

Application of Metacognitive Strategy in the Cultivation of College Students' English Autonomous Learning

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Abstract: Under the network environment, autonomous learning has become a trend. At the same time, cultivating students' autonomous learning ability is one of the teaching objectives required by College English teaching. The traditional Chinese teaching method made most students to learn passively, and the success of language learning depends to some extent on students' autonomous learning after class, therefore it is quite a necessity to strengthen the training of students' autonomous learning ability. Metacognition theory, with its unique characteristics and contents, is also regarded as the core of autonomous learning ability. This paper firstly introduces the real situation of autonomous learning of college students, and then try to employ metacognitive strategies as a guide to improve students' awareness of English autonomous learning and help them to make their own learning plans, monitor and evaluate their own learning process to improve their ability of autonomous learning English. Finally, students become the manager of their own learning, so as to meet demands of the school and society for a compound talents. The results show that there is a close relationship in learners' English independent learning ability and metacognitive strategies. Metacognitive strategies provide guidance for the cultivation of students' autonomous learning ability, and the interaction between them can really promote learners' autonomous learning ability. Therefore, it is very vital to improve college students' independent learning ability under the guidance of metacognitive strategies.

1. Introduction

In the late 1970s, China began making a systematic study on autonomous learning(Pang guowei2003). Looking back on the college English teaching practice, however, most students' basic proficiency level of English is weak^[1]. At the same time, autonomous learning consciousness is not strong due to lack of learning initiative, self-control and fewer time for autonomous learning. Even a majority of students almost cannot manage and monitor their own learning.

1.1 Lack of autonomous learning awareness

Autonomous learning ability is an important learning skill for college students. But, at present, many college students' autonomous learning awareness are lower than those in foreign countries. The main objective of college English learning is to enhance the comprehensively communicative

English competence which include listening, speaking, reading, writing and translation^[2]. More importantly, it requires students to carry out more and more independent expansion training and learning after class. Without the consciousness of autonomous learning, it is difficult to get the goal of learning college English well. Students often think what teachers teach in class are what they need to learn and handle, so those teachers don't mention in class are not important all and they won't take the initiative to acquire them. Many students have slackened a lot in thinking and action after the completion of the college entrance examination, so that their attitude and state of study after entering the university are very slack. On the one hand, different from the tight and orderly curriculum arrangement in the period of basic education, college gives students more time to arrange independently and more things to learn actively. On the other hand, when students come to the campus, they don't know much about the setting of subjects and the main framework of subjects, and they don't know much about their major and future. Therefore, in a long time after the change of situation, college students have no clue to study, which makes many college students confused, unable to correctly position their learning objectives, and lack of autonomous learning^[3].

1.2 Ineffective process in autonomous learning

With the development of network technology, some college students often can't resist the temptation of the network and indulge themselves in online games and make friends excessively. It's hard for them to balance the relationship between self-study and entertainment by using network resources reasonably. Some students can't control themselves completely so they can't concentrate on their study, which leads to low learning efficiency. Some students without their unique opinions and ideas are unwilling to think and reflect independently so that they are unable to raise problems in class or after school, and some students participate in learning activities with negative thinking and consciousness, thus gradually unwilling to learning autonomously. Most of them are accustomed to be supervised by their parents or teachers in completing their tasks. They don't know what to study and how to study without others' supervision. Due to the weak awareness of autonomous learning and the failure to develop the habit of autonomous learning, students will not take the initiative actively to borrow materials from the library, and will not discuss learning with other students, resulting in the low utilization of learning resources, and the learning content limited to textbooks. They often do a lot of meaningless efforts because of ineffective process in autonomous learning.

1.3 Lack of correct evaluation model

For a long time, in China, test scores are one of the most important evidence and basis to prove a student's learning effect. According to the survey, the assessment of students' English level in most schools mainly depends on their final English test scores. In fact, the content of the final examination of college English cannot fully reflect the students' ability to understand, master and use English, finally resulting in such a one-sided evaluation method. Learning English is not a process of unilateral acceptance or listening, nor is it a task-based learning, which requires students to participate as participants, rather than just recipients. Only using scores as a reference for learning results will also reduce the enthusiasm of many students in learning English. Because many students choose to study hard only a few days before the final exam to catch up these knowledge in order to pass the exam. However, to learn a language well, students need to consume a lot of time and efforts to get to the desired results, but just a few days of accumulation cannot do. Therefore, the outdated evaluation model will reduce the students' interests and motivation in active autonomous English learning. Moreover, this kind of evaluation method encourages them to be careless in their daily study, neglect the accumulation of study and the cultivation of self-education

ability.

