Research on the Autonomous Learning Mode in the Environment of Computer Network Technology

Eryan Ni*

Guangdong Industry Technical College of Higher vocational institute

*E-mail: zhangxueni9063@outlook.com

Abstract. Autonomous learning is an important part of basic education for all. At the same time, with the continuous development of computer network technology, it provides a new model for autonomous learning to some extent and improves the efficiency of learning. This paper mainly studies the needs of residents' autonomous learning under the computer network technology environment and how to combine computer technology for efficient autonomous learning. Through the analysis of this paper, for the students to create a good learning atmosphere, provide reliable learning guidance, and how to implement the "happy learning", "learn well", "learned" as the guiding goal of the educational training model to provide reference.

Keywords: Autonomous Learning Mode, Computer Network Technology, Student-oriented

1. Introduction

The basic task of autonomous learning for teachers is in modern learning society, including school, family and society. For students in school, school is the main place and channel of learning, and teachers and principals are the most important teachers. Autonomous learning requires that teachers should take school education as the main position, supplemented by necessary and scientific family education and social education, so that children and adolescents can learn to seek knowledge, learn to be human, learn to be healthy, learn to appreciate beauty, learn to live, learn to communicate, learn to work and learn to survive through autonomous learning, and have the learning, life, labor and survival that adapt to the needs of modern society. The basic quality of communication, production and continuous promotion of self-development.

2. Independence of autonomous learning

Each learning subject is a relatively independent person. Learning is the "own" thing and "own" behavior
of the learning subject, which cannot be replaced by anyone.

Each learning subject has its own independent psychological cognitive system. Learning is the result of its independent analysis and thinking of external stimulus information, and has its own unique way and special significance[1].

Each learning subject has the desire to seek self independence. It is the internal basis and motivation for its independence.

Each learning subject has the learning potential of "talent" and certain independent ability, and can solve the "obstacles" in the learning process by itself, so as to acquire knowledge. The four meanings of "independence" in learning are interrelated and unified. The independent learning subject is the independent undertaker of "autonomous learning"; the unique psychological cognitive structure is the thinking foundation of "autonomous learning"; the desire for independence is the power foundation of "autonomous learning"; the learning potential and ability of the learning subject is the ability foundation of "autonomous learning"[2].

It can be seen that self-reliance is the basis and premise of "autonomous learning", the intrinsic nature of learning subjects, and the common feature of every learning subject. It is not only reflected in all aspects of learning activities, but also throughout the learning process. Therefore, independence is the soul of "autonomous learning". As Figure 1

![Figure 1: Autonomous learning mode](image)

3. Self-action of autonomous learning

Learning subjects bring learning into their life structure and become an integral part of their life activities. Learning self-interest is the embodiment and development of independence, which contains four levels of structural relations: self-exploration, self-selection, self-construction and self-creativity[3]. Therefore, self-directed learning is essentially a process of self-exploration, self-selection, self-construction and self-creation of knowledge.

Self-exploration is often based on curiosity. Curiosity is human nature, which not only produces learning needs, but also a kind of learning motivation. Self-exploration is the process of learning subject's self-seeking knowledge of things, environment, events, etc. based on curiosity. It is not only reflected in
the learning subject's direct understanding of things and events, but also in the learning of "text" knowledge. Text knowledge is the cognition of predecessors or authors to objective things, not the direct cognition of learning subjects. Therefore, the study of "text" knowledge is actually an exploratory study. To seek knowledge and cognition through self exploration is one of the ways for learning subjects to acquire knowledge for themselves.

Self selectivity refers to the self attention of the learning subject to the information in the exploration. External information can only be included in the cognitive field through the selection of learning subjects; selection is due to being noticed, and only the information that has been noticed by learning subjects can be selected and recognized (so there is a situation of "turning a blind eye, listening but not listening"). Therefore, learning starts from the attention of learning subject to information. One kind of information should be paid attention to, mainly because it is consistent with the internal needs of the learning subject. The selective learning, which is caused by the attention to information selection caused by internal demand and the selective extraction and application of long-term memory information in the brain, is an important performance of self-learning[4].

Self construction refers to the process in which learning subjects construct their own knowledge in the learning process, that is, the formation and establishment of their new knowledge. In this process, the new information and knowledge provided by selective attention is the object of learning. The learning of this object must be based on the original experience and cognitive structure of the learning subject, and the information selected and extracted from the brain is the basis of learning new information and knowledge. The integration and assimilation of the new and old knowledge take place in these two information through the thinking processing of the learning subject, which enriches, sublimates and unites the original knowledge, thus establishing a new knowledge system. Therefore, the construction of knowledge is not only the construction of new information and new knowledge, but also includes the transformation and reorganization of the original experience and knowledge; it is not only the retention of the original knowledge, but also the transcendence of the original knowledge.

