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Could Explicit Training in Metacognition Improve Learners' Autonomy and Responsibility?

Brahim Machaal
Yanbu University College,
Saudi Arabia.

Abstract

This paper aims at highlighting the importance of students' training in metacognitive learning strategies as a way to build their autonomy and responsibility. It concerns itself with providing a practical educational model for college preparatory year programs. The suggested prototype is informed by a small scale research that involved 44 students and 14 EFL teachers in a college in Saudi Arabia , the findings of which suggest that students who join the program need explicit training in the use of metacognitive language learning strategies. The model also draws on the experience of the author as a teacher and manager of the English language center where the study took place. The collected data confirms what has been reported in the related literature and suggest that explicit training in the use of metacognitive learning strategies would help new college students to develop both autonomy and responsibility.

***Keywords*:** learning Strategies, Metacognitive Strategies, EFL

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Introduction

College students need to be empowered with the required knowledge, the suitable attitudes and the relevant skills to enable them to succeed in their education. A number of studies have highlighted the role of metacognitive learning strategies in increasing students' motivation, autonomy & responsibility (Cross & Paris, 1988; Eisenberg, 2010; Martinez, 2006; Paris & Winograd, 1990; Ray & Smith, 2010; Schraw et al., 2006; Whitebread et al., 2009). Most Saudi students who join a college Preparatory Year Program (PYP) find themselves lost and confused due to the cultural shock caused by the unfamiliar college life and study culture (Hassan, 2012). Both experience and research suggest that this class of students need to be trained in metacognitive strategies in order to succeed as college students. In addition, research evidence suggest that metacognition strategies are teachable (Cross & Paris, 1988; Haller et al., 1988; Hennessey, 1999; Kramarski & Mevarech, 2003). Informed by the results of a small scale study that involved 44 PYP students and 14 of their EFL teachers, this paper proposes a practical model to train students in metacognitive strategies through a learning-by-doing approach.

Language Learning Strategies

Language learning strategies have drawn the attention of researchers as early as the 1960s resulting from the influence of cognitive psychology on language learning (Burden, 1997). Since then, a great deal of literature has been published to classify, define and research language learning strategies (Rubin, 1975; Wong-Fillmore, 1976; Tarone, 1977; Naiman et al., 1978; Bialystok, 1979; Cohen & Aphek, 1981; Wenden, 1982; Chamot & O'Malley, 1987; Politzer & McGroarty, 1985; Conti & Kolsody, 1997). However, the term metacognitive strategies was identified overtly only as a subcategory of language learning strategies (e.g., O'Malley, 1985; Oxford, 1990). Nonetheless, metacognitive language learning strategies have been the focus of many research endeavors (e.g., Goh; 1997, 1998; Goh & Yusnita, 2006).

In the context of EFL education in Saudi Arabia, there have not been studies bearing on the metacognitive learning strategies. On the other hand, there have been a number of studies bearing on language learning strategies (McMullen, 2009; Aljunaid, 2010; Aljhaisoni, 2012). This lack of focus on metacognitive learning strategies leaves a gap in the related literature. Hence, this paper is an attempt to fill this gap and to raise the awareness of all stakeholders to the importance of formally training college students, particularly PYP students, in metacognitive learning strategies.

Metacognitive Learning Strategies

Perhaps the simplest definition of metacognitive learning strategies is the one advanced by John Flavell who originally coined the term metacognition in the late 1970s to mean “thinking about thinking” (Flavell, 1979, p. 906). Since then, most suggested definitions remained in essence faithful to Flavel's. For instance, Cross and Paris defined metacognition as “the knowledge and control children have over their own thinking and learning activities” (1988, p. 131); while Kuhn and Dean suggested that metacognitive learning strategies are “awareness and management of one’s own thought” (2004, p. 270), or simply as Martinez puts it, “the monitoring and control of thought” (2006, p. 696).

With relation to English language teaching, Richards considers metacognitive strategies to refer to ‘those conscious or unconscious mental activities that perform an executive function in the management of cognitive strategies" (2008, p.11). Richards elaborates that these strategies are necessary for the management of cognitive strategies used by learners to process and store the

acquired input and therefore learn. Similarly, O'Malley defined metacognitive language learning strategies as the operational activities undertaken by learners to plan and think about their learning and to monitor their production and comprehension in order to evaluate their learning activities through self-monitoring and self-management (1985, pp.582-584). On the other hand, Oxford used the term to refer to actions taken by learners to focus, plan and evaluate their learning (1990, pp.9-17). This same classification was reproduced by Goh (1997, 1998) who suggested that metacognitive strategies for self–regulation by language learners in a listening class are exercised through planning, monitoring and evaluating their learning.

