Self-Regulated Learning Strategies in Reading Comprehension of a Group of ESL Students

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ABSTRACT

This study was aimed at ascertaining the degree to which ESL students use Self-regulated learning (SRL) strategies which include planning, monitoring, problem solving and evaluating. It was also aimed at assessing the degree of awareness on the part of the students of their selfefficacy beliefs in using self-regulated strategies. The study was conducted on a group of ESL students at a public university in Sarawak within 30 hours of reading class whereby the students were exposed to the four self-regulated strategies. Direct Explanation Method was used to teach students on using SRL strategies. The research employed a mixed method incorporating both quantitative and qualitative paradigms. However, due to the limitation of the paper, only the quantitative aspect of the study is highlighted. The data were collected using likert-type inventories and immediate written recall protocols generated through semi-structured interviews. The findings reveal that the students were using the strategies frequently throughout their reading process with the exception of Evaluating strategy, which was hardly being used. The findings also show that the students were confident of their ability in using the strategies as they reported high score on the self-rating self-efficacy scale. This study has to a certain extent provided some interesting evidence on the nature of learning the students were involved in especially as regards the use of SRL strategies.

Keywords: Self-regulated learning. Planning. Monitoring. Problem solving. Evaluating.

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INTRODUCTION

Most Malaysian ESL undergraduates are still grappling with the idea of how best to master the English language. According to Philip (2005), what seems particularly lacking among young Malaysian adult ESL students is the control over their own learning, that they lack the knowledge of learning strategies and techniques, which would enable them to take greater

responsibility of their own learning, and hence better control of their learning process. Such inadequacy poses a significant problem for the undergraduates, as they need to use reference books largely written in the English language. It is important therefore that students be equipped with conscious knowledge of self-regulatory processes in their attempts to learn particularly in the contexts of comprehending academic texts. It is indeed critical for Malaysian ESL undergraduates to have not only a working knowledge of English but also knowledge of a strategic learning approach to enable them to read and comprehend academic texts in order to fulfil various academic tasks effectively. They are most likely in need of conscious instruction in what Wenden (1998) calls the "know-how" of approaching academic texts in English. In other words, these students need to be trained in effective use of learning strategies to take control of their learning process before they can eventually take complete responsibility of their learning or become autonomous in their overall learning approach. Training the students in strategy use requires a suitable approach, and in the context of this study, the researcher employs a direct instruction approach called Direct Explanation, introduced by Winograd and Hare (1988) The main focus of the research is to examine the use of self-regulatory processes in terms of SRL strategies as applied by ESL diploma students at a public university in Sarawak as they were comprehending academic texts within the classroom setting.

Research Objectives and Questions

The following research objectives are addressed accordingly by the following research questions:

1. To ascertain the level of frequency of use of Self-regulated Learning strategies by ESL students.

This objective is to determine the extent to which the students are using the SRL strategies in their text comprehension process. It has been found that poor comprehenders use metacognitive strategies with much lower frequency than skilled comprehenders (Duffy, Roehler, & Herman, 1988).

What is the level of frequency of use of Self-regulated Learning strategies by ESL students?

2. To ascertain the level of self-efficacy beliefs of ESL students regarding Self-regulated Learning strategies.

This objective seeks to explore the extent to which the students are able to form beliefs in their self-efficacy as a consequence of the direct instruction given. It is important that the students form positive beliefs in their self-efficacy before they can actually attain a high level of self-efficacy.

What is the level of self-efficacy beliefs of ESL students regarding Self-regulated Learning strategies?

LITERATURE REVIEW

Self-regulated Learning

Generally, students can be described as self-regulated when they are metacognitively, motivationally, and behaviourally active participants in their own learning process (Zimmerman, Bonner & Kovach, 2002). The basis of self-regulation is said to be self-awareness, which can be accomplished by training in various self-testing, self-monitoring, and self-questioning strategies. Through such training, students can be taught to be aware of what learning activities considered appropriate, what their unique characteristics and limitations are, the nature of materials to be learned, and what the critical tasks of learning are (Brown, 1981). Similarly, Paris et al. (1983) stress the need to teach learners about their own cognitive functions and the ways they can be combined or organised to solve problems. Such training provides the metaknowledge and strategies for self-management and self-control of learning problems by helping students recognise that there is a problem and that there are learnable skills and strategies for solving the problem, thereby enhancing their motivation to solve it (Livingston, 2003).

