# Research on the cultivation of university students' independent learning ability in the network environment

## Lili Chen\*

Hainan Technology and Business College, Haikou, Hainan, 570203, China \*Corresponding author

*Keywords:* Network environment, university students, self-directed learning, capacity building

*Abstract:* With the continuous innovation of China's science and technology level, network technology has long been involved in many areas of our lives and changing people's lifestyles. The side role of network technology in educational activities is also becoming more and more prominent, helping educational activities to promote the all-round growth of students. The shaping of independent learning ability has become a necessary ability of university students to carry out learning activities, and the wide use of network technology has provided technical support for the cultivation of university students' independent learning ability and created a good learning environment. In order to actively cultivate students' independent learning and use network Internet technology to make scientific and reasonable corrections.

## **1. Introduction**

In the current educational activities, the cultivation of independent learning ability is an indispensable and important part of the development of university students, which can effectively promote students' learning effect and improve learning efficiency. Allowing learners to fully learn to learn independently and focusing on cultivating their own independent learning ability is the primary tendency of the school to carry out teaching activities, which shows how important it is for students to learn independently. The wide application of network technology has effectively changed the original single classroom teaching mode, promoted more flexible teaching methods, diversified teaching modes, and effectively improved students' independent learning ability and all-round development.

## 2. Independent Learning in a Network Environment

Independent learning in the network environment means that students can independently master the application of multimedia technology and obtain rich information resources for learning. With the continuous advancement of computers and network equipment in education, the classroom teaching mode is constantly scientifically innovative. When teaching subject knowledge, teachers should actively guide learners to conduct independent learning, improve their ability to understand and solve problems, and use scientific knowledge to conduct in-depth exploration and research on places they do not understand <sup>[1]</sup>. The application of network technology makes the teaching mode and teaching method more scientific and reasonable, and uses multimedia technology to attract students' enthusiasm for learning and improve learning efficiency.

In the network environment, teachers can make full use of network technology to help students think about knowledge, solve problems in learning, and help the classroom to be carried out efficiently. Teachers can make full use of network technology, assist teaching activities through multimedia and other applications, and help students make independent choices and improve their independent learning ability by playing short films or specific storylines related to teaching content<sup>[2]</sup>. In the network environment, teachers can discuss curriculum knowledge and exchange teaching courses through the network platform, no longer limited by time and geographical factors, educators in various places learn from each other's experience, help the effective development of educational activities, and promote the improvement of teachers' teaching ability. Teachers can reasonably use the micro-classroom in the network environment to summarize and summarize the knowledge taught in the classroom, and the micro-classroom is an online course, and learners can repeatedly play back on their own to promote the cultivation of students' independent learning ability.

University students should fully recognize the advantages of the network environment in learning, and use network resources to conduct independent learning. Students can find knowledge explanations that meet their own requirements on the Internet according to their own learning situation and preferences, respect the individual differences between each person, and provide targeted explanations according to their aptitude. In the network environment, actively cultivate students' independent learning ability, let students fully realize their main position in educational activities, actively face various choices in learning, and demonstrate university students' independent learning ability <sup>[3]</sup>.

#### 3. The Problems of University Students' Independent Learning

#### 3.1. Lack of Awareness of Learning and Lack of Initiative

Independent learning refers to learners actively learning and actively studying knowledge under the guidance of educators. In the current university classroom teaching, the number of courses is large, the time for knowledge teaching in each subject is far apart, and students do not learn too many learning tasks except for the homework and classroom learning assigned by the teacher. Without clear learning goals and enthusiasm for learning activities, students cannot form and develop self-reliant learning ability well<sup>[4]</sup>. When learning, most students only listen to the teacher's lectures in the classroom, so as to learn knowledge, and cannot fully use network resources for learning in class, and lack the self-discipline ability to learn.

