

therapy and personalized medicine. Belarus and China can cooperate in these cutting-edge fields to jointly promote the development of biomedicine.

As the global demand for renewable energy continues to grow, Belarus and China can jointly study renewable energy technologies such as solar, wind and biomass energy, as well as energy storage and efficiency improvement.

With the increase in cyber-attacks and data leaks, cybersecurity has become a global challenge. Belarus and China can jointly research cybersecurity technologies such as encryption algorithms, intrusion detection systems and security protocols.

Thus, the study underscores the dynamic nature of Belarus-China cooperation, particularly in education and scientific research. Student and teacher exchange programs have fostered mutual understanding, enhanced academic achievement, and promoted cultural exchange. Joint research initiatives have driven innovation in fields such as advanced manufacturing, biomedicine, and environmental sustainability, reflecting the strengths of bilateral collaboration. However, challenges such as language barriers, cultural differences, and limited funding highlight areas for improvement. Strengthening language training, respecting cultural diversity, diversifying funding sources, and enhancing project management systems are essential strategies to overcome these obstacles. By addressing these challenges and building on existing successes, Belarus and China can continue to strengthen their partnerships, contributing to academic excellence, technological progress, and a deeper cultural connection between the two nations.

**UDC 378.02:37.016**

***Li Hui***

*Belarusian National Technical University (BNTU)*

*Scientific supervisor: Malashenko E.A.,*

*Ph.D. in Education, Associate Professor*

***Minsk, Republic of Belarus***

*Belarus State Economic University (BSEU)*

[\*malashenko@bseu.by\*](mailto:malashenko@bseu.by)

## THE CONCEPT OF ONLINE EDUCATION IN CHINA'S HIGHER EDUCATION

**Abstract:** *With the rapid development of information technology and the widespread adoption of the Internet, China's higher education system is undergoing significant transformation. Online education has emerged as a flexible and resource-efficient complement to traditional education. This paper examines the concept of online education in China's higher education system, exploring its connotation, characteristics, and practical pathways. By analyzing challenges such as cultural constraints, information literacy, and structural mechanisms, the study highlights opportunities for integrating ICTs into education. The paper reviews synchronous, asynchronous, and interactive teaching models, offering insights for promoting equity, modernization, and quality in education.*

**Keywords:** *Online education, higher education, China, concept, ICT integration, synchronous learning, asynchronous learning, educational challenges, pedagogical models, e-learning.*

**Ли Хуэй**

*Белорусский национальный технический университет (БНТУ)*

*Научный руководитель: Малашенко Е.А.,*

*кандидат педагогических наук, доцент*

**Минск, Республика Беларусь**

*Белорусский государственный экономический университет*

[malashenko@bseu.by](mailto:malashenko@bseu.by)

## КОНЦЕПЦИЯ ОНЛАЙН ОБУЧЕНИЯ В СИСТЕМЕ И ВЫСШЕГО ОБРАЗОВАНИЯ КИТАЯ

**Аннотация:** *С развитием информационных технологий и повсеместным распространением Интернета система высшего образования Китая переживает значительные изменения. Онлайн-образование стало гибким и ресурсосберегающим дополнением к традиционному обучению. В статье рассматривается концепция онлайн-образования в системе высшего образования Китая, сделана попытка проанализировать ее содержание, особенности и практические пути реализации. Подчеркнуты вызовы, такие как культурные ограничения, цифровая грамотность и структурные механизмы, а также возможности интеграции ИКТ в образовательный процесс. Рассматриваются синхронные, асинхронные и интерактивные модели обучения, предлагаются идеи для продвижения равенства, модернизации и качества образования.*

**Ключевые слова:** *Онлайн-образование, высшее образование, Китай, концепция, интеграция ИКТ, синхронное обучение, асинхронное обучение, образовательные вызовы, педагогические модели, электронное обучение.*

With the rapid development of information technology and the widespread popularity of the Internet, China's higher education system is undergoing a profound transformation. As an emerging educational model, online education is gradually becoming an important part of the traditional education system with its unique flexibility, convenience and resource sharing. In this context, it is particularly important and urgent to explore the educational concept of online education in China's higher education system.

The educational concept of online education refers to the fundamental views and guiding ideas of educators on educational goals, educational content, educational methods and educational evaluation in the network environment. It is not only related to the healthy development of online education, but also affects the reform and development of the entire higher education system. In the process of promoting online education, China's higher education system needs to form a set of concepts that adapt to the development of the times, conform to the laws of education, and have Chinese characteristics.

This paper aims to deeply analyze the educational concept of online education in China's higher education system and explore its connotation, characteristics and practical path. First, this paper will review the development of online education in China and analyze its status and role in China's higher education system. Through in-depth research on the educational concept of online education, this paper hopes to provide theoretical support for the reform and development of China's higher education system and provide reference for the practice of online education.

