Innovative Exploration of Integrating Bashu Culture into College English Teaching in the Context of Smart Education

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Abstract: Under the background of globalization, college English teaching transcends the mere cultivation of linguistic proficiency to serve as an integral component in developing intercultural communication competence. As an important gem of Chinese civilization, Bashu culture has a rich historical and cultural background, providing unique and rich resources for college English teaching. Moreover, the development of smart education has provided new means and platforms for the integration of Bashu culture into college English teaching. This paper takes Unit 4, "Let's Go" from New Horizon College English (book 3) as an example. By integrating Bashu cultural resources and adopting an online-offline blended teaching model, it constructs a trinity teaching framework of "language + culture + technology" and a Bashu cultural integration path of "perception - understanding - dissemination," aiming to enhance students' language ability and cultural literacy.

Keywords: Bashu Culture; College English Teaching; Smart Education

1. Introduction

In the waves of globalization and digitalization, college English teaching is undergoing a profound transformation from a "language instrumentalism" approach to a "culture-empowering" pedagogy. [1] President Xi has repeatedly emphasized the importance of cultural confidence, stating that "without a high degree of cultural confidence and the prosperity of culture, there can be no great rejuvenation of the Chinese nation." In the educational domain, the "Guidelines for the Construction of Ideological and Political Education in Higher Education Curricula" mandate the integration of ideological education across disciplines to promote the excellent traditional culture of China. The "College English Teaching Guidelines (2020 Edition)" explicitly requires the alignment of college English with institutional ideological-political curricula, enhancing students' understanding and awareness of Chinese culture, and equip them to disseminate native cultural narratives in English. This requirement not only provides a clear direction for the reform of college English teaching but also offers policy support for integrating local culture into English teaching. As a vital part of the excellent traditional Chinese culture, Bashu culture, with its profound historical background and unique regional charm, offers rich pedagogical resources and a unique perspective for reforming college English education. [2]

In the Digital 3.0 era, smart education has revolutionized college English teaching through advanced technology. [3] Rapid developments in artificial intelligence (AI), virtual reality (VR), and augmented reality (AR) have enabled the visualization, enrichment, and practical implementation of cultural education. Smart education, by deploying perception-enhancing systems, cognitive scaffolding tools, and adaptive feedback mechanisms, has restructured the traditional teaching model, facilitating embodied cultural experiences and deep cognitive engagement. This paper explores innovative approaches to integrating Bashu culture into college English teaching within smart education ecosystems. By constructing a "Culture-Language-Technology" Model, the paper analyzes the important role of Bashu culture in ideological-political curricula and proposes actionable solutions based on thematic design and task-driven teaching methods.

2. College English Teaching Reform under the Context of Smart Education

Building upon the broader context of college

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English teaching reform in the smart education era, it is essential to clarify the core concepts and development path of smart education first. As a revolutionary approach that is redefining teaching methods, smart education is not merely a technological adjunct but a systemic reshaping of how learning environments are structured, delivered, and evaluated. The following section clarifies its definition, developmental stages, and technological drivers, thereby establishing a theoretical and practical scaffold for understanding its catalytic role in reshaping language education—particularly in integrating regionally rooted cultural elements like Bashu heritage in college English teaching.

2.1 Definition and Development of Smart Education

Smart education, an educational model based on emerging information technologies, empowers the teaching process through the Internet, big data, artificial intelligence (AI), and other technologies to achieve intelligent, personalized, and efficient pedagogical practices. [4]

Its core lies in constructing data-driven, intelligent learning environment that supports students in engaging in learning activities characterized by high-order, innovation, and challenge. These ecosystems cultivate students' high-order thinking and abilities such as cooperative competencies and cognitive thinking, ultimately realizing education characterized by personalization, intellectualization, and interactivity. [5]

In recent years, smart education has gained important momentum through national policy support. In January 2022, the State Council issued the "14th Five-Year Plan for Digital Economic Development," which explicitly advocating "deepened implementation of smart education." The same year, the National Education Work Conference Launched the National Education Digitalization Strategy Initiative. In October 2022, A report emphasized "advancing the educational digitalization" further clarifying the important position of smart education in the national strategy. In February 2023, "Overall Layout Plan for the Construction of Digital China" has been released which clearly pointed out the need to vigorously advance the National Education Digitalization Strategy Action and enhance the National Smart Education Platform. In 2024, smart education further emphasized leveraging the unique advantages of technology to shift education and teaching from mass standardization to personalized intelligence, ensuring that every student has an education plan tailored to their needs for free and comprehensive development.