Some teachers usually take the evaluation of students' learning grades as the ultimate goal, not take the performance in the whole process as a part of general evaluation. A desirable evaluation model should be student-centered, which means that teaching needs should be integrated with learners, and learners need to absorb knowledge through personal understanding. Only through formative assessment can teachers accurately grasp students' learning state. Then teachers can make teaching tasks reasonably for the next stage according to the evaluation results, so as to realize the teaching based on the actual needs of students. What's more, students will have a more complete understanding of their autonomous learning states and abilities. A student's ability is not determined just by passing the final exam.

1.4 Lack of immediate guidance and supervision

Some students realize that they should manage their spare time to promote autonomous learning, but they often don't know how to do or when to start. Even after completion of the plan, they can't receive feedback and guidance from their teacher. Because the traditional teaching model does not provide correct and immediate guidance^[4]. In fact, everyone has inertia, but some people can well restrain this inertia, while others can't. Language learning cannot be accomplished in such a short time, so it needs continuous hard study. However, in the actual learning process, many students are unable to control their own inertia, in the face of learning, always like to learn more about they interested and do not like to learn about what they are not interested in. In order to help students enhance their ability of autonomous learning, teachers need firstly change their previous teaching concepts and roles in the process of teaching, from the original teacher of educational knowledge to the organizer, coordinator of the teaching activities. So immediate guidance and supervise is vital for autonomous learning.

2. Metacognitive Strategy

2.1 Metacognitive strategy

Metacognitive strategy is a typical learning strategy, refers to the students about their cognitive process and results of effective monitoring and control strategy (Wenden 1999)^[5]. So far, research on learning strategies has pointed to powerful role of metacognition in learning and the potential for greater use of metacognitive strategy in autonomous learning process. Metacognitive strategy plays a dominant role in the system of learning strategies and is the key to cultivating students' ability of autonomous learning. Metacognitive strategies are some ways for learners to process information. Their basic functions are as follows: one is to process and organize information effectively; the other is to store information systematically. Metacognitive strategy can be divided into the following three kinds: planning strategy, monitoring strategy and adjusting strategy.

2.1.1 Planning strategy

Planning strategy refers to planning various activities, predicting results, selecting strategies, imagining solutions to problems, and estimating their effectiveness before cognitive activities start according to the specific objectives of cognitive activities (Wenden 1999). Planning strategies consist of making learning goals, scanning or browsing relevant materials, generating questions to be answered, and analyzing how to accomplish learning tasks. Students should have a learning plan for every subject. Successful students are not just listening to lectures, taking notes and waiting for teachers to assign materials for examination. They will predict how long it will take to finish the

task, explore meaningful points in class, remember notes after class, dividing study groups when necessary and use different other methods. In addition, successful students are always active rather than others

2.1.2 Monitoring strategy

Monitoring strategy refers to the objective evaluation and feedback of cognitive activities according to cognitive goals in the process of cognitive activities. And People should correctly estimate the degree and level of their achieving cognitive goals, and evaluate the implementation effect of various cognitive actions and strategies according to effective criterion (Wenden 1999). The monitoring strategies include thinking when reading, asking questions about the materials, and monitoring the speed and time of oneself during the examination. These strategies make learners know about the potential threat in their cognitive features and learning methods, so as to find out and modify them. Some studies have shown that many people, from children to college students, lack this kind of comprehension and monitoring skills, and many students always take repetition (such as rereading, note taking, etc.) as their main strategy.

