

AI-Enabled Curriculum Innovation and Value-Shaping Education Practice with Jiangxi Characteristics: A Case Study of the Course *Introduction to Chinese Culture*

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Abstract: Generative artificial intelligence (AI) is transforming university teaching, yet how it can serve value-shaping education and the transmission of regional culture has received little attention. Taking *Introduction to Chinese Culture*, a compulsory course for translation undergraduates at East China Jiaotong University, as a case, this paper reports a three-year reform built on a “three-dimensional integration and four-directional driving” framework that fuses cultural knowledge, value guidance and English expression. Four measures were implemented: an AI-driven dynamic content system, a three-stage AI support system, a scenario-based practice system, and a Jiangxi-cultural transformation system. Evidence from course archives, student questionnaires, contest results and routine evaluations shows that the reform resolved the course’s four long-standing pain points, namely outdated and homogeneous content, the dual burden of cultural understanding and English expression, the gap between learning and use, and underused local cultural resources, while strengthening students’ cultural confidence, intercultural communicative competence and civic responsibility. The reform also demonstrates a route for converting regional cultural assets into teachable and exportable course content through bilingual compilation, studio-based practice and cooperation with local cultural institutions. The case offers transferable implications for AI-era curriculum innovation and value-shaping education in foreign language programs.

Keywords: AI-enabled education; Value-shaping education; Curriculum innovation; Jiangxi cultural resources; Translation education; Chinese culture course

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1. Introduction

Generative AI has entered classrooms faster than institutions can adapt. Large language models can produce teaching materials, simulate interlocutors, offer instant feedback and personalize learning paths, yet they also

raise legitimate concerns about academic integrity, over-reliance and the reliability of machine output ^[1]. Universities are consequently searching for frameworks that deploy AI deliberately rather than defensively ^[2]. Meanwhile, Chinese higher education is undergoing an equally significant reform, value-shaping education (curriculum ideological and political education), which requires every course to embed value guidance, such as cultural confidence and patriotic responsibility, within knowledge transmission and ability cultivation ^[3-4]. Foreign language and translation programs carry a special burden here, because their graduates are expected to interpret Chinese culture for international audiences in English ^[5]. For culture-oriented courses, this tension is especially acute, because the subject matter is itself value-laden, and any tool that mediates cultural content participates in value transmission. Recent surveys in Chinese higher education suggest that over half of language instructors have experimented with such tools, although the depth of integration varies.

Introduction to Chinese Culture, a professional compulsory course for translation undergraduates at East China Jiaotong University (ECJTU) in Jiangxi Province, sits precisely at the intersection of these two movements. The course team identified four persistent problems, designed an integrated reform that combines AI, Jiangxi's distinctive cultural resources and value-shaping education, and has refined it through three years of practice. This paper analyzes the problems, the innovation framework, its implementation and the observed outcomes, and discusses what the case implies for similar courses. Unlike many accounts of AI in education that concentrate on generic language skills, the present case places a specific regional culture at the center of course design, so that technology and local cultural assets work in concert.

2. Literature review

Research on AI in language education has grown rapidly. A bibliometric review of over five hundred studies shows that automated writing evaluation, intelligent tutoring systems, automated error detection and personalized learning have become dominant applications, with AI increasingly used to scaffold writing, reading, vocabulary and speaking ^[6]. Generative chatbots add interactional affordances: they provide round-the-clock practice, adjust input to learners' proficiency and supply immediate formative feedback ^[7]. In the writing and translation classroom specifically, intelligent writing assistance and machine translation no longer play a peripheral role, so learners must develop critical literacy to use such tools without surrendering judgment ^[8]. Studies of ChatGPT in translation teaching similarly report that students value its help with mechanical drafting and editing but still need human guidance for culturally and contextually demanding decisions ^[9]. Across these studies, AI tools work best when embedded in deliberate pedagogical designs rather than attached to existing routines, with teachers retaining responsibility for goals and quality control.

A second strand concerns value-shaping education. Wen ^[3] proposed a framework for what college foreign language courses should convey ideologically and how to organize it across the whole teaching process, while Huang and Xiao ^[4] identified six elements for building ideological-political content into foreign language curricula. Related work stresses cultural confidence: instruction that integrates Chinese cultural content strengthens learners' confidence and their capacity to tell China's story ^[5]. Finally, meta-analytic evidence indicates that immersive technologies such as virtual reality (VR) produce positive effects on language learning outcomes ^[10], although effects depend on instructional design. Taken together, these strands suggest that cultural confidence grows out of concrete encounters with authentic materials rather than exhortation, and that immersive, task-based environments can convert such encounters into usable communicative competence.