#### 3.2. Insufficient Use of Resources and Low Information Literacy

China implements the examination system, the school takes students' performance as the standard to measure students, students will rely too much on teaching materials and teachers' explanations in order to improve their academic performance, which is not conducive to the formation of learners' own independent learning habits. Many students think that learning knowledge is just to cope with exams, and this mentality will only reduce students' enthusiasm for learning and cannot improve their learning effect. The use of information equipment in Chinese universities is insufficient, and students' information literacy is low <sup>[5]</sup>. In the face of the information equipment introduced by the school, many students do not know the specific use method, so that the high-end information equipment has become a decoration and cannot play its own value.

#### 3.3. There is a Large Amount of Network Information and a Lack of Effective Management

The continuous development of science and technology has promoted the formation of the information age. The bizarre world created by the use of information technology on the Internet can easily attract students' attention, and if you are not careful, you will go astray and cause irreversible consequences. There are many online information resources, and learners cannot make effective choices about the relevant knowledge in learning. This kind of phenomenon hinders the learning growth of learners and inhibits the improvement of students' self-ability.

#### 4. The Cultivation of Learners' Independent Learning Ability

The use of network technology can be displayed in various forms, providing an effective learning space for the cultivation of learners' independent learning ability. Students independently carry out learning activities, which can effectively increase students' enthusiasm for knowledge learning, thereby promoting the improvement of independent learning ability and cultivating good habits to help learning. In order to better cultivate the independent learning ability of university students in the network environment, it is necessary to improve and implement it from the following directions <sup>[6]</sup>.

#### 4.1. Enrich Teaching Methods and Enhance Students' Enthusiasm

The cultivation of independent learning ability requires long-term persistence, but most students have weak independent learning ability and cannot effectively acquire knowledge in the learning process. Interest is the best teacher, teachers as the guide in teaching activities, according to the specific learning situation of students, reasonable use of multimedia technology to carry out new teaching mode, stimulate students' interest in learning. Teachers can also make reasonable use of the teaching mode created by the situation, so that students can actively participate in the classroom, enrich the classroom activity and improve students' enthusiasm for learning, and use real situations to let students gain knowledge in a relaxed and pleasant classroom atmosphere <sup>[7]</sup>. Only when interest is stimulated can students fully concentrate on the classroom and further help students improve their independent learning ability.

"Cooperative learning" is a new teaching mode in the 21st century, which can effectively promote students' cooperation, and can effectively measure students' independent learning ability in cooperation. In the network environment, educators should actively guide learners to carry out cooperative activities, let learners think according to the questions designed by the activities, select, research and summarize relevant network information, and let students complete it independently <sup>[8]</sup>. Provide learners with a place for knowledge exchange and exchange, so that participants can fully display their own conceptual views and solutions to problems, and then summarize from multiple directions through thinking about the achievements of others to achieve a comprehensive understanding. While cultivating students' independent learning ability, it also promotes the improvement of cooperative inquiry ability.

## 4.2. Optimize the Teaching Environment and Promote Capacity Building

In the teaching activities, students occupy the main position, and teachers are the transmitters of knowledge and the guides of educational work. In the network environment, teachers should reasonably use network technology to select learning materials suitable for students' development to help them effectively complete their own educational activities. Teachers should give students as much free time as possible, so that students can make their own learning plans and carry out independent learning activities according to the content of the learning plan. Teachers should actively

guide students to actively participate in various forms of learning activities, and give timely encouragement and help. It is necessary to pay full attention to the development of students, adhere to the people-oriented teaching concept, guide students to choose their own learning style in combination with their actual situation and learning ability, and cultivate independent learning ability. According to their own learning needs, they look for learning materials that meet their actual development in the network information, consolidate knowledge, and solve problems in learning <sup>[9]</sup>.

The network information age is constantly advancing, and teachers should actively guide students to use the use of network technology to enrich their knowledge reserves. Faced with students' low network literacy, teachers should help students learn network devices <sup>[10]</sup>. For example, the most basic word, excel, PowerPoint, frontage, etc., as well as flash, Photoshop and other very practical software, to help students improve their own network literacy. Teachers should actively involve extracurricular knowledge when teaching courses, so that students can conduct relevant learning and discussion in their off-class time, and help students improve their independent learning ability.

