

Analysis of the Current Situation and Driving Factors of College Students' Autonomous Learning in the Network Environment

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Abstract

Self-directed learning ability is the most important ability for college students to develop independent thinking and constantly master new knowledge. This paper analyzes the current situation and characteristics of college students' autonomous learning in the network environment, the status of autonomous learning resources acquisition, the status of autonomous learning attitude and the status of autonomous learning ability, and it is concluded that the factors driving autonomous learning of college students include perfect supervision mechanism, high-quality online teaching and college students. Finally, this paper puts forward some countermeasures and suggestions to promote college students' autonomous learning in terms of strengthening the construction of study style, constantly exploring new supervised learning modes, improving the quality of platform learning resources, and creating an autonomous learning atmosphere.

Keywords

Network Environment; Autonomous Learning; Driving Factors.

1. Introduction

President Xi Jinping has repeatedly emphasized on different occasions that we must persist in learning and rely on learning to move forward into the future. Among all learning abilities, autonomous learning ability is the most important one. This ability can prompt college students to develop the skills of independent thinking and continuous mastery of new knowledge. College students have the initiative to learn, and the self-study-based learning form allows college students to turn passive learning into active learning, have a happy learning experience, and enjoy learning. Especially with the continuous development of new Internet technologies, the relationship between teaching and learning in colleges and universities has undergone great changes. The acquisition and imparting of knowledge has changed from typical face-to-face teaching to a hybrid online and offline teaching mode, which has effectively promoted the modernization of education. At present, Internet online education platform resources such as Chaoxing Erya, Rain Classroom, and China University MOOC are developing rapidly, providing the possibility for college students to share Internet education resources and a new method for college students to cultivate their self-learning ability.

2. Literature Review

Some scholars have noticed the problem of the autonomous learning ability of college students' online education resources, and analyzed the problem from a multi-dimensional perspective.

Jun Zheng and Tianyu Xu (2021) pointed out that the self-learning ability of college students has ushered in unprecedented challenges under the background of the new crown epidemic. In view of the current "Internet + education" defects and deficiencies in the self-learning ability of college students, through the individual Based on the analysis of psychological variables and emotional variables, it is proposed to use "Internet + education" to design a reasonable and efficient "multi-evaluation mechanism""teaching according to aptitude" teaching mode, "cooperative learning system" model, and construct a fair competition, dare to act and think. Fang Xue (2022) pointed out that in the context of the Internet era, the most basic learning literacy that college students must have is self-directed learning. By creating an immersive learning environment, we can improve the motivation of online self-learning, adopt the "mining" development model, and set points The reward method, through the introduction of group learning competition mechanism, promotes college students to improve their autonomous learning ability and strengthen autonomous learning. YuYe and Yang Song (2022) analyzed the autonomous learning ability of medical college students by investigating the learning status of medical college students, and deeply discussed the motivation of college students' autonomous learning and the corresponding control strategies. Anzhong Zhang (2022) firstly defined the autonomous learning ability and dimensions of college students, and randomly investigated and analyzed college students' autonomous learning ability in the form of questionnaires. Summarize and reflect on the learning situation, make full use of learning resources, develop cooperative learning awareness, and finally put forward the countermeasures to improve college students' autonomous learning ability on this basis. Gang Zeng, Kun Cheng, and Beibei Li (2022) used content analysis method to conduct research by summarizing the theoretical basis, research content and research design of college students' autonomous learning in the Internet environment in the past 16 years, and pointed out the future trend and direction of college students' autonomous learning research. Zhiwu Zhang, Zeping Li (2022) studied the autonomous learning ability of English major freshmen in a ubiquitous learning environment. Through interviews and questionnaires, it is found that their self-regulation ability is good, and their weak links are mainly reflected in information processing ability, self-planning ability and communication. At the same time, it is necessary to pay attention to the importance of the ubiquitous learning environment for the cultivation of autonomous learning ability, as well as countermeasures and suggestions for improving autonomous learning ability.

