university level students' emerging understanding related to strategy use as well to enable them to become metacognitively aware of the intra- and inter-individual differences in strategy use by them and others, an area that has not been investigated qualitatively in the adult L2 literature.

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[46] Garner, R. *Metacognition and Reading Comprehension*. (New Jersey: Ablex Publishing Corporation, 1987).
[47] Pintrich, P. The role of metacognitive knowledge in learning, teaching and assessment. *Theory into Practice, 41*(4), (2002), 219-225.
[48] Almasi, J. F., & Hart, S. J. Best practices in comprehension instruction. In L. M. Morrow & L. B. Gambrell (Eds.), *Best Practices in Literacy Instruction* (4th ed., pp. 250-275). (New York: The Guilford Press, 2011).
[49] Palinscar, A. S., & Brown, A. L. Reciprocal teaching of comprehension fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(2), (1984), 117-175.
[50] Anderson, V., & Roit, M. Planning and implementing collaborative strategy instruction for delayed readers in grades 6-10. *The Elementary School Journal, 94*(2), (1993), 121-137.

Creating students' interest in reading

The literature highlights that the interest level plays a role in comprehension monitoring[51]. In addition, previous studies indicate that highly motivated learners use more strategies than students who are not highly motivated (e.g. Oxford & Nyikos[52]; Wharton[53]) and that motivation is the cause of the use of L2 learning strategies[54]. In the current study, students' interest was fostered in reading since most of the students in Cycle 1 and some in Cycle 2 did not display an interest in reading at the start of the cycles. For this purpose, a number of measures were taken in both cycles of the study. For instance, pair and group work was employed in the lessons. The importance of collaboration among students have been variously explored in the literature on reading (e.g. Guthrie & Davis[55]; Wentzel[56]), with researchers showing that collaboration could amplify students' motivation. In addition, students were engaged in goal setting since it could increase motivation[57]. Moreover, the meaningfulness of the activities they were engaged in was shared with the students since if a learning activity is not considered time and effort worthy by students, they might not satisfactorily engage in it, or even disengage from it[58].

The findings of the study reveal that these motivation-enhancing practices developed students' interest in reading and reading strategies. The findings of the study also show that raised awareness of reading strategies enhanced some students' motivation to use the reading strategies. These findings suggest that metacognition and motivation worked together to interact with each other during the lessons, paving the way for raised students' interest, awareness, use and regulation of reading strategies. Put another way, it seems metacognition and motivation influenced one another during the study. This suggests that the motivational dimension should be taken into account during metacognitive reading strategy instruction for a more complete and useful instructional practice in my and maybe other contexts. In this regard, Ushioda[59] also states that research should highlight the link between metacognition and motivation in L2 learning research since 'the intersection

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[51] De Sousa, I., & Oakhill, J. Do levels of interest have an effect on children's comprehension monitoring performance? *British Journal of Educational Psychology*, *66*(4), (1996), 471-482.
[52] Oxford, R. L., & Nyikos, M. Variables affecting choice of language learning strategies by university students. *Modern Language Journal, 73*(3), (1989), 291-300.
[53] Wharton, G. Language learning strategy use of bilingual foreign language learners in Singapore. *Language learning, 50*(2), (2000), 203-243.
[54] Dornyei, Z., & Skehan, P. Individual differences in second language learning. In C. J. Doughty & M. H. Long (Eds.), *The Handbook of Second Language Acquisition* (pp. 589–630). (Oxford: Blackwell, 2003).
[55] Guthrie, J. T. & Davis, S. Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading and Writing Quarterly, 19*(1), (2003), 59-85.
[56] Wentzel, K. R. Peers and academic functioning at school. In K. Rubin, W. Bukowski & B. Laursen (Eds.), *Handbook of Peer Interactions, Relationships, and Groups. Social, Emotional, and Personality Development in Context* (pp. 531-547). (New York: The Guilford Press, 2009).
[57] Short, E. J., & Weisberg-Benchell, J. A. The triple alliance for learning: cognition, metacognition, and motivation. In C. B. McCormick, G. E. Miller and M. Pressley (Eds.), *Cognitive Strategy Research: From Basic Research to Educational Applications* (pp. 33–63). (New York: Springer Verlag, 1989).
[58] Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), (2004), 59-109.
[59] Ushioda, E. Motivation, autonomy and metacognition: exploring their interaction. In D. Lasagabaster, A. Doiz, & J. M. Sierra (Eds.), *Motivation and Foreign Language Learning: From Theory to Practice* (pp. 31-49). (Amsterdam: John Benjamins Publishing Company, 2014).

between motivational and metacognitive engagement remains a largely under-theorised and under-explored area' within the field of L2 learning research[60].

Discussion, Conclusion and Recommendation

The purpose of the present study, as stated earlier, was to understand the teaching practices that could promote metacognition of reading strategies in an ecologically valid university level ESL classroom setting in Pakistan. Taking all findings of the study into consideration, it seems fitting to say that in the study the instructional practices that have been shown to have a positive impact on students' metacognition of reading strategies in previous studies were kept in view. These instructional practices, namely teacher modelling, guided and independent practice; and students' collaborative think aloud provided me with a useful starting point to implement the instruction. However, I did not transfer them wholesale in my context. Rather, as discussed earlier, I modified them to make them work for my students on the basis of my personal understanding of language teaching and learning, as well as on the basis of emerging realities in my context. Put another way, keeping in view that what is appropriate and helpful in one context might not be of relevance to another[61], the study did not adopt a top-down approach to implement the instructional practices produced in other parts of the world. I started from where the students were in terms of their understanding and tried to make the instructional practices contextually plausible.

Based on the current research findings, it is evident that teachers of all contexts need to understand how to provide metacognitive reading strategies instruction since such an instruction could 'new' to them and their context[62]. Teachers also need to keep in view that a teaching methodology parachuted in from elsewhere could be problematic since it does not draw on local knowledge[63].

[60] *Ibid*.
[61] Wedell, M. TESOL initial teacher training and TESOL curriculum goals: Making the connection. Keynote paper at the Seminar on Initial Education for Teachers of English: What can be learned from the International Experience? (Pontificia Universidad Catolica de Chile, Santiago. 26.04.04, 2004).
[62] Edge, J., & Mann, S. *Innovations in Pre-service Education and Training for English Language Teachers*. (London: British Council, 2013).
[63] Holliday, A. *Appropriate Methodology and Social Context*. (Cambridge: Cambridge University Press, 1994).

Bibliography

Borg, S. Language teacher research engagement. *Language Teaching*, 43 (4), (2010).

Carrell, P. L. Can reading strategies be successfully taught? *Australian Review of Applied Linguistics, 21*(1), (1998).

Chalmers, D. and Fuller, R. Research and a professional development programme on teaching learning strategies as part of course content. *International Journal for Academic Development*, 4 (1), (2009).

Guthrie, J. T., & Alao, S. Designing contexts to increase motivations for reading. *Educational Psychologist, 32*(2), (1997).

Nash-Ditzel, S. Metacognitive reading strategies can improve self-regulation. *Journal of College Reading and Learning*, 40 (2), (2010).

Oster, L. Using the think-aloud for reading instruction. *The Reading Teacher*, 55 (1), (2001).

Paris, S. G., & Winograd, P. How metacognition can promote academic learning and instruction. In B. F. Jones & L. Idol (Eds.), *Dimensions of Thinking and Cognitive Instruction* (pp. 15-51). (New York: Routledge, 1990).

Turner, J. C. The influence of classroom contexts on young children's for literacy. *Reading Research Quarterly, 30*(3), (1995).