

Analysis of the Opportunities, Challenges, and Pathways of International Chinese Language Education in the Era of Generative Artificial Intelligence

Xiao Han^{1*}

¹ College of Foreign Studies, Guilin University of Technology, Guilin, China

*Correspondence: Xiao Han

Received: 6 June 2026; **Accepted:** 13 July 2026; **Published:** 26 July 2026

Abstract:

Against the background of the rapid development of AI and the increasing importance of national cultural soft power construction, international Chinese education is ushering in its important new phase. Generative AI, represented by ChatGPT and DeepSeek, has brought unprecedented opportunities for international Chinese education with its powerful functions. But challenges also exist. This study aims to investigate how generative AI can reshape international Chinese language education by combining the perspectives of second language acquisition theory, cognitive linguistics and educational technology. By constructing a four-dimensional framework of “subject of teaching, content of teaching environment of teaching and overseas students”, the study analyzes the three dimensions of cognitive science, cultural integration, and technological empowerment. It is found that the opportunities brought by generative AI to international Chinese language education are mainly reflected in the diversification of teaching subjects, the dynamization, personalization and multimodality of teaching content, and the intelligent and immersive teaching environment, as well as the scenarioization of the integration of virtual reality and reality. Opportunities are also accompanied by challenges: the questionable accuracy and pedagogical appropriateness of AI-generated content, the lack of teachers’ digital competence and the inadequacy of the educational system, ethical dilemmas such as educational fairness, as well as possible simplifications and misinterpretations of AI in dealing with the linguistic characteristics and cultural connotations of the Chinese language. To capitalize on the opportunities, this paper will address the challenges through four paths: technology, teachers, policy and culture. The conclusions drawn during the study can serve as a reference for international Chinese language education practices.

Keywords:

Generative Artificial Intelligence, International Chinese Education, Digital Transformation in Education

1. Introduction

1.1. Background and Significance

Globalization is profoundly reshaping our cultural and educational landscape, propelling Chinese to spread across the world at an unprecedented pace. Consequently, learning Chinese has become a global phenomenon. With the remarkable advancements in generative AI represented by ChatGPT and DeepSeek in recent years, the era of AI intelligence is dawning. In this new era, international Chinese education has not only gained a powerful ally, but also witnessed a quiet transformation in the mechanisms involving educational entities, content, environments, and cultural dissemination. Consequently, international Chinese education faces both opportunities and challenges.

Research into this phenomenon reveals both theoretical and practical significance: Theoretically, this study integrates perspectives from second language acquisition, cognitive linguistics, and intercultural education to foster interdisciplinary dialogue. It provides a more comprehensive interpretation of the intrinsic relationship between generative AI and international Chinese education, enriching the Chinese teaching system in the AI era. Practically, this research aims to provide guidance for practitioners in international Chinese education, enabling the field to achieve efficient development amid technological innovation.

1.2. Literature Review

The integration of generative artificial intelligence with international Chinese language education has emerged as a new topic in recent years. Scholars both domestically and internationally have conducted research with distinct focuses, resulting in complementary theoretical and practical approaches.

1.2.1. Domestic Research

Domestic research focuses on practical needs in Chinese language teaching to enhance instructional effectiveness. On one hand, scholars emphasize developing theoretical frameworks for international Chinese education and summarizing pedagogical models (Lu Jianming, 2021)[1], while also prioritizing the deepening of cultural connotations and identity formation in Chinese instruction (Deng Xiaomang, 2017; Jiang Ruixue, 2002)[2][3]. These two focal points establish the cultural identity and pedagogical practicality foundation for AI technology application in international Chinese instruction.

However, with technological advancement, domestic research has progressively delved into the cognitive dimensions of teaching. This includes utilizing the “Event Domain Cognitive Model” to optimize Chinese character instruction (Cheng, 2024)[4] or developing vocabulary learning methods based on complex network theory (Yang & Zhuang, 2025)[5]. Concurrently, classroom practice studies reveal that integrating gestures with concrete contexts significantly enhances vocabulary retention (He-Zhang, 2025)[6]. This finding resonates with embodied cognition theory in cognitive science, which emphasizes experiential learning (Barsalou, 2020)[7]. At the practical level, research also explores the potential of generative AI in specific teaching scenarios (Zhou Zhiwan & Wang Hui, 2025)[8]. Collectively, these domestic studies converge on a core challenge: how to adapt technological tools to align with the cognitive patterns of Chinese language learning.