Effective self-regulation depends on students developing a sense of self-efficacy for self-regulating their learning (Zimmerman, 1998). Of critical importance is the process of self-evaluation of capabilities and progress in skill acquisition. Positive self-evaluations lead learners to feel efficacious about learning and motivated to continue to work diligently because they believe they are capable of making further progress (Schunk, 2001). Quite importantly in relation to effective self-regulation is goal orientation made by the students. This is because achievement goal orientations relate to self-efficacy (Schunk & Zimmerman, 1998). Schunk and Zimmerman (1998) contend that providing learners with feedback stressing learning goal orientation can enhance self-efficacy, motivation, self-regulatory activities, and achievement more than providing feedback emphasising performance goals. Individuals holding a learning-oriented goal value learning for its sake and seek to improve their competence. On the other hand, individuals holding a performance-orientated goal seek to demonstrate high ability and gain positive judgments from others.

According to social cognitive theory, self-regulated strategy use is influenced by students' self-belief systems. As Zimmerman (2001) notes, self-regulated learners are metacognitively aware of strategic relations between self-regulatory processes and learning outcomes, feel self-efficacious about using strategies, have academic goals of learning, and believe that strategy use will help them attain goals at higher levels. Goal progress and attainment raises students' self-efficacy and can lead to their adopting new, more difficult goals (Schunk, 2001). Furthermore, students who feel efficacious about learning select what they believe are useful learning strategies, monitor their performances, and alter their task approach when their current methods do not appear to function properly (Zimmerman, 2001). Research shows that self-efficacy relates positively to productive use of self-regulatory strategies (Zimmerman & Martinez-Pons, 1988).

Self-regulated Learning (SRL) Strategies

Chamot and O'Malley (1990) identify metacognitive strategies as involving thinking about the learning process, **planning** for learning, **monitoring** the learning task, **problem solving**, and **evaluating** how well one has learned.

Planning (PLA) Strategy

Chamot et al. (1999) describe planning strategies as those enabling learners to develop and use forethought. These strategies encourage learners to think about how they are going to approach and carry out the task. The sub-strategies which fall under this macro strategy, include previewing, predicting, activating background knowledge, and directed attention.

Table 1								
Planning Strategy								
Planning Description								
Preview	This strategy involves previewing the main ideas and concepts of a text. This may involve looking at familiar specific terms or sub- headings that can provide some clue into the meaning of the text in question, examples include scanning information in text and skimming for gist of information in text.							
Predict	Predicting involves thinking of the kinds of words, phrases, and information that one can expect to encounter based on one's background knowledge and/or on information one encounters during the task.							
Activate background knowledge	This strategy involves activating background knowledge to help bring to mind information that one knows about the topic, the world, and the language in order to do the task at hand.							
Selective Attention	Learners apply this strategy to attend to key words, specialised terms, phrases, ideas, linguistic markers, etc. In other words, this strategy is used to find specific information during task execution. Pre-task selective attention refers to deciding in advance to attend to specific items or terms that can facilitate understanding of the text, whereas during task selective attention refers to attending to specific items during task execution in order to enhance understanding of the important points in the text.							

Monitoring (MONT) Strategy

Learners use monitoring strategies to measure how effective they are in working on a task (Chamot et. al, 1999). Learners monitor their comprehension and production by thinking about whether they understand the text they are reading or listening to. They also monitor their strategy use and make adjustments when necessary. Monitoring strategies include the following:

Table 2								
Monitoring Strategy								
Monitoring	Description							
Comprehension Monitoring	This strategy requires checking, verifying, or correcting one's understanding.							
Production Monitoring	This strategy concerns checking, verifying, or correcting one's language production while it is taking place.							
Strategy Monitoring	This strategy entails tracking how well a particular strategy is used.							

Problem Solving (Psolve) Strategy

This strategy involves students choosing other strategies to solve problems as they face certain difficulty in the comprehension process. Among those sub-strategies under the Problem-solving strategy include the following:

Table 3	
Problem Solving Strategy	
Problem Solving	Description
Inferring from contextual clues	Relying on contextual clues to infer meanings
Making logical & intelligent guesses	Making guess after scanning & skimming
Integrating information into a summary	Making a summary of certain portion of the text for better understanding
Seeking clarification from teacher	Asking the teacher questions for clarification
Questioning self/peers or/and cooperating with them	Working & collaborating with fellow students

Evaluation (EVAL) Strategy

Learners use evaluation strategies to reflect on how well their effort went. These strategies allow learners to see whether or not they have carried out their plans well and to check how well other strategies have assisted in the learning process. Evaluation strategy comprises the following strategy types:

Table 4

Evaluation Strategy						
Evaluation	Description					
Strategy Evaluation This strategy entails judging one's strategy use when t completed.						
Performance Evaluation	Learners apply this strategy to judge their overall execution of the task in question.					
Ability Evaluation	As the label suggests, learners use this strategy to judge their ability in performing a task given.					