However, few studies show how AI-enabled teaching, value-shaping education and regional cultural resources can be co-designed in one course, particularly in translation-oriented culture courses. The case presented below offers one such co-design. The study foregrounds the integration question: how the three strands can be co-designed within a single culture course.

3. Course context and problem analysis

The course is offered to first-year translation majors as part of a national first-class undergraduate program at ECJTU. Its objectives are fourfold: to build systematic knowledge of Chinese cultural history, core values and key symbols; to develop students' ability to interpret cultural texts, translate cultural content and communicate across cultures; to nurture cultural identity, aesthetic sensibility and professional ethics; and to strengthen patriotic feeling and the responsibility to facilitate mutual understanding between China and other countries. Student analysis conducted by the team showed that learners had relatively good English proficiency but fragmented and superficial knowledge of Chinese culture, limited confidence in its value and international influence, weak ability to express it in accurate and idiomatic English, passive learning habits, and scant familiarity with Jiangxi's own cultural resources. This profile mattered for design: a course aimed at value shaping cannot assume the value base it intends to cultivate, and students who cannot articulate their own culture in English have little ground for confidence in its reception. The host program also requires students to take modules in regional studies, digital humanities, and applied translation technology alongside their language curriculum.

Four pain points followed. First, content was outdated and homogeneous: textbooks renewed slowly, lacked timely cultural achievements, carried no regional or contemporary flavor, and integrated value education in a formulaic way. Second, learners faced a dual burden of cultural comprehension and English expression, so that shallow understanding produced shallow expression and imprecise language distorted cultural meaning. Third, learning was separated from use, and conventional instruction could not satisfy digital-age needs for immersive, interactive, and personalized experiences. Fourth, Jiangxi's rich cultural assets, ranging from the Jinggangshan revolutionary spirit to classical poetry, ceramics and academy culture, remained outside the classroom, wasting a natural vehicle for cultural identity and value education. These problems reinforced one another: stale content gave students little worth expressing, weak expression blocked the satisfaction of successful communication, and scarce occasions for use made knowledge and language feel inert. A fifth issue concerned assessment: existing rubrics rewarded memorization of cultural facts and did not capture the higher-order competencies the reform sought to cultivate.

4. The Innovation Framework: “Three-Dimensional Integration and Four-Directional Driving”

The reform rests on an overall framework of “three-dimensional integration and four-directional driving”. The three integrations define the value orientation of the course: cultural knowledge is integrated with value guidance, so that the deep values embedded in Chinese culture permeate every unit; theoretical learning is integrated with practical experience through case analysis, role play and cultural fieldwork; and a Chinese perspective is integrated with an international vision, so that students learn to interpret Chinese culture for global audiences. The four directions function as driving forces: AI empowerment supplies dynamic content

and intelligent interaction; Jiangxi characteristics supply authentic, place-based materials that distinguish the course; learner-centeredness supplies diversified resources and individualized pathways; and problem orientation organizes teaching around the difficulties students actually encounter. The framework thus assigns each element a distinct function while requiring them to operate jointly: AI provides capability, local culture provides meaning, learner-centeredness provides motivation, and problem orientation provides direction.

Table 1. Alignment between pain points, measures and mechanisms

Pain point	Corresponding measure	Core mechanism
Outdated, homogeneous content; shallow value integration	AI-driven dynamic content system	Real-time bilingual materials, Jiangxi modules, culture–ideology–scenario mapping
Dual burden of culture and English	Three-stage AI support system	Bilingual knowledge graphs, expression toolkits, AI role-play and feedback
Learning–use gap; unmet digital needs	Scenario-based practice system	VR experience hall, AI cross-cultural laboratory, individualized learning paths
Underused local resources	Jiangxi transformation system	Bilingual readers, cultural studios, cooperation for Jiangxi culture going global

As Table 1 shows, every measure targets one pain point while remaining mutually reinforcing, so that technology serves rather than replaces the value-shaping mission of the course. The mapping also served as a management tool, letting the team check whether any pain point lacked a corresponding measure or any measure had drifted from its intended mechanism.