2.1.3 Adjusting strategy

Adjusting strategy is to find out the problems through monitoring strategy in learning activities, and then use regulation strategy to solve the problems. The regulation strategy is based on the examination of cognitive activity results. If problems are found, corresponding remedial measures shall be taken and relative strategies shall be corrected and adjusted in time according to the inspection of the effect of cognitive strategies (Wenden 1999). For example, if you find that you encounter unacquainted words when reading, you can use a dictionary to solve them; if you find that you are slow in doing a problem, you can improve your speed in doing a problem; if you skip a problem in a test, you can do a simple problem first. Adjustment strategies can help students to correct their learning behaviors and make up their deficiencies. If a person does not have this skill to use adjusting strategies, he cannot successfully plan, monitor and adjust cognitive activities. Adjusting strategy can help student to achieve learning objectives through logical analysis and other learning skills.

3. Cultivation of college students' English autonomous learning ability

There is a tight relationship between autonomous learning and metacognitive strategies because metacognition is a very important aspect of autonomous learning. Wenden (1999) pointed out that learning strategy is good at enhancing students' autonomous learning ability, while metacognitive strategy is regarded as an essential learning method. In the process of autonomous learning, students recognize their learning process and use metacognitive strategies appropriately. Therefore, metacognitive strategies can help students recognize their learning goals, diagnose their strengths and weaknesses, so it plays a dominant role in their whole learning activities. In O'Malley and Chamot's (1990) opinion, metacognitive strategy refers to a kind of behavior that the subject uses the knowledge obtained in the process of knowledge to adjust language learning by establishing learning objectives and making learning plans, monitoring and adjusting learning process and evaluating learning results^[6]. Therefore, college students must have a good command of autonomous learning ability. Under the innovation of education, modern education pays more attentions to how to make students learn in a more time-saving, labor-saving and efficient way. Undoubtedly, it involves a series of learning strategies. However, behind any effective strategy, there must be a perfect theoretical system to support it. Metacognition theory is the most appropriate support theory for learning strategies.

With its unique characteristics, metacognitive strategies provide theoretical basis and effective methods for the cultivation of students' self-study ability. At the beginning, students should realize that the core of autonomous learning ability is to achieve self-regulation and self-monitoring in the process of learning. Planning, monitoring and evaluation are the three functions of metacognition. Therefore, if students eager to train and enhance the ability of autonomous learning, they must strengthen the training and guidance of metacognitive strategies, which requires both the cooperation of students and the guidance of teachers^[7]. A few years ago, the Ministry of education came up with specific requirements for college English education. The main body of college English teaching need be transferred, which means students are the dominant place, not teachers. The outdated teaching system is to teach language and skills alone. Modern education needs to improve the application of English in certain situation and enhance students' ability of autonomous learning. Autonomous learning ability is developed on the basis of self- awareness. From the perspective of ability acquisition process, it needs cognitive modification, targeted training and learning behavior development. Therefore, the construction of college students' English autonomous learning ability needs to start from these points: helping college students to form the awareness of autonomous learning, inspiring their internal interests, training their learning strategies, giving full play to the auxiliary role of teachers, forming their independent learning habits.

3.1 Improving the awareness of English autonomous learning

In order to apply metacognitive strategies to improve English autonomous learning, at the beginning, it is necessary to cultivate students' metacognitive thinking and consciousness, so that students can make a correct evaluation of themselves at the learning process. In the traditional teaching concept of English in our country, learning English aims for examination, and the finally aim of learning English is to get into an ideal university. Therefore, it is more important for students to get high marks than to master the practical application of English, so this caused “Mute English”. But this view is very wrong and superficial, because learning English is to enable students to use English fluently to communicate with others, expand their horizons, experience different cultures, and better improve their comprehensive ability. In addition, some opinions and suggestions from teachers are put forward in the form of explanation and discussion, so as to correct the students' original wrong learning ideas and strategies. In the learning process, they should form the awareness of autonomous learning and complete the learning tasks orderly; after the learning, strengthen the application of metacognition strategies systematically to master English comprehensively. Metacognitive process is very important to estimate the level of learning and decide how to learn. Students can be taught to use many different strategies, but if they do not have the necessary metacognitive skills to let them choose which strategy to use or change at different learning process, they will not be a successful learner. Using metacognitive strategies in English autonomy can effectively promote students' understanding of what they have learned. Under the guidance of metacognitive strategies, students can learn English independently and improve their listening, speaking, reading and writing abilities. Good learning goals are mainly driven by internal motivation and assisted by external motivation, which can be the interests in the learning object itself, demand for knowledge and the honor that learning can bring. If students can get more joy and satisfaction from what they do, they will be more willing to take the initiative and do something for a long time^[8].

