

Teachers' Mediation in Self-regulated Learning among Students Based on the Internet

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Abstract: With the development of Internet information technology, the Internet provides rich study resources and patterns for teachers and students, with abundant information and convenience. The educational goals are not only to help students to acquire knowledge, but also to guide them learn how to learn. This paper is an analysis on the definition and characteristics of self-regulated learning, an important concept in educational research, and it is also a summary of teachers' mediation for training and developing the ability of students' self-regulated learning based on online education, such as how to stimulate the learning desire, how to choose the method, and how to modify the strategy, etc.

1. Introduction

With the development of network technology and the changes in consumer habits of netizens, the exploration of "Internet + education" began. At the same time, Internet thinking dominated, which was more student-centered, focusing on interactivity and the emergence of personalized education models subverting the traditional teacher-centered teaching model [1]. With the close integration of information technology with basic education and higher education, colleges and universities continue to launch online education courses. The emergence of distance education has broken the time and space constraints of traditional education. The educational resources have been re-matched, and the forms of education have been gradually enriched, greatly improving the efficiency of education. The form of education has become multimedia and interactive, and people can make full use of fragmented time to conduct personalized learning. The innovation of educational forms is inseparable from technological progress. Intelligent devices such as computers, mobile phones, iPads and digital TVs are constantly emerging, and educational channels are diversified. With the vigorous development of education and the popularization and application of Internet technology, higher education is increasingly developing in the direction of autonomy, networking and internationalization. The traditional way of receiving knowledge can no longer meet the needs of students, so the students' autonomy learning ability based on the Internet is particularly important [2].

In autonomous learning, the students are the main body of learning dominates. However, it does not mean that the teachers' function is completely lost, and the students' independent learning cannot be separated from the intermediary role of the teachers. Self-directed learning is the process of students learning knowledge in an interactive teaching environment. Teachers as the main interactive objects play an important intermediary role in the students' knowledge construction process, reflecting the transfer of responsibility from teachers to students, which largely determines the acquisition of learners' autonomy [3]. From the perspective of teachers, this paper explores how teachers should fully play an intermediary role in the Internet-based autonomous learning model to help students achieve learning autonomy and how to improve students' self-learning ability and professional development, which enable students to achieve success in academic achievement.

2. Self-regulated Learning

2.1. Conception of self-regulated learning

The goal of education is not only to give students access to knowledge, but more importantly, to let students learn to learn. Zimmerman and Martinez-Pons [4] emphasize that autonomous learning is a self-directed feedback loop process. Autonomous learners can use self-regulating strategies such as metacognition, motivation, and behavior to monitor the effectiveness of their learning strategies. Based on these feedbacks, independent learners can repeatedly adjust their learning activities and know when to use a particular learning strategy or respond appropriately. Xiaotang Cheng [5] and Wensen Yu [6] believe that autonomous learning is a learning mode. Under the macro-control of the overall educational goals and the guidance of teachers, learners develop and complete specific learning objectives according to their own conditions and needs.

Domestic and foreign scholars have different definitions of autonomous learning, but their essence is consistent. Self-directed learning can be defined as the process by which learners are responsible for their own learning, including setting goals, organizing learning with effective strategies, monitoring learning performance, self-reflection, and positive beliefs about one's own abilities. It is very important for learners to be responsible for their own learning in the process of self-learning, which means that they have the potential to shape their own learning patterns according to their own purposes, and can actively adjust their learning status as the environment changes.

2.2. Characteristics of self-regulated learning

Starting from the research theory of self-learning, autonomous learning should have the following characteristics: (I) subjectivity, which is with learners as the main body, teachers as learners' helpers; (II) selectivity, learners can choose themselves relatively preferred learning content and a more suitable learning method; (III) learners' initiative; (IV) effectiveness, learners can take various control measures to optimize learning.

