

Exploration of the Path of Intelligent Development of Continuing Education in the Digital Age

Ronghan Bao*

Jilin Province Continuing Education Center, Changchun 130022, Jilin Province, China

*Corresponding author: Ronghan Bao, 15584399973@163.com

Copyright: © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: With the rapid development of big data and intelligent technology, opportunities and challenges coexist in continuing education work, and the integration of continuing education and intelligent education is imperative. Therefore, China's continuing education should strengthen the construction of the education system, make long-term plans, strengthen overall management in system construction, promote the transformation of continuing education models, and accelerate the modernization process of education. Based on this, this article analyzes and studies the path of intelligent development of continuing education in the digital era, explores its inevitability, analyzes the main characteristics of intelligent continuing education, explores the problems of intelligent development of continuing education, and proposes strategies for the intelligent development of continuing education.

Keywords: Digital age; Continuing education; Intelligence; Modernization; Integrated management

Online publication: August 23, 2024

1. Introduction

In the context of the digital age, emerging technologies such as big data and artificial intelligence have achieved comprehensive development and transformation, with significant results in the field of education. At present, continuing education, as an important component of China's education industry, shoulders the mission of cultivating high-quality talents and promoting social development. Therefore, it is necessary for each continuing education regulatory department or institution to combine its development needs, accelerate intelligent construction, improve overall educational effectiveness, and meet the learning and development needs of learners.

2. The inevitability of intelligent development of continuing education in the digital age

2.1. The inevitable development of intelligent education

In the era of big data, technologies such as artificial intelligence and cloud services have been updated and widely integrated into the education sector. Intelligent education, as a product of the integration of modern education and

information technology, can adapt to changes in social development and improve the effectiveness of education. The definition of intelligent education is a high learning experience, high content adaptability, and high teaching efficiency educational behavior provided by schools, regions, or countries. It can use modern science and technology to provide corresponding services for schools, teachers, and students ^[1].

In order to improve the quality and effectiveness of education and accelerate modernization construction, intelligent education has become a national development strategy. In recent years, the country has proposed measures related to intelligent education and educational informatization and has regarded intelligent education as an important force leading the development and reform of education.

2.2. The development trend of continuing education

Continuing education, as an important component of the lifelong education system, is a way of re-education for modern employed individuals, allowing them to supplement their personal knowledge and skills, form good quality and abilities, promote social and economic development, create a learning-oriented social environment, and present a good social development atmosphere. With the reform and development of continuing education, there are more and more ways and means of continuing education. Only by strengthening the emphasis on continuing education and accelerating the construction of a learning society can we improve the quality and ability of individuals. Therefore, vigorously developing continuing education has become an inevitable trend of the times ^[2].

2.3. The significant wisdom of continuing education

The difference between continuing education and other forms of education is that, firstly, it serves a wider range of audiences. There is a demand for continuing education in various industries and job positions and levels in society, and the demand for continuing education service recipients is relatively high. Secondly, there are diverse demands for education. The learning demands of the educated group are diverse, and their learning objectives are different. Some are to improve professional skills and optimize knowledge structure, while others are to enhance their education level to cope with employment. This also requires selecting the type of education based on one's actual needs. Thirdly, educational goals are relatively realistic. Continuing education is a form of education with clear educational objectives, and learners hope to solve problems and improve their overall quality and abilities in a short period of time. This form of education emphasizes practicality and has clear goals. Fourthly, the form of education is relatively flexible. Most learners are working professionals with heavy work tasks, and many learners lack the time to study. They also have differences in learning habits and knowledge foundations. Thus, continuing education needs to provide more flexible educational methods, ensuring flexibility in time, meeting the learning needs of all learners, and ensuring their learning.

3. Main characteristics of intelligent continuing education

3.1. Personalized characteristics

In the context of the big data era, the mode of continuing education is constantly developing and changing, and information technology is applied in various fields of continuing education. At present, the development speed of continuing education services on the Internet is relatively rapid. By utilizing online education through network technology, students can break free from the limitations of time and space and meet the development needs of various social classes. In addition, the Internet offers students personalized learning spaces, allowing them to study anytime and anywhere. This flexibility helps accommodate individual differences and supports more tailored, focused learning experiences. It is believed that in the future, the personalized characteristics of continuing education will become more prominent, and more attention will be paid to the differences between various

learning groups. Based on the learning methods, skills, and goals of the students, personal learning plans will be formulated to improve learning effectiveness^[3].

