SMART EDUCATION PROMOTING HIGHER EDUCATION BILINGUAL COURSES WITH VALUE EDUCATION

Yuan Yuan Liu[1,2] *, Lu Lu Chen[1], Min Yu Zhao[1], Fa Ying Zhang[1], Cheng Yang[1]

[1]Baltic Sea Region Research Center, Guizhou University, Huaxi Road, Guiyang 550025, China

[2]School of Management, Guizhou University, Huaxi Road, Guiyang 550025, China

Abstract

This study employs value education of China higher education in the context of bilingual courses and smart education to illustrate the systematic work revolving them. This study reveals "value education" of China higher education together with how cores of higher education are achieved in Chinese higher education system. On the other hand, this study focuses on the issues "smart education" and its components. Therefore, applying smart education for value education in bilingual courses. This study presents a system combining "value education", "smart education" and "bilingual courses", and explains how they are integrating with each other, answering challenges in the new era of China.

Keywords: *smart education, higher education, bilingual courses, value education*

1. INTRODUCTION

Smart education, a new notion, describes a brand-new learning and teaching process in the information era (Lin et al., 2018 & Zhu et al., 2016). Digital revolution has brought the development of new technologies, and the emerging new technologies are changing education, as they enable both teachers and students to teach and to learn more effectively, efficiently, flexible and comfortable (Zhu et al., 2018), as the smart devices access digital resources and immerse in both personalized and seamless teaching and learning (Zhu et al., 2018). As the widely spread technologies and the growth of the notion, smart education has gained increased attentions in the digital age (Zhu et al., 2018). Advancing technologies are changing education of the world. However, even thought teaching and learning methods are changing rapidly, the development of desirable values has long been a central concern of education (Duman, 2014). For decades educational scholars have recognized the education institutions' roles in value education and in moral development (Dewey, 1934; Goodman & Lesnick; 2001; Nucci, 2001 & Wynne, 1988). Values are the core leading people's behaviors (Kunduroglua & Babadogan, 2011), and education is defined as a process leading to a behavioral change in an individual through experience, instructing individuals about value education. Values are steady and deep beliefs, and they are valuable for society and people who behave appropriate for these values (Kohlberg & Selman, 1972; Maslow; 1968). One of the purposes of education is to "furnish students with affective behaviors". Values students get with values education affect families and circle of friends, then acquaintances and communities (Kunduroglua & Babadogan, 2011).

At present, all higher education institutions are trying to combine professional courses, ideological and political courses and comprehensive quality courses to achieve the educational purpose. In the education courses of science and engineering majors, the teaching mode has also begun to be changed, the ideological and political elements are closely combined with the curriculum, and the ideological and political elements are infiltrated into the curriculum. From the perspective of pedagogy, especially curriculum theory, we should understand, study and implement "Curriculum Ideology and politics", make an article on the establishment of a curriculum system integrating explicit curriculum and implicit curriculum, start with the construction of an ideological and political education implementation system that ensures the wide participation of all staff, advocate the "four in one" Ideological and political education mode of teaching, dialogue, communication and service, and establish a scientific ideological and political education quality evaluation system.

2. MATERIALS AND METHODS

2.1. Smart education

Smart education has been defined differently in different contexts of countries (Han & Xu). Being "smart" has been widely discussed. Therefore, the "smart" in "smart education" reflects "intelligent education with smart simplified teaching methods, together with intelligent talents providing learners with personalized learning services in a better value orientation". Meanwhile, deep learning techniques are created in "smart education" to build an intelligent environment that could be cultivated to improve the quality of thinking and enhance the ability to act. Then components of smart education have been explored as "smart environment", "smart education", and "smart learning", or from three perspectives as "learners", "technologies", and "environment". Moreover, for educational environment, "smart" refers to engaging, intelligent and scalable. Therefore, "smart" refers to wisdom and intelligence and "smart education" means wisdom and intelligence in education. "Smart" also means to accomplish purposes effectively and efficiently from a technological perspective (Spector, 2014). As a result, "smart education" might refer to wisdom and intelligence in technologies to effectively and efficiently promote educational tasks in engaging, intelligent and scalable environments.

