Study of Ideological Instruction Multimedia Education Thought Based on Artificial Intelligence Model

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ABSTRACT: *The ideological and political education are expected to shape the future society. In this paper, we proposed a multi-agent system which integrates the Intelligent Network Teaching System. We have tested the developed system in the real class room and found that the system improved the university thought political lesson teaching effect and learning efficiency.*

Keywords: Artificial Intelligence, Multimedia ideological education, Teaching mode reform

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1. Introduction

To strengthen and improve ideological and political education is of great significance to the state and society as well as to the college students. With the continuous development of information technology and network technology, the realization of the education teaching form is also becoming increasingly diversified and many schools and teachers begin to apply the computer technology and network resources to teaching, in order to improve the teaching efficiency, effect and interest, ideological and political theory course in colleges and universities is no exception[1].

With the purpose of this work presented, there are many studies initiated, and got very good grades. Marshall McLuhan in his "understanding media: an extension of the theory of man" clearly points out that the medium is the message, that medium is the human body and the extension of the human brain. And predicted that with the development of the electronic media, the world will increasingly become a global village [2]. American artist Levy, Norwich, proposed "the new media in the form of digital display, modularity, automation, variability and coding, based on the technical characteristics that a new media hypermedia,

openness, interactivity and virtual characteristics such as" [3]. A professor at the Massachusetts institute of technology university also puts forward the theory of media convergence of its core idea is "with the development of media technology and some Francisco fleabane break, television, network, the advance of mobile technology, all kinds of news media will blend together" [4]. Research-style teaching means teachers inspire revulsive students in the process of teaching, and on the premise of students independent learning and cooperative discussion. In the current teaching material as the basic exploring content, the students around the world and life practice as reference object, provide students with sufficient freedom of expression, challenge and the opportunity to explore and discuss the problem. Let the student through individual, group, collective and various disambiguation interpretation difficult experiment, apply their knowledge to solve practical problems of a kind of teaching form [5]. Although the inquiry activity can be divided into "classroom" and "outside", but the inquiry teaching is more suitable for projects outside of the classroom teaching, because students can play a greater autonomy in these projects, student autonomy is indispensable to inquiry teaching content [6].

The second part of this article analyses the subject involved in the theory. The third part constructs the model of artificial intelligence research based education multimedia ideological education mode; The fourth part is to model the concrete experiment, and the experiment results are analyzed, the model proved the feasibility and advantage. The fifth part is the full text of the summary and induction, and pointed out the future research direction [7].

2. State of the Art

2.1 Multi Agent System

A multi system (multi - agent) is a kind of intelligent and flexibly change in working conditions and the needs of the process around the response of the system. A multi-agent system is made up of multiple agents through mutual cooperation with the basic unit is the agent, and the agent one can interact with the environment [8]. The agent is composed of three functional layers: management and organization, Coordination layer and execution layer. Management and organizational level is mainly to obtain a target definition or inquiry, and related constraints, including the execution plan, functional assessment and learning. The multi agent system is composed of a set of independent and collaborative work of the Agent. The Agent is the basic component unit, and independent operating entities. In multi Agent system, each Agent mutual negotiation and cooperation, to accomplish a common task, where each Agent can according to the load change and other Agent, to coordinate their own behavior, to achieve the goal and use of resources for reasonable arrangement and adjustment, in order to avoid conflict [9] as shown in Figure 1.

Figure 1. Multimedia education model

2.2 Intelligent Network Teaching System

Intelligent teaching system (ITS) has become an important area of research in education technology where the current main research focus on the intelligent teaching system, including student model, work system, online collaborative learning, natural language dialogue, and evaluation of intelligent teaching system, etc. [10]. Lack of intelligence makes the existing network teaching difficult to become a new kind of teaching method, but it is only a kind of teaching. Intelligence is the objective requirement of the network teaching for the deeper development. Truly intelligent network teaching system should be the same and has the expert teachers' knowledge, experience and discriminant ability. According to different students of different knowledge, learning progress, the difficulty of the target computer will automatically adjust [11] as shown in Figure 2.

Figure 2. Intelligent multimedia education idea

2.3 Exploratory Teaching Theory

Research-style teaching means teachers inspire revulsive students in the process of teaching, and on the premise of students independent learning and cooperative discussion. In the current teaching material as the basic exploring content, the students environment around the world and life practice as reference object provide students with sufficient freedom of expression, challenge the opportunity to explore and discuss the problem. Let the student through individual, group, collective and various disambiguation interpretation difficult experiment apply their knowledge to solve practical problems of a form of teaching[12]. The difference between inquiry teaching and traditional teaching is shown in table 1. The basic process of inquiry teaching is shown in figure 3.

