DOI:10.18686/cle.v2i1.3528

Discussion on the Construction and Development of Digital Education Resources in the "Internet Plus" Era

Ji Chen

Bohai Shipbuilding Vocational College, Huludao , Liaoning China 125105

Abstract: With the rapid development of information technology, the era of "Internet plus" has profoundly affected all fields of society, especially the education field. The rise of the digital revolution has brought unprecedented opportunities and challenges to the development, dissemination and application of educational resources. As an important part of the "Internet plus" era, digital education resources are gradually changing the face of traditional education with their efficient, convenient, flexible and other characteristics. This paper aims to deeply explore the construction and development of digital education resources in the era of "Internet plus". We will look for strategies and paths to promote its sustainable development, and provide useful thinking and guidance for the future exploration of education.

Keywords: "Internet plus" era; Digital education resources; Development strategy

Digital education resources are not only the digitization of textbooks, but also the digital innovation of teaching content, teaching methods, and learning environment. It brings more diverse learning resources to education and provides more flexible and personalized learning methods. In this process, educators, students, and technology are constantly integrating to shape the future of digital education. However, the development of digital education resources also faces challenges, such as ensuring the quality of resources and building a teaching staff, which urgently need to be addressed.

1. The concept and characteristics of digital education resources

1.1 Definition of Digital Education Resources

Digital educational resources refer to the use of digital technology to transform educational elements such as content, instructional design, and learning materials into digital resources, which are stored, disseminated, and communicated through information technology means such as the Internet. The scope of digital education resources is extensive, including but not limited to textbook digitization, teaching videos, online courses, educational games, virtual laboratories, etc. These resources not only contain rich knowledge content, but also integrate various media forms, such as text, images, audio, videos, etc., to present educational information in a more vivid and intuitive way[1].

1.2 Classification and Characteristics of Digital Education Resources

Digital education resources can be classified into multiple categories based on different dimensions and characteristics. From the perspective of content form, digital education resources can be divided into various media types such as text, images, audio, video, etc. The combination of these forms presents more vivid and rich educational content. From the perspective of education stage, digital education resources cover various levels of education content from kindergarten to higher education, meeting the needs of learners of different age groups. In addition, digital education resources can also be segmented based on factors such as knowledge domains, subject classifications, educational objectives, and teaching methods.

The characteristics of digital education resources are mainly reflected in aspects such as interactivity, personalization, traceability, and timeliness. Interactivity is an important feature of digital education resources, and learners can interact with content through links, comments, tests, and other means to promote deep learning; Personalization refers to the ability of digital educational resources to be customized based on learners' interests, levels, and learning styles, providing a more personalized learning experience; Traceability enables educators and learners to record and analyze the learning process, providing a basis for improving teaching and learning;

Timeliness refers to the ability of digital educational resources to be updated and adjusted at any time, keeping up with the times and adapting to the needs of educational change[2].

1.3 The Role and Advantages of Digital Education Resources in Education

Digital education resources play an important role and significant advantages in education. Firstly, it enriches the teaching content, presents knowledge in various forms, stimulates learning interest, and improves learning effectiveness. Secondly, digital educational resources have broken through the time and space limitations of traditional classrooms, enabling learning anytime and anywhere, and promoting the implementation of the concept of lifelong learning. In addition, the strong interactivity makes learning more active and personalized, providing opportunities for autonomous and collaborative learning. In short, digital education resources have irreplaceable advantages in promoting modernization and personalized development of education.

2. Construction and application of digital education resources in the era of "Internet plus"

2.1 The position of digital education resources in the context of "Internet plus" era

In the era of "Internet plus"， digital education resources have become the core element of education development and play an important role. The popularization of the Internet and innovation in digital technology have enabled digital education resources to be more widely and efficiently disseminated, shared, and utilized. It brings openness, flexibility, and diversity to education, reshaping traditional educational models. Digital educational resources promote personalized learning, cross time and space teaching, and promote the globalization of education. In the era of "Internet plus"， digital education resources have become the key support to improve teaching quality and meet the diverse needs of learners, leading education to digital transformation.