5. Implementation of the innovation

5.1. An AI-driven dynamic content system

To counter content stagnation, an AI-assisted resource platform draws on authoritative channels, such as the Ministry of Culture and Tourism, to capture new cultural achievements. A weekly “new perspectives on culture” module supplies curated bilingual materials, while a “Ganpo (Jiangxi) culture database” connects national content with local cases, for example, opening ancient philosophy with the study regulations of the White Deer Grotto Academy and teaching craft vocabulary through Jingdezhen porcelain-making. A culture–ideology–scenario mapping table extracts values from concrete cultural texts, and a “tracing–interpreting–expressing” sequence lets ideological elements emerge naturally, such as guiding students from Song Yingxing’s *Tiangong Kaiwu* to the Chinese tradition of scientific innovation. Because the platform draws on curated official channels rather than open web harvesting, the materials carry institutional credibility, and the team reviews each batch before release, keeping human judgment inside the content loop. Each module is reviewed by a content mentor before release so that factual claims remain consistent with the established teaching outline.

5.2. A three-stage AI support system

Pre-class, students enter a topic and receive an AI-generated bilingual knowledge graph with an expression toolkit containing core translations, sentence frames and confusable-word distinctions. In class, “AI cultural role interaction” allows students to converse in English with AI-simulated figures such as Tao Yuanming or Li Bai, with immediate feedback on both cultural accuracy and linguistic appropriateness. Post-class, “micro translation and promotion tasks” are first assessed by AI, which labels language errors and cultural

mistranslations, and then refined by the teacher. The system therefore strengthens cultural cognition and English expression simultaneously. The staging matters pedagogically: support is concentrated where cognitive load is highest, at first encounter with unfamiliar cultural material and at the production of public-facing English output.

5.3. A scenario-based practice system

A “Jiangxi virtual culture experience hall” recreates scenes such as Yongshu Road and the White Deer Grotto Academy, where students complete first-person English tasks in VR, while an “AI intercultural communication laboratory” simulates authentic scenarios and generates ability-radar reports that trigger individualized resources. Online and offline activities are linked: students produce short English videos on Jiangxi culture, and “cultural tourism practice weeks” take them to landmarks such as Tengwang Pavilion to deliver real English commentaries with AI-supported script revision. These scenarios turn the learning-use gap into a design variable: rather than hoping classroom learning will eventually transfer to real communication, the course stages progressively more authentic communicative situations.

5.4. A Jiangxi cultural transformation system

The team compiled bilingual resources, including an annotated reader of Jiangxi poetry in English, and built a bilingual case library of regional cultural events. A “studio for international communication and practice of Chinese culture” organizes a series of Ganpo cultural experience activities, and cooperation with local cultural-tourism authorities channels outstanding student outputs into regional external-promotion resource pools, allowing students to participate in Jiangxi culture going global. A representative unit, “A Glimpse of Chinese Classical Poetry,” illustrates the full cycle: pre-class bilingual packages covering *The Book of Songs* and *Odes of Chu*; in-class AI dialogues with Li Bai, Du Fu and Wang Anshi on romanticism, patriotism and aspiration, together with a VR visit tracing Ouyang Xiu’s legacy on Yongshu Road; and post-class tasks in which students produce English short videos and on-site commentaries on poetry related to Jiangxi, including lines from Wang Bo’s *Preface to the Pavilion of Prince Teng*. The unit illustrates how the four systems interlock within a single teaching cycle rather than operating as separate add-ons, experienced by students as one coherent learning journey from encounter to expression.

6. Outcomes

Evidence from three years of practice is encouraging. Student surveys report markedly stronger cultural confidence and perceived ability to introduce Chinese culture to foreigners in English. Students have won national prizes in English speech and translation contests, many with Chinese-culture topics, and their project outputs, such as Jiangxi-themed videos, show creativity and problem-solving ability. Course evaluations have remained above 94 points for three consecutive years. The course team’s ideological-political teaching design won first prize in the provincial competition, the reform project “AI-Mapped Jiangxi: Exploring Classical Verse, Encountering Poetic Jiangxi” received provincial funding, and the experience has been shared with other universities in Jiangxi. Team members have published teaching-reform papers and strengthened the link between research and teaching. Socially, graduates now work in translation, education, foreign affairs, cultural tourism and media, and many volunteers help present Jiangxi’s red, poetic and ceramic culture abroad. Beyond these indicators, change was visible in everyday classroom behavior: students increasingly

initiated discussion of translation choices, brought in Jiangxi materials they had found themselves, and volunteered for English-language cultural service, suggesting the reform reached dispositions, not only scores. Peer observers from sister universities who attended demonstration classes reported that the redesigned sessions were noticeably more interactive than the traditional lecture format.