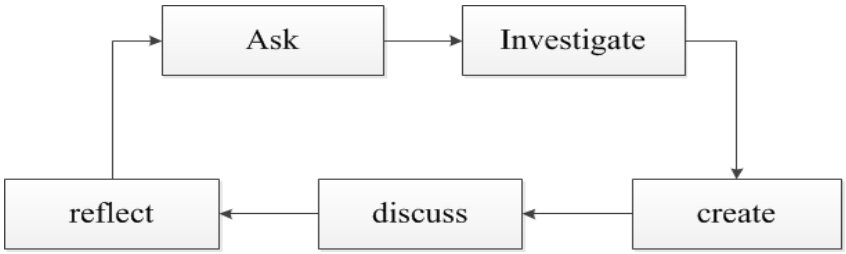

Figure 3. Inquiry teaching process diagram

The name of the	Teaching emphasis	Status between teachers and students	Teaching plan	Teaching evaluation
The traditional teaching method	Place greater emphasis on the mastery of teaching contents and teaching focus on the content of the “known”.	With the teacher as the center, teacher is the disseminator of knowledge, students are the recipients of knowledge.	Teaching plan is used in the progress of the whole class organization, outside the teaching plan of the problem is often delay to the later of course content.	Evaluation process often revolves around a “standard” for the answers.
Inquiry teaching method	Emphasis on information processing and problem solving ability, focus is on “how to know?” The process of teaching.	Take the student as the center, the student is to explore the process of the subject; Teachers is a process to explore the organizer and promoter of learning process, the mentor and monitoring.	Teaching plan revolves around the zetetic “problems”, the whole teaching plan is a process of guides the student to solve the problem.	Don’t emphasize the “standard” the answer, and pay attention to students in the course of the inquiry, evaluation mainly revolve around students in the course of the inquiry.

Table 1. The difference between inquiry teaching and traditional teaching

3. Methodology

The university stage is young students learn and master professional knowledge, and form a cognitive system of the golden age, and from the correct world outlook to perform the outlook on life and values the important stage. The artificial intelligence system, network technology and inquiry teaching mode and the combination of to reform education mode allow students to better use the learned knowledge to analyze and solve problems, as shown in figure 4, based on the specific situation of the artificial intelligence of exploratory education classroom.

Figure 4. Of the inquisitive teaching based on artificial intelligence model education classroom

System goal: Good man-machine interactive interface has relatively comprehensive teaching function, such as new knowledge is explained, problem sets, practice, test and evaluate students' master degree. It can make use of the Agent according to the students' learning situation in several teaching strategies to choose a suitable teaching strategy. It can let students to easily search for information search, courseware. It has a perfect student Agent model, teachers' Agent model, and management model of the Agent.

System structure: Teaching strategies library from the experienced teachers teaching strategy can also be used in the system according to the teaching effect in the process of the add and remove. Teaching repository is the foundation of the whole teaching system, where the web pages, test questions, assignments, such as teaching resources, login to the user can access to browse the contents of the teaching system, teachers and administrators can also modify the adds content. Item bank is used to deposit the student assessment of the examination paper, and some chapters of exercises, etc. It can be used by teachers and students, in order to test the students have mastered the knowledge level. Student information database record the learner's personal information, such as name, age, student id, etc. Also record learning, including learning time, number, content, current level and learning ability, etc are used.

4. Results Analysis and Discussion

In order to verify the feasibility of the teaching mode and advanced nature, we through a questionnaire asked the students to express their understand of the teaching effectiveness and student evaluation of the teaching mode, so as to prove the model reform is a success. Its findings are as showed in table 2.

	Content vivid	33.71%
Advantages	Improve the students' participation in the "two courses"	29.21%
	Rich in natural resources	71.91%
	Can stimulate the learning, enthusiasm	17.98%
Disadvantages	Is not better than the traditional teaching and vivid	20.22%
	Teaching schedule is very difficult to control	55.06%
	Other	5.62%

Table 2. Advantages and disadvantages of the teaching mode

Through as can be seen in table 2 of the inquisitive teaching based on artificial intelligence model has more advantages, it also better able to attract students' attention and interest. It indicates that the teaching model is in accordance with the present situation of the students, and is suitable for college students now, so the model is better than the traditional model and is feasible and advanced.

5. Conclusions

Ideological education is the ideological and political education for the college students. Through the nurture of the education essential courses, it is possible for better teaching mode reform for the course, make students better able to shape their personality character and it becomes one of current important topics. Through the analysis of the existing research results and the study of the theoretical basis and technical ability, the inquisitive teaching based on artificial intelligence model, and the experiment and the experimental data processing, proved the advanced nature and effectiveness of the model.

Through the study of this article, we can get some conclusions. With finding the right subject for the teaching mode as the breakthrough point of the study, in the form of group, the cooperative learning style development of network resources, use the Internet platform to realize interaction and interaction between teachers and students and students to interact with resources. In order to improve the university thought political lesson teaching effect and learning efficiency, it embodies the education technology for ideological and political theory teaching practice service. Teachers in the main with the help of a network platform monitor students in the exploration stage of learning the task completion. With the full communication and interaction with students at the same time, it also can combine network and the traditional classroom. In the process of face-to-face teaching

on students' inquiry activity process monitoring and individual guidance, it is to ensure the quality of inquiry online and study group independent inquiry learning.

While this study research has achieved good results, there exist some problems, such as the model needs to be expanded to make it applicable to all university courses and all the students for the future research needs deep thinking.

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