Self-regulation and Reading

Self-regulated learners are aware of the variables that influence learning and are motivated to take responsibility for it. They attribute learning outcomes to factors within their control, such as effort and strategy use, and have a repertoire of effective learning and problem-solving strategies that they apply appropriately. Good readers think as they read by carrying on an inner conversation which helps them understand what they read as they monitor their success. Readers who are metacognitively aware of what they know and can do, will apply these insights while they read and learn. They continually try to make sense out of what they read, and they know when to alter their reading strategies in tune with the task demand. Further, according to Mokhtari and Sheorey (2002), good readers are typically able to reflect on and monitor their cognitive processes while reading. They are not only aware of which strategies to use, but they tend to be better at regulating the use of such strategies while reading.

Metacognition (Conditional Knowledge)

As regards Self-Regulated Learning (SRL) strategies, knowing that and knowing how are not sufficient to ensure that learners are able to apply strategies appropriately (Donker et al., 2014). Students need to learn when and why various strategies should be used to accomplish different purposes. Paris et al. (1983) refer to this as "conditional knowledge" because it informs learners about the value and situational appropriateness of various strategies. Alternatively, conditional knowledge may be referred to as metacognition. Metacognition refers to the deliberate conscious

control of cognitive activity (Livingston, 2003). Baker and Brown (cited in Brown, 1981) distinguish two components of metacognition namely, knowledge about cognition and regulation of cognition.

Knowledge about cognition

Knowledge about cognition includes such things as knowledge about one's own cognitive resources, and knowledge about how compatible the demands of learning situations are with one's own resources. Knowledge about cognition is believed to be stable over time (if one believes that one can use a particular strategy today, it is likely that one will behave likewise tomorrow). It is here that students should be made aware of their metacognitive knowledge especially with respect to strategy use (Garcia et.al., 2015; Donker et. al., 2014). Knowledge of cognition in reading refers to one's awareness of the purposes and goals of reading as well as the strategies that contribute to comprehension (Meloth, 1990). Such knowledge as Baker and Brown (1984) argue is essential if readers are to effectively regulate their strategy use while reading. Being aware of their metacognitive knowledge however, is still insufficient; rather, learners need to be able to regulate it. Regulation refers to the ability to follow one's chosen plan and to monitor its effectiveness (Philip, 2005a).

Regulation of cognition

Regulation of conditional knowledge consists of the self-regulatory mechanisms used by an active learner during an ongoing attempt to solve problems (Brown, 1981). Such mechanisms are thought to be relatively unstable (students may use them on some occasions but not on others). Brown (1981) provides examples of those regulatory metacognitive activities which include, planning one's next move, checking the outcome of any strategies one might use, monitoring the effectiveness of attempted actions, testing, revising, and evaluating one's strategies for learning.

Facilitating Strategy Use

Effective strategy use is the goal of self-regulation. To achieve this goal, students need to be engaged in instruction regarding their use of various strategies when approaching difficult reading tasks. Teachers should encourage their students to reflect upon and understand which strategies are effective in the problem-solving process. Teachers can explicitly teach students self-regulatory processes or strategies. To encourage self-regulated learning in the classroom, teachers can firstly, develop students' knowledge of cognitive and metacognitive strategies, secondly, model metacognition, thirdly, use teaching-learning strategies and activities that support and develop metacognition, and lastly foster classroom environments that promote metacognition (Christine Chin, 2004; Donker et. al., 2014).

One approach, which a teacher can use in teaching strategies, is known as Direct Explanation (DE) (Winograd & Hare, 1988). In direct explanation instruction, students are informed of the value and purpose of strategy training. Argument in favour of direct explanation

is that learners are aware of the purpose and importance of strategies and thus strategy use can be maintained over time and even transferred to new tasks. What is essential is that learners gain self-efficacy because it has an important influence on motivation. Belief in self-efficacy determines the degree to which an individual will become engaged in and expend physical or mental energy in an activity (McCabe, 2003).

Winograd and Hare's Direct Explanation Model (L1)(1988)

Winograd and Hare (1988: 123-124) outlines a number of steps to teach strategies directly to learners. They believe that what constitutes a careful and complete explanation of a reading comprehension strategy is as in the following table below:

Table 5	
Direct Explanation Model	
Strategy Use	Teacher's roles
What the strategy is.	Teachers should describe critical, known features of the strategy or provide a definition/description of the strategy.
Why the strategy should be learned.	Teachers should tell learners why they are learning about the strategy. Explaining the purpose of the lesson and its potential benefits seems to be a necessary step for moving from teacher control to student self-control learning.
How to use the strategy.	Here, teachers break down the strategy, or re-enact a task analysis for students, explaining each component of the strategy as clearly and as articulately as possible and showing the logical relationships among the various components. Where implicit processes are not known or are hard to explicate, or where explanatory supplements are desired, assists such as advance organizers, think- alouds, analogies, and other attention clues are valuable and recommended.
When and where the strategy is used.	Teachers should delineate appropriate circumstances under which the strategy may be employed, (e.g., whether the strategy applies in a story or informational reading). Teachers may also describe inappropriate instances for using the strategy.