From the above research, the lack of autonomous learning ability of college students is a common view of many scholars, for which they provide corresponding countermeasures and suggestions from multiple perspectives. Through the analysis of the current situation of college students' autonomous learning ability, this paper starts from the adjustment mechanism to explore the driving factors of college students' autonomous learning ability in the network environment, and provides a certain reference for colleges and universities to explore how to improve college students' autonomous learning in the reform of education modernization.

3. The Current Situation of College Students' Autonomous Learning in the Network Environment

3.1. The Characteristics of College Students' Willingness to Use Network Resources to Learn Independently

The Internet is an open system that is constantly growing. With the continuous development of information technology, learning resources are rapidly enriched. Through the retrieval function of Internet search engines, students can quickly have a wider range of learning content. Whether college students are willing to use online education resources to carry out self-study is the primary factor determining whether online education resources can become a way for

college students to improve their learning ability. With the increasing diversification of online learning resources, according to the data of iiMedia Research, only a small number of college students It is indicated that the use of pot network education resources to carry out independent learning shows that college students are indeed not very willing to use network education resources. In particular, boys have lower willingness to use, and only a small number of boys have used online education resources to carry out independent learning.

3.2. The Status of College Students' Acquisition of Online Learning Resources

In terms of the characteristics of online education resources, it is not easy for college students to obtain high-quality online education resources. Further, the lack of supervision measures for online education resources affects the learning effect. In addition, college students use online education resources to carry out independent learning, and cannot communicate with teachers who teach online resources. Good communication, problems that cannot be solved in time, and the lack of learning attraction of online education resources are the factors that restrict the effect of self-directed learning. Because of this, college students think that their learning effect is not ideal when they use network educational resources to carry out self-directed learning, and students do not evaluate the effectiveness of self-directed learning by themselves, thus limiting the judgment of using network resources to carry out self-directed learning. In addition, the teaching attractiveness, teaching quality and teaching attitude related to online educational resources teachers are also important factors that affect college students' autonomous learning of online educational resources. However, the quality of online education resources is uneven, which reduces the enthusiasm of college students to carry out online self-learning.

3.3. The Attitude of College Students' Autonomous Learning in the Network Environment

College Students' autonomous learning ability is formed in the continuous process of autonomous learning, and autonomous learning is usually stimulated by students' internal motivation, self-determination of their own learning goals and methods, self-monitoring of the learning process and self-monitoring of learning results. Self-assessment and reflection are carried out under the condition of self-assessment and self-reflection. Therefore, the process of self-directed learning is actually a process that includes prior intrinsic motivation, in-process comparison selection and supervision, and post-event evaluation of self-learning results. If college students are to cultivate the ability of autonomous learning in the process of autonomous learning, the pre-, inter- and post-event links of the autonomous learning process need to form a continuous and progressive virtuous cycle process. That is to say, in the initial autonomous learning process, the If the intrinsic motivation for learning can be continuously stimulated and the learning process can be well supervised and regulated, college students will have a sense of accomplishment in the self-evaluation and reflection of their learning outcomes. The self-learning initiative is continuously stimulated, and finally a good self-learning ability is formed.

3.4. The Status of College Students' Autonomous Learning Ability in the Network Environment

From the perspective of educational psychology, if there is no supervision between the subjects of teaching and learning to carry out learning, it needs to rely on the learner's autonomous learning ability, that is, the ability to complete the learning task under the learner's own learning initiative. On the one hand, college students are accustomed to the traditional cramming-style teaching, and the phenomenon of "absence" of learning that is unwilling to learn, unable to learn, and unable to learn is common among college students [1-2]; Resource open sharing has not achieved the expected effect, and the effect size in promoting students' autonomous learning is smaller than that of traditional classrooms, and even some students'

autonomous learning ability has declined to a certain extent [3-6]. If this is the case, educational informatization will not play a positive role in college students, and the passive position of college students in educational information reform will seriously affect the role of educational informatization in talent training in college education. Therefore, how to drive the improvement of college students' autonomous learning ability of online education resources is a proposition of great significance for colleges and universities to explore the reform of education modernization.

