

Study on the Integrated Construction of Ideological and Political Courses in Primary, Secondary and Tertiary Schools Empowered by Digital and Intelligent Technology

Xuege Lin

Xinjiang Art Institute, Urumqi 830000, Xinjiang, China

Copyright: © 2025 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: Digital and intelligent technology serves as a crucial engine for advancing the integrated construction of ideological and political courses in primary, secondary and tertiary schools. It is conducive to enriching the content of ideological and political education, promoting cooperation among different educational entities, accelerating the establishment of a collaborative education model, and facilitating the implementation of the fundamental task of fostering virtue through education. This article analyzes the value implication of digital and intelligent technology empowering the integrated construction of ideological and political courses in primary, secondary and tertiary schools, explores the existing difficulties, and elaborates on three aspects—improving the digital literacy of ideological and political teachers, building digital teaching platforms, and empowering classroom teaching with artificial intelligence. The aim is to advance the integrated construction of ideological and political courses in primary, secondary and tertiary schools and enhance the quality of ideological and political education.

Keywords: Digital and intelligent technology; Integrated construction of ideological and political courses in primary, secondary and tertiary schools; Value implication; Construction path

Online publication: August 26, 2025

1. Introduction

In November 2022, the Ministry of Education issued the Opinions on Further Strengthening the Construction of Ideological and Political Courses in Primary and Secondary Schools in the New Era, which put forward specific requirements of “making good use of digital resource platforms, extensively pooling various high-quality digital teaching resources for ideological and political courses, and promoting the joint construction and sharing of high-quality resources”. However, at present, the integrated construction of ideological and political courses in primary, secondary and tertiary schools is faced with problems such as isolated islands of ideological and political teaching data, uneven digital literacy of ideological and political teachers, and irrational application of digital and intelligent technology. These problems have affected the quality of the integrated construction of ideological and political courses in primary, secondary and tertiary schools. Therefore, primary schools, secondary schools and universities should strengthen cooperation, make overall plans, and grasp the construction of ideological and political courses in all school sections in a holistic manner. This is to promote the formation of a scientific system for ideological and political courses in various school sections, which features vertical connection, horizontal integration and spiral improvement, and ultimately enhance the teaching quality of ideological and political courses.

2. The Importance of Digital and Intelligent Technology Empowering the Integrated Construction of Ideological and Political Courses in Primary, Secondary and Tertiary Schools

2.1. Conducive to Breaking Temporal and Spatial Boundaries

The empowerment of digital and intelligent technology in the integrated construction of ideological and political courses in primary, secondary and tertiary schools helps break the barriers of time and space. It enables schools to establish digital teaching platforms, promotes communication among ideological and political course teachers from different regions, schools and academic stages, breaks regional restrictions, and facilitates the sharing of high-quality educational resources^[1]. In addition, digital and intelligent technology can assist ideological and political course teachers at all academic stages in conducting online lesson preparation, distance teaching and online teaching research, helping them improve their digital teaching capabilities, thereby promoting the integrated construction of ideological and political courses in primary, secondary and tertiary schools.

2.2. Conducive to Stimulating Students' Learning Interest

In the "Internet +" era, online live streaming, new media and big data have become popular learning tools among primary, secondary and college students, which lays a solid foundation for digital and intelligent technology to empower the integrated construction of ideological and political courses in primary, secondary and tertiary schools. By leveraging big data to create accurate portraits of students, the empowerment of digital and intelligent technology in the integrated construction of these courses helps teachers grasp students' ideological and behavioral characteristics, realize the precise customization and personalized recommendation of ideological and political course content, and thus stimulate students' interest in learning ideological and political courses^[2]. Meanwhile, digital and intelligent technology is beneficial for enriching the teaching content of ideological and political courses—integrating current political news, intangible cultural heritage and other content that students are interested in into the teaching process. This meets students' high expectations for ideological and political courses and further enhances their moral literacy^[3].

2.3. Conducive to Giving Play to the Collaborative Education Function of Ideological and Political Courses at All Academic Stages

Digital and intelligent technology injects vitality into the integrated construction of ideological and political courses in primary, secondary and tertiary schools. It helps ideological and political teachers at all academic stages integrate teaching resources and share ideological and political education cases, thereby promoting the connection of teaching content across these courses and further expanding the scope of ideological and political education resource sharing. This is conducive to exerting the collaborative education function of ideological and political courses at different academic stages^[4]. Furthermore, against the backdrop of educational informatization, the integrated construction of ideological and political courses in primary, secondary and tertiary schools is gradually transforming towards intelligence and digitalization, thus establishing a new "digital + intelligent teaching" model for ideological and political courses. For example, virtual simulation technology is used to create immersive scenarios, innovating the models of red culture and patriotism education. This enhances the affinity of ideological and political education and gradually improves the education quality of ideological and political courses at all academic stages^[5].