1.2.2. Overseas Research

Overseas research has focused on theoretical exploration and reflection. Some scholars have examined the practical effectiveness and interactive mechanisms of AI as language learning partners (Fryer et al., 2020)[9], applying language adaptation theory (Giles, 1991)[10] to analyze human-machine dialogues and identifying positive social regulation strategies.

However, such research faces more criticism than positive reception. One of the most prominent critiques suggests that large language models may merely engage in random “parroting” (Bender, 2021)[11]. This criticism stems from concerns that generated content may contain errors or even biased information. Concurrently, scholars have developed theories such as linguistic imperialism (Phillipson, 1992)[12], examining shifts in language structures and power during global expansion, and the concept of emerging data colonialism in the AI era (Couldry & Mejias, 2019)[13], driven by technological and digital empowerment. These studies collectively underscore that educational technology applications are inextricably intertwined with culture, power, and politics.

1.2.3. Review Analysis

Collectively, domestic and international research has formed complementary theoretical and practical foundations for existing AI+Chinese studies. However, current research tends to lean either toward theory or practice, lacking a framework that organically integrates both. Therefore, this paper aims to construct a multi-level analytical framework to better examine the overall shaping of generative AI on international Chinese language education.

1.3. Questions and Methods of Research

After reviewing the above literature, it becomes clear that generative AI, as a powerful force, presents opportunities that also conceal challenges—in the era of artificial intelligence, how can emerging technological capabilities empower international Chinese language education? This paper will address three questions: How will generative AI, as a technological opportunity, reshape international Chinese language education? What challenges will accompany these opportunities? To seize opportunities and address challenges, how can AI and international Chinese language education achieve synergistic development? To answer these questions, this paper employs three research methods:

First, conducting literature analysis to synthesize relevant research from second language acquisition, cognitive linguistics, educational technology, and AI ethics, thereby establishing a theoretical foundation. Second, performing theoretical deduction to achieve interdisciplinary integration, constructing an analytical framework, and thoroughly elucidating the opportunities and challenges AI presents for international Chinese language education. Third, conducting a case study using DeepSeek as an example of practical application in Chinese language education settings, analyzing its model, effectiveness, and limitations.

2. Theoretical Foundations and Conceptual Framework

This paper will utilize key theories of second language acquisition, language adaptation theory, and educational technology integration theory as a foundation to construct an analytical framework for generative artificial intelligence and international Chinese language education.

2.1. Theory of Language Education

The practice of international Chinese language education is grounded in modern language teaching theory. Two seminal theories—Krashen's "Input Hypothesis" and Vygotsky's "Sociocultural Theory"—emphasize that effective learning relies on "comprehensible language input" and "social interaction." This provides a benchmark for assessing whether technological advancements genuinely enhance language acquisition. Simultaneously, within language interaction, Giles's (1991) theory of speech adaptation reveals how interpersonal distance is adjusted through the modification of discourse strategies. These theories remind us that when designing instructional practices using generative AI, we must align with social interpersonal dynamics. Furthermore, the TPACK framework emphasizes that teachers must deeply integrate technological knowledge, pedagogical knowledge, and subject-matter expertise in instruction. Based on the above, the application of generative AI will inevitably necessitate adjustments and deep integration from instructional design to the role of the teacher.

2.2. Integrating Generative Artificial Intelligence into Language Education

The characteristics of generative AI help us understand education from an entirely new perspective. Human-machine collaborative teaching transforms the teaching role from a solitary teacher to a "dual protagonist" dynamic. Simultaneously, artificial intelligence is driving learning toward multidimensional development, with the theory of "embodied cognition" being one of its key pillars. Experiments indicate that integrating gestures with contextual scenarios significantly enhances Chinese vocabulary retention (He-Zhang, 2025), providing concrete validation of embodied cognition's validity and importance. Technologically, generative AI's ability to produce text, images, animations, and other materials enables international Chinese language education to achieve genuine "tangible experience." Zhu Zhiteng (2021) [14] suggests that micro-level changes in daily teaching practices will converge into transformative shifts in overall pedagogical models. As a pivotal element, generative AI is collaborating with educators, learners, and course resources to shape a new educational ecosystem characterized by greater personalization and intelligence.