The essence of smart education is to create intelligent environments by applying smart technologies to support smart pedagogies and smart learning (Zhu & He, 2012). In this essence, smart education helps providing an environment for smart pedagogies which is facilitated as to provide personalized learning services and to empower learners to foster their talents of wisdom with better value orientation, higher thinking quality, and stronger competencies. Thereafter, a framework is developed according to the essence and the mechanism behind the essence. Fig. 1 shows the framework of smart education which is composed of smart environments, smart pedagogy, and smart learners. The framework shows that smart education emphasizes an ideology for pursuing better education, addressing needs for smart pedagogy, and smart learning environments, advancing educational goals to cultivate and develop smart learners.

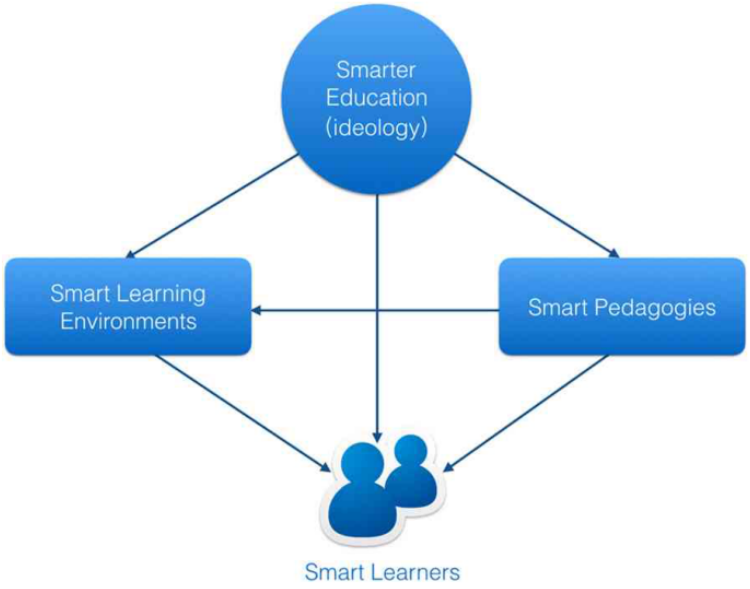


Fig. 1. Smart education framework

Source: Zhu Z, Yu M & Riezebos P 2016, "A research framework of smart education", Smart Learning Environments, vol. 3, no. 4.

2.2. Value education in higher education, value education within bilingual courses, value education within bilingual courses in smart education

Value education is not a major, nor a specific course, but a educational and teaching concept (Wang et al., 2022). In the context of China higher education, value education should be the appropriate translation to "课程思政", instead of "course of ideology and politics". From Chinese search engine Baidu, it is easily to find how "China value education" is articulated. The main form of value education is to integrate the elements of ideological and political education, including the theoretical knowledge, value concepts and spiritual pursuit of ideological and political education, into each course, which has a subtle impact on students' values and behaviors. Value education in China is the work of cultivating students how to be a person. It solves the questions of "what kind of person to cultivate" and "how to cultivate people". The fine traditions of China and the Party are the core of value education. It adheres to the principle of moral education, pays attention to strengthening the education of students' world outlook, outlook on life and values, inherits and innovates the excellent traditional Chinese culture, and actively guides contemporary students to establish a correct national outlook, historical outlook and cultural outlook, so as to cultivate more talents with comprehensive development of morality, intelligence, physique, art and labor for the society. China Ministry of Education launches a document in 2022 about developing value education in the new era of China. The document describes and defines a framework of value education in the new era of China, which is a guiding diagram of China higher education. The framework contains not only how to implement value education in the process of higher education but also a mechanism of integrating all parts of the value education of China. It is shown in Fig. 2.

