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Research Status of "Internet + Education" at Home and Abroad

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Abstract. The current society has entered the era of "Internet +", and "Internet + Education" has become a development strategy for the education front. In this paper, the current research status of "Internet + Education" both in foreign countries and in China were introduced, including the categories and characteristics of "Internet + Education". Meanwhile, the origin, practical exploration of "Internet + Education" and its integration with "double creation" talents training in China were also studied.

Introduction

At present, the amazing development of mobile Internet and information technology has gradually changed people's working style, learning style and thinking style, which made many changes in higher education. In his March 2015 government work report, Premier Li Keqiang elaborated on the "Internet +" plan of action to promote the combination of mobile Internet and other modern industries. Since then, the "Internet +" leap into a national strategy [1, 2]. However, the impact is far from being only in the modern manufacturing industry. Due to this radiation, the education industry has also put forward the development direction and goal of "Internet + Education" one after another [3]. As the name implies, "Internet + Education", with the aid of increasingly advanced and developed Internet technologies, and introduces it into the education system, actively improves the level of higher education informationization, and promotes the transformation of quality education resources from openness to openness and sharing, so that the modern education can be maximized spread [2]. This paper introduces the characteristic of "Internet + Education", the research status of "Internet + Education" in foreign countries and in China which include the integration and development of "Internet + Education" and "Double Creation" (Innovation and Entrepreneurship) Talents.

Characteristic of "Internet + Education"

Internet teaching is rich in educational resources and human-machine interface is friendly. It can arouse students' active learning. The teaching quality and teaching efficiency are greatly improved. Under the guidance of the teacher, students can search for information, analyze and summarize, according to individual learning needs to build knowledge, achieving personalized learning.

In internet education, students are in a dominant position, while teachers are in the leading position to promote the reform and innovation of teaching methods and teaching modes. At the same time, the teaching process has special requirements on teaching resources and teaching environment, and also promotes the development and construction of teaching resources and teaching environment.

Research Status of "Internet + Education" Abroad

In recent years, "Internet + Education" has spawned MOOCs, SPOCs, Micro classes, Flip classes, Educational APPs, and E-book cloud services.

MOOC is the Massive Open Online Curses, a product of the combination of the Internet and open education. It started in the United States and started to be popular all over the world in 2012. After the emergence of MOOC, some famous universities such as Harvard University and Yale

University, also conducted a strategic adjustment, and embarked on the layout of online education. In 2012, the MOOC online learning platform Coursera reached an agreement with the University of Antioch, where students from Antioch University underwent additional courses on the Coursera platform under the direction and management of their teachers, and Antioch gave credit to students for the appropriate courses. Coincidentally, the University of California, Berkeley also opened a precedent for recognition of MOOC credits. They recognized the MOOC course credits of those students transferred from California Community College to elective their MOOC courses. Then, Georgia State University was also willing to admit their students'MOOC course credits gained from other schools. In early 2013, Coursera's five courses were officially recognized by the U.S. Board of Education, marking the beginning of MOOC and other online learning courses from the edge of education to the ontology of education. In the same year, Udacity, another online learning platform, offered 5 elementary STEM courses to San Jose and Georgia Tech planned to enroll in a MOOC Computer Master. Since then, many universities had formally incorporated the MOOC into their curricula and had students choose electives [4].

On many occasions, SPOC (Small-Scale Privately-Served Courses) had also become the trend of building online courses in schools, which contained the respect of personalized content by "Internet + Education".

The University of Miami, Tennessee State University and the University of Puerto Rico used flip classes in succession and found that this learning method greatly enhanced students' participation and enthusiasm for learning, resulting in new breakthroughs in their learning outcomes.

In 2013, Rafael Gross-mann, doctor of the East Maine Medical Center in the United States, successfully used Google Glass during the operation and broadcasted the progress of the surgery in real time, which made on-site consultation, surgical monitoring and distance learning, etc. during surgery can be achieved in a simple way. This approach made teaching more realistic, expanding the students' knowledge and improving their enthusiasm and initiative of learning.

In addition, some IT companies at home and abroad had also practiced cloud education, such as Google, Hewlett-Packard, Microsoft, IBM's education cloud and Lenovo's education cloud, having achieved good results [5].

Research Status of "Internet + Education" in China

Origin of "Internet + Education". In March 2015, Premier Li Keqiang put forward the "Internet +" plan of action in the government work report. Since then, the "Internet +" had risen to the national strategic level and the education front had also put forward the development strategy of "Internet + Education." "Internet + Education" referred to actively promote the development of education information to achieve the sharing of quality education resources by the means of internet information technologies. It reshaped educational models, contents, tools, methods and systems with the thinking of the internet. It changed the teacher-centered teaching mode for thousands of years. It was the reconstruction of traditional education and teaching process [6].

Practical Exploration of "Internet + Education". In China, MOOC, micro-class, flip classroom, mobile, games, virtual reality and other fresh teaching methods gradually went into the classroom, triggering the changes of teachers role and curriculum model and so on. Shanghai Jiaotong University merged "MOOC" with "one screen and multiple display" technology to create a "cloud classroom" based on "Internet +" and realized "private custom" education of "optional courses and teachers' arbitrary". Huazhong University of Science and Technology appeared "Barrage Teaching" mode, that is, students send questions and put forward their views in the classroom, these would appear on the teacher's courseware screen, and then teachers adjusted the content and manner of teaching at any time according to feedback [3]. On September 18, 2014, Professor Guo Xuegang, Director of Digestive Liu Di, Xijing digestive disease hospital in Xi'an, successfully completed a remote rounds consultation with a pair of Google glasses, which was the first time that Google Glass technology had been used in remote clinics in clinical medicine [1]. All of these were innovative cases of relying on information technology and network platform to promote education development, teaching reform and teaching quality.