3.2. Market-oriented characteristics

The personalized characteristics of continuing education will also expand the market for continuing education. In the future, continuing education will be driven by marketization. While meeting the laws of educational development, we will also combine them to carry out educational work and meet market demands. At present, intelligent education takes into account the actual needs of learners in terms of teaching content, teaching facilities, and educational environment. This requires full consideration of the characteristics of learners' needs, achieving on-demand teaching, and ensuring the pertinence and effectiveness of educational work. Continuing education, as an important component of the education industry, should closely follow the development of the market, align with current market demands, and meet the future learning and development needs of learners. At the same time, the future of continuing education is increasingly oriented towards sharing. The continued advancement of the Internet will facilitate a more efficient flow of resources, align better with the actual needs of education, enhance educational quality, broaden its reach, and more effectively support lifelong learning.

3.3. Sharing characteristics

Continuing education is an important component of the concept of lifelong education, and it is also the key to achieving transformation and upgrading in future education. It has replaced traditional classroom teaching forms and created a collaborative education form between society and schools, laying a solid foundation for the development of shared education. In the context of the continuous expansion of continuing education, traditional education methods and forms are no longer able to meet the needs of continuing education. This necessitates that continuing education transcends the limitations of closed teaching environments in terms of resources and methods. It requires effective utilization of diverse educational resources, strengthened collaboration with government bodies, educational institutions, and enterprises, and the development of an efficient continuing education service system. These steps will provide greater convenience and accessibility for learners.

4. Problems of intelligent development in continuing education

4.1. Uneven distribution of educational resources

In the context of digitalization, technological progress has brought unprecedented challenges to education. However, in actual educational work, there is an issue of imbalanced resource allocation, which is inconducive to the development of continuing education. High-quality educational resources include teacher resources, teaching equipment, and curriculum resources. However, these educational resources are still mainly concentrated in continuing education institutions in big cities, which also leads to regional differences in educational resources, and uneven distribution of educational resources is not conducive to educational equity. Some learners in remote areas have difficulty accessing high-quality learning resources, making it challenging for them to effectively learn these resources, affecting the strengthening of their competitiveness and future development. On the other hand, the uneven distribution of educational resources has also exacerbated the fixation of social classes, leading to a decline in the role of educational resources in promoting social equity. However, in the context of the big data era, the problem of uneven distribution of educational resources may worsen. The introduction of new technologies requires schools to have sufficient funds and technology, which is a major development dilemma for schools with scarce resources. If these issues are not addressed in a timely manner, the fairness of continuing education could become a more pressing concern in the future.

4.2. Low quality of teachers

In the face of the development of the big data era, intelligent education has achieved comprehensive transformation. Many teachers still lag behind in their educational ideas, concepts, and skills, which is not conducive to the development of educational work. In terms of educational philosophy, many teachers have a more traditional mindset, emphasizing knowledge transmission while neglecting skill cultivation, which makes it difficult to adapt to the requirements of intelligent education for the comprehensive quality and ability of students. In terms of educational skills, many teachers lack information technology teaching abilities and are unable to effectively integrate online and offline educational resources, which also leads to overlapping teaching outcomes. In terms of teaching methods, some teachers still use traditional narrative teaching, which makes it challenging to achieve interactive learning and mobilize students' learning initiative. These issues can also affect the overall effectiveness of teaching. This requires strengthening educational reform, updating educational concepts, and improving educational effectiveness^[4].

4.3. Low integration of technology and education

Although many continuing education schools have achieved certain results in the field of intelligence, there are still many problems in the integration of technology and education, and this form of education makes it difficult to achieve the expected results. At present, many continuing education institutions only focus on surface teaching when introducing intelligent education technology, including online course teaching, electronic teaching, etc., and have not delved into educational concepts and methods. The insufficient integration of technology and education has resulted in the failure to effectively unleash the potential of intelligent education. However, the insufficient depth of integration between intelligent technology and education directly affects the quality and effectiveness of education, which is inconducive to the development of teaching work.

5. Strategies for the intelligent development of continuing education

In an intelligent environment, the learning needs and status of students will gradually become prominent, and their learning abilities will be improved. Compared with traditional teaching methods, in an information-based and intelligent learning environment, students can learn more easily and their learning efficiency will also be improved. In the context of intelligent education, schools should strengthen continuing education reform and improve the effectiveness of education. The specific strategies are as follows.

5.1. Building an intelligent education ecosystem

In the context of the digital age, education is undergoing comprehensive reforms. Continuing education, as an essential component of development and change, is actively exploring learner-centered educational time models. At the same time, integrating educational resources both on and off campus and building an intelligent education platform that combines online and offline has become an important way to promote innovative development in continuing education. In traditional educational reform work, teachers are the leaders of classroom teaching, while students are in a passive learning state. The learning needs and methods of students have undergone significant changes, which require teachers to pay attention to their personalized and autonomous learning and development, transform educational concepts, place learners at the core of education, and design practical teaching activities around their learning needs.