3. Opportunities Presented by Generative AI for International Chinese Language Education

The integration of generative artificial intelligence is opening new doors for international Chinese language education, with multiple positive developments warranting our attention. These changes are not merely additive; they may catalyze opportunities for pedagogical advancement, impacting the entire chain from teaching entities and content to learning environments and learners.

3.1. Expansion and Collaboration of Teaching Entities

In traditional international Chinese language classrooms, teachers typically dominate instructional activities. With the introduction of generative AI, the teaching dynamic is evolving toward greater diversity. AI serves as a personalized tutor, providing immediate feedback, assigning exercises tailored to individual student abilities, and offering targeted assistance for errors. This enables teachers to allocate more time and energy to other aspects of instruction. Additionally, in translation or writing exercises, students can leverage AI to rapidly generate drafts, followed by

human review and editing. This “MT+PE” (Machine Translation + Proofreading and Editing) model is increasingly becoming the new standard in international Chinese language education.

Moreover, the integration of AI in international Chinese education is catalyzing a transformation in the teacher’s role. Educators are evolving from solely imparting knowledge to becoming human-machine collaborative guides. Consequently, teachers must consider how to organically incorporate AI tools into instruction, design tasks that stimulate students’ motivation to explore, and guide them toward critical thinking and cultural comparison.

3.2. Innovation and Reconstruction of Teaching Content

Educational content serves as the core vehicle of education. Generative AI transforms teaching materials from static, standardized textbooks into dynamic, personalized resources. AI effortlessly generates multi-module, contextualized instructional materials. For instance, it can produce corresponding AI videos tailored to specific teaching needs. This multisensory input effectively enhances student memory retention and learning engagement.

More importantly, this AI-generated content is not arbitrary. It aligns with the brain's natural language learning patterns and integrates seamlessly with professional linguistic resources. For instance, in Chinese character instruction, AI can apply the principles of the “Event Domain Cognitive Model” (Wang Yin, 2005) [15] to break down new characters into meaningful components. These components are then woven into short stories or animated visuals, enabling international students to comprehend and memorize Chinese characters more efficiently. For vocabulary and translation learning, AI can build networks based on words to create terminology databases, ensuring accuracy and consistency in specialized terms. In cultural education, AI leverages deep analysis and online search capabilities to select authentic case studies, providing real-world language materials from diverse cultural contexts. This helps international learners deepen their understanding through comparison, enabling genuine cultural experiences and discussions.

3.3. Intelligent and Immersive Learning Environments

The teaching environment is no longer constrained by the physical limitations of traditional classrooms. Instead, it integrates technologies such as speech recognition and real-time captioning to propel teaching locations and environments into an ocean of intelligence. Through the fusion of virtual and real elements, it constructs scenarios for language learning and cross-cultural communication. Within a simulation environment that allows for repeated trial and error, students hone their communication skills and cultural adaptability.

Simultaneously, AI dynamically analyzes student learning data to adjust difficulty levels and focus areas, enabling foreign students to pursue self-directed learning. AI-empowered instruction delivers instant, precise feedback to every learner, significantly boosting training efficiency.

3.4. Deepening the Learner Experience

Technology-enabled education should focus on enhancing learner experiences and core competencies, and generative AI demonstrates immense potential in this regard. AI significantly boosts learning motivation and self-directed learning abilities while

sustaining learner engagement. Simultaneously, personalized learning pathways empower learners with greater control.

Secondly, the low-pressure, repeatable interactive environment created by AI helps alleviate learning anxiety and enhances international students' sense of self-efficacy. Through sustained dialogue, students more readily develop habits of independent inquiry and reflective optimization.

Ultimately, these opportunities collectively advance international students' understanding of the Chinese language and culture, as well as their cross-cultural awareness. Integrating Chinese instruction with language training and cultural comparison can deepen students' Chinese proficiency beyond superficial mastery. By enhancing the teaching and dissemination of Chinese, we can elevate its competitiveness within the global linguistic landscape.

In summary, generative AI presents comprehensive opportunities for international Chinese language education. It is reshaping the future of teaching Chinese as a language, culture, and professional competency in global communication. However, realizing this ambitious vision inevitably entails a series of risks and challenges that must be addressed.