Value education in the context of China education is more or less similar to the value based public relations education (Azionya et al., 2019). Involvement in social issues, ethical considerations should be applied to organizational, professional and societal levels, and placement of identity, representation, production, consumption and regulations, are parts of value based public relations education. Complex social issues require active citizenry and diverse stakeholder partnerships, various partners such as charities, local government departments and intergovernmental organizations are working together to expose students to the real society and learn to meet needs of the society in the perspectives of values which will promote growth and development of the society. Azionya et al. (2019) explores a model Value Based PR Education in a Poly-contextual Society, which expresses similar essences and cores of value education in higher education in the context of China. The model is shown in Fig. 3.

Language is not only a tool for transmitting information, but also a carrier of national and national culture (Wang et al., 2022). Higher education institutions are employing more and more bilingual courses, which will make students have a subtle comparison of different countries and cultures in the same profession field. Comparing which is good or which bad in which cultural context is definitely not the core of higher education. Therefore, when bilingual teaching activities are used, special attentions should be paid to the course value education. Teaching reform of bilingual courses is of great practical significance to enable students to cultivate correct world outlook, outlook on life and values while learning professional knowledge in foreign languages.

Therefore, utilizing smart education for value education in bilingual courses of higher education is composed of at least three levels, which are "smart education", "value education" and "bilingual courses of higher education". According to theories of each of the dimensions, it could be concluded that value education for higher education bilingual courses in smart education is a systematic work which promotes education effectiveness and efficiency with advancing technologies in smart environments with value education and smart pedagogy for smart higher education students to gain professional knowledge with foreign language and value of the world, societies and personal lives.