Despite being a relatively new field of research, the development of smart education, has witnessed rapid growth. As of January 2025, the author conducted a search using the term "smart teaching" as the title and in academic databases which yields 2,093 publications. The main research topics are concentrated in three areas such as technological infrastructure: Smart teaching platforms, intelligent learning environments; pedagogical innovations: Smart teaching models, blended teaching methodologies and tool development: AI-driven instructional tools.

2.2 The Significance of Smart Education for College English Teaching

As a compulsory foundational course, college English plays a vital role in in cultivating globally competent talents.[6] However, traditional college English teaching models have gradually revealed limitations in precision instruction, personalized learning experiences, and in-depth assessments of teaching effectiveness. Smart education, empowered by artificial intelligence (AI), can deeply analyze students' learning trajectories to design teaching plans that meet individual needs, thereby unlocking learning potential and effectively improving teaching quality and learning outcomes.

The significance of smart education for college English teaching is mainly reflected in the following four key aspects:

a. It can enhance teaching efficiency and quality. AI-driven smart education can monitor students' learning progress in real time, deliver personalized learning paths and resources, thus to significantly improve teaching effectiveness. [7] b. It can strengthen students' autonomous learning abilities. Based on students' habits, proficiency levels, and interests, smart teaching platforms generate tailor-made learning materials and activities to foster students' autonomous learning capabilities.

c. Smart education supports various innovative

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models such as blended online and offline teaching and task-driven teaching, offering more possibilities for college English teaching.

d. By providing technological platforms and methodological frameworks, smart education supports the infusion of regional cultures like Bashu culture into college English teaching, effectively realizing the goal of cultural education.

Additionally, STEM-oriented students exhibit heightened adaptability and expectations for technology-integrated English learning due to their disciplinary focus. therefore, research on smart teaching in college English is inevitable, offering new ways for cultivating interdisciplinary talents with both professional expertise and global vision, thereby injecting new vitality into educational modernization.

In summary, smart education provides innovative frameworks and methodologies for the reform of college English teaching. Through technological empowerment, college English teaching can not only elevate the quality of language teaching but also better achieve the goal of cultural education, revitalizing the mission to nurture versatile professionals equipped for global challenges.

2.3 The Critical Role and Feasibility Analysis of Bashu Culture in Ideological-Political Education

Bashu culture, as a vital branch of the excellent traditional Chinese culture embodies distinctive philosophical thoughts, literary arts, and folk customs. [8] Its important role in curriculum ideological and political education is mainly reflected in the following two aspects:

a. Cultivation of Cultural Confidence

The Taoist and Confucian thoughts in Bashu culture, as well as its rich artistic forms (e.g., Sichuan opera, tea culture) strengthen students' identification with and pride in in their local culture. Through ideological-political curricula, students not only acquire linguistic knowledge but also deeply appreciate the profoundness of Chinese culture.

b. Ideological and Political Education

The philosophical thoughts and historical relics in Bashu culture (e.g., Dujiangyan Irrigation System) provide rich pedagogical resources. These materials can guide students to establish correct worldviews, life values, and ethical principles while fostering innovative spirit and practical problem-solving skills.

For the feasibility of integrating Bashu culture into college English teaching, It is mainly reflected in thematic design, which aligns cultural elements (e.g., Shu embroidery symbolism, Sanxingdui archaeological artifacts) with language learning objectives; task-driven design which develops scenario-based projects like "Virtual Tours of Bashu Heritage Sites" or "Bilingual Documentation of Intangible Cultural Heritage" ; and blended online and offline teaching that leverages smart education platforms for immersive cultural simulations (VR-based temple rituals) and collaborative fieldwork (e.g., documenting Sichuan dialect variations).