How to evaluate use of the strategy.	Teachers should show students how to evaluate
	their successful/unsuccessful use of the strategy,
	including suggestions for fix-up (improvise)
	strategies to resolve remaining problems.

Winograd and Hare's Direct Explanation is an example of a metacognitively-based instruction. It deals directly with not merely teaching features of strategies per se but also providing learners with metacognitive knowledge in relation to strategy use in appropriate learning contexts. It also teaches learners how to evaluate their success in strategy use, which implicit in this experience is motivation for future strategy applications.

Self-efficacy and strategy use

Bandura (1997) defines perceived self-efficacy as personal judgments about how well one can execute the courses of actions that are required to handle particular situations. Judgments of self-efficacy are said to be strongly affected by individuals' perceptions of their abilities to exercise adequate control over their actions, thereby affecting the amount of effort expended in a given learning situation (Tavakoli & Koosha, 2016).

It was found in Bandura's (1997) research that when presented with a difficult task, people who doubt their capability tend to give up. In contrast, those with a high sense of self-efficacy exert greater effort to meet the challenge (Schunk, 2001; Schunk, 1998). Bandura (1997) emphasises that the higher the perceived self-efficacy, the greater are the performance accomplishments. Students with high perceived self-efficacy are strategic in their learning as compared to those with low perceived self-efficacy who are nonstrategic Garcia et. al.,(2015). Self-efficacious students will exert much effort to meet their goals and they can recover quickly from setbacks enabling them to achieve their personal objectives. While yet students with low self-efficacy believe that they cannot be successful and thus are less likely to make further efforts (Tavakoli & Koosha, 2016).

METHODOLOGY

This research employed a mixed-methodology approach in a larger study comprising both quantitative and qualitative research paradigms (Johnson & Christensen, 2004). This approach addressed the central question from both research perspectives, that is, quantitatively as well as qualitatively. In this paper however, due to space limit, only the findings from the quantitative aspect of a larger study were reported accordingly.

Subject

The subjects for this study comprised diploma students doing electronic engineering. This group of students has completed a two-part of the three-part compulsory proficiency English courses.

There were altogether 25 students engaged in the study. The general selection criterion is that the students were of mixed group in terms of proficiency level. The students were not selected on any specific criterion such as gender or proficiency level because this study does not assess differences in strategy use based on either gender or proficiency level. Rather, this study was more focused on finding out the extent to which ESL students employed Self-Regulated Learning strategies in comprehending reading texts.

Instrument

The study employed two main instruments Likert-type inventories for SRL strategies and Selfefficacy beliefs (see **Appendix I for sample**). The self-constructed inventory which was piloted earlier was used to obtain quantitative data on the frequency of strategy use as well as the degree of awareness of self-efficacy.

Research Procedure

The research was conducted over a period of a month since it was not easy to find the suitable time for the students to be fully available for the investigation purposes. Each class was carried out for a period of two hours. The researcher started the class using Winograd and Hare's Model of Direct Explanation (1988) by explaining to the students the four main Self-Reguated Learning strategies that could be used by the students in comprehending reading texts. The students were given an academic reading text that was taken from their discipline in each session for them to read and comprehend with facilitation by strategy use. Each intervention was carried out in a two-hour session. A voluntary English language lecturer with teaching experience of more than ten years was involved in the study. Prior to the study, the lecturer was given some comprehensive explanation as to the teaching procedure to be implemented for the reading class. The whole investigation involved 15 two-hour sessions, making it 30 hours of reading class throughout the data collection phase.

Data collection and analysis

The study used two Likert-type inventories adopted from Philip's (2005) to obtain quantitative data on frequency of strategy use and self-efficacy beliefs, administered at the end of the investigation. The two inventories used were namely, Self-Regulated Learning Strategy Inventory and Self-Efficacy Belief Inventory. Each inventory has four sections and each section has five items. Each item has responses that range from "1" (never) to "5" (very frequent). The maximum score for each section is "25" and the minimum is "5". The responses of the students were scored in basic percentage to indicate the extent to which the strategies were used and the extent to which the students believed in their self-efficacy of strategy use. The students' responses were placed into the following range:

Table 6	
Range of Scores	
Description	Range of Scores
Very Frequent	25 - 21
Frequent	20 - 16
Neutral	15 - 11
Less Frequent	10 - 6
Never	5 - 1

The percentage was calculated based on the number of student that fell within each score range out of the total number of students. For example, if 15 out of 25 students fell within the "Very Frequent" range (i.e., they have scored within the range of 25 to 21), then these 15 students would generate a percentage of 60%. Similar calculations were made for both inventories.