Starting from the learners themselves, the characteristics of autonomous learning are summarized as follows: (I) learners should have "thinking" based on the motivation of internal learning; (II) learners should have "energy based on the development of self-consciousness"; (III) learners should have "learning" based on mastering certain learning strategies; (IV) learners should have "persistence learning" based on willing efforts.

From the perspective of teaching practice, the specific characteristics of autonomous learning are as follows: (I) learners are interested in the subject of learning; (II) learners know the meaning of the learning theme to themselves; (III) learners know how to actively choose and apply various learning resources; (IV) learners can define their own learning goals and develop corresponding learning plans; (V) learners can gain self-confidence and persistence from the learning process; (VI) learners can self-supervise during the learning process and make corresponding adjustments; (VII) learners can continuously summarize the reasons for success and failure in the learning process to improve their cognitive skills; (VIII) learners can actively use and adjust the mode of thinking and other learning methods.

3. Teachers' Intermediary Role

Feuerstain's mediating theory [7] emphasizes that the characters who play an important role in student learning are intermediaries who choose and organize the stimuli appropriate for them in the most conducive ways. The intermediary role of teachers is to help students form the consciousness, confidence and ability to control their own learning behaviors. According to the needs of students, they can choose the best form of action to help students understand and internalize their knowledge and guide students to develop independent thinking skills, let them learn knowledge actively in a good state, coordinate development in terms of knowledge and cognition, and adjust their own state to adapt to various learning changes at any time [8, 9].

3.1. Stimulate students' desire to learn

Teachers need to develop students' active learning motivation and establish a correct learning attitude. The intermediary role of teachers is to help students realize the importance of complete and comprehensive learning. Teachers can understand the existing learning concepts and methods through questionnaires and interviews. For the students whose learning needs are not clear or their learning is weak, teachers should provide targeted guidance to explore the reasons why students' desire to learn is not strong, find the corresponding solution to guide students to clarify the purpose of learning, teach students how to learn, and develop students' metacognitive knowledge and ability.

For students who have a weak desire to learn because of poor learning, teachers should use more encouragement and praise to stimulate students' desire for learning. For students who do not have strong desire to learn because of rebellious psychology, teachers should change their thinking and adopt situational methods and audiovisual methods that naturally bring students into the study, stimulating students' desire to learn. For students who have less desire because of an unsuitable learning method, teachers should guide them to learn from others' methods to establish their own learning methods integrating self-learning characteristics, and stimulate students' desire to learn [10].

3.2. Choose right learning method

Interest is the best teacher. After learning desire, the intermediary role that teachers need to play is to choose the appropriate learning method to help students to continue learning. Naturally, things are half the work if learning method is not suitable for you. Finding appropriate learning methods can reduce the learning difficulty of students and enhance students' learning confidence. Therefore, teachers need to help students find suitable self-learning methods. Appropriate learning methods can help students make lasting learning and reduce the phenomenon of halfway in the process of self-study.

According to each student's learning foundation and characteristics, teachers can discuss the mode of learning methods with students one-on-one to guide them to find appropriate learning methods, or to explore suitable activities for their own learning methods in extracurricular group activities. Based on an in-depth study of the basis and characteristics of learning, they can develop suitable learning methods [11].

In the process of learning tasks, teachers should give supervision and guidance to help students understand the choice of learning tasks and methods, decompose complex learning tasks, and design progressive knowledge building processes. At the same time, teachers should also guide students to find out the relevant learning patterns and characteristics, understand the meaning of teaching links, and improve students' judgment and self-control.

3.3. Analysis and adjustment learning methods

Teachers should ask students to record the learning methods they have used in the learning process and then reflect on them. The more comprehensive the reflection activities are, the more beneficial it is to improve the students' metacognitive level. Through timely feedback on learning tasks, students assess the content of learning and the methods used. They can recognize and evaluate their own changes to develop their independent learning ability. After understanding the problems and confusions of students, teachers can effectively help students adjust and formulate practical learning methods and find solutions to difficulties. Self-evaluation and comprehensive evaluation of teachers can improve the rationality of independent testing and evaluation. No matter which kind of autonomous learning method, it is necessary to be continuously improved. The progressive learning method is increasingly perfect. Teachers should regard the intermediary role of helping students learn autonomously as a long-term work. This intermediary role has always run through the entire teaching career. The way to help students reflect on self-directed learning from time to time is long-term. When teachers find a certain point in daily learning, they should communicate with students in a timely manner, and help students reflect and improve their learning methods.