2.3.1 Thematic Design.

Table 1. Three-tiered Thematic Database of Bashu Culture

Thematic Levels	Typical Content	Teaching Orientation
Material Culture	Sanxingdui Bronze Sacred Tree, Shu Brocade Weaving Techniques, Giant Panda Ecological Reserve etc.	Materials for Language Description Training
Spiritual Culture	Color Symbolism in Sichuan Opera Face-Changing, Legend of the Cuckoo's Bloody Cry; Integrity in Bamboo Culture, etc.	Materials for Value Shaping
Behavior-al Culture	Social Codes in Covered Bowl Tea Ceremonies, Ethnic Identity in the Torch Festival, Metaphorical Wisdom in Bashu Dialects etc.	Materials for Cross-Cultural Comparison

Based on international recognition (e.g., the global influence index of the giant panda ≥85%); relevance to daily life (by selecting cultural symbols of Bashu voted on by students); and language adaptability (matching the requirements of Levels 4–5 of the China English Proficiency Scale), the author has constructed a three-tiered thematic（Material Culture，Spiritual Culture，Behavioral Culture）database of Bashu culture

2.3.2 Task-Driven Teaching Design

To enhance students' cultural output competencies, task-driven teaching activities

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which focus on Bashu culture have been designed in college English teaching. For example, students are encouraged to produce short videos (e.g., “Sichuan Opera Face-Changing,” “Chengdu’s Philosophy of Slow Living”) and share them on social media platforms. They can also participate in college English contests such as "Telling Chinese Stories in English" and "Intercultural Communication Competitions" to refine cultural dissemination skills.

2.3.3 Online-Offline Blended Teaching Model

In the context of smart education, Bashu culture integration is achieved through blended teaching: For the online phase, smart teaching platforms like U-Campus and MOOC deliver multimedia resources (e.g., English documentaries on the Dujiangyan Irrigation System, Sichuan opera tutorials) for pre-class preparation and post-class review. Additionally, online discussion forums are organized for students to discuss cases of Bashu culture, fostering their ability of critical thinking. The offline classroom teaching focuses on interaction and practice. Teachers introduce new lessons by playing videos on Bashu culture (e.g., the Daoist principle of “harmony between humanity and nature”), Subsequently, students are organized into groups for discussions and project presentations, such as writing a "Bashu Culture Travel Plan" and delivering English presentations on heritage sites to enhance linguistic and intercultural communication skills.

In summary, smart education provides new ideas and methods for college English teaching. Through cognitive restructuring and cultural immersion, this approach not only improve students' language abilities but also enhance their cultural confidence and intercultural communication skills.

3. Teaching Design of Integrating Bashu Culture into College English Teaching in the Context of Smart Education

This paper takes New Horizon College English Reading and Writing book 3 (3rd Edition) as an example to illustrate a teaching framework for integrating Bashu culture into college English instruction empowered by smart education. Targeting second-year non-English majors, the case is selected from Unit 4 "Let's Go". This design covers 5 aspects: reconstruction of teaching objectives, innovation of teaching content, reform of teaching methods, construction of a smart teaching environment, and optimization of teaching evaluation. It deeply integrates Bashu cultural elements with intelligent technological means to build a model of "culture-language-technology", aiming at fostering linguistic competence, cultural literacy, and digital fluency.

3.1 Reconstruction of Teaching Objectives

In the context of smart education, the reconstruction of teaching objectives can enhance the learning experience and outcomes through technological means. For Unit 4 “Let’s Go,” this transformation manifests across three domains:

Knowledge objectives shift from memorization of travel-related vocabulary, sentence patterns and grammar to immerse students in simulated travel scenarios by utilizing online platforms and virtual reality technology to college English teaching. For instance, students engage with the MOOC platform to access a “Bashu Tourism Bilingual Glossary Pack” (e.g., Mount Qingcheng, Dujiangyan Irrigation System) and participate in VR-based dialogues simulating interactions at cultural landmarks. Multimedia resources, such as 3D reconstructions of the Dujiangyan irrigation system, are paired with interactive discussions on platforms like Rain Classroom, where students analyze the philosophical implications of Li Bing’s ancient hydrological innovations and their relevance to modern engineering ethics, crafting complex sentences to articulate these connections.

