Exploring the Captivating Virtual Instruction for Training Distributed Teaching Practice System in Journalistic Education

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Abstract: Artificial intelligence technology has brought earth-shaking changes to the media environment, and has set new requirements for the professionalism of journalism learners. Against this background, this present paper argues that artificial intelligence is ought to be considered for the college education. The author designs a Captivating Virtual Instruction for Training Distributed Teaching Practice System (CVITDTP) that is suitable for the nurturing and flourishing of journalism and communication professional personnel training.

1. Introduction

Artificial Intelligence (AI) is one of the most popular areas of technological change nowadays, providing the news industry with the possibility of more updates such as big data processing, robot writing, and personalized news distribution. Changes in the media ecology will inevitably place new demands on the quality of journalism talents. [1] Journalism education urgently needs a change that conforms to the trend of the times and involves the entire discipline system. [2]

Since the rise in the 1980s, artificial intelligence has been the focus of attention in the education industry. Nevertheless, artificial intelligence has not yet become an emphasis on college education in mainland China. As reported in the Journal of the Chinese People's Political Consultative Conference, China accounted for 51% of the global emerging artificial intelligence projects in 2017, yet China has only about 5% of the global artificial intelligence talent reserve. [3] Tsinghua University released a report of a similar result in 2018. The report shows that the United States is far ahead in the number of outstanding artificial intelligence talents, with a total of 5158 people, but the number of outstanding artificial intelligence talents in China is 977, which is less than one-fifth of the United States. [4]

The development of technology is endless. The artificial intelligence technology that is currently at the forefront is likely to be replaced by other technologies in the future, or develop into a new form. To keep facing the changes in the media environment, journalists must maintain the ability to learn continuously and adapt to the new business environment brought about by technological updates; raise awareness of innovation and make timely industrial adjustments to form a new human institution and news production model. Continuous learning and innovation capabilities are fundamental for journalists to respond quickly to change.

This paper argues that artificial intelligence provides students with opportunities for collaborations. Besides, it drives students forward and accelerates great potential for innovation. On the one hand, AI is used as a high-level auxiliary means of education to solve the problems of educational participation. One the other hand, AI embeds technology into the teaching system to promote the training and improvement of students' artificial intelligence technology[5]. Therefore, artificial intelligence provides a brand-new talent training method in college. It not only fully solves the participation problems in traditional education, but also provide an accumulation of intelligent talents for the news industry.

2. Cvitdtp: Artificial Intelligence and Journalism

Captivating Virtual Instruction for Training (CVIT) is a distributed learning model designed to combine real-time classroom methods with the most suitable virtual technologies, as well we artificial intelligence technologies. By using the original professional teaching plan as a research platform, the virtual human, intelligent counseling, cognitive and learning science, professional teaching and entertainment are grafted together to form an interactive platform that provides students with virtual professional practice participation.

This model has been used by the USC-ICT Institute of Innovation and Technology (USC-ICT) for the Army Information Architecture Course and Supervision Review Course. By using game-like scenes, the existing courseware was redesigned, featuring attractive teaching videos, allowing students to play different roles in intelligence tasks, and helping soldiers understand the links and roles between military intelligence departments and systems, It also allows learners to practice their interpersonal communication skills and program operations in a game-like interaction with virtual tutors.

This article builds on the existing journalism course to design a CVITDTP that is suitable for the cultivation of journalism and communication professionals.

The design is composed of two parts.

3. Technical Design

3.1 Virtual Assistants

Although digital education platforms can simulate an identical classroom environment, the lack of teaching assistants is irreparable. CVITDTP could build virtual assistants and provide real-time answers to hundreds of common questions about data journalism.

3.2 Intelligent Tutoring System

The Intelligent Tutoring System (ITS) can provide real-time feedback and personalized coaching through cognitive science and advanced technology. In the practice of digital journalism, the intelligent tutoring system can provide a wealth of activities in response to data journalism requirements, targeted feedback on students 'course practice and correct students' work, providing flexibility, convenience and differentiated learning. possibility.

3.3 Problem Identification and Resolution System

Each teacher has to face dozens or hundreds of students each time he teaches. Students 'learning speed and progress vary, so it is difficult to determine and meet their specific educational needs. The construction of the problem identification and resolution system is to analyze the data through artificial intelligence algorithms to identify students' learning gaps in data journalism, analyze teacher interaction and student performance data, to supplement the personalized needs of classroom teaching.

3.4 Expand Crowdsourcing Counseling Resources

Data journalism is a typical news practice course that integrates technology and art. The complexity of the profession and technology constitutes an obstacle for the comprehensive and specific guidance of its practice. Crowdsourcing counseling can help students get accurate mutual cooperation and support nationwide and globally through educational social network links and screening. To enhance the interest and ability of professional learning.

4. Practice Training

After artificial intelligence technology enters journalism, it replaces journalists to engage in stylized and repetitive work. [6]Journalists should take the initiative to learn new technologies and

take advantage of the convenience brought by artificial intelligence. For example, in the era of AI, news people are no longer isolated, and machines are no longer separate from the main body, but become a part of the main body, forming a complementary cooperative relationship between humans and machines. In the process of news production, big data and algorithm technology assist news people in collecting news materials; writing robots assist news people in writing the basic facts of news manuscripts; news people can't capture the emotions and internal links of the machine. Therefore, journalism education cannot ignore the cultivation of technology. Journalism colleges should integrate computer science and journalism education to train compound talents who can apply technology and management technology.

In addition, after the artificial intelligence technology entered the media field, the industry put forward higher requirements for journalists' independent thinking and judgment ability. [7] The comprehensive cultivation of humanities and social science courses can help students establish a macroscopic vision, enhance their thinking ability in multiple perspectives and develop critical thinking.

The traditional news and media courses follow the elite education model. The courses are greedy for perfection and allow students to learn blindly. The results often show the students are lack of practice and training. The CVITDTP project designs a curriculum schedule that is composed of basic courses and training. The curriculum schedule includes (1) embedding teaching points according to the requirements of real data journalism projects; (2) reforming the teaching period to create a real project actual combat environment; (3) strengthening collaboration and enhancing practical effects; (4) reforming the curriculum management model and implementing personalization Evaluation; (5) The combination of real job setting and high-frequency rotation training.

5. Implementation and Development of Cvitdtp

Artificial intelligence technology has brought earth-shaking changes to the media format environment, and has set new requirements for the professionalism of journalism talents. [8] Changes in the general environment have urged the reform of journalism education to cultivate news talents that meet the requirements of the AI era. Journalists in the AI era need to focus on the cultivation of learning and innovation ability, technology application, management ability, and independent thinking and judgment ability. The reform of journalism education requires the integration of humanities, technology and humanities, academia and industry, the construction of a knowledge system that reflects human-computer cooperation and a forward-looking vision, and the integration of technology-oriented courses and humanities and social sciences courses. Artificial intelligence practice platform, building internship bases, and inviting first-line media practitioners with rich experience to enter the classroom to cultivate news talents with the skills and social responsibility that meet the requirements of the development of the times.

6. Conclusion

The CVITDTP in Journalistic Education is not only the supplement and supplement of news and communication education through artificial intelligence technology, but also the in-depth reform of news and communication education in the new era. Therefore, the system must emphasize the importance of the technology platform, and also vigorously improve the content of the curriculum practice, in order to achieve the rationality of the system and meet the requirements for the cultivation of excellent journalists and talents.

The construction of the practice system is not a one-time process, it requires a lot of resources and continuous improvement. Therefore, the improvement of the CVITDTP in Journalistic Education also requires the tireless efforts of educators.

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