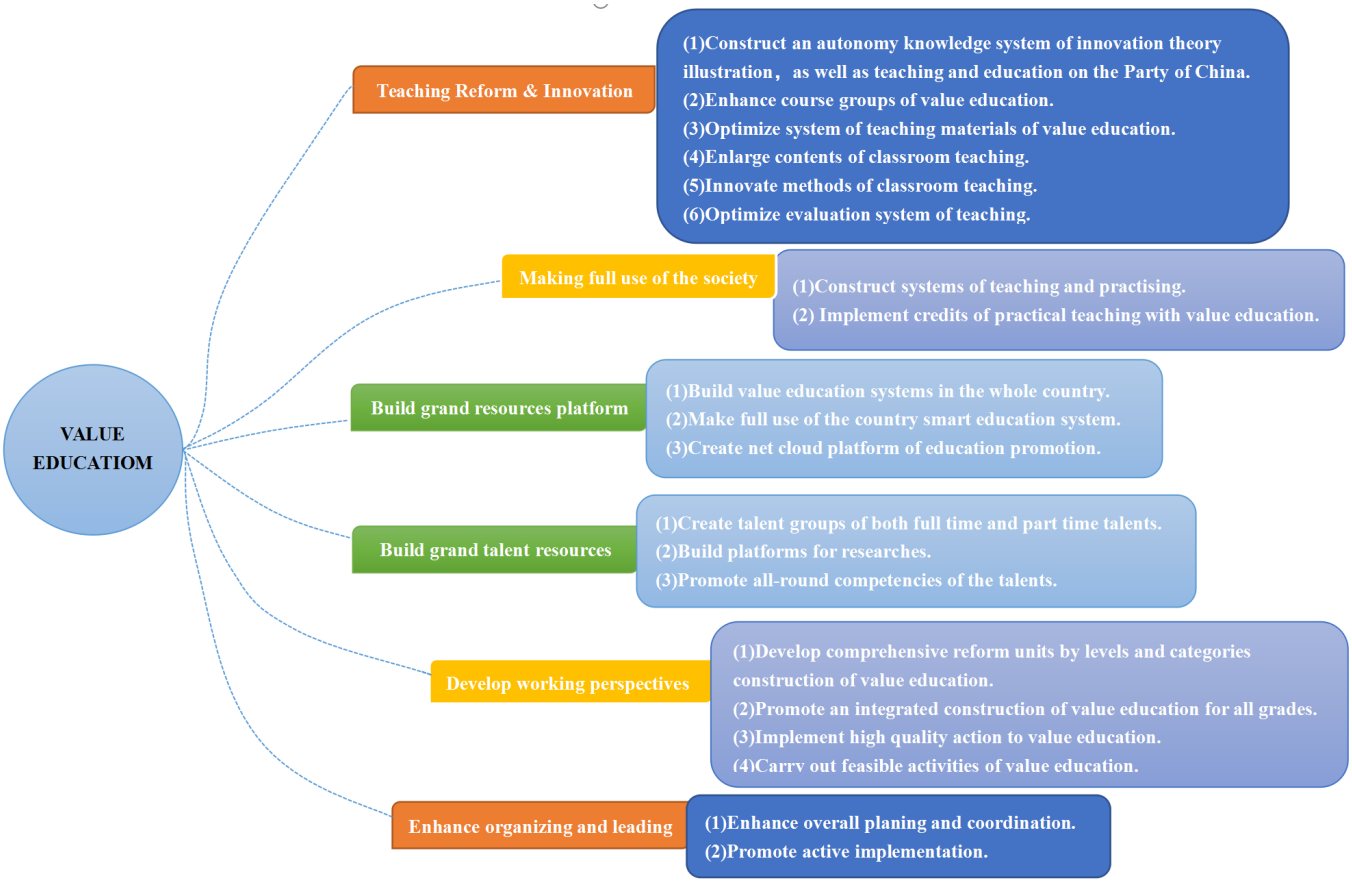


Fig. 2. Diagram of China Value Education System

Source: Own source

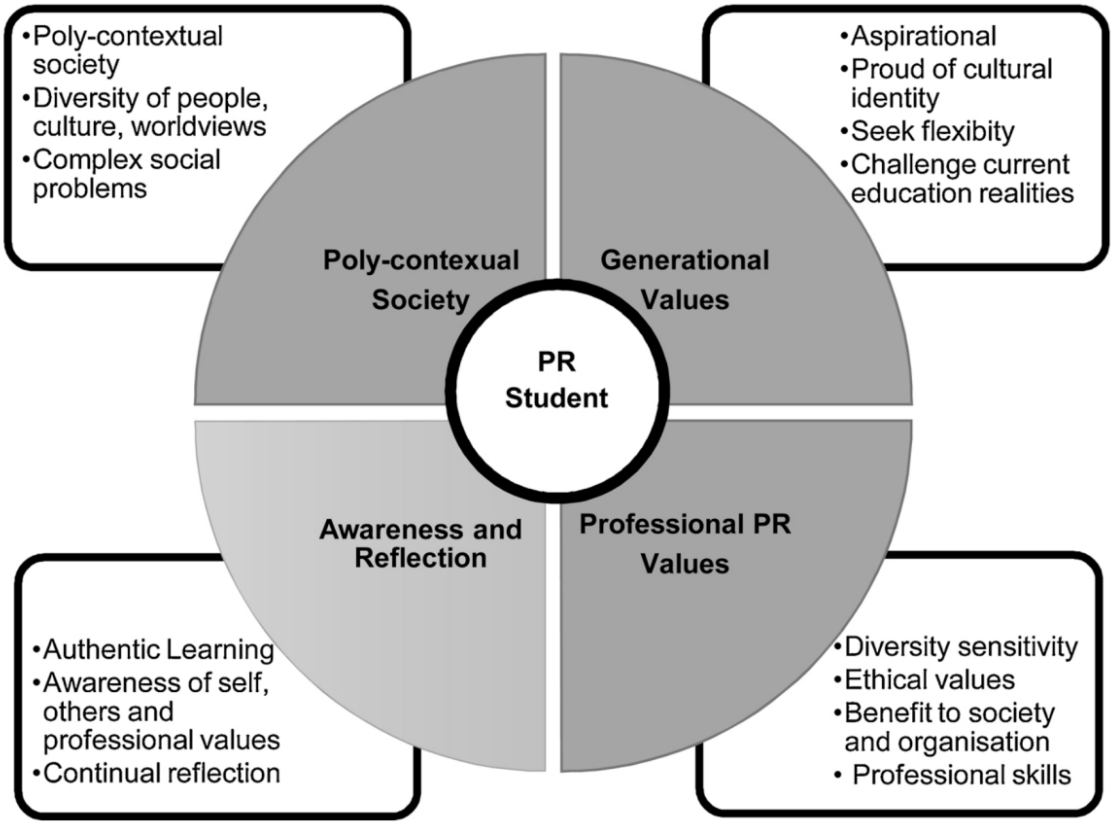


Fig. 3. Model for Value Based Private Relations Education in a Poly-contextual Society

Source: Azionya, C, Oksiutycz, A & Benecke, DR 2019, "A model for value based public relations education in a diverse and poly-contextual society", Public Relations Review, vol. 45, p.5.

3. RESULTS

Smart education is changing higher education systems of the world. This study borrows China higher education system to illustrate the application of smart education in the context of value education for bilingual courses of China higher education. As a result of illustrating the related theories of "smart education", "value education", "bilingual courses of higher education" respectively, this study concludes a framework for value education in higher education bilingual courses with smart education. The results and the framework will be explained from three main components of smart education, which are "learners", "technologies", and "environment".

First of all, in the framework of smart education, learners are one of the most important outcomes, as "smart learners". From Figure 4, it could be concluded that either smart education (ideology), smart learning environment or smart pedagogy, are focusing on the outcome "cultivating talents". That is why arrows of Figure 4 are all focused on smart learners. Placing smart learners in the context of value education for bilingual courses, smart learners which are the higher education students should benefit from the rest of the two elements "technologies" and "environment". Therefore, the main target of value education for bilingual courses within smart education is to promote learning outcomes of learners competencies and values.

Secondly, advancing technologies are helping the system achieve its goals. Technologies, as supporting bases and the driving force changing higher education, are inevitable essences and elements of smart education. In the system, promoting learning outcomes, effectiveness and efficiency are the basic needs to apply advancing technologies. Creating possibilities for bilingual environment and value education environment are tasks for advancing technologies. Therefore, technologies should also technically guarantee the implementation of bilingual courses and activities of value education.

Last but not least, value education and dual languages are the environments of the system of smart education. Concerning the environments, no matter which ever smart pedagogy will be applied, teaching goals of bilingual courses and value education are the final tasks. Either language skills, professional competencies or values for the world, the country, the society and personal life are still expected outcomes of teaching activities and the education. Creating and keeping suitable environments to reach the goals are prerequisite of the smart education. Contents input together by teachers and learners will generate the environment with the help of advancing technologies.

