# Analysis on the Influence of Problem-oriented Autonomous Learning on Self-efficacy

Mu Chen

College of music, Jiamusi University, Heilongjiang 154007, China

#### Abstract

Through the analysis of the significance of relevant theoretical concepts on learning problem orientation and the definition of Self-learning and Self-efficacy, this paper points out the influence of Problem-oriented autonomous learning on Self-efficacy, and gives some suggestions on how to cultivate Self-efficacy in English autonomous learning.

#### Keywords

Self-efficacy; Self-learning; Influence.

#### 1. Introduction

Self-efficacy is an important emotional factor with motivation affecting students' learning. It not only affects the setting of students' learning goals, the degree of effort, but also affects the choice of learning strategies. This paper aims to study the influence of Self-efficacy on students' autonomous learning, and give some suggestions on how to cultivate Self-efficacy in autonomous learning.

## 2. Concepts of Relevant Theories

#### 2.1. Significance of Learning Problem Orientation

Learning problem orientation is to start teaching from learning problems, which means focusing on what students don't understand. It is a "teaching starting point" with strong pertinence and high efficiency. Moreover, this starting point is quite different from the three teaching starting points mentioned above ("zone of proximal development", "from known to unknown" and "teaching based on learning"). It does not require teachers to spend a lot of time to investigate the learning situation (necessary investigation is indispensable), clarify the students' "known" or confirm the zone of proximal development, and so on. As long as the teachers guide the students to study the teaching content by themselves, find out what they don't understand, and then help each other to solve the smaller problems, the remaining problems that everyone doesn't understand, that is, the key or key teaching problems, which is the "teaching starting point" that the teachers need to direct. This teaching starting point is not only clear, and in line with the actual situation of students, but also relatively easier for teachers. Secondly, teachers should set up the goal, that is, the relative end point. With a little thought, it is not difficult to understand that the starting point of learning problem-based teaching is its end point, and the starting point and belonging are the same. In other words, if the learning problem is not solved, the teaching goal will not be achieved. This puts forward the requirements for the setting of teaching objectives. Firstly, there should be both the presetting stable objectives and the dynamic objectives determined according to the changes of learning problems. Otherwise, problem-based learning will become empty talk. In the case that the preset teaching objectives have nothing to do with the learning problems, teachers should adjust the teaching objectives in time to keep the consistency between the teaching objectives and the learning problems. Secondly, the teaching objectives should be quantitative and measurable. Whether the learning problems have been solved or not, how many students have solved them, and so on, should be tested on the spot through classroom practice or examination, so that teachers and students can have a clear idea about themselves. For example, like experiential teaching, teachers don't care about the achievement of teaching objectives and they leave after the content is finished, having no knowledge of the degree of solving learning problems, it is learning problem-based teaching in vain.

#### 2.2. The Definition of Self-efficacy and Self-learning

Self efficacy refers to an individual's speculation and judgment on whether he has the ability to complete a certain behavior. Bandura first put forward this concept, which originated from Bandura's social learning theory. Bandura began to put forward this theory in his book *The Social Basis of Thought and Behavior*. Under the promotion of Bandura and other scholars, the theory has been developed in many fields, and it has been widely used in psychology, education, management and other fields. Bandura believes that human behavior is not only influenced by the result of behavior, but also by the expectation of self-behavior ability and behavior result formed by the cognition of human being.

Autonomous learning refers to students' ability to stimulate intrinsic motivation and apply planned or skillful learning methods to arrange learning time regularly and effectively. They are aware of the results of learning and highly sensitive and adaptable to the material and social environment of learning.

# 3. The Influence of Problem-based Autonomous Learning on Self-efficacy

#### 3.1. Internal Factors

Researchers believe that there are many internal factors affecting autonomous learning, including Self-efficacy, attribution, goal setting, cognitive strategy, metacognitive strategy, will level, gender role and so on. Self-efficacy refers to an individual's belief that he or she has the ability to accomplish certain tasks. Self-efficacy is associated with specific tasks. Self-efficacy is a key variable that affects autonomous learning. On the one hand, Self-efficacy is closely related to the use of learning strategies and self-monitoring of students. Compared with students with low Self-efficacy, students with high Self-efficacy show higher level of learning strategies and more self-monitoring of learning results. On the other hand, Self-efficacy is significantly positively correlated with academic performance, especially in students with low achievement. In addition, the study also showed that Self-efficacy was positively correlated with task persistence, task selection, and acquisition of good skills. Therefore, Self-efficacy is an important motivation factor that affects autonomous learning.