4. Analysis of the Driving Factors of College Students' Autonomous Learning in the Network Environment

Education informatization is a powerful support for educational modernization. As a high-level talent training base, colleges and universities must adapt to the development of educational informatization in talent training. However, various information shows that at present, many college students are addicted to the Internet but do not prefer the learning of online educational resources. It is a common phenomenon in colleges and universities that the independent learning ability of college students is not high. Therefore, it is necessary to explore how to use education informatization to improve college students' autonomy learning ability is an important part of the modernization reform of higher education.

Because the learner's autonomous learning ability is formed in the process of continuous autonomous learning, and autonomous learning is usually motivated by the learner's intrinsic motivation, self-determination of their own learning goals and methods, self-monitoring of the learning process, learning outcomes are conducted under condition.

4.1. College Students' Self-learning Supervision Mechanism

The self-learning process is actually a process that includes the internal motivation before the event, the comparison selection and supervision during the event, and the evaluation of the self-learning results after the event. If learners are to develop their ability to learn autonomously in the process of autonomous learning, the pre-, inter- and post-process of autonomous learning needs to form a continuous and progressive virtuous cycle. In other words, in the initial process of autonomous learning, if the internal learning motivation can be continuously stimulated, and the learning process can be well supervised and adjusted, learners will have a sense of achievement in self-evaluation and Reflection on learning results, which will continue to strengthen learners' internal self-learning ability. Motivation, and then the learner's self-learning initiative is continuously stimulated, and finally a good self-learning ability is formed.

4.2. The Quality of Online Teaching

Most college students have not used online education resources to carry out autonomous learning, and college students are not willing to use online education resources. At the same time, the number of students with low self-learning ability in online education resources is not large. Therefore, on the whole, there are driving conditions and space for the improvement of college students' self-learning ability of online education resources. The purpose of college students choosing online education resources to carry out independent learning is mainly reflected in acquiring knowledge, increasing knowledge accumulation for personal life planning, and enriching time. In terms of satisfying personal interests and completing personal challenges, male and female students did not show too strong purpose. In terms of learning conditions, most college students said that they have the conditions for independent learning of online educational resources, which can guarantee them to carry out independent learning. However, in terms of the characteristics of online education resources, more than half of the college students believe that high-quality online education resources are difficult to obtain, and

43.4% of the college students believe that the lack of supervision measures for online education resources affects the learning effect.

4.3. Adjustment of College Students' Autonomous Learning Conditions

The teaching level of online education resources can not only affect college students' autonomous learning ability through teachers' own attitude, attractiveness, teaching quality, etc., but also affect college students' autonomous learning ability by strengthening the supervision measures of online education resources, so as to improve the autonomous learning of college students' online education resources. After adding the adjustment effect of learning conditions, the driving path of online education resources to college students' autonomous learning ability has changed. When learning conditions play a role in regulating the teaching level of online education resources and assisting supervision measures, it not only improves the teaching level of online education resources. The direct driving force of autonomous learning ability also strengthens the mediating effect of supervision measures, forming six driving paths. Among them, the supervision measures have formed a certain mediating effect for the teaching level of online education resources under the adjustment of learning conditions; at the same time, under the adjustment of learning conditions, the teaching level of online education resources not only directly affects the improvement of college students' autonomous learning ability, At the same time, it also has an indirect impact on the supervision measures and promotes the smooth implementation of the supervision measures. If the supervision measures are also regulated by the learning conditions, the teaching level of online educational resources can also produce a mediating effect. Therefore, under the adjustment effect of learning conditions, the direct driving force of the teaching level of online education resources to the self-learning ability of college students is improved, and the mediating effect of supervision measures is increased. In this way, the learning conditions play a regulating role in the direct drive, so as a whole, the autonomous learning ability of college students is improved. Therefore, both the learners themselves and the network educational resources have factors that restrict the improvement of college students' autonomous learning ability. The driving factors of college students' autonomous learning ability of online educational resources are composed of the teaching level, supervision measures and learning conditions of online educational resources. Among them, the teaching level of online educational resources is composed of the characteristics of online educational resources. Self-supervision; learning conditions include learning space, network conditions and their own internal learning conditions. Supervision measures and learning conditions have a mediating effect and a moderating effect on the relationship between online educational resources and college students' autonomous learning ability, respectively, and then form different driving paths. Under the two effects, college students' autonomous learning ability can be improved.

