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Evaluation Model of Modern Network Teaching Quality Based on Artificial Intelligence E-Learning

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ABSTRACT

Modern e-learning system is a representative service form in innovative service industry. This paper designs a personalized service domain system, optimizes various parameters and can be applied to different education quality evaluation, and proposes a decision tree recommendation algorithm. Information gain is carried out through many existing principles of improved decision tree algorithm, and the information gain of the algorithm determines the inheritance of information. The process of modern e-learning system is based on personalized teaching and humanized intelligent interaction. This paper theoretically analyzes the improvement performance of the existing e-learning system in teaching quality evaluation and shows a good classification effect. This model provides reference materials for the expansion of education and teaching and provides a feasible practical model for personalized teaching in online schools. The authors provide good educational conditions and environment for students and cultivate all-around talents for the society.

KEYWORDS

Artificial Psychology, Model Building, Online Education, Teaching Quality

INTRODUCTION

With the development of the country's "Modern Distance Education Project", various networked and distance education systems have emerged. Distance education, as a one-way broadcasting mode, lacks two-way interactivity (Wang et al., 2016). The third generation is a distance education system that requires humanized and intelligent interaction capabilities. The research makes a practical prediction and evaluation of the development direction of communication technology. The interaction between teachers and students is analyzed and evaluated. The personalized computer-intelligent teaching process is added. So, a new education and learning method—E-learning has emerged as the times require.

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At present, there is no universally recognized definition of E-learning, and there are different opinions about the definition of "E-learning" at home and abroad (Taylor & Taylor, 2021). E-learning is a rapidly developing industry.

Presently, many online learning models are not clear. Basically, it is still in a wild period and can only move the existing offline methods to the online. There is no mature mode based on the use scenario of the online itself. The content organization is relatively messy. The online behavior of the Internet makes the traditional knowledge content precipitate. Therefore, the information in the knowledge base grows exponentially with respect to the offline (González-González et al., 2020). The knowledge base contains all kinds of knowledge on the Internet, such as entertainment, finance, government affairs, publishing and distribution, and biomedicine, providing a better solution for people to use the web more intelligently. However, since any institution or organization can create a knowledge base according to its own needs and design concepts, the data in the knowledge base are also full of diversity and heterogeneity, and there are many mutual duplications or complementations. However, the lack of an effective organization and sorting business model is immature. The definition of online education is unclear. The demand points that need to be solved first should be positioned. The significance of the current online education slogan is greater than the actual significance (Sadiku et al., 2018).

The innovation of this paper: In the traditional classroom dominated by lectures, the teacher's own knowledge structure is consolidated, and the channels for obtaining data are also limited, becoming a closed classroom. Likewise, students gain very limited knowledge in closed classrooms. The intelligent E-learning of artificial psychology can conduct statistical analysis on massive data through the Internet to build an open classroom, which not only provides massive data resources for learners to use but also provides personalized services for learners. This paper breaks the framework of traditional online education methods, combines intelligent E-learning of artificial psychology with online education system technology, combines the characteristics of online education resources, learner characteristics, behavioral preferences, integrates specific education situations, and forms a closed-loop big data construction surrounding. This model provides reference materials for the expansion and application of big data in education and teaching and provides a feasible practical model for personalized teaching in online schools.

E-learning is a modern e-learning system that provides innovative services. However, traditional distance education systems lack two-way interactivity and humanized intelligent interaction capabilities. Therefore, the E-learning system based on artificial psychology intelligent e-learning has been proposed to provide personalized services and optimize various parameters for different educational quality evaluations. Moreover, a decision tree recommendation algorithm has been introduced, which utilizes information gain to determine the inheritance of information. The use of a personalized computer-intelligent teaching process helps to improve teaching quality evaluation in online education. This paper aims to analyze the performance of existing electronic learning systems in teaching quality evaluations and shows good classification results. The proposed model can provide reference materials for the expansion of big data in education and teaching and a feasible, practical model for personalized teaching in online schools.

LITERATURE REVIEW

Development Trends of Online Learning

There are currently three different translation methods for E-learning in China: network learning, E-learning, and digital learning (Sun et al., 2021). The current education reform in our country has taken the degree of education informatization as an important symbol, and an important criterion for judging the actual level of education is to evaluate its application level to development (Gurung, 2021). There are many virtual simulation software- or program-aided instructions in the market. It is very important for teachers to conduct application analysis reasonably.