Feedback As a New Regulation in Metacognitive Reading Strategies: Review on Metacognitive Regulation

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Abstract: Reading is an activity that requires time and persistence, so it needs certain strategies to avoid boredom. Even though it is not a new thing in reading activity, some articles show that Metacognitive Reading Strategies are still relevant nowadays as one of the strategies used to gain students' comprehension in reading. In MRS, feedback has a significant influence on students' comprehension. However, feedback is a dependent factor because it can exist in every step of MRS (in planning, monitoring, and evaluating regulations). This is initial research on the position of feedback as a new regulation in MRS after evaluating step. The data were taken from a literature review which reveals metacognitive regulation and how feedback affects the student's reading comprehension.

Keywords: Metacognitive Reading Strategies, Metacognitive Regulations, And Feedback,

1. INTRODUCTION

Reading is one of the basic skills that should be taught to students in academic life, especially in language learning for ESL/EFL students. Even though it is a basic skill in learning a language, reading needs more time and students' consistency to do it. As Grabe said reading is an essential skill apparently the most vital skill for second language learners to master in their academic settings and ensure their further progress [1]. In teaching reading, the teachers are responsible for delivering material attractively because this activity requires a great time and attention. Besides that, the students usually struggle to understand the reading materials. Some problems may occur in teaching this skill, and the teachers should solve them as they are related to the student's comprehension and reading scores.

Regarding this, using reading strategies is important for student's reading comprehension and ability to read effectively and efficiently. This is in line with Olshavsky and Singhal [2] that reading strategies are purposeful means of comprehending the author's message and help the students in the acquisition, storage, and retrieval of information from reading materials. To administer reading strategies, particularly to university students, Metacognitive Reading Strategies (MRS) could become a solution. This is because MRS provides the opportunity for the students to use reading strategies they prefer and is easy for them to understand the passages. It plays a regulatory role in the reading process which in the end will help readers self-direct themselves [3], including administering feedback in it.

In metacognitive reading strategies, the teachers can give feedback in terms of clarification requests, repetition, recast, expansion, or translation) in planning, monitoring, and evaluating steps. In fact, the teacher provided feedback on 43% of the erroneous learner turns and tended to give feedback to learner turns that had only one error rather than those with many errors Doughty [4]. This becomes an interesting point that feedback should provide a way out for the students in every situation, not only in certain circumstances.

2. METACOGNITIVE READING STRATEGIES

The term metacognition is one of the latest buzzwords in educational psychology that we engage in everyday activities. Metacognition enables us to be successful learners and has been associated with intelligence [5]. They added that metacognition refers to higher-order thinking which involves active control over the cognitive processes

engaged in learning, such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task are metacognitive in nature.

Metacognition involves thinking about one's thinking, or cognition, with the goal of enhancing learning. It refers to the active monitoring and consequent regulation and orchestration of the process that is usually in service of some concrete goal or objective [6]. Metacognition drives our brain and is certainly worth the effort to teach students how to take charge of their learning, and by monitoring and improving their use of the cognitive assets, make steady gains in learning [7] .

Metacognition is considered important, so it is stated that metacognitive strategies are higher-order executive skills that use the knowledge of cognitive processes and involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned [8], [9]. Wenden [9] added that metacognitive strategies as the general skills through which learners manage, direct, regulate, and guide their learning which comprise planning, evaluating, and monitoring. Furthermore, metacognitive strategies show that a good reader uses these strategies for thinking and controlling before, while, and after reading a text [10]. Duke and Pearson [11] believed that metacognitive reading strategies influence readers in a positive way for they can empower strategic readers to go through the reading systematically and effectively. They can preview a reading text; predict what is going to happen next; and evaluate and question the meanings they make as they read.

Metacognitive reading strategies make a great contribution to the students' reading comprehension, by teaching them to read using this technique would provide benefits especially for those students who start learning how to read and for those who attempt to overcome reading problems [12]. Borkowski and Muthukrishna [5] argued that metacognitive strategies have "considerable potential for aiding teachers as they strive to construct classroom environments that focus on strategic learning that is both flexible and creative.

