

Research Design based on Blended Teaching Students' Learning Autonomy and its Promotion Countermeasures——Take the Students Majoring in Educational Technology in Northwest University for Nationalities as an Example

Sijia Liu¹, Xiaolong Mao¹, Yanli Wang¹, Shulian Liu²

1.College of Educational Science and Technology, Northwest University for Nationalities, Lanzhou 730030, China

2. School of Mechanical & Energy Engineering , Zhejiang University of Science & Technology, Hangzhou 310027,China

Abstract: Blended teaching combines the advantages of traditional learning mode and network learning, and fully reflects the initiative, enthusiasm and creativity of students as the main body of the learning process. This paper to discuss the hybrid teaching for education technology students' learning autonomy, to reveal how the “autonomous learning, classroom teaching and network interactive” teaching mode for improvement of the education technology professional students autonomous learning ability and self-efficacy, promote the application of students' autonomous learning strategies, to cultivate international talents to adapt to the era development. In the actual teaching of educational technology, teachers should use online educational resources and information technology to promote curriculum teaching, according to the characteristics of educational technology, to help students learn the way of educational technology, to cultivate students' comprehensive application ability of educational technology.

Keywords: Blended teaching; Educational Technology; Learning autonomy; Self-efficacy

1. Introduction

Under the background of the construction of “double first-class” universities, more and more scholars and teachers are paying attention to the teaching in Chinese universities. Educational technology teaching plays an important role in improving college students' professional knowledge level and skills and enhancing their academic communication ability and competitiveness. However, many students are still not fully equipped with the skills. In particular, students lack effective teaching methods and training of autonomous learning strategies. Educational technology teaching is different from conventional teaching methods, and it is also a great challenge for teachers. However, the current teaching form of teachers is relatively single, which can not arouse students' enthusiasm and initiative in learning, and students' various abilities are difficult to improve. Therefore, it is urgent to improve students' learning autonomy, self-efficacy and learning strategies.

Hybrid teaching can give full play to the leading role of teachers in teaching and the main role of students in online learning, which is conducive to stimulating students' interest in learning and enabling them to obtain positive emotional experience, thus achieving the best teaching effect. However, few empirical studies have demonstrated the impact of blended teaching mode on autonomous learning and self-efficacy in educational technology. Therefore, this study adopts the method of questionnaire survey and explores the learning autonomy and self-efficacy of students majoring in educational technology in the hybrid teaching mode, aiming to improve students' autonomous learning ability and academic communication ability and meet their professional development needs.

2. Study on learning autonomy and self-efficacy

The concept of autonomous learning was first proposed by Holec, which refers to “the ability to control self-learning”. Autonomous learning ability includes different dimensions such as goal orientation, strategy use, monitoring and evaluation. Independent learning is not equal to learning alone, but a multilateral interactive and open system of students, peers and teachers.

Self-efficacy refers to an individual's speculation and judgment on whether he or she is capable of completing a certain behavior. It is an individual's view on the effectiveness of his or her own behavior when using strategies to complete a given task.

Studies on autonomous learning and self-efficacy are becoming multidimensional. However, there are few researches on learning autonomy and self-efficacy of students majoring in educational technology based on blended instruction. Therefore, this study starts from this aspect and studies the study of educational technology major students' learning autonomy and its promotion strategies based on blended teaching.

3. Analysis of literature data

3.1 A total of 967 eligible articles were retrieved from CNKI with the theme of ‘blended learning’, as shown in Figure 1 :

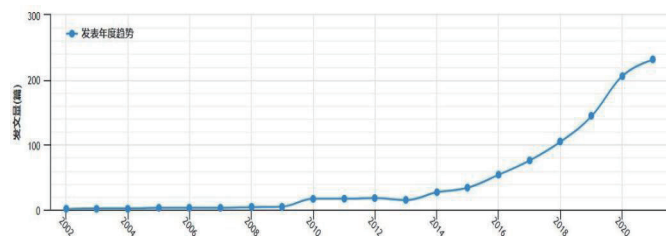


Fig 1 General trend chart of annual publication of blended teaching

As shown in the figure, the blended teaching mode began to attract everyone’s attention from 2010, and began to show a linear upward trend from 2014.

3.2 A total of 1396 eligible articles were retrieved from CNKI with the theme of ‘Educational Technology’, as shown in Figure 2 :

As shown in the figure, educational technology has attracted people’s attention since 1994, and it has shown a linear upward trend since 1996. However, it has shown a downward trend since 2008, indicating that the attention to the major of educational technology has gradually declined. Therefore, we should strengthen the influence on the major.

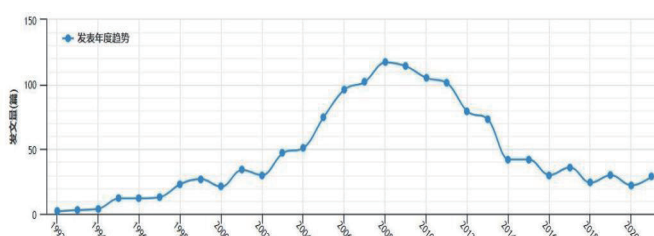


Fig 2 General trend chart of annual publication of Educational Technology

4. Analysis on Teaching Design of Educational Technology Majors Based on Blended Teaching Mode

4.1 Research design

To teaching model based on hybrid of education technology professional students learning autonomy, and self-efficacy were tested, the effect of the experimental research method was adopted, Lanzhou, Northwest University for Nationalities Education Technology Professional in grade 2020 and 2021 four month-long experiment class nature, the two classes is that in comparative classes (70 people), Two classes are experimental classes (70 students). The two sample groups were similar in age and academic experience.

The subject of this study is the educational technology course, which is a compulsory course for undergraduates majoring in educational technology. Its purpose is to improve students’ listening, speaking, reading, writing and application abilities in the academic field, so as to promote students’ professional learning.

The experimental study lasted for one semester, and the control class adopted the traditional classroom teaching mode. The experimental class is taught in multimedia classroom and network teaching platform, adopting the hybrid teaching mode of “independent learning + classroom teaching + network interaction”. At the beginning and end of the experiment, a questionnaire survey was conducted for the experimental class and the control class respectively to analyze the learning autonomy and self-efficacy level of the students majoring in educational technology under the hybrid teaching mode and the traditional teaching mode.

4.2 Research methods

This study used questionnaire survey to evaluate the effect of experimental research. Autonomy scale according to the Hunan Normal University Hong-Mei Yuan (2005) compiled by the “autonomous learning ability of scale” to carry on the design, the scale for the 5 Likert scale, scale including content and environment, self-regulation, learning motivation and learning strategies, four dimensions, the survey results of the internal consistency reliability (Cronbach alpha’) of 0.831. The self-efficacy scale was designed based on the academic self-efficacy scale developed by Liang Yusong and Zhou Zongkui (2000) from Central China Normal University with high reliability, which was also a five-level Likert scale. In addition, the internal consistency reliability (Cronbach ‘α) of the survey results was high, indicating a good reliability of the questionnaire results.

4.3 Data processing

SPSS 25.0 was used for statistical analysis of all data, and descriptive statistics, independent sample T test, correlation analysis, regression analysis and other methods were used to obtain the research results.

5. Discussion and countermeasure

Through a series of analysis of the experimental data, the relevant conclusions are drawn, and based on the conclusions put forward reasonable solutions to the problems and promote teaching countermeasures.

References:

- [1] Li Zhihe, Liu Dujuan, Pu Mimi. The —— is based on the analysis of the doctoral dissertation in Educational Technology from 1999 to 2020 [J]. Journal of Distance Education, 2021,39 (05): 95-103.