RESULTS AND DISCUSSION

Research Question 1: What is the level of frequency of use for Self-regulated Learning (SRL) Strategies by ESL students?

It must be emphasized here that it is important to assess the frequency of strategy use because it provides an indicator as to whether or not the students are metacognitively equipped with the strategy. Research shows that poor comprehenders use metacognitive strategies with much lower frequency than skilled comprehenders (Duffy, Roehler, & Herman, 1988). Metacognitive processing is expressed through metacognitive strategies (Tavakoli & Koosha, 2016). Further, Carrell et al. (1989) in fact consider metacognitive awareness and metacognitive control, that is, planning and consciously executing appropriate actions to achieve a particular learning goal to be a critical element of proficient, strategic reading (in Cedric Leong & Wong Mei Yin, 2004).

SRL Planning (PLA) Strategy



Chart 1 shows very clearly that 24% of the students were using Planning strategy very 32

frequently. Whereas another 64% were using the Planning strategy frequently, and 12% did not indicate the level of frequency of Planning strategy use. Overall, it may be concluded that the students were using Planning strategy frequently. This demonstrates an understanding on the part of the students that they need to plan their reading before they actually engaged the reading process. The planning strategy involves making an overview of the task at hand, and if it is a reading task, the learner may engage skimming and scanning strategies to help predict the content of the reading text. The learner may also need to select useful strategies which they can eventually implement in doing the task proper. It also indicates that the students did not read the text in a linear fashion but skim and examine pictures, graphs, and captions, and moved back and forth in the text, making comparisons with previous knowledge. This shows an ability in selfregulating their learning process as they were aware of the need to plan in order to comprehend the reading text effectively. This is an example of what Zimmerman (2002) identifies as being metacognitively active.

SRL Monitoring (MONT) Strategy



As shown in Chart 2, only 4% of the students did not use the Monitoring strategy frequently. 56% of the students reported having used the strategy frequently and 20% very frequently. This indicates positively that the students were metacognitively aware of the need to monitor their comprehension process. This also shows that the students were in control of their comprehension process (Tavakoli & Koosha, 2016). The fact that the students were in control indicates that they were able to use the strategies appropriately, hence appropriate application of "conditional knowledge", the ability to know when and where to apply the strategies (Paris et. al, 1983). In other words, this is metacogniton which refers to the ability to reflect on one's reading to understand, regulate and self-guide the process of reading (Pinninti, 2016). *SRL Problem-Solving (Psolve) Strategy*



SRL Problem Solving (Psolve) Strategy

As illustrated in Chart3, the students reported 48% of frequent use and 36% of very frequent use. This indicates self-regulatory control on the part of the students as they were engaged in reading comprehension process. It is important for the students to have the ability to "problem-solve" their comprehension difficulties because such metacognitive knowledge should enable an effective self-regulation of reading process (Baker & Brown, 1984). Readers who are metacognitively aware of what they know and can do, will apply these insights while they read and learn (Tavakoli & Koosha, 2016). They continually try to make sense out of what they read, and they know when to alter their reading strategies in tune with the task demand (Cedric Leong & Wong Mei Yin, 2004). Being metacognitively aware of their needs in face of comprehension difficulty, the students will engage such strategy as asking their peers or teacher, or cooperating with their peers to seek solution to their comprehension problems.

Evaluating (EVAL) Strategy



SRL Evaluating (EVAL) Strategy







reading process. Only 8% reported using the Evaluating strategy frequently, while 68% did not respond positively to the use of the strategy. 24% of the students indicated using the strategy less frequently. The students were found to be less aware of the use of EVAL strategy probably because they could have effectively used other strategies (for example, Monitoring & Problemsolving strategies) throughout the reading process that, there was not the opportunity to use Evaluating strategy. If this is being the case then the students were still metacognitively in control of their reading process because they seemed to demonstrate that they knew when and where not to use what strategy. However, it seems that the students have not acquired the need to self-evaluate their own performance in terms of effective strategy use which seems to indicate that the students have not attained a high level of self-efficacy. This is not surprising because it is not really possible to acquire self-efficacy in such short period of reading practice as constrained within this research (30-hour session). To have a high self-efficacy level means to be able to evaluate one's success and failure, and an inability to self-evaluate indicates positively that the students have not really acquired self-efficacy. Nonetheless, in terms of perceived self-efficacy/ beliefs in self-efficacy, the students seem to demonstrate a positive outcome as shown below.

Research Question 2: What is the level of self-efficacy beliefs of the ESL students regarding Self-Regulated Learning Strategies?