3. Difficulties in the Empowerment of Digital and Intelligent Technology for the Integrated Construction of Ideological and Political Courses in Primary, Secondary and Tertiary Schools

3.1. Poor Application Effect of Digital and Intelligent Technology

Ideological and political course teachers at different academic stages vary in their attention to the empowerment of digital

and intelligent technology for the integrated construction of ideological and political courses in primary, secondary and tertiary schools, which is reflected in the following two aspects. First, some teachers need to improve their sensitivity and recognition towards the digital transformation of ideological and political course teaching. They one-sidedly equate multimedia with digital and intelligent technology, and neglect participating in the construction of integrated teaching and research platforms for ideological and political courses in primary, secondary and tertiary schools as well as the development of digital teaching resources, which affects the integrated construction of ideological and political courses^[6]. Second, some ideological and political course teachers have developed a dependence on the application of artificial intelligence and digital technology—they directly apply online ideological and political education cases, while ignoring the compilation of teaching cases and teaching designs based on the physical and mental development characteristics of students of different age groups. This makes it difficult to give full play to the advantages of digital and intelligent technology.

3.2. Uneven Digital Literacy of Ideological and Political Course Teachers

At present, the digital teaching capabilities of ideological and political course teachers at different academic stages are uneven, which affects the integration of digital and intelligent technology with the integrated construction of ideological and political courses. Primary school ideological and political teachers frequently use micro-courses and online teaching and research websites, but rarely apply artificial intelligence technologies such as big data and knowledge graphs. Secondary school ideological and political teachers bear heavy teaching tasks, focusing mainly on explaining knowledge points in textbooks, which weakens the application of digital and intelligent technology. In contrast, university ideological and political teachers apply big data, knowledge graphs and blended teaching more frequently. It can be seen that the information literacy of ideological and political course teachers at different academic stages is uneven, which impacts the integrated construction of ideological and political courses in primary, secondary and tertiary schools^[7].

3.3. Prominent Issue of “Data Silos” in Ideological and Political Courses

Currently, the construction of integrated digital teaching platforms for ideological and political courses in primary, secondary and tertiary schools is relatively backward. This hinders communication among ideological and political teachers in primary schools, secondary schools and universities, leads to difficulties in sharing teaching data of ideological and political courses, and inadvertently gives rise to “data silos”, which affects the integrated construction of ideological and political courses^[8]. For instance, many regions have not established integrated online teaching and research platforms for ideological and political courses in primary, secondary and tertiary schools, making it hard to realize the sharing of ideological and political teaching resources. This affects the connection of teaching content of ideological and political courses across different academic stages and greatly reduces the effectiveness of the integrated construction of ideological and political courses.

4. Practical Paths for Digital and Intelligent Technology Empowering the Integrated Construction of Ideological and Political Courses in Primary, Secondary and Tertiary Schools

4.1. Build Digital Teaching Platforms to Promote the Sharing of Ideological and Political Course Resources

Local education authorities should play a “leading role” in building integrated and digital teaching platforms for ideological and political courses in primary, secondary and tertiary schools, so as to promote the sharing of teaching resources for such courses^[9]. First, education authorities need to develop integrated online teaching platforms for ideological and political courses, and urge ideological and political teachers in primary schools, secondary schools and universities to update online teaching resources such as teaching cases, courseware and videos. This enables teachers to understand the teaching content