In this paper, the term metacognitive learning strategies is used to refer to the learner's learning needs and preferences as well as planning, self-regulation and organizational strategies; which include their ability to manage their time, prioritize their tasks, gather and organize study materials and arrange a study space, the ability to monitor mistakes, monitor the learning process and evaluate the degree of success of their learning. In fact, these strategies are used not only to learn in class but rather to manage the overall learning process.

Learner Responsibility and Autonomy

Learner responsibility and autonomy are two key characteristics that help nurture successful college students. The two characteristics are not mutually exclusive but rather complementary. A learner is said to be responsible when he realizes that he needs to make efforts to learn and not just rely on his/her teacher or others to teach her/him. Learner responsibility is demonstrated through the steps learners initiate to 'consciously monitor their own progress' and the actions they take to 'use available opportunities to their benefit, including classroom activities and homework' (Scharle & Szabo, 2000, p.3).

Learner responsibility engenders learner autonomy. This concept implies that a learner takes initiatives and makes decisions about his learning freely and without help. However, he is aware that he is accountable for his actions. This definition suggests that responsibility is inherent in autonomy. An autonomous but irresponsible learner may misuse his freedom and end up with negative results. For instance, an autonomous learner may take the initiative to interrupt the teacher to ask a question or clarify an issue, which is encouraged for interactive learning, or he may interrupt him simply to disturb the lesson. The argument made here is that learner responsibility harnesses learner autonomy, and that the latter can only be achieved through formal training in the use of metacognitive learning strategies in order to raise learners' awareness towards their active role in consciously making decisions about their learning.

The research

This paper is based on two small-scale studies; one involving PYP students and the other surveying EFL teachers. The students' survey sought to find out what these students' English proficiency is low. On the other hand, the teachers' questionnaire aimed at establishing why learning strategies students make use of.

The Students' survey

The idea of seeking the students' opinions on this very important issue rests on the premise that the students themselves are better judges of their situation and can describe their learning experiences in a way that is genuine and authentic. In addition, the voice of the students is not often heard; although my personal experience and those of the colleagues I spoke to suggest that the students share some responsibility in their failure to learn English.

A number of 44 beginner students participated in the survey which sought to find answers to the above-mentioned question. In fact, these students have been placed in the beginner level based on their scores in the PYP English placement test. Prior to joining college PYP English, they have had the opportunity to study English for at least six years (or even 10 to12 for some). The placement test used to screen and place PYP students in suitable levels, always suggest that 3/4 of these students need to start from the beginner level (Alswede & Daf-Allah, 2012).

The students were asked to list the reasons for their failure to benefit from the pre-college English classes. They proposed three main reasons for such failure:

- Teachers:
  The Students have reported that their failure would be attributed to the fact that their EFL teachers were not qualified, were not motivated, were absent most of the time, used Arabic most of the time, taught the test, and did not seem to enjoy teaching.
- Teaching materials:
  Students have reported that they did not find the teaching materials to be neither interesting nor attractive; adding that the learning context as well as the methodologies used were not conducive to learning English.
- Students:
  The students also reported that they were also responsible for their failures to benefit from these English classes because of their lack of motivation and commitment, because of their frequent absences and because of their negative attitude towards English.

Without going into much details about these factors, this paper is only concerned with the students' related reasons as the two other factors could be dismissed given the strict recruitment policy and the fool-proof text book selection criteria that are implemented by the PYP English in the majority of the colleges in the kingdom.

It is worth noting that the situation in the PYP English is different from what these students have experienced in their pre-college education. First, the teachers are recruited through a process which allows only for suitably qualified and experienced EFL teachers to be employed. In addition, the syllabi have been carefully designed to suit the learning needs of the college students. Accordingly, textbooks and other teaching materials are evaluated and adopted judiciously. In fact, text books are evaluated and selected to match the learning objectives of the course they have chosen for. In short, the two first reasons advanced by the students as being responsible for their failures in pre-college EFL education are not found in the college PYP English.

The only reason that remains relevant therefore is the students' role in their learning. While issues related to motivations and attitudes were advanced by the students as reasons behind their failure to benefit for their prior EFL education, this paper will only focus on the role of metacognitive learning strategies and how they could be integrated in the EFL education. It has often been observed by the author and also reported by many EFL teachers that PYP English students behave as though they do not know how to study, nor do they show that they understand their role in the learning process. For instance, they rely on learning strategies, such as memorization and expecting their teachers to motivate them to perform, inherited from high school but which are not effective in college. To address the issue, many colleges have introduced a college study skills course for PYP students. However, the course fails to equip students with the useful study skills they need as it is mostly theoretical. In addition, the course is assessed through summative forms of assessment designed in the form of multiple choice

questions. In fact, it has been observed that the students do not seem to benefit much from this course as they often fail to turn the knowledge acquired into daily practices in the classroom. For instance, students who have just taken a lecture on note taking would attend subsequent classes without pens or notebooks.

