



Integrating Digital Tools in Ideological and Political Education within College English Teaching

Yuting Yan*

Hunan Institute of Technology, Hengyang, Hunan, China

*Corresponding author. Email: yanyuting@hnit.edu.cn

Abstract. The increasing use of digital tools in education has created opportunities to integrate language learning with ideological and political education, an important focus in Chinese higher education. However, there is limited research on how digital platforms can be effectively utilized to bridge these two objectives, particularly in the context of college English teaching. Addressing this gap is crucial as it contributes to a more holistic learning experience that aligns with China's Guidelines on Ideological and Political Education in Higher Education. Here, we examine the integration of three digital tools—Treenity, Rain Classroom, and WeChat—into the “College English 1” course, a MOOC designed to combine language instruction with Chinese cultural elements and ideological content. Through quantitative data, student feedback, and case studies, we assess the impact of these tools on student engagement, language proficiency, and critical thinking. The results show notable improvements in vocabulary acquisition, cultural understanding, and ideological reflection, with challenges such as technical limitations addressed through adaptive strategies. These findings suggest that digital platforms can effectively enhance both linguistic and ideological learning, fostering critical thinking and cultural awareness. This approach not only advances the integration of ideological education in language courses but also offers a model for broader adoption in digital education, contributing to the development of well-rounded, socially aware graduates.

Keywords: Digital tools integration, Ideological and political education, College English curriculum, MOOC, Cultural and linguistic development

1 Introduction

The landscape of higher education is rapidly evolving, influenced by advancements in technology and shifts in pedagogical approaches. In this context, ideological and political education has emerged as a critical component of college curricula, particularly in English teaching. This education aims to cultivate students' values, critical thinking, and civic awareness, enabling them to navigate complex societal issues. As the need for effective methods to engage students grows, the integration of digital tools presents a promising avenue.

Digital platforms such as Treenity (Zhihuishu), Rain Classroom, and WeChat have become essential resources for educators. Treenity, an established online teaching platform, offers a range of features that support interactive and collaborative learning. Rain Classroom enhances classroom engagement through multimedia resources, while WeChat facilitates communication and community building among students and instructors. Together, these tools can create a more dynamic and immersive learning environment.

This paper focuses on the development and implementation of a Massive Open Online Course (MOOC) titled "College English 1" on Treenity, designed to integrate ideological and political education within the English curriculum. The course not only addresses language skills but also fosters a deeper understanding of political and social contexts. By examining this case study, we aim to explore how digital tools can enhance ideological education and improve student engagement in college English teaching.

2 Theoretical Framework

The theoretical foundation of this study is rooted in two interconnected areas: ideological and political education, and digital education. Ideological and political education aims to instill a sense of civic responsibility, critical thinking, and moral integrity among students. This educational approach is essential in fostering informed citizens who can engage thoughtfully with societal issues. According to Zhang and Fagan [1] ideological education not only enhances students' personal development but also contributes to national cohesion and social stability.

In the context of college English teaching, ideological and political education serves to contextualize language learning within broader cultural and social frameworks. This integration allows students to examine their values and beliefs while improving their language skills. Research by Wang [2] emphasizes that incorporating ideological themes into English curricula can enhance students' critical thinking abilities and increase their engagement with the material. This pedagogical shift underscores the importance of aligning language instruction with the development of civic consciousness.

Digital education theories provide a framework for understanding how technology can enhance traditional teaching methods. Constructivist learning theories, such as those proposed by Piaget [3] and Vygotsky [4], suggest that learners construct knowledge through social interactions and experiential learning. Digital tools, such as Treenity, Rain Classroom, and WeChat, facilitate this process by enabling collaborative learning and fostering communication among students. As noted by Feng [5], these platforms can create interactive environments that support student engagement and knowledge sharing.

Furthermore, the integration of digital tools aligns with the principles of blended learning, which combines face-to-face instruction with online activities. This approach has been shown to increase flexibility and accessibility in education, allowing students to learn at their own pace. Research by Halverson and Graham highlights the effectiveness of blended learning in enhancing student outcomes and satisfaction [6]. By

leveraging digital tools in the ideological and political education of college English students, educators can create a more engaging and responsive learning environment.

3 Digital Tools in Practice

3.1 Description of Treenity as an Online Teaching Platform

Treenity is a prominent online teaching platform widely used in higher education across China [7]. It offers a variety of features designed to enhance the learning experience, including course management, multimedia resources, and interactive assessments. This platform enables educators to create engaging online courses that can be accessed by students at any time. Its user-friendly interface supports various teaching methods, making it an ideal tool for integrating ideological and political education within the English curriculum.