In the context of the new era, exploring the educational concept of online education in China's higher education system is of great significance for promoting educational modernization, achieving educational equity, and improving educational quality. The Chinese government has attached great importance to the development of e-learning since its emergence in the 1990s. As a consequence of the implementation of a series of policies, China has made significant achievements in the e-learning arena with respect to infrastructure construction, production of resources, academic

education, non-academic training, and education for disadvantaged groups. However, due to the constraints of China's traditional culture, information literacy, and educational mechanisms, challenges have emerged in the implementation of e-learning that need urgently to be addressed. As e-learning in China continues to grow, major research areas such as students' and teachers' perspectives on developments in e-learning, teachers' pedagogical capacity and ongoing professional development in e-learning settings, and the production of more convenient and useful e-learning resources, are likely to be topics of continuing research interest.

This paper will explore the challenges to and opportunities for e-learning in China from the perspective of integrating ICTs into China's educational systems. According to the National Educational Technology Plan 2000, 'E-Learning: Putting a world-class education at the fingertips of all children', e-learning has the potential to enhance learning and improve student achievement using new and emerging technologies (US DoE, 2000). Such technologies are transforming the sources of knowledge – from teachers to computer networks, multimedia, learning websites, e-libraries, and online courses (Research Institute of Shanghai Academy of Intellectual Development, 2001). The use of ICTs in education has given rise to diversified pedagogical models and methods, including networked learning, multimedia education, online and open education, and blended learning. In China, the term 'ICT in Education' is used interchangeably with the more general term 'e-learning'.

China first initiated the integration of ICTs into education in the 1990s. Major programmes such as the '211 Project' (MOE, 2011a), '985 Project' (MOE, 2011b), 'Education promotion plan of action for the 21st century' (MOE, 1998), 'Rural elementary and secondary school distance education project' (MOE, 2005), 'Campus computer network construction project for universities in West China' (MOE, 2002), 'Networks between schools project' (MOE, 2001) and a series of other ICT in education projects have been launched by educational administrative authorities at all levels, including in schools.

Distance education is a systematically organized form of self-study in which the consultation of students, the preparation of learning materials, and the guarantee and supervision of students' achievements are carried out by a team of teachers [Козленкова 2009]. Each member of this team has a high sense of responsibility. It is possible to eliminate distances through media means, which can cover long distances. It is also a method of imparting knowledge, skills and attitudes, rationalized by the application of the principles of division of labor and organization and the widespread use of technological media. In particular, the purpose of reproducing high-quality teaching materials is to make it possible to teach a large number of students at the same time where they live. It is an industrialized form of teaching and learning. It is a general term for education organized by various institutions or social institutions in which teachers and students are relatively separated in time and space, and the teaching and learning behaviors are connected, interacted and integrated through various educational technologies and media resources.

Distance education is a form of self-study and a form of teaching. The form of self-study is only one aspect of distance education, not the whole meaning. Distance education is a form of education relative to regular school education, and it belongs to the category of educational work or educational activities implemented by educational institutions; while distance education is a teaching method relative to traditional classroom teaching, and it belongs to the category of teaching behavior between teachers and students [Kozlenkova 2009].

There are two concepts at different levels, just like the difference between school education and classroom teaching. It is easy to distinguish distance education from distance education based on the two corresponding relationships. The concept of distance education is larger than that of distance teaching. In addition to distance teaching, distance education also covers other fields such as educational information resource development, distance education system construction, and management; and distance education is the core of distance education work. The two should be defined or expressed separately and should not be confused. There are many modes of online

education in China. Different modes have different characteristics and are suitable for different learning forms. The following ten modes are listed.

1. *Synchronous online teaching mode* is a mode in which teachers and students interact and teach at the same time in different time and space. This mode can generally use live broadcast tools to build virtual classrooms, which can realize one-to-one or one-to-many synchronous online teaching. The video conference of the live broadcast system can basically meet the requirements of this type of mode.

Generally speaking, the live broadcast system integrates the multi-person audio and video communication, presentation display, text discussion, etc. required for group teaching, and can be displayed on multiple terminals such as tablets, mobile phones, and computers. The core feature of this teaching mode is that the space for teaching and learning is not together, but the time is synchronized.

2. *Asynchronous online teaching mode* refers to the separation of teacher teaching activities and student learning activities in time and space. This mode can adapt to students' flexible time investment, allowing students to flexibly control their time, self-adjust their learning pace according to their personal learning characteristics, self-control their learning progress, and realize the 4A (Anyone, Anytime, Anywhere, Anything) learning method.

3. *Collaborative learning model based on learning community* is an important form of online teaching, which generally includes three dimensions: teaching, social interaction and platform technology support. The learning community does not pursue the real-time nature of interaction, but emphasizes supporting students' cognitive improvement through a variety of learning resources and asynchronous interaction. In this collaborative learning model based on learning community, generally speaking, teachers first design the topic of discussion, then provide students with some resources, design some activities, and then students discuss with students. At the same time, they can also retrieve some resources to further enrich the discussion of the problem. Then based on these discussions, the learning results are generated, and then knowledge transfer is done, and finally a deep understanding of knowledge is achieved. In this

process, teachers guide the entire student participation process as a whole, and provide evaluation and feedback. This is a typical learning model based on learning community.