of ideological and political courses in other academic stages, thereby promoting the connection of teaching content across primary, secondary and tertiary schools. For example, the integrated online teaching platform for ideological and political courses can set up a “Red Culture” column, which clarifies the corresponding teaching content of ideological and political courses in primary, secondary and tertiary schools. This facilitates teachers of different academic stages to upload relevant course resources in a timely manner, including content such as the Long March Spirit, the Red Boat Spirit and the deeds of revolutionary martyrs. It helps teachers explain the century-long history of the Communist Party of China in depth to students of different grades and inspire their patriotic enthusiasm^[10]. Second, universities should organize integrated online and offline seminars on ideological and political courses to promote communication among teachers of ideological and political courses in different academic stages and break the existing “data silos”. For instance, as the leading university, Xinjiang Arts University adopts a model of offline concentration combined with online meetings. It invites representatives of teachers from the School of Marxism of Xinjiang Vocational and Technical College of Construction, representatives of teachers from the School of Marxism of Kizilsu Kirghiz Autonomous Prefecture Vocational and Technical College, representatives of ideological and political teachers from No.1 Primary School, No.3 Primary School, No.1 Middle School, No.2 Middle School and No.3 Middle School of Kizilsu Kirghiz Autonomous Prefecture, as well as members of Wang Chao Autonomous Region Ideological and Political Theory Course Master Studio, Wang Shengchu Teaching Expert Studio, Liu Jing Kizilsu Kirghiz Autonomous Prefecture Senior High School Political Master Studio, Wang Chao Junior High School Morality and Rule of Law Master Studio and Li Jing Primary School Morality and Rule of Law Master Studio to participate in collective teaching and research activities. These participants jointly study the construction goals, practical paths and excellent teaching cases for the integrated construction of ideological and political courses in primary, secondary and tertiary schools, and jointly compile integrated teaching cases and design plans for integrated ideological and political practical activities, so as to improve the quality of the integrated construction of ideological and political courses^[11].

4.2. Empower Ideological and Political Classroom Teaching with AI to Improve Teaching Quality

Ideological and political teachers in primary, secondary and tertiary schools should transform their teaching concepts, break the boundaries between academic stages, proactively understand the teaching content of ideological and political courses across different stages, clarify the relationships between knowledge points of such courses, and carry out thematic teaching, so as to advance the integrated construction of ideological and political courses in primary, secondary and tertiary schools. Taking the theme of socialism with Chinese characteristics as an example, ideological and political teachers can use DeepSeek for intelligent analysis and retrieval of knowledge points related to “socialism with Chinese characteristics” in ideological and political textbooks of primary schools, junior high schools, senior high schools and universities, and automatically generate knowledge graphs. This makes the relationships between knowledge points clearer, helps students of different academic stages master relevant knowledge points, and improves classroom teaching efficiency. In this process, teachers can use DeepSeek to carefully design teaching cases and produce micro-courses, so as to deepen students of different academic stages’ understanding of socialism with Chinese characteristics^[12]. Ideological and political courses in primary and junior high schools mainly focus on topics such as “political systems” and “law-based society”, aiming to help students understand the basic systems of the country; ideological and political courses in senior high schools focus on “politics and rule of law”, guiding students to learn knowledge such as the legal system, political and economic principles, and enhancing their political identity. Ideological and political courses in universities focus on shaping students’ political beliefs, systematically introducing the theoretical system of socialism with Chinese characteristics, and helping them firm their ideals and beliefs and establish lofty aspirations of serving the motherland. In addition, teachers can also use digital platforms to conduct remote online teaching and invite ideological and political teachers of different academic stages to participate. This allows students to engage in online teaching interactions with ideological and political teachers, who can answer students’ questions in a timely manner and help them understand the teaching content of ideological and political courses across different academic stages^[13]. In remote online teaching, ideological and political teachers of different academic stages can explain the corresponding textbook knowledge points and raise online questions—such as

the significance of reform and opening up, the content of the rural revitalization strategy, and the manifestations of poverty alleviation. Through this, students can perceive the great changes that socialism with Chinese characteristics has brought to society and personal life, stimulate their patriotic enthusiasm, and give play to the educational value of the integrated construction of ideological and political courses in primary, secondary and tertiary schools.

4.3. Organize Digital and Intelligent Teaching Training to Improve the Information Literacy of Ideological and Political Teachers

Local education authorities should attach importance to the development of ideological and political teachers' ability to apply digital and intelligent technology, and organize "online + offline" training activities. They should invite ideological and political teachers from primary schools, junior high schools, senior high schools and universities to participate in the training, so as to improve their information literacy and enhance their attention to the empowerment of digital and intelligent technology in the integrated construction of ideological and political courses in primary, secondary and tertiary schools^[14]. First, education authorities should invite experts in the field of artificial intelligence to serve as trainers and conduct online training. The training should systematically explain the application of blended teaching models, software such as DeepSeek and Doubao, big data and virtual reality technology in ideological and political course teaching, and demonstrate with relevant cases. This helps ideological and political teachers master various digital and intelligent technology application skills, accelerate the digital and intelligent transformation of ideological and political course teaching, and solidly advance the integrated construction of ideological and political courses in primary, secondary and tertiary schools. Second, universities can also organize offline training, invite ideological and political teachers from primary and secondary schools to participate, and hold forums on the integration of ideological and political courses. These activities allow ideological and political teachers to jointly discuss topics such as the paths for DeepSeek to automatically generate teaching cases and knowledge graphs, Doubao to generate teaching videos, and big data to empower the teaching evaluation of ideological and political courses. This promotes the in-depth integration of digital and intelligent technology with ideological and political course teaching, enables the rational application of digital and intelligent technology, and uses such technology to advance the integrated construction of ideological and political courses in primary, secondary and tertiary schools, thereby improving the quality of ideological and political education^[15].