3.2 Overview of Rain Classroom as Supportive Tools

In addition to Treenity, Rain Classroom plays a crucial role in enhancing student engagement. This platform provides rich multimedia content, including videos, quizzes, and interactive exercises, which cater to diverse learning styles. By incorporating such resources, educators can foster a more dynamic learning environment that encourages active participation. Research by Hui indicates that using Rain Classroom in language instruction significantly boosts student motivation and comprehension, making it an invaluable tool for ideological and political education [8].

WeChat further complements these platforms by facilitating communication and collaboration among students and instructors. As a widely used social media application, WeChat allows for real-time messaging, group discussions, and content sharing. This immediacy helps create a sense of community and encourages peer-to-peer interaction. Studies, such as those conducted by Huang, show that using WeChat for educational purposes enhances student engagement and fosters collaborative learning [9]. Together, these tools create a comprehensive digital ecosystem that supports both language acquisition and the development of civic awareness.

3.3 Case Study: Development of the MOOC “College English 1” on Treenity

Course Objectives.

The MOOC “College English 1”, developed on the Treenity platform, was designed with a dual focus: enhancing students' English language proficiency while incorporating elements of ideological and political education. The course aims to improve students' language skills—reading, writing, translation, and vocabulary—while simultaneously nurturing their awareness of cultural and societal issues. Each chapter integrates themes that align with the values of civic responsibility, respect for diverse perspectives, and personal development. Through these objectives, “College English 1”

seeks not only to teach the mechanics of the English language but also to cultivate critical thinking, cultural sensitivity, and civic engagement among students.

Content Structure and Delivery Methods.

The course is divided into six chapters, each focusing on a distinct theme relevant to students’ personal growth and societal engagement. These chapters are designed to progressively develop both linguistic skills and ideological awareness. Table 1 illustrates the themes of each chapter.

Table 1. Content Structure of “College English 1”

Chapters	Title	Theme
1	Fresh Start	focuses on setting academic and personal goals, helping students reflect on their identities and ambitions
2	Loving Parents, Loving Children	explores familial relationships, encouraging students to consider filial piety and intergenerational communication
3	Heroes of Our Time	discusses contemporary Chinese figures who have made significant contributions to society, prompting students to think about civic duty and self-sacrifice
4	Social Media Matters	examines the impact of social media on personal and societal interactions, fostering digital literacy and responsible online behavior
5	Friendship Across Borders and Gender	emphasizes cross-cultural communication and gender equality, encouraging inclusivity and mutual respect
6	Winning Is Not Everything	challenges the notion of success, urging students to reflect on values such as integrity, perseverance, and teamwork

Each chapter is structured into six sections: Lead-In, Word Study, Global Reading, Cultural Exploration, Writing Skills, and Translation Techniques. This structure ensures comprehensive coverage of language skills while introducing relevant ideological content. For instance, the Lead-In sections set the tone for each chapter by prompting students to engage with thought-provoking questions related to the chapter’s theme, while the Cultural Exploration sections integrate Chinese cultural elements, helping students draw connections between global perspectives and their own cultural heritage.

The course delivery utilizes Treenity’s multimedia features, including video lectures, interactive quizzes, and discussion boards. The video lectures are used to introduce key concepts in each chapter, while interactive elements such as quizzes and peer assessments are integrated to reinforce learning. The discussion boards allow for real-time engagement, where students can discuss topics related to both language learning and ideological themes. These delivery methods ensure that the course remains interactive and student-centered.

Interactive Elements and Student Engagement.

Engaging students in both language and ideological education is a primary goal of “College English 1”. The course leverages several interactive elements on the Treenity

platform to achieve this. One of the key strategies is the use of multimedia content—videos, animations, and case studies that make abstract ideological concepts more tangible. For example, in Chapter 3, “Heroes of Our Time”, video segments on contemporary Chinese heroes are used to illustrate the real-world application of moral and civic values, encouraging students to reflect on their own roles in society.

Additionally, interactive quizzes and assignments provide opportunities for self-assessment and peer review. Students complete quizzes that test their comprehension of both language skills and the ideological content embedded in each chapter. For instance, after reading materials in “Global Reading”, students are asked to summarize texts while reflecting on the ideological implications of the content. In the “Writing Skills” section, students are tasked with writing essays that incorporate both English language conventions and reflections on the chapter’s themes, such as the importance of social responsibility or cross-cultural understanding.

To further enhance engagement, “College English 1” incorporates the use of WeChat for out-of-class discussions. WeChat groups are set up for each class, allowing students to communicate with one another and the instructor. This real-time communication fosters a sense of community, and peer-to-peer discussions often focus on the ideological themes of the course, making the integration of ideological education more fluid and accessible.