Skill objectives are redefined through technology-mediated tasks. In terms of writing skills, the focus shifts from writing cause-and-effect essays to using online writing platforms that provide instant feedback and suggestions for improvement. Students draft essays like “Why Sichuan Hotpot Attracts Tourists” on Pigai.org, an intelligent writing platform that provides real-time feedback on argument structure and lexical accuracy. Translation exercises extend beyond literal sentence conversion to context-aware challenges, utilizing tools like DeepL and a curated Bashu Culture Corpus to explore nuanced translations of classical texts. Speaking skills evolve from merely describing

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travel experiences to practicing in virtual environments through video conferencing and online presentation platforms. For example, students can record a short video titled "My Virtual Tour to Sanxingdui," introducing the bronze masks.

Competency objectives emphasize the cultivation of cultural agency and global citizenship. The goal of cultivating a positive attitude towards travel is transformed into encouraging students to record and share their travel experiences through online travel diaries and social media platforms, such as sharing a "Bashu Culture Check-in Map" on WeChat Moments. The objective of enhancing cross-cultural awareness is upgraded to comparing the social rules of Sichuan teahouses with Western coffee shops and deliver a presentation titled "Comparison of Eastern and Western Tea-Drinking Cultures." Students can also produce videos and share them on social media platforms like Tick-tock and Bilibili.

3.2 Innovation of Teaching Content

Under the context of smart education, the integration of Bashu culture is realized through carefully designed teaching content. Taking the unit "Let's Go" as an example, the teaching content is constructed with cultural depth by incorporating elements of Bashu culture, such as historical relics (e.g., the Dujiangyan Irrigation System), folk arts (e.g., Sichuan opera face-changing), and natural wonders (e.g., Jiuzhaigou Valley). These contents not only cover language knowledge but also integrate rich cultural backgrounds, helping students to deeply understand the unique charm of Bashu culture while learning the language. Meanwhile, leveraging smart educational resources, such as the U-Campus and MOOC platforms, a wealth of multimedia resources are provided, including videos, audios, and interactive exercises, to create an immersive learning experience for students. These resources not only enrich the teaching content but also offer students diverse learning ways, enhancing the fun and interactivity of learning.

In the teaching design of this unit, the theme focuses on "Exploring Bashu Civilization and Decoding the Value of Travel," integrating cultural cognition and language learning into real travel scenarios to build a "cultural experience-based" English teaching model.[9] In terms of cultural theme selection and travel scenario matching, typical cultural content is chosen from three levels—material culture, spiritual culture, and behavioral culture—corresponding to travel-related themes such as geographical landscape cognition, historical wisdom appreciation, and local life experience. For example, Dujiangyan, Li Bing's water management philosophy, and the social etiquette of Gaiwan tea are selected. Corresponding language skill objectives are also determined, such as descriptive writing, interpretative analysis, and comparative expression.

3.3 Reform of Teaching Methods

To integrate Bashu culture into college English teaching, an online-offline blended teaching model has been used. [10] Online platforms such as MOOC and U-Campus offer a variety of multimedia resources, including virtual reality (VR) tours of Qingcheng Mountain and quizzes related to Bashu dialects. In contrast, offline learning focus on experiential activities like role-playing and debates etc. A special project-based learning (PBL) program is titled "Design Your Bashu Cultural Journey." In this project, students are tasked with creating English travel itineraries that incorporate bilingual cultural explanations. This approach helps students achieve two primary objectives: enhancing linguistic competence and developing cultural agency. AI tools such as Pigai.org provide real-time feedback on travelogue drafts, helping students refine their language skills. Meanwhile, the final projects are uploaded to Bilibili and evaluated using a rubric that assesses cultural authenticity, linguistic fluency, and audience engagement.