The application of students' autonomous learning strategies largely depends on their metacognitive decision-making process. In general, task analysis or plan determines the choice or change of autonomous learning strategy, while the formulation of the plan depends on the characteristics of tasks and environment, declarative and autonomous knowledge, goals, Self-efficacy, emotional state, and learning results. At the specific level of autonomy, the process of behavior control guides attention, execution and persistence, as well as the monitoring of strategic and non-strategic reactions in specific situations. For autonomous learners, strategic planning guides students to control the learning process and interacts with feedback from the control process.

Goal-setting also has an important influence on autonomous learning. The research finds that higher-grade students set learning goals more frequently and consistently according to their learning tasks than lower-grade students. However, Zimmerman thinks that goal setting is not the key factor for autonomous learning. It is important to distinguish the types of goals and the ways of setting goals. First of all, the goal should be set according to the difficulty of the task, and the goal should be realistic. Autonomous learning students can better set goals that can be

achieved. Secondly, teachers should distinguish between short-term goals and long-term goals. The research shows that helping students with low motivation to set short-term learning goals can greatly improve their academic performance and stimulate their inner interest in learning. Thirdly, teachers should make a distinction between specific goals and general goals. Compared with the students who set general goals, the students who set specific goals have better learning effect and they are more confidence in completing the goals. Fourthly, teachers should make a distinction between the goals set by students themselves and those given by others. Research shows that for students with low achievement motivation, allowing them to set their own goals can significantly improve their learning level. Last but not the least, teachers should distinguish the learning objectives from the performance goals. The research finds that those students who set up the learning goals have higher Self-efficacy, higher level of skills and more satisfaction with themselves than those who set up the performance goals. Therefore, teaching students to set appropriate learning goals is very important to promote their autonomous learning.

#### **External Factors** 3.2.

The external factors affecting students' autonomous learning can be roughly divided into three categories, school education, family factors and social cultural factors. Students study in school most of the time, so school education is very important for students' independent learning activities and ability training. The choice of teaching mode is very important, and the studentcentered teaching mode is conducive to students' independent learning. Flipping classroom to let students to let go of power, teachers should teach students to form their own habits of selfstudy methods, and be able to monitor their own learning. Teaching materials are called three basic elements with teachers and students in teaching activities, which are the materials for students to choose to study and deal with. We need to develop teaching materials suitable for our school's two stages, four steps and ten links, and cooperate with the study plan and micro class at the same time. The school makes good use of audio-visual media to maximize the power of educational technology. The electronic whiteboard in the classroom and students' tablet computers provide a good material basis for students' autonomous learning. Under the guidance of teachers, students can self-monitor, self-regulate and complete their learning tasks independently. Besides, a good learning atmosphere is also conducive to students' autonomous learning. Teachers should adopt the classroom management mode of "cooperation with students". Students can not only self-discipline and manage their own learning, but also help themselves to learn through cooperation and mutual learning.

## 4. Conclusion and Suggestion

After the summary, it is pointed out that students with different Self-efficacy are more active in the above aspects, which is more conducive to achieve good results. According to Bandura's theoretical research, whether students' autonomous learning can be effectively carried out is closely related to students' Self-efficacy. Then, the question how can teachers improve students' Self-efficacy should be considered. For autonomous learners, we can analyze the influence of Self-efficacy in the process of autonomous learning from the following aspects.

Successful experience. Let students get the first success in learning, and actively create opportunities for students to succeed. The success or failure experience of behavior is an important factor affecting Self-efficacy. The first success and subsequent multiple successes will make learners obtain a sense of achievement and gradually establish a stable sense of Selfefficacy.

Alternative experience. Let the students observe the activities with the same level of ability, so as to make an indirect evaluation of their ability. Alternative experience is a kind of indirect experience, which makes the observer believe that he can achieve the same level of achievement when he is in a similar activity situation.

Verbal persuasion of authoritative persons. Teachers can make use of some methods, such as the foreword of a lesson, to tell students that if they do something, their learning behavior will be effective. Such words can play the role of verbal persuasion, encourage students to act, and improve students' Self-efficacy.

External reinforcement. In the process of learners' learning, teachers should give effective feedback to students in time, and give them praise and encouragement to strengthen them positively, so as to maintain and enhance their Self-efficacy.

Attribution training. By understanding the individual's attribution to success or failure, it can change their Self-efficacy. In teaching, teachers can guide students to make correct attribution to success or failure of their studies, improving their sense of Self-efficacy, and thus they can generate positive and strong learning motivation.

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