Analysis on accurate early warning and intervention model of blended learning in ideological and political courses based on Learner portrait

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INTRODUCTION

With the rapid advancement of big data, cloud computing and artificial intelligence technology and the widespread rise of MOOCs, "Internet +" education has entered the educational horizon with its unique charm, bringing about great changes in teaching and learning. The blended learning mode, which combines the advantages of traditional classroom teaching methods with the advantages of online learning, has been widely used in ideological and political teaching in colleges and universities. Mining the great teaching value of the integration and innovation of big data, artificial intelligence technology and ideological and political education and giving full play to the advantages of blended teaching have become the future development trend of ideological and political teaching.

Ideological and political theory course is the key to carry out the fundamental task of moral education, and is the main channel and the central site of ideological and political education for college students. Learning early warning and intervention is the key to improve the teaching effectiveness of ideological and political courses, change "lood irrigation" to "precise drip irrigation", master learners' learning conditions. In combination with the new situation, new requirements and new characteristics of ideological and political course teaching in colleges and universities, actively explore the application of information technology combined with traditional ways of accurate early warning and intervention of blended learning in ideological and political course, which is of great significance to enhance the attractiveness of ideological and political course, promote independent and personalized learning of learners, and improve the effectiveness of ideological and political education.

MAIN PROCESS

On the basis of learning analysis, this paper puts forward the process and principle of constructing learner portrait, and design the "BILDES" six-side learner portrait model, which includes six dimensions: basic information, internal characteristics, learning style, learning behavior, emotional attitude and social interaction. Based on the portraits of learners, an accurate early-warning and intervention model of blended learning of ideological and political courses is constructed from the theoretical level. In the early-warning mode, warnings are given to students through red lights or green lights, emails, digital dashboards and news push. In the intervention mode, systematic automatic intervention and manual intervention are combined. And an experiment is carried out to test the accurate early warning and intervention model of blended learning in ideological and political courses based on Learner portrait.

RESULTS AND ANALYSIS

Based on the supply of high-quality resources, the early warning and intervention model of blended learning in ideological and political courses based on learner portrait uses data mining and analysis tools to collect a large number of students'learning behavior data from online education platform and information-based teaching tools. Multi-modal analysis such as content analysis, social network analysis, conversation analysis, context analysis and emotion recognition was carried out based on data collection. Combined with the teachers' subjective evaluation of classroom teaching, the "BILDES" Six-sided Learner Portrait is made from six dimensions: basic information, internal characteristics, learning style, learning behavior, emotional attitude and social interaction. The analysis results are output in the form of charts, figures and so on by visualization technology. According to the learning situation presented by the analysis results and the students'online and offline learning performance, crisis diagnosis is made to judge whether there is a learning crisis in the current stage of learners. Different teaching strategies are adopted for different groups and individuals of students. At the same time, the diagnosis of students' learning crisis is carried out in a cycle with the continuous development of learning activities. With the continuous updating of the collected data, students' learning situation can be analyzed in real time, their learning progress can be monitored at all times, and hierarchical teaching, differentiated teaching and personalized teaching can be carried out according to students' learning situation.

In order to test the feasibility and validity of the model in ideological and political course, we take " the course of the ideological and moral cultivation and legal basis" as the experimental object. Preliminary experiments show that the model can promote accurate identification, effective early warning and accurate intervention to a certain extent, which is helpful to resolve learning crisis and improve learning quality.

CONCLUSION

Under the situation of education modernization and the normalization of epidemic prevention and control, the blended learning in ideological and political courses has a broad application prospect, and the importance of learning accurate early warning and intervention is becoming increasingly prominent.Relying on online education platform, by the early warning and intervention model, we can based on education courses blended learning behavior data generation learners portrait, quickly identify exist different degree of risk in the course aspects of student individual or group, and find out its characteristics and weak spot in the learning process, through the system and the artificial diversity, multi-dimensional, accurate early warning and intervention, Effectively resolve the learning crisis, for the implementation of precision teaching, personalized teaching, improve the effectiveness of the reference. In this study, a precise early-warning and intervention model of blended learning in ideological and political courses was constructed from the theoretical level. On this basis, several rounds of empirical studies were conducted to iteratively revise the model. At the same time, the scientific, accurate and effective learning early warning and intervention also requires the cooperation of the government, schools, teachers, students and technical parties. In the future, the application scenarios and strategies of the model will be discussed from different levels and perspectives.