The inclusion of “Chinese elements” in each chapter provides a unique cultural dimension to the course. For example, in Cultural Exploration, students are introduced to aspects of traditional Chinese values such as “ren” (benevolence) and “yi” (righteousness), which are woven into broader global themes. This approach ensures that students not only improve their language skills but also deepen their understanding of their own cultural heritage in relation to the broader world. The integration of these elements helps reinforce national pride and cultural identity, while simultaneously developing an appreciation for global perspectives, aligning well with the goals of ideological and political education.

4 Implementation of Digital Tools

4.1 Strategies for Integrating Treenity, Rain Classroom, and WeChat into the Curriculum

The successful integration of digital tools like Treenity, Rain Classroom, and WeChat into the college English curriculum requires thoughtful planning and alignment with both linguistic and ideological education objectives. For “College English 1”, the strategy centered on creating a blended learning environment where in-class activities were seamlessly supported by online resources. Treenity served as the primary platform for delivering course content, with Rain Classroom providing in-class interactions and WeChat facilitating communication and community engagement.

In the classroom, teachers introduced key concepts, while the Treenity platform reinforced these lessons through online video lectures, quizzes, and interactive tasks. Each section of the course—such as Lead-In, Word Study, and Global Reading—was paired with specific activities on Treenity and Rain Classroom to ensure that students

could revisit and deepen their understanding of the material outside of class hours. For example, after an in-class lecture on Word Study in Chapter 4, Social Media Matters, students would complete a vocabulary quiz on Rain Classroom and participate in a discussion on WeChat about the impact of social media on communication norms. In the Cultural Exploration section of each chapter, students watched videos or listened to podcasts that brought Chinese and global cultural elements into focus. This multimedia content not only enriched language learning but also contextualized the ideological themes of each chapter. For instance, in the Cultural Exploration section of Chapter 5, Friendship Across Borders and Gender, Treenity provided video case studies of cross-cultural interactions, which sparked discussions on inclusivity and understanding.

WeChat played a pivotal role in maintaining continuous communication between students and instructors. Beyond logistical coordination, the platform was used for reflective discussions and collaborative assignments. After each class, students were encouraged to engage in group discussions on WeChat, where they could exchange views on the ideological themes introduced in the chapter. For instance, students discussed the ethical implications of success in the WeChat group after completing *Winning Is Not Everything* in Chapter 6. This real-time interaction reinforced the sense of community and allowed for deeper reflections on both language and ideological content.

4.2 Challenges Faced During Implementation

While the integration of these digital tools provided numerous advantages, the implementation process was not without challenges. One of the primary challenges was ensuring that students were comfortable using multiple platforms. Many students were already familiar with WeChat, but fewer had experience with Treenity and Rain Classroom, which required time to adapt. Initial feedback indicated that students felt overwhelmed by the need to navigate between platforms, especially in the first few weeks of the course.

Another challenge was maintaining student engagement across both in-class and online activities. While Treenity and Rain Classroom provided valuable resources, some students struggled with time management, often postponing online activities until just before deadlines. This affected the quality of participation in online discussions and peer feedback sessions. Ensuring consistent engagement across multiple modes of learning (in-person, online, and peer-to-peer) required ongoing effort from both instructors and students.

Additionally, there were technical challenges, particularly in areas with unstable internet connections. Some students reported difficulty accessing multimedia content on Treenity due to connectivity issues, which hindered their ability to fully engage with the course materials.

4.3 Solutions and Best Practices for Effective Integration

To address these challenges, several solutions and best practices were developed over the course of the MOOC's implementation. First, a comprehensive introduction to each digital platform was provided during the first week of the course. A series of lectures

and videos were created, guiding students through the registration process, platform navigation, and completion of online tasks. Additionally, instructors made themselves available during office hours and via WeChat to troubleshoot any technical difficulties or answer questions about the platforms.

To enhance student engagement, weekly deadlines were introduced for online activities, ensuring that students completed their tasks in a timely manner. This allowed for more meaningful participation in online discussions and peer feedback sessions. Instructors also encouraged students to take part in collaborative assignments that required them to interact with their peers. For instance, group projects on Treenity, where students were tasked with analyzing cultural themes from the course, improved interaction and kept students engaged.

To mitigate the impact of technical difficulties, alternative solutions were implemented. In cases where students could not access multimedia content on Treenity due to connectivity issues, downloadable versions of the materials were made available. Additionally, transcripts of video content were provided on Rain Classroom for students with low bandwidth, allowing them to follow along with the material even if video streaming was not possible.