3.2 Making a reasonable autonomous study plan

The purpose of planning is to make learning tasks easier. A plan consists a lot of specific methods, plans, and steps to complete the task. Therefore, we should first have a clear

understanding of our ability, and then make a reasonable plan for every day, every week and every month. The next step is to create a suitable environment conducive to concentration, focusing on one thing at a time and then on the next task. Study plan can be divided into long plan and short plan. A long plan is a general arrangement over a relatively long period of time. As the actual learning life is often unpredictable, the long plan cannot be too specific. So it must be divided into weekly or daily tasks to achieve. When making a study plan, students must start from the reality. It mainly refers to the following aspects: own knowledge and ability; learning time of each stage; deficiencies and key points in learning; the actual progress of teachers' teaching. The plan should be as comprehensive as possible. In order to really complete the learning plan, students must take other uncontrollable factors into account when considering the plan^[9]. After a plan is completed, it need to reflect the effect of completion. If the effect is not good, find out the reasons and make adjustments in time. The plan is not a reality, but a prediction. In this process, it is inevitable that some unforeseen things will happen, and various conditions for learning will change. Regardless of how practical the plan is, some unexpected situations may happen. Therefore, in order to ensure the realization of the plan, plan shouldn't be too specific, and should leave time for revision. Before classroom teaching, teachers should understand the basis and needs of students, and set achievable goals of autonomous learning. In the aspect of cultivating students' ability of planning, teachers should make learning objectives scientifically, use metacognitive strategies flexibly, adjust learning plans dynamically. Finally these efforts will promote students to carry out independent learning efficiently and improve English knowledge system under the guidance of planning strategy.

3.3 Specifying appropriate strategies

Correct learning strategies is the most important for efficient learning. There are more than one good learning strategies, and the effect of the same learning method is different from that of people, but only the strategies suitable for oneself is a useful and good method. People's characteristics are different, that is to say, when they feel very successful and convenient in using a study method which is the best one. Although the curriculum of College English has clearly regulated the course objectives, most of the students do not know what level their English should reach after one semester's study. For example, the goal of individual English overall level in each semester or after college is to communicate with other people smoothly. In the process of autonomous learning, students should make clear the main objectives used in study, actively cultivate their awareness of metacognitive strategies and know the essence of metacognitive strategies. Students should have enough patience with themselves, and gradually improving their understanding of metacognitive theory and cultivating their interest and positive emotion in strategy training. Particularly, teacher need keep a watchful eye on those students with weak foundation and insufficient confidence. College students need more experiences to develop their skills about application of metacognition strategies into autonomous learning. The development of cognitive level shows obvious characteristics of stages. Different learning methods should be adopted in different stages. Moreover, there are significant individual differences in English learning subjects and learning styles. Hence in the initial stage of setting goals, students should make a reasonable objective based on own features or needs then strengthen the metacognitive knowledge and guide them to pay attention to the application of metacognitive strategies in autonomous learning so as to achieve the goal.

It is the first step to set a theoretical foundation for students on strategy training for the smooth implementation of subsequent strategy training. Although most undergraduates are adults, they still lack of self-discipline. Many students attach great importance to professional courses, but they don't pay enough attention to English courses, which leads to problems such as low class arrival rate, absent mindedness in class, not listening carefully, and failure to complete after class learning tasks

as required. Students should learn to design a reasonable and efficient learning method according to metacognitive strategy.