7. Discussion and implications

Several factors explain the results. First, AI was positioned as a pedagogical medium rather than an end in itself: content renewal, simulation, feedback and personalization all served the course's cultural and value objectives, echoing calls for ecological rather than merely technical integration of AI ^[2]. Second, authentic local culture supplied the emotional and cognitive hooks that abstract ideological-political content often lacks, aligning with evidence that culture-rich materials strengthen identity and confidence ^[5]. Third, the three-stage design distributed AI support across the learning cycle and retained the teacher as the final arbiter of quality, which is essential when machine output is fluent but not always culturally safe ^[8-9]. Fourth, the alignment between pain points and measures gave the reform internal coherence, so every investment answered a documented need, sustaining teacher commitment across three years.

The case also raises cautions. AI-generated cultural content must be verified for factual and value accuracy; data privacy and equal access require institutional policy; and immersive tools demand considerable investment and teacher training ^[10]. As a single-case study relying partly on self-reported and institutional data, the findings are indicative rather than causal, and replication in other regions and disciplines is needed to test generalizability. Sustaining the reform will also require continuous updating of the AI components and protection of the substantial preparation time that scenario-based teaching demands.

8. Conclusion

This paper reported how *Introduction to Chinese Culture* at ECJTU integrated AI enablement, Jiangxi characteristics and value-shaping education in a coherent curriculum reform. By aligning an AI-driven content system, a three-stage support system, scenario-based practice and local cultural transformation with the course's four pain points, the “three-dimensional integration and four-directional driving” framework achieved measurable gains in cultural confidence, language performance and social contribution. The case suggests that the most productive use of AI in value-shaping education is not to automate teaching but to enrich authentic content, deepen interaction and connect learners with their own cultural heritage, so that technology and values reinforce each other in cultivating competent and confident tellers of Chinese stories. Future iterations will extend the resource platform, deepen cooperation with cultural institutions, and follow the program graduates as they develop into cultural communicators.

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References

- [1] Kasneci E, Sessler K, Küchemann S, et al., 2023, ChatGPT for Good? On Opportunities and Challenges of Large Language Models for Education. *Learning and Individual Differences*, 103: 102274.
- [2] Chan CKY, 2023, A Comprehensive AI Policy Education Framework for University Teaching and Learning. *International Journal of Educational Technology in Higher Education*, 20: 38.
- [3] Wen QF, 2021, A Framework of Integrating Moral Education into College Foreign Language Teaching. *Foreign Languages in China*, 18(2): 47–52.
- [4] Huang GW, Xiao Q, 2021, Six Elements in the Ideological-Political Construction. *Foreign Languages in China*, 18(2): 10–16.
- [5] Wang H, Liu W, 2021, Research on Enhancing Students’ Cultural Confidence in College English Teaching. In *Proceedings of the 2021 2nd International Conference on Computers, Information Processing and Advanced Education (CIPAE 2021)*, 471–475. ACM.
- [6] Huang X, Zou D, Cheng G, Chen X, Xie H, 2023, Trends, Research Issues and Applications of Artificial Intelligence in Language Education. *Educational Technology & Society*, 26(1): 112–131.
- [7] Kohnke L, Moorhouse BL, Zou D, 2023, ChatGPT for Language Teaching and Learning. *RELC Journal*, 54(2): 537–550.
- [8] Godwin-Jones R, 2022, Partnering with AI: Intelligent Writing Assistance and Instructed Language Learning. *Language Learning & Technology*, 26(2): 5–24.
- [9] Sahari Y, Al-Kadi AMT, Ali JKM, 2023, A Cross-Sectional Study of ChatGPT in Translation: Magnitude of Use, Attitudes, and Uncertainties. *Journal of Psycholinguistic Research*, 52(6): 2937–2954.
- [10] Chen J, Dai J, Zhu K, Xu L, 2022, Effects of Extended Reality on Language Learning: A Meta-Analysis. *Frontiers in Psychology*, 13: 1016519.

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