Some researchers would likely agree that to enhance learning to the fullest, learners need to become aware of themselves as self-regulatory organisms who can consciously and deliberately achieve specific goals [13]. In general, metacognitive theory focuses on (a) the role of awareness and executive management of one's thinking, (b) individual differences in self-appraisal and management of cognitive development and learning, (c) knowledge and executive abilities that develop through experience, and (d) constructive and strategic thinking [14]. It is supported by Phakiti [15] that "metacognitive strategies are conscious processes that regulate cognitive strategies, action, and other processing which consist of planning, monitoring, and evaluating".

Teaching students to become more metacognitive equips them with skills to "drive their brains" and self-directed learners. Students benefit from explicit instruction on how to focus their attention, on monitoring how well they are applying this asset, and on practicing the use of selective attention across contexts in the classroom and in their personal lives. Nevertheless, it is helpful only when they are used appropriately. In addition, metacognitive abilities are not naturally endowed but can and should be taught and learned. The goal of teaching students to be metacognitive is to guide them to consciously, and with increasing independence, recognize when and how to employ cognitive strategies that work best for them across various situations, including reading activities.[16]

3. METACOGNITIVE REGULATION

Jacobs and Paris [17] said metacognitive activities help control one's thinking or learning. Three essential skills in metacognitive regulation accordingly namely, planning, monitoring, and evaluation. Where planning involves the selection of appropriate strategies and the allocation of resources that affect performance. It includes making predictions before reading, strategy sequencing, and allocating time or attention selectively before beginning a task. Monitoring refers to one's online awareness of comprehension and task performance [18], [19]. This ability improves with training and practice. Evaluation is appraising the products and regulatory processes of one's learning.

Metacognitive regulation occurs when individuals make use of their metacognitive skills to direct their knowledge

and thinking. Metacognitive regulation draws upon individuals' knowledge (about self and strategies, including how and why they use strategies) and uses executive skills (such as planning, self-correcting, setting goals) to optimize the use of their own cognitive resources. Thus, when thinking metacognitively, learners reflect on their existing knowledge or thought processes. So that, individuals may be aware to evaluate and/or regulate their own thinking.

Since effective readers must have awareness and control of the cognitive activities they engage in as they read, most characterizations of reading include skills and activities that involve metacognition. Some of the metacognitive skills involved in reading are: (a) clarifying the purpose of reading; (b) identifying the important aspects of a message; (c) focusing attention on the major content rather than trivia; (d) monitoring ongoing activities to determine whether comprehension is occurring; (e) engaging in self-questioning to determine whether goals are being achieved; and (f) taking corrective action when failures in comprehension are detected [20].

Metacognitive experiences involve the use of metacognitive strategies or metacognitive regulation [21]. Metacognitive strategies are sequential processes that one uses to control cognitive activities and to ensure that a cognitive goal (e.g., understanding a text) has been met. These processes help to regulate and oversee learning, and consist of planning and monitoring cognitive activities, as well as checking the outcomes of those activities.

Strategies specific to reading can be classified into three metacognition clusters: planning, monitoring, and evaluating strategies [22], [23]). Planning strategies are used before reading (activating learners' background knowledge to get prepared for reading). Previewing a title, picture, illustration, heading, subheading, and general information in the text and its structure can help readers grasp the overview of the text. In addition, learners may check whether their reading material has a certain text structure, such as cause and effect, question, and answer, and compare, also setting the purpose for reading can also be categorized as a planning strategy [24], [14], [25].

Monitoring strategies occur during reading. Some examples of monitoring strategies are comprehension vocabulary, self-questioning (reflecting on whether they understood what they have read so far), summarizing, and inferring the main idea of each paragraph [22], [25]. While evaluating strategies are employed after reading. For example, after reading a text, learners may think about how to apply what they have read to other situations. They may identify with the author, a narrative, or a main character, and may have a better perspective of the situation in the book than they did at first.

In line with the previous point of view on metacognitive strategies, Graham agrees that it allows students to plan, control, and evaluate their learning, and have the most central role to play in this respect, rather than those that merely maximize interaction and input. Thus, the ability to choose and evaluate one's strategies is of central importance [25].