Teachers' survey

In order to ascertain what effective learning strategies PYP students use, it was very important for this study to identify these strategies in order to compare them with the documented learning strategies that have reported to be used by good language learners. The findings of the study confirm the findings of two recent research studies on the topic (Hassan, 2012 & Khallid, 2004). The findings of these works suggest that the low achievements are mainly due to the students' learning culture of depending on others for motivation and evaluation, which they had inherited from pre-college educational experiences. However, the two studies did not make any practical suggestion on how the issue could be solved. This research came to fill that gap in the related literature.

On the other hand, the teachers' survey focused on finding what language learning strategies their students use. The results suggest that although some of the students could be using cognitive language learning strategies, very few of them use metacognitive learning strategies. In view of these finding, the argument is made for the inclusion of explicit training in metacognitive learning strategies in the PYP. This model could inform the existing college study skills courses by revisiting its instructional and assessment strategies. The paper concludes with a description of practical suggestions on how this model could be included in the English PYP program in the institution where the research took place.

In order to focus more on the students and learning strategies, a survey inspired by Rubin and Thompson's characteristics of good learners (1982) was distributed to 14 EFL teachers involved in the PYP and the raw results are shown by table 1.

Table 1. ***Language learning strategies used by PYP students as observed by their EFL teachers***

Good learners' Characteristics	All (100%)	Most (66-99%)	Some (36-65%)	Few (1-35%)	None (0%)
1. Autonomous	0	0	1	9	1
2. Organized	0	0	5	6	0
3. Creative	0	0	2	9	0
4. Self-reliant	0	0	2	7	2
5. Motivated	0	0	5	6	0
6. Recall past learning		2	2	7	0

7. learn from errors	0	0	4	5	2
8. Use prior linguistic knowledge	0	2	4	5	0
9. Use contextual cues for comprehension	0	1	5	5	0
10. Make intelligent guesses	0	1	3	7	0
11. Use effective learning strategies	0	1	1	8	1
12. Use compensation techniques to communicate	0	2	5	4	0
13. Manage their time effectively	0	0	2	7	2
14. Vary communication techniques	0	1	2	5	3

The results suggest that the participating EFL teachers have observed that very few PYP students make use of good language learning strategies. With only 35 % of the student using most of the strategies listed above, it would be safe to conclude that 75% of the students need training in the use of learning strategies for their EFL as well as all the PYP classes, mainly metacognitive learning strategies.

While discussing these above findings with some of the participating teacher, it became clear that PYP students lack training in metacognitive strategies such as time-management, planning, taking responsibility for their education and organizing their priorities. PYP students need intensive and continuous training to be piloted for a semester to asses it and identify what needs to be added, changed or modified. These findings echo the conclusions reached by (Shawn, 2010) who reported that her Saudi students recommend orientation program to help them to the new educational environment.

Training in learning strategies

The role of learning strategies in rendering English teaching efficient and effective has been researched at length (Wenden, and Rubin, 1987; O'Malley and Chamot, 1990; Chammot and O'Malley, 1994; Oxford, 1996; Cohen, 1998, Stern, 2003)). These studies have all emphasized the relationship between the use of effective learning strategies and language learning. In addition, explicit instruction of metacognitive strategies has been found to contribute to improving learning (Commander and Valeri-Gold, 2001; Ramp and Guffey, 1999; Chiang, 1998; El-Hindi, 1997; McKeachie, 1988). In fact, the explicit teaching of metacognitive learning strategies contribute to deepening understanding and increasing learning confidence (Goh and Yusnita, 2006). However, according to (McKeachie, 1988), there is an assumption by the teachers in college that explicit teaching of metacognition is not required as the students learned that in high school. The truth for Saudi students do not demonstrate that they have received such instruction, and it is suggested that they need such training badly in order to succeed in their college studies.

The proposed training in metacognitive learning strategies aims at raising Saudi college students awareness about their role as autonomous responsible students, who are expected to take ownership of and make decisions about their education. The training seeks to provoke their self-awareness, their self-regulation, their consistent commitment and their continued disposition towards their education and towards life in general. The model builds on the strategies that the students already know and aims to help them to correct and develop them further. It focuses mainly on helping college students to rekindle three main skills which are at the core of the metacognition. These skills are organizational skills, motivational skills, and self- evaluation skills. The intertwined relationship between these skills is demonstrated by figure 1 below.