#### 4.3. Strengthen Network Management to Help University Students Obtain Learning Resources

The network information platform is an important way for students to obtain learning resources, and relevant personnel should strengthen supervision to ensure that students can obtain learning resources safely and reliably. The complex and diverse network information has led to a test for university students to choose the right learning resources for themselves<sup>[11]</sup>. It is necessary to actively investigate the security of network information resources, fully promote the positive energy development of network information resources, resist bad network information, help learners improve their ability to analyse and select information. The use of network information technology to promote the cultivation of learners' independent learning ability, while improving learners' independent choice ability in network resources.

Schools can set up a dedicated teacher management organization to help learners optimize network information. In the online environment, relevant teachers should actively and effectively help learners analyse online information resources, and correct and guide learners in a timely manner for the reference when choosing to prevent learners from going astray<sup>[12]</sup>. Managers should strive to improve their own network technology, enrich network practical experience, do a good job in network supervision, effectively help students complete resource selection, and promote the efficient development of students' independent learning ability.

#### **5.** Conclusions

The cultivation of university students' autonomy in the network environment is a process of continuous improvement and development. In today's new educational concept, students' independent learning ability is an important work to comprehensively promote the discovery of university students' self-ability. Educators should strive to optimize the learning environment for learners, scientifically and rationally use network information resources in the network environment, and promote the cultivation of students' self-learning ability. Students are the main force of future social development, so teachers should actively cultivate students' independent learning ability and independent thinking ability to practice and innovate, keep up with the pace of development of the times, use network information technology as a medium, and actively promote the development of students' independent learning ability.

#### Acknowledgements

This work was supported by Hainan Provincial Education Department Project (Hnjg2022-151), Cultivation and Evaluation of Students' Network Independent Learning Ability under the Background of Higher Vocational Enrollment Expansion.

#### References

[1] Zhang Yan, Gong Xianghong. (2015). An Empirical Study on the Development of University Students' English Independent Learning Ability in Multimedia Network Environment [J]. Journal of Lanzhou University of Education, 31(1), 3.

[2] Jiang Yanyan. (2016). Research on Countermeasures for Cultivating University Students' Independent Learning Ability in Network Environment [J]. Forest Area Teaching, 4, 2.

[3] Wang Shuqing. (2008). Cultivation and Research of University Students' English Independent Learning Ability in Network Environment [J]. Times Literature, 20, 1.

[4] Cheng Huawei. (2018). Research on the Cultivation of Independent Learning Ability and Innovation Ability of College Students in Private Colleges and Universities based on Network Environment[J]. Chizi, 000(033), 142.

[5] Zhang Li. (2018). Research on the Cultivation of Independent Learning Ability of Peasant University Students in Network Environment [J]. Chinese and Foreign Entrepreneurs, 36, 1.

[6] Hua Shaofeng. (2017). Research on the Cultivation of University Students' English Independent Learning Ability in Network Environment: A Case Study of Hetao College [J]. Journal of Hetao University, 2, 68-70.

[7] Qu Jianzhong, Xing Lirong, Zhang Yang. (2021). Cultivating University Students' Independent Learning Ability in Network Environment—A Survey Based on the Course of "International Trade Practice" [J]. 2011-24, 178-180.

[8] Shen Shilin. (2018). Current Situation and Enlightenment of University Students' Independent Learning of Foreign Languages in Network Environment [J]. Science and Education Journal-Electronic Edition (Late Edition), 12.

[9] Wang Long, Li Aijuan. (2013). The Cultivation of University Students' Independent Learning Ability in Network Environment [J]. Modern Communication, 5, 2.

[10] Wu Yulun, Li Zhe. (2010). On the Cultivation of Independent Learning Ability of University English in the Network Environment [J]. Journal of Shenyang Normal University: Social Sciences Edition, 1, 3.

[11] Zhong Haiyan. (2013). The Cultivation of University Students' Independent Learning Ability in Network Environment [J]. Research on Ideological and Political Education, 29(6), 3.

[12] Liu Xueli, Liu Tongtong. (2017). Research on the Cultivation of University Students' Independent Learning Ability in Applied Undergraduate Colleges and Universities in Network Environment [J]. Journal of North China Institute of Aerospace Technology, 27(2), 4.