Self-Efficacy (SE) Belief on Planning (PLA) Strategy



Self-Efficacy (SE) Belief - Planning (PLA) Strategy



Chart 5 shows that the students believed quite strongly in their ability to use Planning strategy, 28% 'strongly agree' and 64% indicating 'agree'. Such self-efficacy belief is important if the students were to perform well in comprehending the text using Planning strategy (Bandura, 1997). The students' high level of beliefs in their self-efficacy as regards planning must have been attributed to the explicit instruction that they received. Beliefs in self-efficacy are a clear

indication that the students are aware of the need to use Self-Regulated Learning (SRL) strategy like planning.



Self-Efficacy (SE) Belief on Monitoring (MONT) Strategy



Chart 6 indicates 68% of the students agreed that they possessed the ability to monitor their comprehension process and 24% were very positive as regards their ability in using Monitoring strategy. The fact that the students were aware of their monitoring ability explains clearly that the students were able to perform well in reading because the higher the students level of self-efficacy the greater would their performance accomplishment would be (Bandura, 1997). This also shows that the students were strategic and have greater confidence in their capability to use a strategy if they perceive that they have the level of ability and effort required for effective use of the strategy, and that the strategy is appropriate for tasks at hand (Philip, 2005).

Self-Efficacy (SE) Belief on Problem-solving (Psolve) Strategy



Chart 7

As shown in Chart 4.7, the students reported 80% of self-efficacy awareness in using Problemsolving strategy. This is a positive perceived self-efficacy on the part of the students which is very useful in determining whether or not the students are capable of performing well in the reading tasks. Such positive perception of their self-efficacy also helps motivate the students to continue to engage in the learning activity (Schunk, 1991). It is also an indication of the students' metacognitive awareness in using SRL strategies strategically to their own advantage.

Self-Efficacy (SE) Belief on Evaluating (EVAL) Strategy



Chart	8
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Chart 8 shows 20% 'strongly agree' and 56% 'agree' as regards their awareness in the need to evaluate their reading progress. The percentage indicates a positive level of self-efficacy awareness on the part of the students as far as Evaluating strategy is concerned. This data also shows that at least the students are aware of the need to evaluate their performance as they undertake a particular task. By comparisons, the percentage within the "agree" category for *Belief in Evaluation* seems to be smaller than the other three SRL strategies, probably because it will take time for the students to acquire the skill of evaluating one's ability and performance.

It was found that the students were using the four SRL strategies frequently which indicates that they are metacognitively in control of their learning process (Donker et. al., 2014). Second language (L2) reading research also shows that good L2 readers can compensate for a lack of English proficiency by increasing their awareness of reading strategies and learning how to use these strategies to enhance comprehension (Carrell, Pharis, & Liberto, 1989). Having metacognitive knowledge on when, where and why a strategy is appropriate, help the students facilitate their learning and comprehending process. The findings suggest that the students formed positive beliefs in their self-efficacy in using the SRL strategies. The greater the students' level of perceived self-efficacy the greater would be the chances for them to become more strategic in their strategy use.

CONCLUSION

The outcome of the research demonstrates that students can be taught how to use self-regulated learning strategies via Direct Explanation. In the intervention sessions the students were found to be generally frequent in using all the four main self-regulated learning strategies namely, Planning, Monitoring, Problem Solving and Evaluation. The research also shows that students with knowledge of how to use strategies effectively are active and effective learners. This seems to suggest that as a result of the explicit instruction, the students were developing metacognitive awareness in strategy use. The students were also forming some positive beliefs in their own self-efficacy in using those self-regulated learning strategies. It should be recommended that the students undergo informed and explicit strategy instruction or training. With proper training the students should be able to become metacognitively sophisticated readers who know when, how, why and where to apply strategies appropriately. Further research on strategy use should be recommended which may involve a larger group of students. On top of that, a longer period of study needs to be conducted in order to generate and obtain more comprehensive data to establish a stronger and more compelling evidence of the significance of explicit instruction in strategy use. Besides, strategy use may also be assessed not only in the context of reading but within other language skills like writing and speaking.