5 Impact on Student Learning and Engagement

5.1 Analysis of Student Feedback and Performance Metrics

The integration of digital tools like Treenity, Rain Classroom, and WeChat in “College English 1” significantly impacted both student learning outcomes and engagement levels. To assess this impact, a combination of student feedback surveys, performance metrics, and participation data was collected throughout the course. Surveys conducted at the end of each module revealed that the majority of students found the digital tools helpful in supporting their learning. Specifically, students appreciated the flexibility offered by Treenity, which allowed them to revisit lectures, complete quizzes at their own pace, and engage with supplementary materials beyond the classroom.

Quantitative performance metrics also provided insight into the effectiveness of these tools. Across the six chapters of the course, students’ quiz scores and essay submissions indicated a steady improvement in language proficiency, particularly in vocabulary acquisition and reading comprehension. For instance, data from Chapter 3, *Heroes of Our Time*, showed a 15% increase in vocabulary retention after students completed the interactive quizzes on Treenity compared to traditional in-class exercises. Similarly, essay scores in the Writing Skills section demonstrated enhanced critical thinking, as students were required not only to analyze linguistic features but also to reflect on ideological themes such as civic duty and heroism.

Participation metrics further reinforced the positive impact of the digital tools. The discussion forums on Treenity and the group discussions on WeChat saw active engagement, with over 85% of students contributing regularly to online conversations. This high level of participation suggests that the digital tools provided an accessible platform for students to engage with course material, collaborate with peers, and reflect on ideological content. However, it is worth noting that participation rates were highest

in the Lead-In and Cultural Exploration sections, which featured multimedia content and open-ended discussions, suggesting that students were particularly motivated by interactive and thought-provoking elements.

5.2 Role of Digital Tools in Fostering Ideological Understanding

The digital tools used in course of College English were not only instrumental in improving language proficiency but also played a significant role in fostering ideological understanding. Through the carefully designed content and interactive features, students were encouraged to engage with complex social, cultural, and political themes. For example, in Chapter 4, Social Media Matters, students examined the role of digital platforms in shaping public discourse and were asked to reflect on the ethical responsibilities of online communication. The combination of multimedia resources on Treenity and group discussions on WeChat helped facilitate deeper reflections on these topics.

Research by M. Gonzalez-Mohino suggests that digital tools, when effectively integrated into ideological education, can enhance students' critical thinking and moral reasoning [10]. In "College English 1", this was evident in the Cultural Exploration sections, where students were introduced to traditional Chinese values such as "ren" (benevolence) and "yi" (righteousness) and asked to compare these with contemporary global values. By encouraging students to draw connections between Chinese cultural elements and broader global themes, the course promoted an understanding of cultural identity while fostering openness to diverse perspectives. The discussions in these sections demonstrated a higher level of ideological reflection, as students explored the implications of cultural and political values on their own lives.

WeChat, in particular, played a crucial role in reinforcing ideological education by enabling real-time, informal discussions that extended beyond the classroom. The flexibility of the platform allowed students to share articles, videos, and personal reflections related to the course themes, creating a collaborative learning environment that fostered continuous engagement. As M. M. Skoric and Zhu highlight, the use of social media in educational settings can strengthen community building and enhance students' emotional and intellectual engagement with ideological content [11]. In "College English 1", the use of WeChat group discussions provided a space for students to discuss sensitive topics such as gender equality and social responsibility, leading to more nuanced understandings of these issues.

6 Conclusion

The integration of digital tools like Treenity, Rain Classromm, and WeChat into "College English 1" provides a compelling case for how technology can enhance both language learning and ideological and political education. The course not only improved students' English proficiency but also nurtured critical thinking, cultural awareness, and civic responsibility—core elements of China's ideological education initiative in higher education.

One of the central insights from the implementation of these tools is the versatility they offer in creating a blended learning environment. Treennity, with its multimedia resources and interactive features, allowed for flexible learning and self-paced study. This empowered students to revisit course content, engage with quizzes, and participate in peer-to-peer discussions outside of class, as supported by research showing how online platforms improve student retention and performance [12]. Rain Classroom enhanced the learning experience by delivering rich, multimedia content that catered to various learning styles and supported cultural exploration, as shown in research by Wang [13], which emphasizes the role of multimedia in fostering deeper engagement.

WeChat, widely used in daily communication, provided an invaluable tool for sustaining dialogue beyond the classroom. Its real-time messaging feature allowed for more informal, continuous interaction, fostering a sense of community and encouraging students to reflect on both linguistic and ideological content in a collaborative manner. This finding aligns with S. Setia and M. Tichy's [14] work, which highlights the role of social media in strengthening the learning community and enhancing emotional and intellectual engagement.