4. Challenges Presented by Generative AI for International Chinese Language Education

Generative artificial intelligence presents vast prospects for international Chinese language education, yet it also brings a series of complex challenges. These challenges extend beyond specific teaching practices to encompass deeper dimensions such as cultivating students' critical thinking, instructional design, and even social equity. While these challenges stem from the inherent characteristics and limitations of AI itself, they also reflect the absence and lag in establishing corresponding educational environments and implementing substantive supportive policies.

4.1. Reduced Teaching Reliability and Learner Development Challenges

The most dangerous issue with introducing AI into teaching lies in the questionable authenticity and appropriateness of its outputs. The current phenomenon of “hallucinations” and “seriously spouting nonsense” in large language models directly threatens accuracy in language and cultural instruction. Simultaneously, the “instant-answer” nature of AI can foster dependency among international students, leading to laziness in critical thinking and creative expression. This weakens core language skills and erodes critical thinking habits. Over time, international students may develop dependency on AI tools, leading to diminished capabilities when operating without such assistance. Furthermore, if AI becomes the primary teaching agent in classrooms, students will passively absorb AI-generated content, reducing opportunities for independent thinking and consequently undermining the depth and effectiveness of classroom training.

4.2. Adaptive Challenges in Teacher Roles, Educational Systems, and Learner Self-Regulation

Technological iteration is rapid, but teachers, systems, and students themselves require time and guidance to adapt. Many educators lack sufficient digital literacy and AI-assisted teaching capabilities, unsure how to effectively transform AI into instructional design tools. Simultaneously, existing curricula, assessment standards,

and management policies lag significantly behind, making it difficult to evaluate learning outcomes from AI-supported personalized, process-oriented learning. This creates a lack of corresponding institutional support for teaching innovation.

From the student perspective, challenges such as insufficient self-discipline and lack of independent learning planning cannot be underestimated. While AI can generate personalized feedback based on student performance, computer models cannot fully grasp individual circumstances. Students mechanically accepting AI feedback may become complacent with superficial information, creating an illusion of learning that is “all show and no substance.” This overreliance on technology-driven guidance risks undermining their resilience and ability to independently solve problems in real, dynamic work scenarios.

4.3. Challenges to Ethics, Fairness, and Depth of Thought

The development of any technology invariably sparks debates about ethics and fairness. The ownership of intellectual property rights for AI-generated content remains in a legal and ethical gray area. Simultaneously, the unequal distribution of technological resources and disparities in usage capabilities will exacerbate educational inequality, creating a new digital divide.

On the cognitive and cultural level, AI may weaken foreign students’ critical thinking skills regarding the Chinese language. Learning Chinese extends beyond mastering vocabulary; it involves using language as a lens to examine cultural differences underlying distinct linguistic systems, thereby enabling the identification and correction of cultural biases. If Chinese learning is entirely entrusted to AI, students may struggle to filter and analyze their output, potentially leading to deficiencies in Chinese proficiency in future contexts.

On the other hand, for international Chinese language education, high accuracy, correctness, and sound values are paramount objectives. However, AI’s mastery of Chinese language and culture remains limited. Linguistically, its outputs may be grammatically correct yet stiff and unnatural. Culturally, AI tends to process simplified, superficial content, leading to significant distortions in international students’ understanding of Chinese language and culture. The essence of Chinese culture is largely shaped by context and background knowledge. Research indicates (Liu, 2021) [16] that Chinese and English exhibit systematic differences in metaphorical cognitive structures. Furthermore, AI processes text based on computational language models, resulting in outputs that tend toward standardization and inflexibility. These characteristics significantly detach Chinese language and culture from their profound connotations, leading to cultural cognitive biases among international students.

In summary, generative AI presents both opportunities and challenges in international Chinese language education. Recognizing these challenges clearly is not about resisting technology, but rather about better achieving the dissemination of Chinese characters and culture, and enhancing cultural soft power.

5. Response Strategies and Collaborative Development

Faced with the opportunities and challenges brought by generative artificial intelligence, international Chinese language education must not merely adapt passively but proactively plan and build a collaborative, pragmatic, and effective development pathway. This requires concerted efforts from multiple stakeholders to

collectively guide the technology toward positive development.

5.1. Educational Technology

Educational demands guide the development of specific technologies. Therefore, to advance international Chinese language education, it is imperative to vigorously promote the research and development of AI tools tailored for educational purposes and sensitive to Chinese cultural contexts. Simultaneously, such AI should master the learning patterns of Chinese as a second language—not only generating targeted texts for foreign learners but also creating images and videos that aid comprehension of both the Chinese language and its cultural nuances as needed.