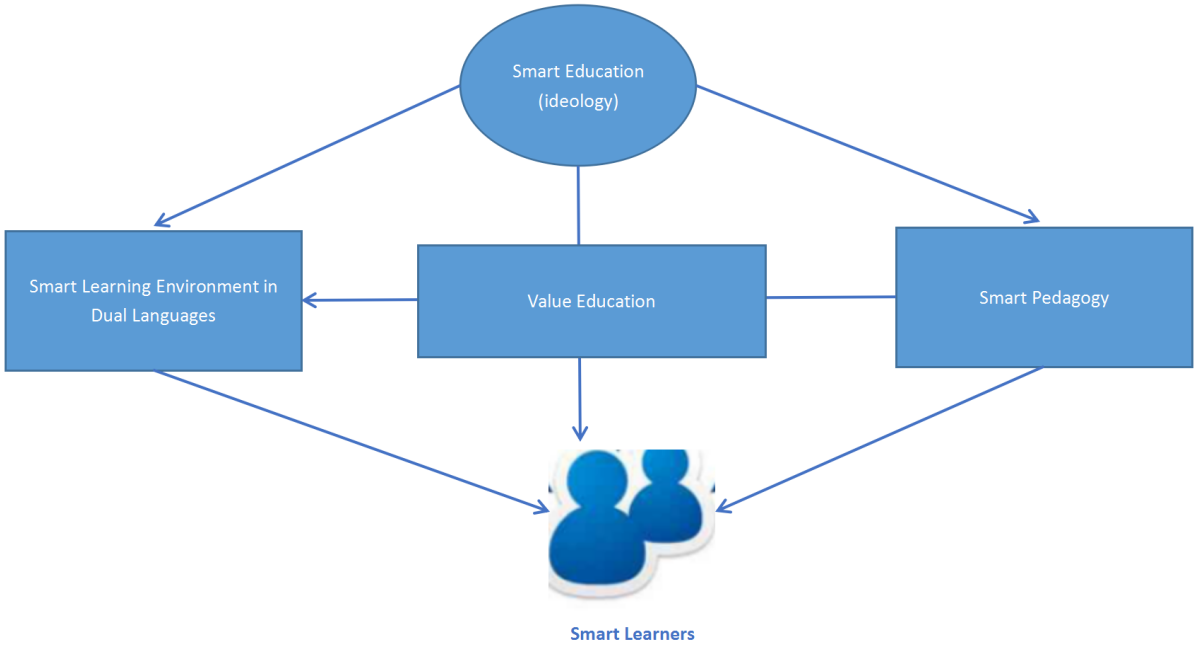


Fig. 4. Value Education in bilingual Courses of Higher Education in the Smart Education System

Source: Own source

4. DISCUSSION

At the press conference held by China Ministry of education on March 29, 2022, the Department of higher education of the ministry introduced the construction and application of the "smart education platform for higher education in China". It is reported that at present, the proportion of Chinese college teachers using mixed teaching has increased from 34.8% before the epidemic to 84.2%, and a set of digital development plans for higher education with Chinese characteristics, including concepts, technologies, standards, methods and evaluation, has been basically formed. The first batch of 20000 online courses are high-quality courses selected from 50000 courses built by 1800 universities. The courses cover 13 disciplines and 92 professional categories, allowing more college teachers, students and social learners to enter the online classes of various higher education institutions. Smart education has become a widely spread system work in China and is making profound influence in China higher education system. Both teachers and students will be benefited from the effectiveness and efficiency of the smart education system. Chinese experiences in applying smart education will soon be promoted in the world wide.

Smart education mainly refers to the use of cloud computing, big data, Internet and other information technologies to provide new ways for education in teaching management and teaching methods, and promote the informatization reform of education. In short, smart education is the advanced stage of the development of information-based education and a new educational form that makes education better serve human development and social and economic construction. At present, driven by the concept of

"talent power", the pace of education reform has never stopped. It is an eternal theme of China's education development to comply with the needs of the times and constantly carry out education and teaching reform. The birth of the intelligent education concept has further promoted China's education and teaching reform, further realized the optimal allocation of education resources, eliminated the differences in education resources between regions, and laid a solid foundation for improving China's overall education and teaching level. In a word, wisdom education has pointed out the direction for the education and teaching reform at all stages in China, and also made the relationship between education and economic construction in China closer.

