

Study on the Path of “Three-Dimensional Education” in College English Courses in the Digital and Intelligent Era

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Abstract

To effectively address the deficiencies in the education subject, content, and processes within the ideological education of contemporary university English courses, this paper explores new pathways for a "comprehensive, continuous, and all-dimensional" approach in the context of the digital age. Through practice, we have identified three effective strategies for implementing this "three-dimensional education" model: First, by designing textbooks with a holistic approach, we can refine and expand teaching content from multiple perspectives, thereby enhancing teaching effectiveness. Second, by improving the first classroom experience and expanding into second and third classrooms, we can ensure that students not only acquire knowledge but also apply it in practice, providing them with opportunities to implement what they have learned. This integrated learning model enables students to gain knowledge, develop strengths, and apply their skills effectively. Lastly, by engaging diverse stakeholders in the educational process, we can create a collaborative educational ecosystem.

Keywords

Three-dimensional education, “comprehensive, continuous, and all-dimensional” approach, teaching effectiveness, collaborative educational ecosystem.

1. Introduction

In his report to the 20th National Congress of the Communist Party of China, General Secretary Xi Jinping emphasized the accelerated construction of an “education power, science and technology power, and talent power.” As the main front for talent cultivation, institutions of higher learning bear the crucial mission of nurturing talents for the Party and the country. College English, an integral part of higher education, has consistently adhered to the main channel of ideological and political education in curriculum development, actively exploring multifaceted approaches to cultivate responsibility in the field of English education. Remarkable achievements have been made in both theoretical research and teaching practice. In recent years, information technology, represented by artificial intelligence (AI), has flourished, with the application of AI technology rapidly gaining popularity. The digital era poses significant challenges while presenting valuable opportunities for the development of college English courses. In January 2024, the Ministry of Education emphasized that advancing the digitization of education is a necessity for educational development and the direction of educational reform. Seven years after the vigorous implementation of ideological and political education in curriculums, college English, which bears the responsibility of “cultivating foreign language talents who love China and understand foreign countries, as well as talents who understand foreign languages and excel in their majors” [1], should also assess the situation and recognize that integrating advanced digital and AI technologies to innovate educational paths has become a necessity of the times.

Guided by the concept of “Three-Dimensional Education,” this paper comprehensively analyzes the current status of ideological and political education in college English courses and, based on this foundation, explores new paths for ideological and political education in college English courses in the digital and intelligent era.

2. Analysis of the “Three-Dimensional Education” Concept in Universities

The “Three-Dimensional Education” concept emphasizes holistic education involving all personnel, throughout the entire process, and across all dimensions. In the new era, the “Three-Dimensional Education” concept deepens and expands traditional educational approaches, precisely targeting educational goals, fostering consensus, optimizing the allocation of educational resources, adhering to educational laws, and emphasizing the comprehensive construction of an educational system from both temporal and spatial dimensions. It aims to advance the modernization of higher education governance and promote the high-quality development of ideological and political work in universities. This concept not only underscores the holism and systematicness of education but also highlights its contemporary relevance and innovativeness [2].

A deep understanding and grasp of the theoretical connotation of “Three-Dimensional Education” in universities in the new era is crucial for further implementing and deepening its practical pathways. It not only helps us more clearly recognize the goals, tasks, and requirements of educational work but also provides powerful theoretical support and practical guidance for our work in practice, pushing the educational work in universities to new heights. Firstly, “holistic education involving all personnel” focuses on the core force of “Three-Dimensional Education” — an educational team that spans the entire process and covers all dimensions. Both the subject and object of education are constantly developing in time and space during the educational process, and the essence of education lies in facilitating this development. Under the concept of “holistic education involving all personnel,” a tight educational linkage mechanism should be formed among schools, families, society, and students. Within universities, education and management have clear boundaries of responsibility, but their roles in education are complementary and indispensable. This concept emphasizes breaking down the barriers between education and management in terms of nurturing talent, enabling all faculty and staff to actively participate in the educational process and fostering an atmosphere of “everyone educating everyone.”

Secondly, “education throughout the entire process” emphasizes the temporal element of education, highlighting the continuity and phased characteristics of the educational process. It serves as the foundation and practical basis for “holistic education involving all personnel” and “education across all dimensions,” embodying the inherent requirements of full participation and comprehensive coverage. Time, as a continuous thread of development, connects the past, present, and future. Based on this understanding, “education throughout the entire process” emphasizes integrating educational work into students' entire university life, formulating and optimizing educational content and plans according to students' growth characteristics and development laws. Continuous efforts should be made at every stage of education, “educating at all times,” to enhance the effectiveness of education.