By combining smart technologies with face-to-face interaction in classroom, this model enhances both language competence and cultural understanding, preparing students to discuss regional heritage globally.

3.4 A Three-stage Progressive Teaching Procedures

This design employs a three-stage progressive teaching process, encompassing pre-class, in-class, and post-class activities (perception - understanding - dissemination) to enhance students' cultural understanding and language skills through an immersive and interactive

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learning experience. Below is an introduction of each stage, involving theoretical constructs, operational mechanisms, and pedagogical motivations

Stage 1(Pre-class): Cultural Perception Input — Virtual Pre-Travel Preparation

The first stage focuses on cultural perception and input through virtual pre-travel preparation activities. Students engage in a variety of interactive tasks designed to familiarize them with key cultural terms and concepts. A vocabulary quest titled “Sichuan Travel Lexicon Marathon”, focusing on culturally significant terms. Examples include: Architectural terms: plank road (historic cliffside pathways); Culinary terms: dandan noodles (spicy Sichuan street food); Philosophical concepts: harmony between humanity and nature.

The platform provides instant feedback, generating personalized practice packages for any incorrectly answered terms to reinforce learning. For instance, students struggling with “tea ceremony etiquette” receive curated multimedia flashcards combining textual definitions, audio pronunciations, and 360° visuals of Sichuan tea houses.

Another activity in this stage is a virtual exploration of cultural sites using ClassVR. Students virtually visit Mount Qingcheng, a renowned Taoist sacred site, and complete fill-in-the-blank tasks to deepen their understanding of Taoist philosophy. For instance, they might encounter a sentence like: "The Taoist temples blend into the forest, reflecting the philosophy of _____." (Answer: harmony between human and nature). This activity not only enhances their vocabulary but also helps them appreciate the cultural significance of the sites they are exploring.

Stage 2(In-Class): Cultural Meaning Internalization — In-Depth Travel Experience

The second stage aims to internalize cultural meanings through an in-depth travel experience. Students participate in activities that require them to cultivate comparative cultural analysis and argumentation skills through collaborative, tech-mediated tasks. One such activity is a cultural lens comparison, where groups Groups contrast the cultural symbolism of “Shu Roads” (ancient Sichuan trade routes) with “Route 66” (American highway culture).

They create interactive mind maps using MindMeister to visually represent their findings and insights, exploring how these two iconic routes reflect different cultural values and historical contexts.

Another highlight of this stage is an AI-enhanced debate. The topic for the debate is "Is mass tourism destroying the authenticity of Sichuan culture?" Students use DeepSeek to generate evidence-based argument scaffolds, which provide them with structured frameworks to develop their points. Then Real-time debates conducted via Tencent Meeting, featuring AI-powered moderation tools that track logical coherence, rhetorical effectiveness, and cross-cultural sensitivity metrics. This activity not only enhances their critical thinking and argumentation skills but also allows them to practice expressing complex ideas in English.

Stage 3 (Post-Class): Cultural Dissemination Output — Elevating the Value of Travel

The final stage focuses on disseminating cultural knowledge and elevating the value of travel experiences. Students are encouraged to create cultural stories based on their virtual travel experiences. They transform these stories into English narratives and use AI voice synthesis technology to produce audio stories. These audio stories are then shared on platforms like Ximalaya, allowing students to reach a broader audience and practice their storytelling skills in English.

To further amplify cultural engagement, students can produce short English videos about Bashu heritage landmarks such as the Dujiangyan Irrigation System (a UNESCO World Heritage hydraulic engineering marvel) and Sichuan opera face-changing techniques (an intangible cultural art form). These videos can be uploaded to Bilibili and TikTok to enhance students’ digital literacy but also transform them into proactive "cultural ambassadors", bridging the gap between regional heritage and global audiences through viral-ready content.

Additionally, students engage in cultural product design. They create English learning cards featuring elements of Bashu culture, using Canva to design visually appealing and informative cards. These cards are then sold at a campus cultural fair, providing students with a practical application of their language skills and an opportunity to promote Bashu culture to their peers and the wider community.

