Teacher’s role in promoting students’ self-regulated learning

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1. Background

The term “self-regulated learning” (SRL) is used to describe independent, academically effective forms of learning that include metacognition, intrinsic motivation, and strategic action. In the process of metacognition, self-regulated learners can plan, set goals, organize, self-monitor, and self-evaluate during the acquisition, these processes make them to be self-aware, knowledgeable in their approach to learning. In the process of intrinsic motivation, self-regulated learners have high self-efficacy and are interested in the task. They employ effort and persistence during learning. In the process of strategic action, self-regulated learners seek out advice, information, and strategies which are helpful for them to learn, they self-instruct and self-reinforce during performance enactments.

Self-regulated learners who own the skills to learn effectively will exert influences both in schools and later in life. So how to foster students to be self-regulated learners should be the main target of the whole society. So the self-regulated learning has become a key construct in education in recent years. The current research implements the promotion of self-regulated learning in school. Many of the research on self-regulated learning involve students in the middle school through university. Because they felt that elementary students are difficult to coordinate the cognitive and metacognitive processes, they are hard to use strategies directly in their learning process. Until recently, more investigations provide that elementary students are able to regulate their learning activities, control their motivation and behaviors. At the same time, we should recognize that the training of self-regulated learning is significant for young children in their following learning life. These findings ask us to research what teachers can do to promote elementary students to be self-regulated learners in the classroom.

If we know the importance of self-regulated learning to students, it is not difficult to find some empirical researches which examine different kinds of strategies are helpful to support students’ self-regulated learning.

For example, Paris and Paris (2001) provided an information literature review that categorizes relevant research into two groups, the focus of both groups is to promote self-regulated learning in students. One group of studies assumed a developmental view of self-regulated learning and sought to examine how students self-regulate their learning and meet personal goals. The other group was to examine the role of a transmission model in the acquisition of self-regulated learning. These studies displayed the effect of explicit instruction in the use of self-regulated learning strategies.

Englert et al. (1991) used cognitive and metacognitive strategy instruction in a writing program for fourth and fifth grade elementary students. The instructions, which are useful to improve students’ self-regulated learning, involve direct explanation of writing strategies and modeled use, daily writing with topics selected by students themselves, use of procedural facilitation in the form of think-sheet, peer review and feedback, frequent writing conferences, and publication of students’ papers.

Harris and Graham (1992) taught children some kinds of practical strategies for organizing, planning, and revising their compositions. They taught “self-instructional tactics” such as identifying the problem, focusing on the task, applying the strategies, evaluating performance, coping with anxiety and maintaining self-control,
self-reinforcement, goal-setting, self-assessment, and self-monitoring, which can improve students’ self-regulation in the general learning process.

However, the context cannot be ignored. Some researchers still use various perspectives to examine how tasks and situations influence students’ learning and motivation.

For instance, Blumenfeld and her colleagues (1992, 1987) explained that variety, diversity, challenge, control, and meaningfulness, as well as the procedural complexity and social organizations of the task, which affect the use of deep-level learning strategies.

Stipek, Feiler, Daniels, and Milburn (1995) made distinguishing between children in child-centered classrooms and children in teacher-directed classroom and found that the children in child-centered classes demonstrated more attitudes and behaviors that associated with self-regulated learning. In the child-centered classrooms, children are willing to interact with peers, and it gave children chance to choose various activities and materials that are interesting and meaningful to students. In contrast, teacher-directed classrooms pay more attention to basic skills that were not applied in meaningful activities and only controlled by teachers.

Perry and Vandekamp (2000) made a classroom observation and find out that the contextual factors of the environment can supply necessary support for students. Nonthreatening evaluation practices, involvement in complex reading and writing activities, the provision of autonomy related to what students read and write, and the ability to modify learning tasks to control challenge are all contextual features that improve self-regulated learning in elementary students.

From the previous research mentioned above, we can see that teachers’ role in promoting students’ self-regulated learning in the classroom could be illustrated in many aspects. On the one hand, teachers need to train students to be strategic learners thus involve making students aware of potential strategies, attribute success to good strategies, and choose and monitor appropriate strategies, meanwhile, providing students with instruction and intervention in managing and coordinating their plans and implementation which help them to gain positive effects and outcomes in their performance. On the other hand, the construction of learning environment is still significant in fostering students’ self-regulated learning. Whether students can use self-regulated learning strategies in school, what kinds of tactics they utilize, how much effort they expend on self-regulation and strategies application, which all depend on the tasks and contexts that teachers create for students.

Hence, we get a conclusion that no matter what kinds of strategies training or contextual construction, every aspect has a deep effect on students to become self-regulated learners. But the most important thing is that we need to put those two respects together to explore and research, which means giving students relevant strategies training in a supportive learning environment that is a better method to achieve our educational goal—promoting students to be self-regulated learners. So the teachers, as the strategies trainers and environment constructors, play a crucial and main role in this process. In fact, there are limited researches in this aspect. Therefore, the aim of this study is not only to indicate the significance of synthesizing these two aspects, but also improve some methods to facilitate the implementation in practical teaching.