***Figure* .1 key components of learner metacognition**

Although teachers in PYP may not always be aware of the importance of strategy instruction, his aspect of language learning is of paramount importance to the learners who need not only to learn concepts and skills, but also efficient learning strategies, especially metacognitive strategies, which are considered "the most basic of all skills because it is the key that unlocks future success.... Equipped with this skill, an individual can achieve competency in all other basic workplace skills from reading through leadership" (Carnevale et al, 1988, p. 8).

The rationale behind suggesting explicit training in metacognitive strategies takes its defense from both theory and practice. In fact, metacognitive learning strategies can have 'a significant, positive, direct effect on cognitive strategy use, providing clear evidence that metacognitive strategy use has an executive function over cognitive strategy use in task completion' (Purpura,1999, p. 61). In addition, other studies of EFL learners in various countries (e.g., in South Africa (Dreyer & Oxford, 1996) and in Turkey (Oxford, Judd, & Giesen, 1998)) suggested that metacognitive strategies 'are often strong predictors of L2 proficiency' (Oxford,

2003, p. 9). As for practice, the findings of the research underpinning this paper bear testimony to the importance of such training in promoting the sense of both learner autonomy and responsibility.

The proposed training model is an educational and developmental process that seeks to raise learners' awareness about their roles and change their attitudes towards learning. As such, it should be part of any college preparatory program in order to help new students to go through the transition from high-school to college in a smooth fashion. Students are often shocked and confused by the new educational culture that requires them to be autonomous, organized and responsible learners. These students have demonstrated that they have not been made aware of this requirement. This lack of awareness becomes evident every time students are confronted about their absences, lateness or lack of commitment. They show signs of confusion and surprise as though they were not expecting to be held accountable for their actions.

Newly-recruited students who join the PYP from high school do so with the same learning strategies they used in high school only to realize that these strategies do not fit with the new educational environment. It has been observed for the last seven years that their educational difficulties are partly due to their lack of metacognitive skills such as self-motivation and self-regulation. While self-motivation refers to will students possess to learn and develop, Self-regulation refers to the learners' ability to monitor their learning and adjust their behavior to the new challenges (Hallahan et al., 1979; Graham & Harris, 1992; Reid Harris, 1989, 1993).

Self-regulation of learners is best illustrated through their autonomy and responsibility. The fact remains that most Saudi learners have grown up dependent and in a culture where others have been doing their tasks and duties for them. For instance, they have grown to rely entirely on maids, cleaners, drivers, and gardeners to do daily chores for them. They also hire private tutors to do their school assignments and homework for them. This could be one of the factors that prevent Saudi students from developing a sense of responsibility and self- regulation.

The proposed Cognitive LLS instruction model

Based on the findings of this study, the feedback of the students' counselor as well as the analysis of the end of semester results, this paper proposes a practical inclusion of training in the use of metacognitive learning strategies in College Study Skills course, currently offered as part of the PYP. The course is available to all new students who join the college PYP and runs for a full semester (16 weeks). The course is mostly theoretical and is delivered over two lectures per week and uses unsuitable assessment methods in the form of written quizzes, presentations, as well as midterm and final papers made-up only of multiple choice questions. Partly because of this students see it as a mere college subject for which they have to pass and forget. Based on the observations made by the author, the teachers and the Students Counselor, the skills imparted to the students through this course do not seem to manifest in the students' behavior either on campus or in class. Past years absence records for PYP students were very high. In addition, students often forget their study materials (books, notebooks, pens) and fail to do their homework or assignments and seem to see nothing wrong with these actions. I have been evaluating the College Study Skills course for the last three years and I have concluded that the way the course is delivered and assessed needs to be rethought. What is proposed here is a new design of the course syllabus to reshape it to achieve the goal it has been designed for, by including training in useful and key metacognitive learning strategies.

The proposed course should include its early chapters the four key metacognitive strategies listed below:

1- Time management strategies; including punctuality, steady attendance, working to deadlines and making good use of the time spent out of college
2- Preparation and organizational strategies to make room for revisions, homework and assignments, as well as quizzes and exams preparations
3- Communication and social strategies and these include class participation, asking questions and interacting with other students in and out of the classroom
4- Reflecting and self-assessment strategies which implies daily, weekly and monthly monitoring of their learning progress

It is anticipated that the above listed strategies should be introduced at the beginning of the course and in the order they are listed. These strategies are arranged in order of importance based on our observations and that of the other colleagues. For instance, the issue of attendance and punctuality is confusing to the new students as they feel they are free to attend class and they are always late. Addressing this issue as early as the first two weeks will set the record straight for the confused students. In addition, when the students learn that they will be assessed regarding their time management strategies by all their teachers, they will take the matter of attendance and punctuality more seriously.