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This three-stage progressive teaching design leverages a variety of technological tools and interactive activities to create an engaging and effective learning experience. By integrating cultural perception, meaning internalization, and dissemination output, it not only enhances students' language abilities but also deepens their understanding and appreciation of Bashu culture. Through this innovative approach, students are empowered to become active participants in cultural exchange and dissemination, preparing them to be the bearers and promoters of rich cultural heritage in a global context.

3.3 Optimization of Teaching Evaluation

A "321" multi-dimensional evaluation system has been established， which systematically integrates smart education tools and human expertise to assess students' cultural-literacy development, language proficiency, and interdisciplinary competencies. [11] This section presents a refined and expanded version of the framework, incorporating the specified components and structured to align with the three-tiered design (3 competencies, 2 contexts, 1 portfolio).

3.3.1 Three Core Competencies

The evaluation of cultural-literacy development encompasses three key dimensions: cultural description, interpretation, and dissemination. For cultural description, students are assessed through oral presentations and multimedia storyboards. Exemplary performance is marked by pronunciation accuracy of at least 85% and the accurate use of five or more cultural terms." In the realm of cultural interpretation, analytical essays are evaluated with the aid of Pigai.org for grammar and Deep Seek for logical coherence. A grammar error density of no more than 8% and clear argumentation are expected, along with the ability to make interdisciplinary connections. Lastly, cultural dissemination is assessed through short videos and competition entries.

3.3.2 Dual Learning Contexts

The dual learning contexts include classroom performance and social practice. In the classroom setting, students engage in group tasks, with their performance tracked using Rain Classroom. Exemplary classroom performance is characterized by active participation, with at least three interactions per session, and efficient task completion within 20 minutes. In the social practice context, students participate in social media campaigns and competitions, leveraging data from platforms like Bilibili and TikTok etc.

3.3.3 Integrated E-portfolio

The integrated e-portfolio serves as a comprehensive assessment tool, incorporating AI preliminary evaluations, teacher refined evaluations, peer collaborative evaluations, and a final exam. The AI preliminary evaluation focuses on grammar and lexical density, using tools like Pigai.org and ITEST. A diverse use of cultural terms and an error rate of no more than 5% are key criteria. The teacher assesses logical structure and cross-cultural depth with feedbacks. A logical structure score of at least 4/5 and in-depth comparative analysis are expected. The peer collaborative evaluation examines creativity and teamwork with an innovation score of at least 4/5 and clear task division. The final exam combines AI-assisted reading and listening assessments with human-reviewed essays and translations.

4. Teaching Effectiveness and Reflections

After established the methodological framework for integrating Bashu culture through blended teaching and project-based learning, it is essential to systematically evaluate how these innovations translate into concrete educational outcomes. This part examines the effectiveness of the proposed model by analyzing empirical data—including both quantitative metrics (e.g., language proficiency gains, platform engagement rates) and qualitative insights (e.g., student reflections, cultural competency development). By integrating evidence from AI analytics, peer assessments, and real-world cultural outputs, we highlight not only the successes of the pedagogy but also its broader implications for balancing technological integration with humanistic education in the smart education era.

4.1 Teaching Effectiveness

The integration of Bashu culture into college English teaching in the context of smart education has yielded clear teaching results. Quantitative and qualitative data collected from student assessments, surveys, and project evaluations reveal three key achievements:

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4.1.1 Enhanced Cultural Literacy

Surveys after the intervention indicate an 83% increase in students' ability to express Bashu cultural concepts in English, with 72% voluntarily engaging in extracurricular activities like virtual tours of Sanxingdui Museum. For example, a student-produced short video about Bashu culture and won the first prize in the "Telling Chinese Stories Well in Foreign Languages" Outstanding Short Video Competition for college students.

4.1.2 Improved Language Proficiency

Comparative analysis of pre-test and post-test scores shows a 26% average improvement in writing tasks involving cultural descriptions (CSE Level 3-5 benchmarks). The use of AI platforms like Pigai.org reduced grammatical errors by 27%, while VR-assisted speaking exercises elevated fluency scores by 21%, as measured by automated speech recognition tools.