4. Application of Intermediary Role under The Internet In Autonomous Learning Mode

With the rapid development of network, multimedia and information technology, the way of personalized and independent learning through the network has been paid more and more attention by people. At the same time, it has become an important means of acquiring knowledge. With a platform for self-learning, learners can use the rich multimedia learning materials, personal learning records, curriculum progress information and teacher-student interaction information provided by the online learning system to determine their own learning content and learning process. It can truly teach students in accordance with their aptitude and personalized learning [12]. The digital teaching platform stores a large number of teaching resources, learning resources and various intelligent systems, providing a good interactive and resource platform for teachers and students. In the feedback system, students can conduct self-analysis, self-test and self-reflection, which is conducive to mobilize students' enthusiasm and enthusiasm for learning, and improve students' ability to learn independently [13, 14].

The teacher has changed from a classroom leader to a leader. The student has changed from a passive absorber to an active inquirer. The student has acted as a teacher to complete part of the teaching task, which has greatly improved the students' self-learning ability and active thinking ability [15]. The teacher organizes the teaching centering on the students' learning, so that the students can really go to the front desk, and the teachers can appropriately withdraw from the classroom teaching to the organizational learning, which can effectively exercise the students' language expression ability, on-the-spot ability and ability to adapt to the situation [16]. Through a variety of learning methods, students are given sufficient time and space to participate in the learning process in depth. At the same time, they can fully experience the fun of learning through independent learning, cooperative learning and exploration.

Teachers should be brave in reforming and innovating teaching methods, making full use of the Internet's learning resources, transforming the role of teachers, and placing students in the main position of learning when assigning appropriate teaching themes to each group [16]. By observing the student's explanation process, the teacher first briefly describes the knowledge points according to the problems existing in the self-study stage, and then focuses on the problems found. In this way, after the teachers have targeted the students, in addition to being able to better find out what they did not understand in the pre-study, and also find deeper problems and further cover what they ignored or did not think about during the preparation process. Through this kind of teaching method, teachers can discover the problems existing in the learning process in time, guide them in time, and teach students how to learn in the process of talking and dialing. The school's course website provides a good communication platform for interactive learning between teachers and students. Self-examination after class is after the completion of the teaching task, the teacher arranges the corresponding exercises to check the student's learning situation. Self-examination exercises are published in a normal work mode with no time limit, or they can be set to test in a time-limited test mode. Teachers review the exercises online after class, and find out the weak links according to the students' practice.

5. Conclusion

In order to maintain the regular and permanent development of students' self-directed learning, they need to be guided correctly by teachers. Firstly, teachers need to train students to correctly use the online self-learning platform and train students' learning thinking and strategies. Therefore, students can realize that the effect of independent learning depends mainly on the subjective initiative of the learners, and then they can actively participate in the practice of self-learning. Secondly, teachers need to teach students in accordance with their aptitude, and effectively guide students' self-directed learning. They adopt different learning strategies according to the learning styles, learning tendencies and learning methods of different levels of students, and guide students to develop independent learning. The plan is to realize personalized learning. Thirdly, teachers need to actively participate in and supervise the students' learning activities, and adopt various

assessment forms to improve students' autonomy, so that students can gradually improve their self-learning ability from the successful experience of independent learning. Fourthly, teachers need to change and update their teaching concepts, always pay attention to improve their teaching quality and accumulation of teaching knowledge, and often add new teaching resources to the teaching management platform. At the same time, schools should also increase investment and optimize software and hardware facilities to create a good independent learning environment for teachers and students.

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