Herewith metacognitive reading strategies according to some researchers. Khosa and Volet investigate productive group engagement in cognitive activity and metacognitive regulation by coding high-and low-quality metacognitive regulation, namely planning, monitoring, and evaluating [26]. Metacognitive planning, monitoring, and evaluating should figure prominently as regulatory processes in motivation, emotion, behavior, and cognition [27]. Reading strategies into metacognitive and cognitive strategies, where metacognitive strategies are divided into three levels; planning (learners have a reading goal in mind and comprehend the text according to this goal); self-monitoring (learners modulate the reading process and apply the suitable strategy when needed); and self-evaluation (the reform phase whereby readers modify strategies if needed to determine whether the aim is to achieve or vice versa or rereads the text).

Hartman [28] said metacognitive skills involve executive management processes such as planning, monitoring, and evaluating. They argued that teaching needs to emphasize metacognitive skills because:

- Teaching specific strategies, such as the order in which to perform a particular task, will not give students the skills they need in the long run. Students must learn general principles such as planning, and how to apply them over a wide variety of tasks and domains.

- Both the long-term benefits of training in cognitive skills and the ability to apply cognitive skills to new tasks appear to depend, at least in part, on training at the metacognitive level as well as at the cognitive level. Metacognitive knowledge and skills are needed for effective cognitive performance.
- Generally, students have a history of blindly following instructions. They have not acquired the habit of questioning themselves to lead to effective performance on intellectual tasks.
- Students with the greatest metacognitive skill deficiencies seem to have no idea what they are doing when performing a task.
- Students have metacognitive performance problems of: a) determining the difficulty of a task; b) monitoring their comprehension effectively, i.e. they don't recognize when they fully understand something (e.g. task directions, information in textbooks); c). planning ahead (e.g. what they need to do and how long each part should take); d). monitoring the success of their performance or determining when they have studied enough to master the material to be learned; e). using all relevant information; f). using a systematic step-by-step approach; g). jumping to conclusions; and h). using inadequate or incorrect representations.
- Metacognitive skills and knowledge, as important as they are, are not often taught in most areas of the curriculum.

It is an interesting fact that as time goes by, metacognitive strategies become very varied. Some researchers all over the world offer various strategies based on their research findings. Dent & Koenka [29] mention five frequently identified metacognitive processes, namely; goal setting, planning, self-monitoring, self-control, and self-evaluation. Lajoie [30] examined the role of socio-emotional processes in both metacognition and co-regulation and showed that the processes in metacognition are orientation, planning, executing, monitoring, evaluating, and elaborating. Berger and Karabenick [31] gave the points of metacognitive strategies as planning, monitoring, and regulating.

Grau and Whitebread [32] noted limited use of metacognitive knowledge in young children's science learning but found more significant use of regulation strategies such as planning, monitoring, control, and reflection. Successful children used metacognitive strategies (i.e., planning, controlling, and monitoring their intention) to wait for the larger reward. Bembenutty and Karabenick [33], [34], [35] found that U.S. college students with a high willingness to delay gratification also reported using meta-cognitive learning strategies, such as planning, monitoring, and self-regulation. According to Chen and Chen [36] metacognitive strategies include regulating, planning for organization, selective attention, goal setting, monitoring, and self-assessing.

A question might arise regarding this issue, why metacognitive strategies are important in teaching reading comprehension. To respond, we might answer by saying not all students develop and use metacognition spontaneously so that teachers need to provide students with explicit instruction in both metacognitive knowledge and metacognitive strategies. By this, the teachers can enhance students' awareness and control over learning to reflect on how they think.

The metacognition category included planning (e.g., advance organizers), monitoring (including self-monitoring), and evaluating (including self-evaluation) [37]. the metacognition model or regulatory into five primary components; preparing and planning for learning, selecting and using learning strategies, monitoring strategy use, orchestrating various strategies, and evaluating strategy use and learning.

a. Preparing and planning for learning

Preparation and planning are important metacognitive skills that can improve student learning. By engaging in preparation and planning in relation to a learning goal, students are thinking about what they need or want to accomplish and how they intend to go about accomplishing it.

b. Selecting and using learning strategies

The metacognitive ability to select and use particular strategies in a given context for a specific purpose means that the learner can think and make conscious decisions about the learning process. To be effective, metacognitive instruction should explicitly teach students a variety of learning strategies and also when to use them.