Finally, “education across all dimensions” focuses on the spatial element, reflecting the comprehensiveness and integration of “Three-Dimensional Education” in terms of educational content and methods. “Education across all dimensions” emphasizes that educational work should be valued and implemented everywhere, achieving a comprehensive improvement in educational effectiveness through comprehensive coverage of educational spaces. This requires us to integrate various educational resources and build a comprehensive and integrated pattern that combines on-campus and off-campus, in-class and extracurricular,

online and offline dimensions, advancing in multiple ways, complementing and interacting with each other, and integrating comprehensively, “educating everywhere,” to promote the comprehensive development of students’ morality, intelligence, physique, aesthetics, and labor. In summary, “Three-Dimensional Education” is an organic system that tightly integrates the educational subject, time, and space. It is a product of the continuous innovation and adaptation of ideological and political work in universities to the times, deeply reflecting the inherent requirements and contemporary characteristics of the holistic construction of ideological and political education in university courses. It also provides a theoretical basis for the implementation pathways of ideological and political education in college English courses.

3. Current Realities and Challenges in the Ideological and Political Education of College English Courses

The notice issued by the Ministry of Education in 2018 regarding the comprehensive reform pilot work of “Three All-round Education” emphasized the importance of “student-centered education,” advocating for a coordinated effort among all sectors and aspects of educational resources and strengths. It also highlighted the need for a “problem-oriented” approach to address shortcomings and establish a comprehensive, all-inclusive education system.

Analyzing current college English teaching against the standard of “Three All-round Education,” we can identify three main challenges in the ideological and political education development process:

3.1. Who is Educating: Transformation from Individual to Community has not been achieved

In September 2021, General Secretary Xi Jinping emphasized in his letter to retired professors at the Beijing Foreign Studies University the need to cultivate more composite talents with a sense of national pride, global vision, and professional skills. Guided by this goal, college English, characterized by its instrumental and humanistic aspects, must recognize that the development of the discipline should more closely align with national and social needs, as well as industry requirements. However, possessing both a “sense of national pride and global vision” is beyond the capacity of a single discipline, necessitating collaborative efforts across fields, departments, and disciplines.

In the current wave of ideological and political education, it is evident that the main educational force remains the individual teachers who are “going it alone” to extract limited educational elements from the curriculum materials. There is a lack of collaboration with other departments and external educational forces to form a cohesive team or group of educators with shared educational intentions and emotional engagement. Additionally, the core educational force—teachers—often lacks cohesion and varies widely in quality, facing issues such as the absence of implicit educational concepts and insufficient capabilities in ideological and political education.

3.2. How to Educate: Transition from Unidirectional to Multidimensional Approaches has not been achieved

Currently, college English education primarily relies on traditional classroom teaching. Despite advancements in theoretical research and information technology, most institutions only shift content from in-person classes to online learning without engaging in exploratory or discussion-based activities that foster critical thinking and creativity. In an age of rapid technological advancement, this monotonous teaching method no longer meets the needs of digitally-savvy students.

Moreover, the educational departments have not effectively developed cooperative channels with administrative, auxiliary, student organizations, or even businesses, leading to students' lack of substantial understanding of the relevance of their knowledge, which diminishes their motivation to learn. The disconnect between education and real-world needs has resulted in a workforce that is unprepared for industry demands.

3.3. Type of person to Cultivate: Comprehensive and Holistic Development of Composite Talents has not been achieved

Comprehensive education aims to enhance students' overall quality, equipping them with the skills and qualities necessary to adapt to future societal developments. Educators must focus not only on students' knowledge acquisition but also on their moral character, abilities, interests, and mental health.

In the current teaching practices, key educational content remains relatively static once published, failing to keep pace with the rapidly evolving social and technological landscape. Outdated textbooks often present simple plots and lack moral education elements, failing to stimulate students' interest or encourage critical thinking on real-world issues. This results in college English courses focusing merely on basic language acquisition, such as text analysis and straightforward Q&A, rather than fostering students' sense of national pride, international communication, and innovative thinking. Additionally, the absence of diverse educational stakeholders and the singularity of educational methods make it challenging to achieve the goal of cultivating systematically developed talents.