4. *Precision teaching model based on learning situation analysis tools* basically includes five key steps: learning situation diagnosis, setting goals, online teaching, analyzing the nearest development zone, and personalized compensatory teaching. The most important thing is to use the data generated during the students' learning process to analyze the students' existing development zone and the closest development zone. When the students are closest to the development zone, the teachers will provide corresponding support and learning services to guide the sustainable development of students in the closest development zone. Based on this teaching model, it generally includes three main links. One is to teach based on data. The second step is to teach students in accordance with their aptitude based on data. The third is to promote teaching based on data. The significance of learning situation analysis lies in providing a basic basis and important guidance for teaching pre-setting. In addition, it can provide important feedback for the regulation and generation of classroom teaching activities. It can provide important sub-resources for teaching generation. In addition, it can also provide rich materials and useful inspiration for the generation of teaching theory and learning theory. The main contents of learning situation analysis include: students' knowledge reserves, students' ability and literacy, students' emotions, attitudes and values, and the overall learning situation of the class.

5. *In Online flipped classroom teaching mode*, students can learn the course content online before class, do application exercises and participate in discussions in the online live classroom. Online flipped classrooms require students to self-study course content by watching micro-classes online, reading materials online, and completing online tests before class. The teacher mainly answers students' questions, clarifies relevant concepts, inspires online discussions, and guides students to conduct online exchanges. At the same time, online application exercises or tests are used to

further emphasize, consolidate, deepen or extend relevant knowledge. This is the online teaching model.

6. *Autonomous learning model based on subject tools* includes three sub-processes: self-monitoring, self-guidance, and self-reinforcement, emphasizing the role of self-efficacy and role model demonstration in autonomous learning. Subject tools can be used as tools for students' cognitive development, providing learners with learning resources, learning scaffolds, learning guidance, etc., so as to support learners' autonomous learning, help learners process learning content, and build their own knowledge system. In this autonomous learning process, learners must self-determine clear learning goals, determine their own learning tasks, choose corresponding learning strategies, and conduct autonomous learning and autonomous exploration according to their own personality characteristics, and then conduct evaluation and reflection. Parents or teachers should help students to self-monitor, self-guide and self-reinforce.

7. *Drill and practice teaching mode based on questionnaire survey tools* is when the computer presents questions to students one by one, and the students answer on the computer and the computer gives appropriate immediate feedback. The computer asks questions to students one by one or in batches, and the students answer. The computer gives feedback based on the students' answers to promote students to master certain knowledge and skills. Using multimedia, many visual dynamic scenes can be used as the background for questions, and more expressive feedback can also be made. The teaching mode of drill and practice is very effective for students to quickly master a certain skill or a certain knowledge, especially for simple knowledge. This is a very effective means.

8. *Thematic inquiry teaching mode based on learning resource website* provides students with rich learning support. The teacher carefully designs questions, and students can implement exploratory learning. Using the interactive function of the website, learners can realize teacher-student interaction and student-student interaction, thereby supporting collaborative exploratory learning.



10. *Internet-based interactive teaching model* is a bit similar to the live teaching model, but it emphasizes the interaction between teachers and students, the diversity of interaction, and the richness of interaction while teaching students. In the Internet-based interactive teaching model, it is possible to establish a diversified connection between teachers, students and learning content, and realize the multiple interactions of "teachers-students-content". Using interactive teaching tools to provide classroom teaching information feedback can enable all students to participate in teaching activities extensively. It supports student exploration and discovery, group collaboration, gamification learning, provides exercises and feedback, and helps teachers and students conduct qualitative evaluation.

The educational concept of online education plays a pivotal role in shaping the transformation of China's higher education system in the era of rapid technological advancement. Online education, with its flexibility, resource-sharing capabilities, and innovative pedagogical models, has become an essential component of modern education. However, its development faces challenges such as cultural traditions, varying levels of information literacy, and systemic constraints. By adopting synchronous, asynchronous, and interactive teaching modes, leveraging ICTs, and focusing on personalized and collaborative learning, China can address these challenges and unlock the potential of online education. These efforts will contribute to promoting educational equity, enhancing the quality of learning, and modernizing the higher education system [Malashenko 2016].

In conclusion, the integration of online education within China's higher education system is not only an educational reform but also a pathway to achieving a more inclusive, effective, and forward-looking educational framework. Continued research and innovation are needed to refine strategies, overcome barriers, and fully realize the opportunities that online education offers.

#### References:

1. Kozlenkova, E.A. Methodological Foundations for Developing a Distance Learning Course in Written Translation in the System of Continuing Education:

English Language, Non-Linguistic University, Qualification "Translator in Professional Communication": Dissertation... Candidate of Pedagogical Sciences: 13.00.02. 2009.

2. Malashenko, E.A. Blended Learning as a Tool for Intensifying Educational and Methodological Work with Students // Information and Communication Technologies in Linguistics, Language Didactics, and Intercultural Communication. Issue 7. Moscow: "Universitetskaya Kniga" Publishing House, 2016. pp. 343–353.