c. Monitoring strategy use

By monitoring strategies used, the students are better able to keep themselves on track to meet their learning goals.

d. Orchestrating various strategies

Knowing how to orchestrate the use of more than one strategy is an important metacognitive skill. The ability to coordinate, organize, and make associations among the various strategies available is a major distinction between strong and weak second language learners.

e. Evaluating strategy use and learning

Teachers can help students evaluate their strategy use by asking them to respond thoughtfully to the following questions: What am I trying to accomplish? What strategies am I using? How well am I using them? And What else could I do?

4. FEEDBACK IN METACOGNITIVE READING STRATEGIES

Feedback is defined as information provided by a teacher, peer, book, self, or experience regarding aspects of one's performance or understanding of something, especially in the teaching and learning process. It is a consequence of performance that needed to provide information specifically relating to the task or process of learning to fill a gap between what is understood and what is aimed to be understood [38], [39].

Obilor [40] said feedback is a very important aspect of the teaching-learning environment because it integrates the knowledge, skills, and behavior of teachers and learners in the classroom. Besides developing the competence and confidence of teachers and learners at all stages of education, it also clarifies good performance and helps in the development of self-assessment and delivery of high-quality information to teachers in improving teaching and learners in enhancing learning. In addition, in giving feedback, [40] teachers might evaluate the written composition of students and only award marks instead of providing feedback. Hence feedback applied strategy to measure its impact on student's attitude and learning. The results were the students improved their interpersonal relationships and enjoyed all processes of collaborative learning although it was challenging both for the participants as well as the instructor [41], [40]

Prompt feedback by the teachers makes learning an active activity and end of class feedback can make the students use the knowledge they gained during the study [42]. Feedback can raise great performances, help the advancement of self-appraisal, convey outstanding data to the learner about learning, empower teachers' and learner's participation, encourage inspiration and self-regard, and inspire teachers to enhance their skills in teaching. Moreover, the teacher's reaction and views may be characterized by employing the feedback strategy and are affected by numerous components such as the language capacity of the learners, types of assignments, and the phase at which the feedback is provided. The teacher at the time of providing feedback serves as the pursuance, editor, facilitator, guard, mentor and evaluator [40].

It is said that during the instruction, all students received feedback on the accuracy of their answers to comprehension questions, but not for how well they were learning the strategy or that strategy use was improving their performance [43].

5. METHOD RESEACH

This study reviews the literature published from the 1980s to 2020 on metacognitive strategies specifically the position of feedback in planning, monitoring, and evaluating. The articles were taken from Google Scholar, Sagepub, and other online libraries that provide international and national journals to reveal comprehensive and systematic methodology.

DISCUSSION AND CONLUSION

From some studies selected that discussed metacognitive regulation, none of them put feedback as a special item in metacognitive regulation even though it shows the important role in a learning process, especially in applying metacognitive strategies in reading activities. Feedback is used to measure the students' comprehension

toward the material given and ended by the grade. In evaluation step provides feedback to the learner on the selection and use of strategies leading to the refinement of one's metacognitive knowledge [44].

Feedback is actually administered implicitly in all steps of learning, and was not mentioned as an independent part in metacognitive reading strategies or regulation. Even though as a matter of fact, it is constructive when it goes beyond pointing at mistakes of learners to providing solutions for areas of weaknesses and suggesting improvement in future learning. It should enhance future learning. When feedback corrects current learning without influencing future learning, then such feedback can hardly lead to any meaningful change in behavior. In other words, feedback may accurately correct errors of the present but still lead to no change in the way a student goes about the next assignment or tackles any future learning task [45]. In addition, studies found that students who received strategy instruction with feedback on the value of strategy use (e.g., "You completed this successfully because you used the strategy.") increased their comprehension of texts more than students who received only one or the other types of instruction.

This can be a strong argument that feedback is not only provided in planning, monitoring, and evaluating steps in MRS, but also after completing an evaluation activity (e.g grade the students and show the result). That is why feedback can be put as the last step in MRS as a new regulation (planning, monitoring, evaluating, and feedback).

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