Thus, to effectively implement the concept of comprehensive education that cultivates the "one excellence, multiple competencies" and "one specialty, multiple skills" composite talents needed by the country and society, we must rely on advanced digital technology to design holistic and innovative teaching models, integrating all possible educational stakeholders through diverse educational methods in a scientific and rational manner.

4. Students' Acceptance of Smart Digital Technology

As an emerging concept and technological form, "smart digitalization" integrates intelligent system functionalities upon the foundation of digitalization. It employs deep learning techniques to continually explore and expand the boundaries of data intelligence, aiming to achieve the digital connection, management, and application of human intelligence, thus promoting the deep integration and mutual empowerment of the virtual and real worlds [3]. This integration facilitates intelligent interaction between humans and machines, bringing infinite possibilities to higher education, including the construction of university English courses.

Based on the aforementioned challenges in the ideological and political education within university English courses, this study investigates students' needs and acceptance of smart digital technology in enhancing ideological education from three perspectives: educational subjects, methods of cultivation, and educational outcomes.

4.1. Research Subjects and Tools

The university English course at our institution offers only 8 credits over two semesters during the first year. Therefore, the primary subjects of this study are first-year students. The research team distributed a survey titled "Digital Empowerment in the Construction of University English Courses" through Wenjuanxing, with 1,206 students participating.

The questionnaire consisted of 15 questions covering five areas: awareness of the importance of ideological education in English courses, teaching content, teaching methods, educational subjects, and autonomous learning under digital empowerment.

4.2. Research Results and Analysis

4.2.1. Understanding of Ideological Education in University English Courses and Textbooks

An analysis of the survey data revealed that the majority of respondents (96.62%) believe that ideological education in university English courses is important. However, a significant portion (40.62%) feels that the current English textbooks are not closely related to their daily lives or future academic and career development. This indicates a recognition of the importance of English, but also doubts about the practicality of the textbooks. A vast majority (91.69%) expressed a desire for English textbooks to include knowledge relevant to their lives and future careers, reflecting a strong demand for practicality and applicability.

4.2.2. Attitudes Toward Digital Technology

Regarding their understanding of digital technology, 86.77% of respondents have a certain level of knowledge and are eager to deepen their understanding; 68.92% are somewhat familiar with virtual reality (VR) or augmented reality (AR); and 82.77% are aware of ChatGPT or similar intelligent generation tools (voice, text, etc.).

In terms of improving teaching methods through smart digital technology, 61.54% of students believe that digital technology can enhance the quality and effectiveness of teaching, while 76.92% feel that applying such digital technologies in classroom instruction would significantly increase engagement. Moreover, 91.69% of students expressed great interest in using VR or AR technology to explain abstract concepts or present contextualized teaching content. When moral education elements are presented in the form of games or videos, 68% of students indicated they would like it, believing it would make their understanding more authentic and profound. Additionally, 85.85% of students are open to using digital media (immersive case experiences, human-computer English interactions, etc.) for autonomous English learning outside of class.

Regarding the importance of teachers possessing digital technology skills, 78.46% of students agree that this would enhance teaching quality. The teaching approach of “teacher-led key knowledge explanation + immersive virtual case practice” is accepted by 86.46% of students, who believe it would increase their interest in learning and provide opportunities for language practice, deepening understanding and enhancing analytical skills.

In terms of diverse educational subjects, students believe that the following should be included: explanations of language knowledge and skills by instructors (80.31%); opportunities for internships provided by relevant departments to understand the practical uses of English in life and work (63.69%); department case studies demonstrating the relevance of English in their field (54.46%); explanations of English's role in various competitions by academic or innovation centers (48%); insights from field experts on the importance of “profession + English” for personal development (46.15%); and full utilization of student clubs to provide opportunities for practicing English (44.92%).

The survey data indicates that respondents generally recognize the significance of English and digital technology, showing a positive attitude towards new teaching methods. They wish for English textbooks and instruction to be more closely aligned with life and future career development, while also anticipating that teachers utilize digital technology to enhance teaching quality and effectiveness. Furthermore, the application of situational games and new technologies like VR/AR in teaching has received broad recognition and support. This provides valuable insights and references for the construction of ideological education in university English courses and the application of digital technology in education.

5. Constructing Pathways for University English Course Development

In the process of reforming ideological education within university English courses, it is essential to closely integrate the characteristics and developmental context of the discipline, adhere to the inherent laws of English teaching and talent cultivation, and systematically plan around current teaching shortcomings. This includes various dimensions such as educational objectives, subjects, and models, and promoting the reform process in a comprehensive manner.