In fact the second proposed change to the CSS is related to the assessment methods used to help the students feel that they are developing skills and nurturing their autonomy as learners, and not just studying a college subject. As this course will affect all the other courses offered to these students, and as the use of meta-cognitive learning strategies is useful for all these subjects, it is proposed that a monitoring sheet for each class will be provided to the other PYP subject teachers to fill up over a set period and return it to the CSS course teacher for his use in the evaluation of the students in the course.

The monitoring sheet, which will look like the one proposed below, could use marks or grades as the teachers prefer, but it is important that it is consistent in this regards.

Table2. ***Sample monitoring sheet for students' use of metacognitive strategies***

Class : A				**Subject: X**
Students Names/IDs	Metacognitive Learning Strategies Mark from 0-5			Total Evaluation
	Time Management	Preparation and Organization	Reflecting and Self-evaluation	Total: /15
Student 1	1	4	0	5
Student 2	0	1	2	3
Student 3	4	2	3	9

Besides the above suggestions, it is also recommended that students' portfolios be included in the CSS course assessment to allow the students the opportunity to reflect on their learning and most of all to monitor and evaluate their own progress. It is very important to mention at this juncture that passed experience showed that students need to be aware of the purpose of these portfolios, how they should go about building them and how they be evaluated.

In addition to their participation in monitoring the students based on the sheet proposed above, to be provided by the College Study Skills course teacher, teachers of other subjects are also required to participate by raising their students' awareness towards metacognitive learning strategies through the use of classroom techniques and practices such as the ones suggested in table 2. The list of activities provided is not exhaustive, and teacher may use their creativity to design activities that would be more suitable to their students, bearing in that the objective is to foster the importance of metacognitive learning strategies.

Table 3. ***Metacognitive learning strategies***

Metacognitive Strategy	Classroom Instruction
Asking Questions	Invite students to ask questions throughout the lesson to keep them involved and to raise their curiosity to learn.
Fostering Self-reflection.	Encourage students to reflect on their learning progress
Encouraging Self-questioning	Promote independent learning by asking learners to produce their own questions
Teaching Strategies Directly	Choose the relevant metacognitive learning strategy and teach it; for example, planning or evaluating.
Promoting Autonomous Learning	When introducing new concepts, create challenging learning experiences and encourage you students to participate.
Provide Access to Peer Assistance	Use pair and group work to encourage interaction, peer assistance and collaboration
Solve Problems with a Team	Instruct groups to work as a team and provide answers they have all agreed upon
Think Aloud	While performing challenging tasks, encourage students to think aloud and report the progress of their work.
Self-explanation	Ask students to write down or express orally their own explanations of challenging concepts
Provide Opportunities for Making Errors	Allow students to make errors and learn from them as this will promote reflection and self-monitoring

The argument is made here that Saudi students are perfectly capable of learning and using metacognitive strategies if the initiative is taken to afford them with the training mentioned above. The evidence in support of this was reported by Shaw (2010) who concluded that her Saudi students in Oregon university in the USA have managed to learn and use - among other skills and strategies - metacognitive learning strategies such as; time management and goal setting, developing and using study skills, taking advantage of campus resources and working hard and persisting (p.229).

Conclusion

Throughout this paper, I have argued the importance of including explicit training in cognitive learning strategies for PYP students. This training could be part of the currently offered college study skills course, after revising its instructional and assessment strategies. The proposition takes its legitimacy from the fact that explicit instruction of metacognitive learning strategies in the way proposed will undoubtedly help college students to become responsible and autonomous. I have also suggested that the monitoring and evaluation of such training should be undertaken by faculty members across the curriculum as well as students counselors, through a systematic monitoring and recording of the students' behaviors inside and outside the classrooms. It is hoped that once students' awareness vis-à-vis the importance of metacognitive learning strategies is raised, this will eventually impact on their cognitive skills, their responsibility and their motivation towards learning. This motivation will ultimately contribute to fostering autonomy and life-long learning that has become the focus of educational systems all over the world.

About the Author:

Brahim Machaal is an educator and researcher in the field of teaching English as a foreign language. He holds a Doctoral degree in applied linguistics and TESOL and has taught English and trained teachers in Morocco and Saudi Arabia. At the time of undertaking research for the present paper, he was affiliated with Yanbu University College in Saudi Arabia.

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