The most prominent feature of smart education is that it is closely related to the Internet foundation and enables other forms of education to be realized. First, wisdom education has the characteristics of sharing. With the promotion of Internet technology, smart education breaks the restriction of time and space through the Internet, so that students in all regions can enjoy high-quality teaching resources. For the continuing education of higher education, the characteristics of sharing further expand the audience of students, so that students in need can actively participate in it. Secondly, wisdom education is characterized by interactivity. In the final analysis, teaching is the "teaching" of teachers and the "learning" of students. It realizes the transmission of knowledge structure, and its essence is still an interactive process. With the support of information technology, students and teachers can realize all-round teaching interaction, achieve high-quality teaching interaction, and further enrich the forms of teaching. Finally, wisdom education has the characteristics of autonomy. Under the influence of lifelong learning, everyone has the freedom and resources for continuous learning. Intelligent education further implements the concept of lifelong education and further expands people's teaching resources. In the continuing education of higher education, people's freedom and initiative in learning will be further released, and they can choose appropriate learning content according to their own needs in work to meet people's needs of "always and everything". The operation and development of smart education has promoted the development of education at all stages, and also made educational resources serve the current social development to the greatest extent. Therefore, under the background of smart education, higher education continuing education should reasonably allocate various resources to maximize the value of smart education.

In terms of educational concept, smart education is mainly to establish the idea of promoting educational reform with technology. Promote the balanced and high-quality development of education through the construction of smart campus and smart education, so as to promote the realization of education equity. High-quality education resources are shared by all people and serve people's lifelong learning, so as to promote the realization of a learning community and even a learning society. Realizing the transformation from traditional higher education institutions to high quality education oriented needs the supports from means of advancing technologies. Put the construction of smart education in the primary position of the development of education needs an overall planning, a layout and implementation, and promotes the overall improvement of education with the development of smart education. It is committed to fully realizing the deep integration of technology and education, forming an intelligent seamless connection between technology and education, and promoting the development of new learning forms and talent training models in the future. Establishing the idea of running education in the whole society gives full play to the leading role of government financial funds, and stimulate more social funds to invest in the construction of smart education. Meanwhile, realizing the transformation from "teacher-centered" to "student-centered" also needs the supports from smart education. "Teacher-centered" is the teaching mode of traditional education. Although this mode could give full play to the leading role of teachers, it ignores the initiative of students. Smart education is the education of respecting students' personality and teaching students according to their aptitude. Under the background of smart education, it is necessary to realize the transformation of the teaching mode from "teacher-centered" to "student-centered", which could not only give play to the leading role of teachers, but also fully reflects the dominant position of students. Last but not least smart education realizes the "fundamental, multi-dimensional and all-round" reform of the learning mode. In the digital education stage, learners find learning resources through the network, while in the intelligent education stage, learning resources in the learning environment such as "cloud" and "end" will be automatically and intelligently pushed to learners through learning analysis technology to realize information finding. In

the future, learning and teaching will be open to the whole society, ubiquitous and collaborative, and students' learning methods will undergo fundamental, multi-dimensional and all-round changes: change passive learning into active learning, change individual learning into collaborative learning, change mechanical learning into inquiry discovery learning, and change network-based learning into cloud based mobile learning and ubiquitous learning.

5. CONCLUSIONS

Smart education has injected new teaching concepts and means into the bilingual courses with value education. It integrates bilingual courses and value education with modern technology, changes the traditional education mode and updates the managerial systems of the higher education institutions, and promotes the sharing of educational resources. The value education in bilingual course adapts to the changes of the international situation. With the whole world as the background, the background and context of value education might change. The bilingual courses with value education should meet the needs of the development at home and abroad. The high-quality development of economy and society requires that the curriculum of bilingual courses adapt to its corresponding values. The specific age of students, the problems and questions students facing the world and life, the confusion of thinking, and the characteristics of receiving education should be adapted to the curriculum of bilingual courses with value education. The adaptability of value education is the key factor whether it could really play its due role in the bilingual contexts.