5.1. Perfecting Education Mechanisms and Involving Everyone in Education

In the context of ideological education within university English teaching, the primary force in student development is the instructors. However, student growth and talent cultivation cannot be carried out in isolation from the needs of society, industries, and families. Therefore, all parties must work together to form an educational community that provides strong support for the comprehensive development of students. At the same time, the construction of diverse educational stakeholders also requires policy support from the government and broad participation from all sectors of society to promote equitable allocation of educational resources and achieve educational fairness.

The construction of ideological education in university English courses is not achieved overnight or by a single individual. It relies primarily on teachers, but also requires full participation from the school's and departments' management, as well as the involvement of field experts and student groups.

As the main force in ideological education within university English courses, teachers play a crucial role in this reform. During the construction of ideological education in university English courses, instructors must have a strong sense of moral education and a sense of responsibility. They should carefully study the textbooks and clarify specific educational objectives. Teachers need to design teaching content from a holistic perspective, summarizing and highlighting the main ideas and themes of the textbooks, clearly identifying the language and skill components, and deeply exploring the moral education elements within the materials. In the teaching process, moral education elements can be seamlessly integrated into relevant content explanations and designed as carriers that highlight knowledge and skills. Additionally, classroom discussions and post-class projects should deepen students' understanding of language, knowledge, and moral education elements, enhancing their overall cognitive level.

In the process of nurturing all students, teachers should not only act as the main educators but also as active learners. To further enhance the professional competence and moral education ability of university English teachers, schools and departments should provide continuous learning opportunities for them. For instance, they can organize training sessions to improve teachers' understanding and application of online teaching platforms, digital resources, and currently popular technologies such as AI generation tools (like ChatGPT, Wenxin Yiyan, etc.) and virtual/augmented reality technologies. This can help teachers innovate their teaching methods, enhance student interest in learning, and improve teaching quality and effectiveness. They can also organize academic seminars, teaching observations, and case sharing on ideological education, to enhance teachers' understanding of cutting-edge developments in academia and strengthen their awareness of ideological education and teaching abilities. Furthermore, there should be efforts to encourage teaching teams to form, allowing teachers to exchange experiences and share teaching methods and resources, promoting mutual growth.

As planners and guides of ideological education, school management should align the overall planning and objectives of ideological education in university English courses with national strategies and social needs. This includes setting clear directions for ideological education, formulating relevant policies and measures, and providing strong institutional support for ideological education initiatives. Additionally, management should organize and coordinate

resources both within the school and externally to promote the in-depth development of ideological education in university English courses. In this integrated design, effective communication and coordination should take place among English teachers, ideological education teachers, subject-specific teachers, and students, collaboratively developing teaching plans to ensure that ideological elements are organically integrated into university English courses.

5.2. Emphasis on Overall Design and Continuous Education

This article confines “comprehensive education” to the university English teaching process, during which teachers, based on students' age, psychology, and physiology, should establish clear training goals and implementation plans, identifying educational focuses at each stage. Under the backdrop of “big ideological education,” when implementing ideological education in university English courses, it is essential to firmly grasp classroom teaching as the primary channel for education. However, to achieve effective ideological education, “classroom teaching must be innovated to provide students with profound learning experiences.” With the continuous advancement and widespread application of digital technology, the teaching and learning space for ideological education has been greatly expanded, providing strong impetus for innovation in classroom teaching and enhancement of student learning experiences.

First, digital technology empowers innovative teaching methods. University English courses, which combine instrumental and humanistic elements, have become significant vehicles for conveying values and elaborating on concepts. Nowadays, leveraging cutting-edge technologies such as VR (virtual reality), AR (augmented reality), and MR (mixed reality), we can break through the limitations of traditional classroom teaching. Using immersive and experiential learning models, we can solidify language knowledge, enhance language application abilities, and deepen understanding of more abstract humanistic and moral content taught in class. This transformation not only greatly stimulates students' autonomy in learning but also fosters deep interaction and intellectual exchanges between teachers and students, injecting new vitality and life into ideological education and making continuous education possible.

