Ways to Improve College Students' Autonomous Learning Ability in Online Education

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Abstract: With the rapid development of the Internet, online learning has become one of the directions for universities to achieve educational reform. The ability of college students to learn independently is the key to the effectiveness of online education. Starting from the current situation of college students' autonomous learning ability, this article summarizes four ways to improve their online learning autonomy: enriching the construction of online learning resources, enhancing the interactive experience of online learning students, strengthening the diversified development guided by online teachers, and constructing a multidimensional online learning evaluation mechanism. Finally, the importance of improving college students' autonomous learning ability can be summarized in four aspects.

Keywords: Autonomous learning ability, Online education, College students.

1. Introduction

The development of smart education has also provided a material foundation for the development of online learning, which has become a focus of higher education. Therefore, the teaching reform of online education has attracted widespread attention. Online learning, such as MOOCs, live teaching, and learning platforms, has become one of the learning modes for college students. Compared with other learning modes, online learning has the advantages of overcoming time and geographical limitations. During the COVID-19 pandemic, universities were forced to shift from traditional education to online teaching. On the one hand, it forces teachers and students to adapt to new teaching platforms. On the other hand, this more "open" learning environment has inspired students to explore learning with the help of the internet. However, online learning is not just about transferring course content from offline to online, nor is it a simple change to the teaching medium. In a more open learning environment, student autonomy is the core factor that affects learning outcomes. Compared with face-to-face teacher supervision, online learning is more open and free, and the initiative and autonomy of learning are more important. Students need to manage their learning time and progress more effectively and master effective learning strategies and skills to achieve good learning outcomes. Therefore, studying how to cultivate students' autonomous learning ability and the influencing factors of online learning on students' autonomous learning is highly important.

2. The Current Issue of Autonomous Learning **Ability among College Students**

At present, most universities are actively cultivating students' self-learning ability, but few achievements exist, and there are naturally loopholes in the process. According to comprehensive data, the learning quality of college students is difficult to improve, and the main reason can be attributed to the failure to grasp the psychological needs and characteristics of students, which leads to failure to cultivate their self-learning ability. Therefore, to enhance the self-learning ability of college students, we need to consider their psychological needs and characteristics, analyze their actual situation and problems, and adopt targeted solutions to solve these problems. The following text categorizes the problems that college students face in the process of self-directed learning into four types for reference.

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2.1 Lack of Awareness of Self-Directed Learning

Self-directed learning is not limited by personnel, time, or space, which means that, in practice, during the process, students have sufficient autonomy and are likely to plan learning tasks arbitrarily because of a lack of time awareness, leading to delays in learning. However, in this learning mode, some students may develop a fear of learning, believing that once they lose the guidance of their teachers, they lack a sense of direction in their studies and have no way to start learning. Some college students lack self-confidence and do not believe that self-directed learning can help improve their learning ability and achieve better learning outcomes. Both of these situations can lead to students developing resistance to self-directed learning.

2.2 Lack of Autonomous Learning Strategies

Given the lack of self-directed learning strategies among students, we found through relevant surveys that some students do not have planning awareness for self-directed learning. However, during the planning process, they do not know the specific planning methods and how to carry out planning, that is, which knowledge points to start learning from and which new knowledge content to learn. After successful planning, it may also be influenced by external factors, resulting in low benefits for self-directed learning and even questioning attitudes toward self-directed learning. Second, when planning learning strategies, some college students are able to independently design learning strategies, but they are not aware of active learning; that is, when learning strategies are developed, they do not follow them and lack self-monitoring awareness.

2.3 Lack of Independent Learning Ability

The cultivation of an ability is not achieved overnight; it

requires long-term behavior and habits. The development of talent can be transformed into an ability. Owing to the above two problems, students have been unable to develop autonomous learning abilities due to a long-term lack of awareness of self-directed learning and the failure to establish scientifically effective learning strategies for planning. Even began to resist self-directed learning and took a different approach, striving to acquire limited knowledge content in the classroom. In the long run, this leads to excessive dependence of students on teachers, which is not conducive to the accumulation of knowledge reserves and thus leads to the solidification of college students' thinking. In addition, few college students who do not know how to use network information technology for self-directed learning rely solely on textbooks to design self-directed learning plans. The self-directed learning it engages in is a backward learning method that cannot keep up with the times and achieve its intended effects.

2.4 Lack of Enthusiasm for Self-directed Learning

College students can independently complete learning task planning through a series of self-directed learning activities, including setting learning objectives and assessing learning outcomes. However, it seriously lacks the ability to monitor itself. Often, after studying for a moment, one is tempted and attracted by other information on the internetInternet and even engages in online games, forgetting and ignoring the true purpose of using the internet. Moreover, when engaging in self-directed learning, a lack of learning motivation can lead to a dull definition of self-directed learning, resulting in a serious decline in knowledge acquisition efficiency and a loss of meaning in planning self-directed learning tasks.