REFERENCES

- Bandura, A. (1997). Self-efficacy. The exercise of control. New York: W.H. Freeman & Company.
- Brown, A.L, (1981). Metacognition: The development of selective attention strategies for learning from texts. In M.L. Kamil (Ed). *Directions in reading: Research and instruction*, pp.21-43, Washington DC: National Reading Conference.
- Carrell, P., Pharis, B., & Liberto, J. (1989). Metacognitive strategy training for ESL reading. TESOL Quarterly, 23, 647-678.
- Cedric Leong & Wong Mei Yin. (2004). Talk your walk: Issues in instruction of self- regulatory second language reading. In Jessie E, Agnes Change & Oon Seng Tan (eds). Thinking about Thinking: What Educators Need to Know. Singapore, McGrawHill.
- Chamot, A.U., Barnhardt, S., El-Dinary, P.B. & Robbins, J. (1999). *The Learning Strategies Handbook.* New York: Addison Wesley Longman.
- Chamot, A.U. & M.J. O'Malley (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Donker, A.S, H. de Boer, D. Kostons, C.C. Dignath van Ewijk, M.P.C. van der Werf. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review 11* (2014) 1–26
- Duffy, G., Roehler, L., & Hermann, B. (1988). Modelling mental processes helps poor readers become strategic readers. The reading Teacher, 41, 762-767
- Duell, O.K. (1986). Metacognitive skills. In G.D. Phye, & T.Andre, (Eds.). Cognitive

classroom learning: Understanding, thinking, and problem solving, pp. 205-239, San Diego: Academic Press

- García, T., M. Cueli, C. Rodríguez, J. Krawec & P. González-Castro (2015). Metacognitive Knowledge and Skills in Students with Deep Approach to Learning. Evidence from Mathematical Problem Solving. *Revista de Psicodidáctica, 2015, 20(2), 209-226*
- Johnson, B. & Christensen, L. (2004). Educational research. Boston: Pearson.
- Livingston, J.A. (2003). Metacognition: An Overview. ERIC.
- McCabe, P.P. (2003). Enhancing self-efficacy for high-stakes reading tests. *The Reading Teacher*. 57(1): 12-20.Pressley, M. & McCormick, C. (1995). *Cognition, Teaching and Assessment*. New York: HarperCollins.
- Meloth, M.S. (1990). Changes in poor readers' knowledge of cognition and the association of knowledge of cognition with regulation of cognition and reading comprehension. *Journal of Educational Psychology.* **82**(4): 792-798.
- Paris, S.G., Lipson, M.Y., and Wixson, K.K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*. 8: 293-316.
- Philip, B. (2005). Self-regulated approach to strategic learning (SRSL): A socio-cognitive perspective. In *Journal of language teaching, linguistics and literature*. Vol. 10: School of Language Studies and Linguistics, Universiti Kebangsaan Malaysia.
- Philip, B. (2005a). Towards a social, motivational, metacognitive strategy instruction model: Theory and practice, Unpublished PhD Thesis. Bangi: Universiti Kebangsaan Malaysia
- Pinninti, R.L. (2016). Metacognitive awareness of reading strategies: An Indian Context. The
- Reading Matrix: An International Online Journal. Volume 16, No.1. pp. 179-193.
- Schunk, D.H. (2000). *Learning theories: an educational perspective*. 3rd Edition. New Jersey: Prentice Hall.
- Schunk, D.H. & Zimmerman, B.J. (1998). Conclusions and future directions for academic interventions. In D.H. Schunk & B.J Zimmerman (Eds), *Self-regulated learning: From teaching to self-reflective practice*, pp. 225-236, New York: Guildford Press.
- Schunk, D.H. (1998). Teaching elementary students to self-regulate practice of mathematical skills with modeling. In D.H. Schunk & B.J Zimmerman (Eds), Selfregulated learning: From teaching to self-reflective practice, pp. 137-159, New York: Guildford Press.
- Schunk, D.H. (2001). Social cognitive theory and self-regulated learning. In D.H. Schunk
 & Zimmerman, B.J. (Eds). *Self-regulated learning and academic achievement*. pp. 125-152, New Jersey: Lawrence Erlbaum Associates.
- Tavakoli, H & M. Koosha (2016). The Effect of Explicit Metacognitive Strategy Instruction on Reading Comprehension and Self-Efficacy Beliefs: The Case of Iranian University EFL Students. *Porta Linguarum 25*, pp. 119-133.

Wenden, A.L. (1998). Metacognitive Knowledge and Language Learning. *Applied Linguistics*. 19(4): 515-537.

Winograd, P. & Hare, V.C. (1988). Direct instruction of reading comprehension strategies: The nature of teacher explanation. In Mokhtari, K. & Reichard, C.A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94(2): 249-259.

Zimmerman, B.J., Bonner, S. & Kovach, R. (2002). *Developing self-regulated learners: beyond achievement to self-efficacy*. USA: American Psychological Association.

- Zimmerman, B.J. & Schunk, D.H (eds). (2001). *Self-regulated Learning and Academic Achievement: Theoretical Perspectives*. New Jersey: Lawrence Erlbaum Associates.
- Zimmerman, B.J.(1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D.H. Schunk & B.J Zimmerman (Eds), *Self-regulated learning: From teaching to self-reflective practice*, pp. 1-19, New York: Guildford Press.
- Zimmerman, B.J and Martinez-Pons, M. (1988). Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology*. 80(3): 284-290.