2.2 Basic Elements of Digital Education Resource Construction

The success of digital education resource construction depends on the synergistic effect of multiple basic elements. The primary task is to build a teaching staff, and educators need to possess digital literacy and be able to flexibly apply technology for teaching design and resource creation. Secondly, technical support and platform construction are crucial. A stable online education platform, efficient content management system, and technical support that adapts to different devices provide basic guarantees for the dissemination of digital resources. The learning content and curriculum design are also one of the basic elements, and high-quality educational resources need to be closely combined with the curriculum objectives, conform to the characteristics of the subject, and meet the cognitive needs of students. In addition, the quality evaluation and monitoring mechanism can ensure the effectiveness and reliability of digital education resources, and improve the quality of education. These basic elements are intertwined and jointly support the comprehensive construction and development of digital education resources.

3. Strategies and suggestions for promoting the development of digital education resources in the "Internet plus" era

3.1 Strengthen the construction of teaching staff and enhance the digital literacy of educators

Strengthening the construction of teaching staff and enhancing the digital literacy of educators is one of the key strategies to promote the development of digital education resources. Educators need to master digital tools and technologies and integrate them into teaching practice. For example, in a certain high school, teachers designed interactive classroom activities through online course platforms, allowing students to participate in Q&A and group discussions through mobile devices in the classroom, which stimulated students' enthusiasm. To achieve this goal, digital literacy training can be carried out, including basic applications of educational technology, online teaching design, and other content, to enhance the ability of educators to teach in a digital environment. At the same time, establish a teacher exchange and sharing platform to promote experience sharing among educators, thus forming a collaborative digital education resource. By strengthening the construction of teaching staff, educators can better apply digital education resources, create rich and diverse teaching content, improve learners' participation and learning effectiveness, and thus promote the sustainable development of digital education resources in education[3].

3.2 Creating a Unified and Open Digital Education Resource Platform

Building a unified and open digital education resource platform is an important measure to achieve the sustainable development of digital education resources. Such a platform can integrate various educational resources, providing a unified access point and user interface. For example, China's "Smart Campus" platform integrates various digital courses, textbooks, and resources, providing convenient online learning environments for teachers and students. This action helps to reduce resource fragmentation

and improve resource utilization efficiency. An open platform can attract multiple participants, such as educational institutions, educational technology companies, teachers, and students, to share and create resources together. At the same time, the platform can also provide personalized recommendations based on the needs of different users, providing learners with more accurate learning resources. By creating a unified and open digital education resource platform, we can integrate resources, optimize utilization, promote innovation, and facilitate the widespread application of digital education resources. This will accelerate the digital transformation in the field of education, promote the popularization and sharing of educational resources, and achieve sustainable development of education.

3.3 Data Analysis and Personalized Guidance

In the era of "Internet plus", traditional teaching content and methods can no longer meet the diversified needs of students. Therefore, innovative curriculum design and colorful learning content become particularly important. Taking programming education as an example, many schools have introduced programming courses and combined digital education resources to design interesting and challenging programming projects to stimulate students' interest and motivation in learning. In the field of language learning, digital educational resources provide learners with rich opportunities for listening, speaking, reading, and writing training. At the same time, through online platforms, students can interact with native speakers worldwide and broaden their horizons for cross-cultural communication. Promoting innovation in curriculum design and learning content requires educators to continuously research, experiment, and innovate, combining subject knowledge and educational technology to design more attractive and practical teaching plans. Digital education resources can enrich course content by providing multimedia presentations, simulation experiments, interactive cases, and other forms, making learning more vivid and interesting

4. Conclusion

In short, digital education resources have played an important role in the "Internet plus" era, enriching teaching content and expanding teaching models. However, its construction and application still face challenges such as quality, personalized needs, and privacy protection. In the future, digital education resources will develop intelligently. Educators need to improve their digital literacy, innovate teaching design, and provide support from the government and society. Global cooperation and sharing are also the trend of future development, bringing better prospects for education. The future of digital education resources in the "Internet plus" era is full of hope, which will promote the continuous progress of education and benefit learners.

References:

[1] Wu Lingling. Research on the Construction and Management of Digital Resources in University Libraries in the Internet Era [J]. Electronic Components and Information Technology, 2022, 6 (11): 84-87+97.

[2] Ke Qingchao, Lin Jian, Ma Xiufang, Bao Tingting. The Construction Direction and Development Path of Digital Education Resources in the Era of New Education Infrastructure [J]. Research on Electronic Education, 2021,42 (11): 48-54.

[3] Yang Xianmin, Zhao Xinshuo, Chen Shichao Construction and Development of Digital Education Resources in the “Internet plus” Era [J]. China Audio Visual Education, 2017, (10): 51-59.