Self creativity is a more important and higher-level expression of learning self action. It refers to that the learning subject creates a practical concept model which can guide practice and meet their own needs on the basis of knowledge construction. This kind of practice idea and mode is the result of the creative thinking of the learning subject according to the objective law of the development of things, the advanced understanding of the truth of things, and the strong and clear internal demand of itself. The construction of knowledge is the knowledge of truth and the transcendence of original knowledge[5].

However, the mode of practical idea is based on the existing truth knowledge and transcends it (that is, the advanced understanding of the truth of things). This kind of advanced cognition is a creative thinking activity guided by a clear goal. In this activity, the memory information base in the mind of the learning subject is fully mobilized, the information is fully activated, the knowledge system is fully organized, and the goal value of the learning subject is fully publicized.

4. Self discipline of autonomous learning

That is to say, the self-discipline or standardization of learning subject. It is manifested in conscious learning in the domain of cognition.

Consciousness is the awakening or awakening of the subject of learning, which fully awakens his
learning requirements, goals, goals, behaviors and meanings. It standardizes and constrains its learning behavior, and promotes its learning to be enterprising and persistent. It is active and active in the behavior domain. Initiative and enthusiasm are the external manifestation of self-discipline. Therefore, self-discipline learning is a kind of active and active learning. Initiative and initiative come from consciousness. Only when we consciously realize the significance of our learning goals, can we make our learning in an active and positive state; and only when we actively learn, can we fully stimulate our learning potential and intelligence to ensure the realization of our goals[6].

Self discipline learning embodies the clear sense of responsibility of the learning subject, which ensures that the learning subject actively explores and selects information, actively constructs and creates knowledge.

To sum up, "autonomous learning" is the learning of self-reliance, self-discipline and self-reliance of learning subjects. The self-reliance, self-action and self-discipline of learning are the embodiment of the three aspects of learning autonomy and the three basic characteristics of "autonomous learning". Among them, self-reliance is the foundation of autonomous learning, self-reliance is the essence of autonomous learning, and self-discipline is the guarantee of autonomous learning. These three characteristics all illustrate the same idea: the learning subject is the master of his own learning, and learning is ultimately led and completed by the learning subject himself. Admitting and affirming this thought is of great significance to the reform and correction of many unreasonable teaching methods and modes, and to the exploration and creation of new teaching methods and modes.

5. Summary

It is not a matter of one day and one night, but a process of accumulation. In the exploration of how to cultivate students' active learning, we should study the relationship between students' autonomous learning and education mode from multiple perspectives and in-depth, so as to create a good learning atmosphere for students. In the current "student-oriented" social situation, we should implement and implement the education and training mode with "learning happily", "learning well" and "erudition" as the guiding goal of independent learning.

Acknowledgements

Fund: This article is one of the phased achievements of Guangdong Province's 2018 education and teaching reform and practice project, "Investigation on Students' Innovation Ability in Higher Vocational Colleges and Research on Training Strategies under the Background of New Engineering - Taking 10 Higher Vocational Colleges in Guangdong Province as Examples" (GDJG2019170) and Guangdong Industry Technical College 2018 grade educational reform project, "Students' Demand-Oriented Dual-Creation Education in Higher Vocational Colleges: Quality Status and Promotion Path"(JG201825).

References

[1] Sangmin Lee,Younghoon Kim,Hyungu Kahng,Soon-Kyo Lee,Seokhyun Chung,Taesu Cheong,Keeyong Shin,Jeeyuk Park,Seoung Bum Kim. Intelligent traffic control for autonomous vehicle systems based on machine learning[J]. Expert Systems With
Applications, 2020, 144.

[2] Chen-Huan Pi, Kai-Chun Hu, Stone Cheng, I-Chen Wu. Low-level autonomous control and tracking of quadrotor using reinforcement learning [J]. Control Engineering Practice, 2020, 95.

[3] Uriel Martinez-Hernandez, Adrian Rubio-Solis, Tony J. Prescott. Learning from sensory predictions for autonomous and adaptive exploration of object shape with a tactile robot [J]. Neurocomputing, 2019.

[4] Hu Delian, Xiao-jie Wang. The construction of a web-based college English autonomous learning model [J]; Reading and writing (educational journal); 02, 2011.

[5] Wen Lin. Multimedia English teaching and the cultivation of students' autonomous learning ability [J]; Popular literature and art; 05, 2010.

[6] Chen Liang. Reflections on the reform of college English teaching in the context of networking [J]; Popular literature and art; 23, 2010.