5. Countermeasures to Improve College Students' Autonomous Learning in the Network Environment

General Secretary Xi Jinping emphasized at the Central Talent Work Conference that the strategy of strengthening the country with talents in the new era should be implemented in depth to provide talent support for the basic realization of socialist modernization in 2035. Education informatization is a powerful support for educational modernization. As a high-level talent training base, colleges and universities must adapt to the development of educational informatization in talent training. However, various information shows that at present, many college students are addicted to the Internet but do not prefer the learning of online educational resources. It is a common phenomenon in colleges and universities that the independent learning ability of college students is not high. Therefore, it is necessary to explore how to use education informatization to improve college students' autonomy learning ability is an

important part of the modernization reform of higher education. Colleges and universities are high-level talent training bases. With the networked, digital, personalized, and lifelong education system becoming the main development goal of China's educational modernization, online educational resources should become an important means and channel for colleges and universities to cultivate talents. However, in view of the above research and findings, there is still some room for discussion on the improvement of the autonomous learning ability of college students' online education resources.

5.1. Strengthen the Construction of Style of Study

The construction of study style is still a key work that cannot be ignored in colleges and universities. At present, the opening and sharing of high-quality educational resources has become an international trend [4], and informatization and digitization have swept across various fields. According to a survey, over 40% of college students surf the Internet for more than 5 hours a day, but they are not willing to use online educational resources. Few students use online educational resources to carry out challenging learning, and over 80% of students go online mainly for social chat, reflecting that there is a lot of room for improvement in the study style of college students. To this end, the Ministry of Education pointed out in the "Opinions on Deepening the Reform of Undergraduate Education and Teaching to Comprehensively Improve the Quality of Talent Cultivation" on the issue of college students' style of study, that colleges and universities should effectively strengthen the construction of style of study, increase the time students devote to learning, and increase the proportion of independent study time. Colleges and universities should deepen the spirit of this document, and guide students to use various learning channels, including online educational resources, to read more and improve their ability to learn independently.

5.2. Constantly Explore New Supervised Learning Models

In the analysis of the driving factors and paths of college students' online education resources, it is found that supervision measures will improve the autonomous learning ability of college students' online education resources, and online education resources are autonomous learning resources. The lack of supervision measures is the biggest difference between them and offline classroom learning. To this end, the online education resource development platform can explore a new supervised learning model for online education resources based on the learning characteristics of college students and the talent training requirements of colleges and universities. In terms of self-study time, students are required to have the proportion of self-study in online education resource courses other than a certain course plan. The platform and universities form a common supervision method to cultivate students' self-study ability.

5.3. Improve the Quality of Platform Learning Resources and Create a Self-learning Atmosphere

At present, platform educational resources are mixed, and some low-quality learning resources have affected college students' judgment and trust in online educational resources. Network sharing platforms can use learners' post-assessment of online educational resources to score online educational resources. At the same time, the scoring data is attached for the learners to refer to and choose. In addition, in view of the fact that learning conditions have played a role in regulating the autonomous learning ability of college students' online educational resources, colleges and universities can use the library to provide information-based study rooms, or open shared study rooms on campus to create an autonomous learning atmosphere for college students, forming a platform-university-university study room, the self-learning mode of integration of learners, and jointly promote the improvement of the self-learning ability of college students' online education resources.

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