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APPENDICES

SRL Strategy Inventory

(Adopted: Philip, 2005a)

Name: ____

You will find statements about process of reading. Write your response (1,2,3,4,or 5) in the space provided after each statement. Each number represents how true of you with regard to each statement below. Respond in terms of how well the statement describes your belief/opinion.

- (1) Never
- (2) Less frequent
- (3) Neutral
- (4) Frequent
- (5) Very frequent

Read the statement and choose a response (1,2,3,4, or 5) as above, and TICK your response in the space provided after

each statement.

	Statement	Response				Official Use		
	PLANNING (PLA)	1	2	3	4	5		
1	I tend to make a preview of what I am about to			-		-		
	read.							
2	I tend to skim the text before reading it.		1					
3	I tend to scan the text before reading it.							
4	I try to predict what the text is all about.							
5	I try to recall some key words/terms that can							
-	provide clues to the overall meaning of the text.							
	MONITORING (MONT)							
6	I tend to make a double check to keep track of							
	my comprehension level.							
7	I tend make a double check to keep track of the							
	effectiveness of reading strategies I use.							
8	I tend to make a double check to keep track of							
	the usefulness of graphic organizer I use.							
9	I tend to verify consciously with myself how							
	much have I learned/understood.							
10	I tend to make a double check to ensure that my							
	previous undertaken moves /acts are effective.							
	PROBLEM-SOLVE (PS)							
11	I tend to look for contextual clues to know the							
	meaning of a difficult word (without access to a							
	dictionary) and sentence.							
12	I tend to make an intelligent guess to understand							
	some parts of the text.							
13	I tend to make a logical guess to understand some							
	parts of the text.							
14	I tend to predict the outcome of a particular							
	proposition (cause-effect relationship).							
15	I tend to fill in any missing information, which I							
	find relevant in helping my understanding.							
1.6	EVALUATION (EVA)							
16	I tend to reflect on how effective were the							
17	strategies, which I used to comprehend the text.							
17	I tend to reflect on now much I have learned, new							
	anguage items such as words, phrases, structures							
10	L tond to reflect on how well have I done in the							
10	reading task: have I managed to understand							
	almost everything in the text							
19	I tend to check my level of understanding at		+					
17	reading intervals.		1	1		1		
20	I tend to self-evaluate on how effective have I	1	1	1	1	1		
_0	executed a particular reading task.							

Self-Efficacy Belief Inventory

(Adopted: Philip, 2005a)

Name: _____

You will find statements about process of reading. Write your response (1,2,3,4,or 5) in the space provided after each statement. Each number represents how true of you with regard to each statement below. Respond in terms of how well the statement describes your belief/opinion.

- (1) Strongly Disagree
- (2) Disagree
- (3) Neutral
- (4) Agree
- (5) Strongly Agree

Read the statement and choose a response (1,2,3,4, or 5) as above, and TICK your response in the space provided after each

statement.

	Statement	Response								
					Official Use					
I believe now that(LS)effectively.										
	PLANNING (PL)	1	2	3	4	5				
1	I should be able to get the overall picture of the text by making a preview.									
2	I should be able to get some idea of each part in the text through skimming.									
3	I should be able to look for specific clues about the text through scanning.									
4	I should be able to enhance my understanding of the text through making predictions.									
5	I should be able to get myself familiarized with the text by recalling some key words/terms for clues.									
	MONITORING (MONT)									
6	I should be able to check on my comprehension level by making a double check.									
7	I should be able to check on the effectiveness of reading strategies I use by making a double check.									
8	I should be able to check on the usefulness of graphic organizer I use by making a double check.									

9	I should be able to check on how much have I learned/understood by verifying it consciously with myself.			
10	I should be able to check on my previous undertaken moves /acts by making a double check.			
	PROBLEM-SOLVE (PSOLVE)			
11	I should be able to look for contextual clues to know the meaning of a difficult word (without access to a dictionary) and sentence.			
12	I should be able to make an intelligent guess to understand some parts of the text.			
13	I should be able to make a logical guess to understand some parts of the text.			
14	I should be able to predict the outcome of a particular proposition (cause-effect relationship).			
15	I should be able to fill in any missing information, which I find relevant in helping my understanding.			
	EVALUATION (EVA)			
16	I should be able to reflect on and evaluate whether or not strategies I used were effective.			
17	I should be able to self-evaluate myself to know what specifically new things I have learned.			
18	I should be able to check whether I have understood everything in the text or almost everything.			
19	I should be able to check my level of understanding at reading intervals.			
20	I should be able to check on my work upon completing the reading task at hand.			