Building a high-quality international Chinese education resource repository is also paramount. The repository's content—including texts, audio, video, and interactive courseware—must undergo expert review to ensure it fosters students' innovative thinking and capabilities. While ensuring teaching materials are diverse, their accuracy and cultural appropriateness must be guaranteed.

5.2. Teacher Development and Instructional Innovation

Teachers are the core of classroom instruction. Therefore, in the AI era, educators must enhance their “digital literacy” to meet the demands of students and the times, particularly by developing teaching design capabilities for “human-machine collaboration.” This will free teachers from mechanical, repetitive tasks and enable them to become technology facilitators. Building on this foundation, the integration of “AI and Chinese language teaching” should be promoted to drive innovation in classroom practices and instructional models.

5.3. Policy and Governance Pathways

At the national and industry levels, as the overarching direction, it is essential to evaluate the actual effectiveness and usage of AI in teaching. This involves establishing appropriate AI teaching standards and quality assessment systems to provide schools, teachers, and students with clear, reliable guidelines, baseline requirements, and ethical boundaries, thereby mitigating ethical risks at their source. Internationally, we should actively advocate for a collaborative, inclusive, and equitable global ecosystem for intelligent education governance. Chinese education constitutes a vital component of global education. We should engage in dialogue and exchange, achieving cultural self-reliance and strength while respecting cultural diversity.

5.4. Cultural Integration

The advancement of technology lies in fostering mutual understanding among people. In international Chinese language education, cultivating deep cultural comprehension and cross-cultural dialogue skills takes precedence. AI not only provides factual information but also guides learners to ponder underlying reasons, enabling them to transcend superficial knowledge and achieve profound understanding. Therefore, we should leverage AI as a tool to achieve the goal of cultural integration.

Finally, we can design and promote a series of culturally rich educational programs and exchange platforms integrated with AI. By enabling international students to actively use Chinese—and naturally, to achieve mutual understanding—through

collaborative course projects, these initiatives organically blend technology and culture. This approach ensures international Chinese education genuinely fosters cultural confidence and mutual learning among civilizations.

In the era of generative AI, international Chinese language education requires robust technological support, sound policy safeguards, and timely educational innovation to navigate its path. Only then can we harness the wave of rapid technological advancement to revitalize international Chinese language education with renewed vigor in this new era.

6. Application of DeepSeek in the Educational Scenarios

DeepSeek is an intelligent model that generates text, images, audio, video, code, and other content based on algorithms and models. Its powerful language comprehension and learning capabilities have made it highly popular among international Chinese language teachers and students. DeepSeek serves as an ideal teaching tool, enhancing the teacher's guiding role by providing instant, personalized feedback throughout all stages of instruction. Its value extends beyond providing standard answers; it inspires students' innovative thinking, enhances teaching effectiveness, and paves a path for students to explore independently.

In practical teaching, DeepSeek's application is primarily reflected in the following scenarios:

(1) Intelligent Lesson Preparation: Teachers can prompt DeepSeek to generate course-related dialogue exercises for classroom discussions and other instructional activities. DeepSeek rapidly generates multiple draft solutions and materials, significantly enriching teachers' instructional resources and boosting lesson preparation efficiency. This allows educators to shift their focus from sourcing and creating materials to refining, optimizing, and designing teaching activities.

(2) Personalized Practice: For students, DeepSeek functions as an instant feedback tutor. They can upload practice exercises and answers anytime, receiving immediate correctness feedback and revision guidance. Simultaneously, DeepSeek delivers personalized exercises based on individual learning outcomes, enabling more targeted practice.

(3) Cultural Contextual Dialogue: This represents DeepSeek's greatest strength. International students can engage in everyday-style conversations with DeepSeek. By simulating real-life scenarios and offering vivid explanations, DeepSeek provides cross-cultural Q&A practice, effectively supplementing the limited cultural exposure available in the classroom.

7. Conclusion and Outlook

This study systematically explores the profound transformation brought about by generative artificial intelligence in international Chinese language education. Generative AI is reshaping the landscape of international Chinese education across four dimensions—teaching agents, content, learning environments, and learner experiences—demonstrating immense potential to empower the field.