First, we should adapt to the development needs of the world, the country, society and individuals. Either smart education, bilingual courses or value education has its vital responsibilities of helping students being adaptive to the world, to the country and to themselves. Therefore, the vital image of any education system should be the philosophy of integrating human beings with his environment. Secondly, it is necessary to adapt to the characteristics of the new era and the practical needs of economic, cultural and social development, and adhere to the unity of political, ideological, academic and professional nature. Education plays an important role in shaping human's lives, while value education changes their behaviors. Being adaptive to shape and to change is challenging for human being. Righteous values will help students to be involved as members of the society, pushing the society moving forward. Last but not least, it is necessary to meet the needs of the growth and development of young higher education students. Being respond to the concerns of students, educating and guiding students to combine the specific goals of learning and struggle with the great goal of national rejuvenation, and establishing lofty ambitions seem to be life goals of students. In today's world, the changes of a century and the world-wide situation of a century are interwoven and superimposed, which all put forward new requirements and challenges to value education. Only by emphasizing the adaptability of value education and continuously deepening the reform and innovation of value education could we truly realize the leading functions of higher education.

ACKNOWLEDGMENTS

The research results are based on a project of Higher Education Research Project of Guizhou University with the project title "Research on Bilingual Teaching and Education Reform for Globalized Higher Education" (GDGJYJ2017016). Special thanks to Office of Philosophy and Social Science of Guizhou University for funding supports. Sincere thanks are also given to students in the research team for collecting data.

REFERENCES

1. Lina, JJ, Pu, HT, Li, YB & Lian, J 2018, "Intelligent Recommendation System for Course Selection in Smart Education", *Procedia Computer Science*, vol. 129, pp. 449–453.
2. Zhu Z, Yu M & Riezebos P 2016, "A research framework of smart education", Smart Learning Environments, vol. 3, no. 4.

3. Duman, G 2014, "Evaluation of Turkish preschool curriculum objectives in terms of values education", *Procedia - Social and Behavioral Sciences*, vol. 152, pp. 978-983.
4. Dewey, J 1934, *A common faith*, New Haven, CT: Yale University Press.
5. Goodman, JF, & Lesnick, H 2001, *The moral stake in education: Contested premises and practices*, Boston, MA:Allyn& Bacon.
6. Nucci, L 1991, "Doing justice to morality in contemporary values education", In J. BENNINGNA (Ed.), *Moral character and civic education in the elementary school*, London: Teachers College Columbia University.
7. Wynne, E 1988, "Balancing character education and academics in the elementary school", *Phi Delta Kappa*, vol. 69, no. 6, pp. 424–426.
8. Kunduroglua, T & Babadogan, C 2011, "How do the students' views about the values in the 'values education program integrated into 4th grade science and technology instructional program' change before and after the delivery of the program? ", *Procedia Social and Behavioral Sciences*, vol. 15, pp.1983-1987.
9. Kohlberg, L & Selman, RL 1972, Preparing school personnel relative to values: a look at moral education in the schools. ERIC Clearing on Teacher Education.
10. Maslow, AH 1968, *Toward a psychology of being*, New York: Van Nostrand Reinhold.
11. Han, ZC & Xu, AF 2021, "Ecological evolution path of smart education platform based on deep learning and image detection", *Microprocessors and Microsystems*, vol. 80, 103343.
12. Spector, JM 2014, "Conceptualizing the emerging field of Smart learning environments", *Smart Learning Environments*, vol. 1, no. 1, pp. 1-10.
13. Zhu, ZT & He, B 2012, "Smart Education: new frontier of educational information", *E-education Research*, vol. 12, pp. 1-13.
14. Wang, RR, Liu HH, Zhang, W, Wu, YQ, Song, YP & Hu, AR 2022, "Research on the reform method of bilingual ideological and political teaching based on action orientation", *Teaching Magazine of China Multi-media and network*, vol. 1, pp. 37-40.
15. Azionya, C, Oksiutycz, A & Benecke, DR 2019, "A model for value based public relations education in a diverse and poly-contextual society", *Public Relations Review*, vol. 45, 101767.