3.4 Monitoring and adjusting autonomous learning

Adjusting strategies occupy a dominant position in College English autonomous learning. Adjusting strategy can make students find out the shortcomings and omissions in their English learning, so as to re-establish a clearer goal and pay more attention to the various strategies used in the process of English learning in order to continuously improve their English autonomous learning ability. The use of metacognitive strategy is a habit that needs to be cultivated for a long time. After students understand metacognitive theory and metacognitive strategies, they will use adjustment strategies gradually in the learning process. Under the development of network and the reform of education, more and more teachers choose to combine certain multimedia technology in the teaching process. Only a few students can preview new knowledge and new content according to the requirements of the guide before class, and actively participate in classroom teaching and learning activities on the basis of effective preview, or have positive interaction with teachers. While most students can not complete the tasks before class, the interaction efficiency is low, and lack of effective planning and control of independent learning. All of these show that students cannot effectively and clearly set a goal for their study and monitor their own learning behavior. However, due to the function of multimedia, many students have poor control, so they often start to surf the Internet, watch movies, play games and so on after learning for a period of time, thus affecting the final learning effect. Adjustment refers to whether the actual learning effect is consistent with the plan made in the early stage, and whether other people's evaluation is consistent with their own internal evaluation. If the result is different from the expectation, the students need to make corresponding adjustment to achieve the ideal goal through the assessment and examination of the learning process and methods before. Under the guidance of metacognitive strategies and autonomous learning models, students have developed good English learning habits, can better use metacognitive strategies for self-monitoring and regulation, and improve their learning ability.

A good attribution pattern can significantly affect motivation and also change the way of cognition. If people think they don't understand well caused by their low IQ or capacity problem which are hard to change. It's easy to feel disappointed and painful. A good learners often attribute the reasons to the external things that can be changed, such as the problem of learning strategies, the problem of resources, and the problem of insufficient efforts. So he can better protect his internal motivation and make himself less vulnerable.

3.5 Evaluating autonomous learning

Learning evaluation is the process of evaluating the changes of learning activities. Learning evaluation can give students feedback effectively, which helps each of them to handle learning process accurately so as to improve autonomous learning activities in time. As a learning method, self-evaluation has been paid more and more attention. It can not only encourage students to study, but also help students improve their learning methods. Students need to have a process to monitor and evaluate their learning, that is, to be able to reflect and correct their performance. In the same way, students also need to develop the ability of self-evaluation, so as to realize the control of their own autonomous learning. There are many ways to evaluate autonomous learning. The assignments and notes are the source of information for students to evaluate their learning activities. If students can analyze their homework and notes carefully, especially if they can trace the root of the mistakes, they will rarely make such mistakes again. Because the wrong questions are often related to the

weak points of their own knowledge. If they can remedy the lack of knowledge, they can naturally improve the knowledge structure and gradually improve their academic performance. Through evaluation, students can sum up experience, find out deficiencies, and formulate practical measures to make up for them, so as to further improve autonomous learning methods. Evaluation can also stimulate students' independent learning consciousness. Through evaluation, students can see the advantages of their learning process and constantly respond to their own learning results. Therefore, it can inspire students' desire for knowledge, prove their enthusiasm for learning, and improve their ability to learn English independently.

3.6 Strengthening the guidance and supervision

The English learning time in college English classroom is limited for college students, so the extracurricular independent Learning has become the key for students to learn English well and expand their knowledge. How to enhance the results of students' autonomous learning of English after class and how to improve students' English level is a problem worthy of discussion for college English teachers. Cultivating learner independent thinking pattern is helpful to the realization of College English teaching objectives and the cultivation of learners' learning habits. Students' autonomous learning and teachers' guidance and supervision are not always exclusive, but interactive and interdependent. Active and moderate guidance and supervision from teachers are helpful to improve learners' English autonomous learning level. Without correct and timely supervision and guidance, students don't deem autonomous learning will make a distinct difference on improving English^[10]. It directly leads to students' deficiency in study motivation. As we know, motivation really can determine success or failure. Teachers should also help students know the features and effectiveness of various learning strategies, and consciously choose appropriate strategies in various learning tasks and activities. In order to improve the effect of College English independent learning, form learners' independent learning ability, it is equally important for English learners and teachers to strengthen supervision strategies.

4. Conclusion

Through the analyses of the situation of college students' English autonomous learning, and then applying metacognitive strategies to enhancing their autonomous learning conscientiousness and skills, this chapter comes to the conclusions of the study.

Firstly, from the part of the current situation of college students' English autonomous learning, it is found that students' awareness of self-study is low and unsatisfying, and the strategies of self-study are unreasonable and teachers don't involve much about self-study in class.

Secondly, for the part of applying metacognitive strategies to change such situation, first of all, students must have the awareness of metacognitive knowledge and then employ the strategies learned before to improve college students' ability. Metacognitive strategy is to use the knowledge acquired in the cognitive process to regulate language behavior by establishing learning goals and plans, monitoring learning process and evaluating learning results.

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