4.1.3 Strengthened Intercultural Competence

Blended learning activities, such as online debates comparing Bashu tea rituals with British afternoon tea traditions, resulted in 89% of students achieving "proficient" or higher ratings in cross-cultural analysis rubrics. Notably, 63% of participants successfully collaborated with international peers via Tencent Meeting to co-create bilingual cultural guides, showing real-world application skills.

4.2 Teaching Reflections

While the results show the model works effective, there are still some areas for refinement:

4.2.1 Technological Adaptation Gaps

Some students reported initial difficulties in using smart platforms, highlighting the need for pre-semester digital literacy workshops. Future versions will add tutorials and chatbots to help with learning.

4.2.2 Cultural Content Depth

Current materials prioritize famous symbols like Sichuan opera and Dujiangyan, but subcultures like Sichuanese dialect literature or minority Qiang customs are seldom mentioned. We can work with local culture offices and online archives, like the Sichuan Intangible Heritage Database, to have a wider range of resources.

4.2.3 Assessment Limitations

While automated tools efficiently grade language mechanics, they have a hard time understanding delicate cultural feelings. A mix of ways can be adopted to assess students. For example, using AI for analysis, having peers review their online work, getting feedbacks from teachers and receiving comments from the public on social media, where students' cultural creations are discussed openly.

5. Conclusion

The integration of Bashu culture into college English teaching under smart education represents a revolutionary combination of protecting regional heritage and teaching methods that work worldwide.

By leveraging blended learning models, AI-driven tools, and immersive technologies, this approach has proven effective in cultivating students' bilingual proficiency, cultural confidence, and digital citizenship. Important ideas like the Culture-Language-Technology Triple Helix Model and a Bashu cultural integration path of "perception - understanding - dissemination" can be copied by other places to help them balance teaching language with keeping their culture alive.

Future endeavors will focus on three main areas. The first involves the collaboration with experts to develop digital textbooks that incorporate 3D models, augmented reality, and bilingual narratives. An example of this could be scanning a page about the Dujiangyan Irrigation System, which would then launch a virtual tour guided by an AI avatar explaining the system in English. Additionally, constructing a knowledge graph that links cultural elements to language learning objectives is planned. This graph would automatically suggest personalized learning modules based on students' interests and language proficiency levels.

In college English, the integration of smart teaching methods and task-based learning is set to be enhanced. Students might utilize VR technology to attend a tea ceremony and then engage in role-playing exercises to practice negotiating in English. Furthermore, vlogging competitions are proposed, where students would create English videos about Bashu culture. The top entries could be demonstrated on social platforms to foster learning and encourage cultural exploration.

What is more, the use of AI for cultural feedback is planned. Sentiment analysis will

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be employed to understand student reflections on cultural topics as expressed on platforms like U-Campus. This analysis will help identify areas where students may need additional instruction. Skill mapping will also be utilized to monitor how engagement with cultural activities contributes to the development of language skills. For instance, if students are struggling with descriptive writing, they could be provided with prompts that relate to Bashu culture to help them improve.

By focusing on culture and new teaching methods, we'll make sure Bashu heritage is experienced through technology and tasks. This will help students learn English while connecting to their local culture and the world.

Facing both the challenges of new technology and cultural homogenization, this research shows that a "glocalized" teaching approach works well. This means using smart technology to enhance local culture. Training students to master technology and tell cultural stories helps to keep Bashu culture thriving.

Acknowledgments

This research was supported by the following grants: Research Center for International Communication of Bashu Culture "Research and Practice on Integrating Bashu Culture into College English Teaching from the Perspective of Cultural Confidence" (No. 2023YB29); China Foreign Language Education Foundation (12th Batch): "Development of the GlgDEAP Geological Academic English Corpus" (No. ZGWYJYJJ12A153); University-Industry Collaborative Education Program (No. 241206281131743); Sichuan Provincial First-Class Undergraduate Course “College English I (3)" (No.YLKC01440)

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