Second, the widespread application of digital technology provides robust support for the implementation of the “precise ideological education” concept. Utilizing advanced technologies such as cloud computing and big data, we can accurately outline students' learning conditions and personalized needs, effectively bridging the gaps between students with varying levels of English proficiency. This allows us to precisely select ideological education content, optimize teaching pathways, and scientifically evaluate teaching effectiveness. This tailored teaching approach truly realizes the educational ideal of teaching students according to their aptitude, continuously enhancing the effectiveness of ideological education in “big ideological courses.”

Finally, digital technology enables dynamic coordination between teaching and evaluation. Teaching evaluation, as a critical measure of the effectiveness of ideological education in university English courses, is undeniably important. With the efficient computing, powerful storage, and precise analysis capabilities of digital technology, we can track and provide feedback on the teaching and learning progress of ideological education in real-time, promptly identifying potential issues and undertaking targeted improvements, thus ensuring the sustained and steady enhancement of teaching quality.

5.3. Emphasis on Smart Assistance and Permeating Education

With the development of technology, classroom teaching spaces are expanding. The construction of ideological education in English courses should transcend the traditional classroom space, extending from the first classroom to second and third classrooms, creating a comprehensive, multi-layered, and three-dimensional educational environment [4]. The rapid advancement of digital technology provides strong technical support for the establishment of

multidimensional educational spaces and offers new ideas and methods for initiating second and third classrooms.

First, utilizing a blended teaching model supported by digital technology. The development of digital technology has given rise to numerous online teaching platforms, MOOC platforms, and digital textbook resources. Modern university English teaching can fully leverage the complementary advantages of physical classrooms and online platforms, encouraging comprehensive use of online resources for foundational knowledge learning, in-depth thematic exploration, and visualization of abstract knowledge. For example, by employing VR/AR technology, we can create immersive, English-language-themed educational scenarios akin to situational games, allowing students to engage deeply in the context and complete language learning tasks through text and voice modes, conduct project practices, and explore the potential outcomes of different behavioral patterns through role-playing. This innovative experiential teaching will provide students with an unprecedented learning experience.

Second, developing the second classroom. Digital technology also injects new vitality into the innovation of practical teaching models. Contemporary students, as digital natives, have become primary audiences for digital media. Thus, utilizing digital technology to innovate social practice models has become an important way to enhance the effectiveness of practical education. We can use existing online resources and student organizations to guide them in organizing activities that feature “unique characteristics + public English teaching themes,” enriching course or club activity content, deepening students’ understanding of relevant topics, and promoting moral development. Additionally, we can leverage digital technology to create micro-media platforms for English learning and cultural exchange, optimizing micro-media content and embedding the concept of moral education into social practices, allowing students to be educated subtly.

Finally, developing practical activities as the third classroom. By integrating the content learned, teachers can assign students meaningful, exploratory tasks or small projects that are appropriately challenging, utilizing on-campus, school-enterprise, or external resources to provide practical and observational opportunities. This enables students to complete tasks based on “theory + practice,” achieving effective education. As is well known, obtaining opportunities for social practice and observation is not easy; digital technology can play a facilitating role [5]. For instance, we can establish fully English-language immersive virtual simulation laboratories or workshops. This not only breaks through the limitations of traditional physical spaces, reducing practical costs, but also provides students with opportunities for English communication, knowledge construction, and trial-and-error experiences based on their subject specialties. At the same time, big data technology can offer intelligent design, guidance, monitoring, and evaluation systems for social practice activities, achieving comprehensive digital management of these activities. This initiative will greatly expand the boundaries of practice, enhance interactivity, and improve teaching efficiency and effectiveness.

6. Conclusion

From the above content, we find that the integration of digital technology into university English education is essential for enhancing the effectiveness of ideological education and meeting contemporary educational demands. They argue that continuous professional development for educators is vital, equipping them with the skills to utilize innovative teaching methods, such as immersive technologies like VR and AR. By leveraging these advancements, educators can provide tailored learning experiences that cater to individual student needs and foster deeper engagement with complex themes. Furthermore, the authors advocate for an expansion of learning environments beyond traditional classrooms, promoting blended

learning approaches and practical activities that encourage active participation. Overall, it's believed that embracing digital tools is crucial for developing a comprehensive and effective framework for ideological and moral education in university English courses, ultimately enriching the learning experience for all students.

Acknowledgements

This paper is the interim research result of the Hebei Province Higher Education Teaching Reform Research Project for 2022-2023, titled *Research on the Ideological and Political Education Path of School-based Public English Courses Guided by the "Comprehensive, All-staff and All-round Education" Concept*. The number of the Project is 2022GJJG403.

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