2. Theoretical framework

In order to research how teachers can best support their students’ self-regulated learning, it is necessary to understand how students can self-regulate their learning firstly. In the field of self-regulated learning, there are some distinct and famous theoretical approaches which are helpful for theorists to explore it.
Zimmerman’s self-regulated learning theory is one of the most common theories in this field of research. In this model, self-regulation is composed of three cyclical phases: forethought phase, performance phase, and self-reflection phase.

**Figure 1: phases and subprocesses of self-regulation**

In the first phase, there are two major classes: task analysis and self-motivation. Task analysis includes goal setting and strategic planning. The students create specific goals for themselves and then plan to use appropriate strategies to maximize success in the learning task. Self-motivation stems from students’ beliefs about learning. Self-efficacy is the beliefs that students believe they have capability to learn. Outcome expectations are the personal consequence of learning. When students have self-efficacious about learning, they will expect to use the knowledge to achieve their goals. Intrinsic interest refers to the students’ valuing of the task skills from their own side. Learning goal orientation refers to valuing the process of learning for its own merits.

In the second phase, there are two major classes: self-control and self-observation. Self-control means the supervision of the concrete methods and strategies that are selected during the forethought phase. The key types of self-control involve imagery, self-instruction, attention focusing, and task strategies. Self-observation means self-recording individual events or use self-experimentation to find out the cause of the events. For example, students are asked to self-record their time use in order to make them aware of the time they spend on studying.

In the third phase, there are two major classes: self-judgment and self-reaction. In the self-judgment, it includes self-evaluation and casual attribution. Self-evaluation refers to students compare their self-observed performances against some standard, such as their prior performance, other person’s performance, or an absolute standard of performance. Casual attribution refers to the beliefs about the cause of errors or successes. There are two different kinds of casual attribution occur among students: attributing a poor score to limitation in fixed ability and attributing a poor score to controllable process, the former will damage students’ motivation in future learning, whereas, the latter will sustain students’ motivation in following learning. One form of self-
reaction involves self-satisfaction and positive effects. Increases in self-satisfaction can enhance students’ motivation, but decreases in self-satisfaction will undermine their further efforts to learn. The other form of self-reaction is adaptive/defensive response. Defensive response means students make effort to protect their self-esteem by withdrawing or avoiding opportunities to learn and perform; to the contrary, adaptive reaction means students can adjust themselves to increase the effectiveness of their methods of learning, for instance, giving up or modifying the futile learning tactics.

Zimmerman’s theoretical framework explains explicitly the role of context which affects students’ self-regulated learning. It indicates that environmental factors have a bidirectional interaction with students’ personal and behavioral characteristics. The interaction with context lead to the cyclical development and adaptation of students’ self-regulated learning. At the same time, teachers can use this context effectively to foster students’ self-regulated learning. For example, teachers may prompt students’ engagement about learning task in forethought phase, such as providing knowledge about strategies use and about its benefit, explicit instruction about goal setting, strategies planning, intrinsic value, and outcome expectations. In the performance phase, teachers can make some interventions and scaffoldings which help students to control their behaviors and efforts, have clear understanding and recognition for their strategies and methods selecting. In the self-reflection phase, teachers supply instructions which assist students to evaluate their performance accurately, attribute their score in a positive attitude in order to avoid negative motivation, and increase effective methods of learning.

Zimmerman’s theory can reflect the context and teachers’ affects which work together to enable prompting students’ self-regulated learning. That is the reason to choose this theoretical framework.

3. Aim

Generally, teachers know some good strategies and students do not, therefore teachers should describe these strategies and suggest students to use them. But there is a problem happened that students who have some strategies do not mean that they can apply or have awareness to use them in real learning. So it raises some questions:

- How do teachers train students to get some strategies?
- How do teachers motivate students to use learning strategies effectively?

Through some research, we find that teachers can promote students’ self-regulated learning either directly by teaching learning strategies or indirectly by arranging a learning environment that assist students to practice self-regulation. So the aim of this study is to combine the strategies training and environment creating together to promote students’ self-regulated learning.

On the one hand, this study is aimed to help students to get more useful strategies in their learning process, for example, in the process of planning. Firstly, teachers need to provide direct explanation about self-regulated learning, multiple curriculum opportunities to foster self-regulated learning and some models of self-regulated learners which make students interested in self-regulated learning and aspire to learn and use effective strategies for their own education. Secondly, teachers should offer explicit instruction about learning strategies. Such as what they are, how they operate, when they should be applied, why they are selected, and so on. When students are given some information about the meaning and utilization of the strategies, they will know clearly about the significance of the strategies and how to employ, monitor, and evaluate the strategies. Those direct instructions about cognitive, metacognitive, and motivational strategies can facilitate students to understand and use the strategies effectively. Lastly, interventions and scaffolding should be applied between teachers and
students. Teachers possess domain knowledge and pedagogical experience, which can scaffold students to realize their potential by providing assistance when they need. The scaffolding will be faded and transferred when students participate actively and use strategies accurately in the process and accomplish the task independently and proficiently.