In order to build a learner-centered education model, continuing education should fully integrate educational resources, which involve teacher resources, teaching content, and teaching equipment. Only by strengthening resource integration can schools break the limitations of traditional education and provide more learning space for

learners. In addition, strengthening the comprehensive integration of educational resources both inside and outside the school can help achieve educational equity, allow learners to access more educational resources, build an education platform that integrates online and offline, and better achieve intelligent education.

5.2. Strengthening the construction of the continuing education teacher team

With the development and progress of the times, educational work has undergone unprecedented changes. In the process of educational reform, the educational role of teachers becomes more important. In order to improve the quality and effectiveness of education and adapt to the needs of the times, continuing education institutions should attach importance to the training of teachers, so that teachers can form good qualities and skills to cope with the continuing education tasks of the new era.

Firstly, the training of teachers should be strengthened. In the context of the big data era, new educational concepts, ideas, and methods are constantly emerging, thus teachers need to continuously deepen their learning, update their knowledge reserves, and master new educational technologies. Continuing education institutions should pay attention to the construction of training mechanisms, regularly organize various training activities for teachers to participate in, and ensure that teachers are timely exposed to new educational ideas and concepts. In the guidance and training of teachers, it is necessary to improve the pertinence of education, take into account the actual situation and characteristics of teachers, provide guidance and help teachers solve problems in teaching, and form good educational skills. In the selection of training content, consideration should be given to the effective integration of subject teaching and technical education, allowing teachers to learn how to apply information technology in education, thereby improving their professional quality and ability, and achieving the effective integration of information technology and education and teaching.

Secondly, the selection of excellent teachers should be strengthened. Excellent teachers not only need to possess strong professional knowledge and teaching abilities but also need to possess new educational concepts in the new era. Therefore, in the process of teacher selection, continuing education institutions should take into account the personal quality and ability development of teachers, effectively penetrate subject knowledge points, and carry out skill teaching. Additionally, continuing education institutions should also establish a scientific education selection system to ensure the effective implementation of selection work and attract more teachers to join the continuing education team. In the recruitment of teachers, open recruitment should be adopted for selection, allowing more outstanding talents with aspirations to engage in the education industry to participate and improve the comprehensive quality and ability of the teaching staff.

5.3. Deepening the integration of technology and education

In the context of the big data era, technologies such as artificial intelligence are influencing the development of society, and the education sector is no exception. Artificial intelligence technology has brought more changes to the education field, especially in regulating the overall process of education, demonstrating great educational potential. Teachers utilizing these technologies can better understand the learning situation of students, provide corresponding support for decision-making, and improve overall educational effectiveness. The application of big data technology in the process of education and teaching can enable the collection of a large amount of data information and analysis of the patterns of changes behind it, including students' learning ability, learning behavior, learning habits, etc. By analyzing the learning situation of students based on this data information, teachers can comprehensively understand the students and provide targeted assistance and guidance. At the same time, big data technology helps teachers understand the learning situation of the entire class, analyze the learning data of students as a whole, discover the differences between student groups, develop various education plans for

different groups, and improve the effectiveness of education.

In terms of management, the continuing education supervisory department supervises the entire continuing education process, which helps to comprehensively understand the training situation, timely analyze various problems that arise in teaching, and thus improve the quality of education. These data also help to provide assistance for teaching evaluation and improvement work. However, the use of big data and artificial intelligence technology to comprehensively regulate the teaching process still faces a series of challenges. For example, there are security issues with data storage. Schools need to strengthen their attention to these issues, adopt scientific and reasonable methods for reform, and ensure the security of data information.

6. Conclusion

In summary, intelligent continuing education has played an important leading role in promoting lifelong learning for all, contributing to the realization of educational modernization. Intelligent education helps to enrich the content of continuing education, expand the scope of continuing education, and enhance the pertinence and relevance of education. Therefore, continuing education should strengthen intelligent reform, build a dynamic and collaborative innovation intelligent education ecosystem, and lay a solid foundation for building a lifelong learning society.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Zhang H, Sang P, 2022, Research on the Design Strategy of Intelligent Management and Service Platform for Continuing Education in Universities. *Journal of Chongqing University of Science and Technology (Social Sciences Edition)*, (04): 34–40.
- [2] Mei Y, Zhang J, Liang Y, 2021, New Technologies Empower New Models of Intelligent Learning in Continuing Education. *Online learning*, (07): 68–70.
- [3] Cui Y, 2021, Research on the Wisdom Path of Ideological and Political Education for College Students in the Era of Big Data, dissertation, Jilin Normal University.
- [4] Ren Y, Shi X, Zhang Z, 2018, An Analysis of the Impact of Informatization on the Development of Continuing Education. *Modern Educational Technology*, 28(S1): 93–95 + 92.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.