Meantime, the real-time exchange platform for teachers and students came into being as well. The CQQJ2313 dual platform was established by Chongqing Refinement Secondary School [7], the E-learning education platform was developed by Beijing Normal University, and the Internet Cafe was developed by Beijing Xiliu Information Technology Co., Ltd. [8].

At the same time, in order to establish a system that links the lifelong learning system, China started to run a credit bank that aimed at accumulating credits. Shanghai, Chongqing and other places had started the pilot bank credit operation. In fact, this was the recognition of learning needs during the development process of "Internet + Education".

In addition, online education products and platforms based on the "Internet +" industry model had also become more and more popular, such as MOOC platform, "100 Education" online free foreign language courses, Tencent classroom and Netease cloud classroom, etc. According to iResearch data, China's Internet education market reached 119.2 billion in 2015, which was expected to reach more than 200 billion in 2018.

Correspondingly, the education circles also started the discussion on "Internet + Education". On May 24, 2015, China Education Informatization Industry Technology Innovation Strategy Alliance (CEIIA) held heated discussions around "Internet + Education" and touched upon the core content of the combination of Internet and education such as education industry mode, learning mode and platform construction under the Internet situation.

In early September 2015, the Ministry of Education issued the Guiding Opinion on Solving the Education Informationization in an All-Round, Thorough and Thirteenth Five-Year Plan (Draft for Comment), which proposed to promote the transformation of the teaching contents and modes in various disciplines through information technology. In October 2015, the 15th China Education Informationization Forum on Innovation and Development focused more on "Internet + Education" to explore the in-depth integration of the internet with information technology and education. The promulgation of this series of documents had pointed out the direction for the development of "Internet + Education" and would surely bring far-reaching changes in the field of education.

In this context, the Ministry of Education of China actively called for the promotion of the construction of the "three links and two platforms" project, digital campus, micro-lectures, MOOC, online lesson preparation, online teaching and research, one teacher one excellent lesson, one lesson one teacher and simulation experiment training and many more.

Integration and Development of "Internet + Education" and "Double Creation" Talents Cultivation. At the 2014 Summer Davos Forum, Premier Li Keqiang called for "public entrepreneurship and innovation" and "Internet +" became a breakthrough point for college students' innovation and entrepreneurship education [9]. At present, "Internet + Education" has created a good environment for training undergraduates of local engineering colleges and universities to become independent learners, and promotes the self-improvement of undergraduates better. Innovative concept of "double invasive" talent is the "Internet + Education" training objectives.

Many colleges and universities had begun to actively introduce the internet industry into schools and set up incubating bases in schools to provide opportunities for students to start their own innovative practice and business [10]. In the theoretical education and practice exercises, the success rate of college students' entrepreneurship had been raised. For colleges and universities, students could also take advantage of the internet to start their own practice and business to realize the career development of students and the connotation construction of colleges and universities. Therefore, to carry out internet education for college students was exactly the embodiment of applied colleges and universities [11].

According to statistics, the proportion of college students starting their own businesses each year was 6%, but the success of entrepreneurship accounts for only half of the total number of businesses. According to the data provided by the Shanghai Municipal Party Committee in 2012, the successful rate of entrepreneurship has risen by 2% in recent years. Data showed that, the National Undergraduate Entrepreneurship Competition in September 2014, 60% of the projects were mainly concentrated in the internet and mobile internet [12].

Students accepted education through the internet. First of all, students will have a deeper understanding of the internet industry and find certain innovative practice and business opportunities there. This will motivate innovative practice and entrepreneurship and then prepare for starting an undertaking. Second, students can master a certain amount of internet technologies and abilities, integrate innovative ideas into the products of startups, and effectively improve the success rate of starting a business. Thirdly, "Internet + Education" has effectively expanded social network relations and thus formed a strong customer base for Internet entrepreneurship. Finally, students can take advantage of the internet education at colleges and universities as a turning point. With the help of the internet platform, students can set up the first market and experimental field for initial start-up, laying a solid foundation for the success of innovation and entrepreneurship in the future.

In summary, colleges and universities carrying out internet education for college students have an important impact on their innovation and entrepreneurship. Therefore, to carry out internet education for college students is just a manifestation of conforming to the trend of the times and serving college students.

Conclusion

Social development has entered an era of "Internet + Education." This era poses more demands and challenges for the reform of higher education and personnel training. It also prepares more opportunities. We should adjust our training strategies and methods in accordance with the social needs in the context of "Internet + Education" and follow the pace of the development of the times so as to cultivate more high-caliber talents and outstanding talents with outstanding capabilities. "Internet + Education" is not only the need of education reform itself, but also the demand of regional economic development. The impact of the internet on education is also comprehensive, such as accelerating the internationalization and generalization of education and solving the problem of education equity. However, the attempt to solve all educational problems through the internet is not yet realistic. We need to update educational concepts, education contents and teaching methods constantly making use of internet thinking. We need to constantly study and absorb new technologies and adopt new approaches to integrate various resources and form a system of synergy to promote the formation of "Internet + Education" and achieve the ultimate goal of enhancing education quality and national competitiveness and achieving world harmony.

Innovative concept of "double invasive" talent is the "Internet + Education" training objectives. However, the "internet + education" in colleges and universities have not yet formed a perfect education system for training creative and pioneering professionals. It still has a long way to go to achieve the social requirement of talent. Under the current situation, the research on the change of "Internet + Education" is a hot topic both in theory and practice of higher education in our country. What kinds of changes of learning methods and teaching methods are brought by "Internet + Education" to higher education? What are the challenges? How to cultivate "double-type" personnel training based on "Internet + Education”? All of these questions are worth studying.

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