However, this transformation is not without its challenges. The study also reveals multi-layered obstacles: credibility issues stemming from the technology's inherent “hallucinations” and data biases; the lag in teacher competency and educational system adaptability; risks of ethical misconduct and educational inequity; and the

potential for superficiality and misinterpretation when AI handles the unique characteristics and cultural depth of the Chinese language. Opportunities and challenges coexist, defining the fundamental characteristics of the current stage.

Based on these findings, this paper offers the following insights for different stakeholders:

For teachers and educational institutions: Proactively embrace change by actively participating in AI teaching literacy training. Focus on learning how to design blended learning activities that integrate human-machine collaboration, becoming “designers” and “facilitators” of learning.

For technology developers: Immerse yourselves in educational frontlines to create specialized AI tools and resource platforms that deeply understand Chinese teaching methodologies and cultural nuances.

For policymakers: Accelerate research and establish ethical guidelines, data security standards, and quality assessment frameworks for AI in education. Advocate for open collaboration to leverage technology in advancing equitable access to global educational resources.

This study primarily relies on literature analysis and theoretical deduction. While incorporating case studies, it lacks large-scale quantitative empirical evidence, representing a significant limitation. Looking ahead, long-term, comparative teaching empirical research should be conducted to precisely evaluate the effectiveness of different AI application models. Continuous attention and research should focus on how to effectively safeguard and promote educational equity during technology dissemination, ensuring that the benefits of technology reach a broader audience of international learners.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

- [1] Lu, J. Future trends in Chinese language research. *Chinese Linguistics*, 2021, 1, 2-7.
- [2] Deng, X. Defending the purity of modern Chinese. *Huxiang Forum*, 2017, 30(3), 173-176+2.
- [3] Jiang, R. The influence of Chinese language on traditional culture. *Journal of Shanxi Colleges and Universities (Social Science Edition)*, 2002, 10, 38-40.
- [4] Yu, C. A Study on the Teaching of Chinese Characters Memorization for Foreigners based on the Memory Principle of Cognitive Psychology. *Region - Educational Research and Reviews*, 2024, 6(6).
- [5] Yang, K.X.; Zhuang, H.B. Variations in Chinese Vocabulary Networks across Different Proficiency Levels and Their Implications for Teaching Chinese as a

- Second Language. *The Asia-Pacific Education Researcher*, (prepublish), 2025, 1-9.
- [6] Yuting He Zhang, Karine Duvignau & Nathalie Huet. The effects of situated gestures on Mandarin Chinese word learning. *Acta Psychologica*, 2025, 261,105806-105806.
- [7] Barsalou, L.W. Challenges and opportunities for grounding cognition. *Journal of Cognition*, 2020, 3(1), 31.
- [8] Zhou, Z.; Wang, H. Opportunities, challenges, and countermeasures of generative artificial intelligence empowering Chinese international communication. *Chinese Language Strategy*, 2025, 12(1), 149-159.
- [9] Fryer, L.K., Nakao, K.; Thompson, A. Chatbot learning partners: Connecting learning experiences, interest and competence. *Computers in human Behavior*, 2019, 93, 279-289.
- [10] Giles, H., Coupland, N., & Coupland, J. Accommodation theory: Communication, context, and consequence. *Contexts of accommodation: Developments in applied sociolinguistics*, 1991, 1, 1-68.
- [11] Bender, E.M.; Gebru, T.; McMillan-Major, A.; Shmitchell, S. (2021, March). On the dangers of stochastic parrots: Can language models be too big?. In *Proceedings of the 2021 ACM conference on fairness, accountability, and transparency*, 2021; pp. 610-623
- [12] Phillipson, R. Native speakers in linguistic imperialism. *journal for critical education policy studies*, 2016, 3.
- [13] Couldry, N.; Mejias, U. A. The costs of connection: How data is colonizing human life and appropriating it for capitalism. In *The costs of connection*. Stanford University Press. 2019.
- [14] Zhu, Z.; Hu, J. Development direction and strategic scenarios of educational intelligence. *Journal of the Chinese Society of Education*, 2021, 5, 45-52.
- [15] Wang, Y. The event-domain cognitive model and its explanatory power. *Modern Foreign Languages*, 2005, 1, 17-26+108.
- [16] Liu, F.X. A Contrastive Study of Metaphorical Idioms in Chinese and English.(eds.)*Proceedings of the Tenth Northeast Asia International Symposium on Language, Literature and Translation*. Eastern Liaoning University. 2021; pp. 174-179.



© 2026 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)