5. Conclusion

In conclusion, digital and intelligent technology has injected vitality into the integrated construction of ideological and political courses in primary, secondary and tertiary schools. It is conducive to innovating the teaching methods of ideological and political courses, promoting the connection of teaching content across different academic stages, and improving the teaching quality of such courses. In the future, education authorities should more proactively promote cooperation and communication among primary schools, junior high schools, senior high schools and universities. They should jointly build an integrated digital teaching platform for ideological and political courses in primary, secondary and tertiary schools, update the digital teaching resources of ideological and political courses for different academic stages in a timely manner, and promote data sharing to break data "gaps". By leveraging big data to empower the teaching evaluation of ideological and political courses, they can advance the high-quality development of the integrated construction of ideological and political courses in primary, secondary and tertiary schools, and implement the fundamental task of fostering virtue through education.

Funding

This article is the research result of the 2023 Scientific Research Project of Xinjiang Arts University titled "Study on

Giving Play to the Leading Role of Xinjiang Arts University in the Integrated Construction of Ideological and Political Courses in Primary, Secondary and Tertiary Schools” (Project No.: 2023XYKYQN07).

Disclosure statement

The author declares no conflict of interest.

References

- [1] Yang W J, 2025, Reflections on the integrated construction of ideological and political courses in primary and secondary schools empowered by technology in the digital and intelligent era. *Reference for Middle School Political Teaching*, (07): 92-96.
- [2] Liao Y, Liu Y, 2025, Difficulties and paths of promoting the integrated construction of ideological and political courses in primary, secondary and tertiary schools with artificial intelligence. *Health Vocational Education*, 43(02): 17-20.
- [3] Zheng J, Huang J, 2024, Explorations on the necessity of the integrated construction of ideological and political courses in primary, secondary and tertiary schools from the perspective of digital literacy. *Journal of Curriculum Ideological and Political Teaching Research*, 7(02): 38-47.
- [4] Li A Q, Li J, 2024, A three-dimensional analysis of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by digital technology. *Beijing Education (Moral Education)*, (12): 43-48.
- [5] Wang J, Xie T X, 2024, The current situation and ideal state of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by virtual reality technology. *Beijing Education (Moral Education)*, (11): 41-45.
- [6] Liu S Y, He M, 2024, The coupling mechanism, risk assessment and path exploration of generative artificial intelligence empowering the integration of ideological and political courses in primary, secondary and tertiary schools. *Journal of China University of Mining and Technology (Social Sciences Edition)*, 26(06): 77-84.
- [7] Min X, 2024, New models of integrated teaching of ideological and political courses in primary, secondary and tertiary schools in the era of generative artificial intelligence. *Economic Herald*, (007).
- [8] Jiang G F, 2024, A brief discussion on the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by digital technology. *School Party Construction and Ideological Education*, (18): 69-71.
- [9] Zhu C H, Li Z, Qin M S, 2024, Practical exploration of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by digital technology—A case study of Xi'an Jiaotong University Press. *Publishing Reference*, (06): 31-34.
- [10] Zhou H W, 2024, Practical obstacles and implementation paths of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by digitalization. *Journal of Hebei Energy Institute of Vocation and Technology*, 24(01): 30-34+38.
- [11] Wang Q Y, 2024, Challenges and countermeasures of ChatGPT empowering the integrated construction of ideological and political courses in primary, secondary and tertiary schools. *East China Science and Technology*, (01): 101-103.
- [12] Zhu Y J, 2023, A three-dimensional examination of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by digital technology. *Journal of Changchun University*, 33(12): 47-50.
- [13] Li L Q, Xu C J, 2023, Promoting the paradigm evolution of the integration of ideological and political courses in primary, secondary and tertiary schools with artificial intelligence. *University*, (18): 1-4.
- [14] Chen W M, 2022, Reflections on artificial intelligence empowering the “Great Ideological and Political Course”. *China Moral Education*, (22): 21-25.

- [15] Zhai Z M, Jiang J C, 2021, A four-dimensional analysis of the integrated construction of ideological and political courses in primary, secondary and tertiary schools empowered by big data technology. *Journal of Social Sciences of Universities in Shanxi*, 33(12): 11-16+22.

Publisher's note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.