While the course successfully leveraged digital tools to improve both language acquisition and ideological understanding, the process was not without challenges. Issues such as platform unfamiliarity, time management, and technical limitations (especially in terms of internet access) posed obstacles to full student engagement. However, through strategic solutions—including detailed platform orientations, weekly deadlines, and alternative content delivery options—these barriers were mitigated, allowing for an effective learning experience.

Ultimately, the digital integration in “College English 1” achieved its intended goals of improving language skills while embedding Chinese cultural elements and fostering ideological reflection. By combining the strengths of online platforms with thoughtfully designed course content, educators can cultivate students’ linguistic capabilities alongside their understanding of civic values and cultural identity. As higher education institutions continue to embrace digital tools in teaching, the lessons learned from this course can serve as a valuable model for integrating ideological education in language learning contexts.

This study underscores the importance of leveraging digital tools in higher education to meet evolving pedagogical goals. It also demonstrates that when carefully implemented, technology can bridge the gap between language instruction and ideological education, fostering a more holistic, culturally resonant, and engaged learning experience. Further research should continue to explore the long-term effects of these digital tools on both academic performance and ideological development, offering insights that can shape the future of education in the digital age.

Acknowledgments

This work is supported by Research Project on Teaching Reform in Hunan's General Higher Education (Grant No: HNJG-2022-1193) and The 2023 Annual Research

Project of the Hunan Provincial Educational Science Research Workers Association
(Grant No: XJKX23B020)

References

1. Feng, X., Mi, K., Shen, Y., Hua, H., Bian, Y., & Bian, H. (2022). Rain Classroom assisted by WeChat for preliminary online physiology teaching during the COVID-19 pandemic. *Advances in Physiology Education*, 46(2), 319-324. doi:https://doi.org/10.1152/advan.00115.2021
2. Gonzalez-Mohino, M., Rodriguez-Domenech, M. A., Callejas-Albiñana, A. I., & Castillo-Canalejo, A. (2023). Empowering critical thinking: The role of digital tools in citizen participation. *Journal of New Approaches in Educational Research*, 12(2), 258-275. doi:https://doi.org/10.7821/naer.2023.7.1385
3. Halverson, L. R., & Graham, C. R. (2019). Learner engagement in blended learning environments: a conceptual framework. *Online learning*, 23(2), 145-178.
4. Huang, L., Wang, K., Li, S., & Guo, J. (2023). Using WeChat as an educational tool in MOOC-based flipped classroom: What can we learn from students' learning experience? *Frontiers in Psychology*, 13, 1098585. doi:https://doi.org/10.3389/fpsyg.2022.1098585
5. Hui, Y. (2024). A Teaching Design of Ideological and Political Education in the College English Listening Curriculum Based on OBE Concept. *Education Reform and Development*, 6(9), 244-250.
6. Piaget, J. (1952). *The origins of intelligence in children*: International University.
7. Setia, S., Tichy, M., & Gilbert, F. (2024). Innovating Social-Emotional Learning to Enhance Positive Engagement of Youth With Social Media: A Comprehensive Review of Why and How. *Cureus*, 16(9), e70130.
8. Shah, V., Murthy, S., Warriem, J., Sahasrabudhe, S., Banerjee, G., & Iyer, S. (2022). Learner-centric MOOC model: A pedagogical design model towards active learner participation and higher completion rates. *Educational technology research and development* 70(1), 263-288.
9. Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New media & society*, 18(9), 1817-1839.
10. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*: Harvard university press.
11. Wang, S. (2022). *Research on the Practical Paths of Ideological and Political Education of College English in the Era of New Media*. Paper presented at the 2nd International Conference on Education: Current Issues and Digital Technologies (ICECIDT 2022).
12. Wang, Y., Wu, J., Chen, F., & Li, J. (2024). Analyzing Teaching Effects of Blended Learning with LMS: An Empirical Investigation. *IEEE Access*, 12, 42343-42356.
13. Zhang, C., & Fagan, C. (2016). Examining the role of ideological and political education on university students' civic perceptions and civic participation in Mainland China: Some hints from contemporary citizenship theory. *Citizenship, Social and Economics Education*, 15(2), 117-142. doi:https://doi.org/10.1177/2047173416681170
14. Zhu, H., Xu, J., & Wang, P. (2023). The irreplaceable role of medical massive open online courses in China during the COVID-19 pandemic. *BMC Med Educ*, 23(323). doi:https://doi.org/10.1186/s12909-023-04315-z

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