On the other hand, this study is aimed to create a supportive learning environment to allow opportunities to practice and generalize the strategies students learned from their teachers, so that students can promote self-regulated learning in general classroom. If teachers structure classroom tasks that emphasize peer competition, rote procedures, and behavioral management, students are likely to perceive those tasks as busy work and burden, they will only focus on completing the task and engage in the activities in a superficial manners, they will not have awareness to use strategies or self-regulation. Therefore, academic tasks are so important that they can influence the quality of students’ learning, strategies application, and self-regulated learning. For the teachers, they should make the meaningful and thoughtful tasks, for example, project-based learning or problem-based learning, which create an open-ended environment to foster students’ self-regulated learning. That environment can provide students more opportunities to use the strategies and develop their self-regulated learning. In that environment, students set challenging goals, make effective plan, have volitional control, participate in assessment, engage in complex tasks, use more strategies, and seek help from peers and teachers. Teachers in that environment encourage students to attempt challenging tasks, support students in making appropriate plan, assist students to use proper strategies, and use performance assessment and feedback in activities that focus on continued progress.

In this study, strategies training will be defined as direct promotion, and environment creating is defined as indirect promotion. Those two diverse promotions work together will foster self-regulated learning among students.

4. Methods

This study examines how teachers train students to get strategies and motivate students to use learning strategies effectively in the process of planning in the general English classroom.

4.1 Participants

The data will be collected in a Finnish elementary school. The participants are 11 fourth-grade students from one class which is called 4A-A, including boys and girls. Their mean age is about 9 years. Most of the students are Finnish. The learning materials include textbook and exercise book.

4.2 Procedure

**Questionnaire**

Making a questionnaire before executing the following activities, this helps to acquaint the current situation about students’ strategies comprehension and practical application. The students will be told about the purpose of the questionnaire, and they fill in this questionnaire in the classroom.

**Teaching training**
According to the teaching contents, the English teacher would be given some instructions and methods which will be used in the classroom one week in advance. The instructions and methods involve rubrics, specific strategies, and so on.

**Observation**

The period of observation is six lessons in three weeks (twice a week). One of project members is the teacher’s assistant who helps English teacher to carry out relevant works designed before. Other project members observe behaviors and reactions both teacher and students in the classroom, and write down related information.

5. **Analysis**

Qualitative and comparative methodology will be used in this study. The initial qualitative analysis involves two sides: one is for teachers’ strategies training situations and supportive environment creating in the English teaching, such as the categories of strategies, the ways of training, context of applying, and so on. The other side is for students’ strategies mastering conditions, such as the understanding about strategies on planning, the strategies using in the specific task, the outcome of strategies’ utilization, etc.

The comparative analysis is conducted through contrasting teachers’ training procedure and students’ actual understanding and utilization about strategies in the classroom, which illustrate the result of teachers’ direct and indirect promotion for students’ self-regulated learning. It refers to that some strategies and activities teachers implement in the classroom are helpful for students’ self-regulated learning, some strategies and activities do not have effective influence to improve students’ self-regulated learning as expected. To relevant problems, we need to attribute the cause and then find out the methods in order to solve the problems.

6. **Timetable**

- Designing questionnaires: in March
- Making questionnaires: at the beginning of April
- Teaching training and observation: from 15\textsuperscript{th} April--30\textsuperscript{th} April
- Analyzing data and writing the results: from May
- Completing “Introduction” part: in October
- Completing other parts (first draft): in December
- Revising the thesis: in February
- Completing the final thesis: in March

7. **Expected results**

Through data collection and analysis, we hope to comprehend the related issues (positive and negative) occurred in strategies training in the classroom and their reasons, so that we can supply teachers with
efferacious suggestions and assistance in order to help them to promote students’ self-regulated learning in the classroom.

8. Implications

This study of self-regulated learning suggests that teachers’ direct promotion and indirect promotion are main factors that facilitate students’ self-regulated learning. The study put forward some methods to help teachers train strategies and construct learning environment for students in order to improve their self-regulated learning in a general classroom, such as understanding knowledge and significance about self-regulated learning, explicit instruction, scaffolding, and tasks design. Through those methods, students can get more strategies and have awareness and ability to use strategies in their daily learning process, which make them to be self-regulated learners. It also suggests teachers put fostering students’ self-regulated learning as a main target in their teaching procedures, not only pay attention to knowledge and information transmission, but focus on students’ learning strategies training and practical application which cultivate students to gain more learning skills and become self-regulated learners.

9. Ethical issues

The construction of the project and relevant research contents are permitted by Faculty of Education of University of Oulu and Oulun Normaalikoulu. The project members are permitted to collect data in a four-grade class which has eleven students; they can analyze and apply those data in their Master’s Theses. In the duration, the project members and the teacher discuss the arrangement and specific implementation details about teaching contents in advance.
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