3. Ways to Improve College Students' Online Learning Ability

3.1 Enriching the Construction of Online Learning Resources

To make the online learning environment truly effective, we need to pay attention to improving the construction of online learning resources. This includes providing high-quality teaching resources, designing diverse learning activities, and offering effective learning support and services. First, by integrating and optimizing existing online learning resources, their quality and effectiveness can be improved. For example, interactive elements, quizzes, and exercises can be added to existing video courses to better stimulate students' interest and motivation. Second, more online learning resources should be developed to meet the learning needs and levels of different students. This includes writing online textbooks, designing online laboratories, and creating online courses. Moreover, it is necessary to consider how to utilize advanced technologies such as artificial intelligence and virtual reality to enrich the form and content of online learning resources. Third, effective learning support and services should be provided to help students better cope with learning challenges and difficulties. For example, online consultation services, academic writing guidance, and study plan guidance can be set up so that students can receive timely help and support.

3.2 Enhancing Students' Interactive Experience with Online Learning

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First, more interactive learning activities can be designed, such as online group discussions, interactive tests, and student presentations. These activities can promote communication and cooperation among students and stimulate their interest in and enthusiasm for learning. Second, various online tools and platforms can be used to support students' interactive learning, such as online whiteboards, real-time chats, collaborative editing, etc. These tools can make communication between students more convenient and efficient. In addition, by increasing interaction between students and teachers, the interactive experience of students can also be improved. For example, teachers can regularly conduct online Q&A sessions, provide personalized feedback and guidance, etc., to help students better understand and master the learning content. Finally, the design and functionality of online learning platforms need to be continuously optimized to enhance students' interactive experience. For example, virtual simulation elements can be added, and a better user interface can be provided to attract students' attention and interest. In addition, the stability and reliability of online learning platforms should be ensured so that students can learn and interact smoothly.

3.3 Strengthening the Diverse Development of Online Teacher Guidance

Teacher guidance is one manifestation of teacher support. Teachers can use different teaching strategies and methods, such as classroom demonstrations, simulation experiments, online discussions, and flipped classrooms, to better stimulate students' interest and enthusiasm for learning. In addition, teachers can use interactive tools provided by online learning platforms, such as online whiteboards and video conferences, to provide students with more specific and real-time guidance. Teachers can also provide personalized learning resources and support for students on the basis of their learning needs and levels. In addition, teachers can use data analysis tools provided by online learning platforms to track and evaluate students' learning progress, promptly identify students' learning problems, and provide targeted assistance.

3.4 Building a Multidimensional Online Learning Evaluation Mechanism

Online learning assessment has an important impact on guiding college students to learn independently online and stimulating their deep learning orientation. To achieve comprehensive online self-directed learning evaluation, various evaluation methods can be used, such as homework evaluation, test evaluation, project evaluation, discussion evaluation, and chapter learning. Students' self-evaluations and peer evaluations should also be considered to better reflect their learning status and ability level. However, there are still some challenges and difficulties in the practical implementation of comprehensive online self-directed learning assessment. One of the main issues is the objectivity

and fairness of the evaluation. Therefore, various methods, such as anti-plagiarism software, online examination systems, standardized evaluation standards, etc., must be adopted to ensure the objectivity and fairness of the evaluation. Moreover, teachers need to actively participate in the evaluation process, provide necessary feedback and guidance to students, and promote their learning progress.

4. The Importance of Improving College Students' Autonomous Learning Ability

The importance of improving college students' autonomous learning ability in the online education environment is self-evident, as it is directly related to students' learning outcomes and future career development.

First, self-directed learning ability is the key to high-quality online learning. Research has shown that students' self-directed learning ability is an important condition for conducting high-quality online learning. Online learning breaks the spatial consistency of learning activities and provides learners with different learning methods, such as synchronous and asynchronous methods, making learning more personalized. However, owing to the lack of objective supervision, learners' autonomous learning ability directly affects the effectiveness of their online learning. Therefore, learners with good self-learning abilities are more likely to achieve good online learning outcomes.

Second, online education provides a good platform for cultivating self-directed learning abilities. Online teaching has successfully achieved the dual goals of "suspending classes without stopping learning" and "closing off to fight against the epidemic". Even after the end of the epidemic, online teaching still became an important auxiliary and supplementary tool for students' learning. While online teaching has many advantages, it has also encountered many problems, such as how to fully utilize and improve students' self-learning ability and how to ensure students' independent thinking and exploration time and space. In response to these issues, teachers should consciously cultivate learners' autonomous learning abilities, including strategies such as exploration, critical thinking, organization, analysis, and the integration of information to participate in online learning.

In addition, in the context of the internet plus education era, college students' autonomous learning ability has become crucial. Internet technology provides students with more learning resources and communication platforms, but it also presents challenges in improving their independent learning ability. The lack of effective learning methods and self-management abilities has made cultivating college students' self-learning ability difficult. Therefore, methods such as encouraging students to participate in online courses and cultivating innovative thinking have been proposed to promote the improvement of college students' self-learning ability.

Finally, given the background of online courses, enhancing the self-learning ability of college students has become an important issue in current education. The characteristics of online courses require college students to be more autonomous in completing learning tasks, acquiring knowledge, and engaging in thinking. Autonomous learning ability is an important quality for college students to become builders of modern society. Modern society requires college students to have a stronger autonomous learning ability to adapt to social changes, master new knowledge, and solve new problems.

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5. Conclusion

Improving the self-learning ability of college students is an indispensable part of the online education environment. This is related not only to students' learning outcomes but also to their future career development and academic success.

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