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An Optimized Teaching Approach of the Course Overview of Arab Countries in a Multimodal Interactive Environment

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Against the backdrop of educational digital transformation, multimodal interactive teaching offers a new paradigm for the reform of area studies courses. Using the course Overview of Arab Countries as a case study, this research addresses key challenges in traditional teaching approaches, such as weak cultural awareness, low student engagement, and limited cross-cultural communication skills. It proposes an optimized multimodal teaching framework based on the integration of three core components: content, methodology, and assessment, aiming to create a more dynamic and student-centered learning environment. Through the strategic use of digital resources, interactive technologies, and diversified assessment methods, the study demonstrates that multimodal interaction effectively stimulates students' learning interest, enhances their language proficiency, fosters critical thinking, and promotes deeper knowledge acquisition and competence transformation. The findings suggest that multimodal interactive teaching can significantly improve the overall effectiveness of area studies education, providing valuable insights for future pedagogical innovations in the digital era.

Keywords: multimodal interaction, Overview of Arab Countries, instructional pathway, effectiveness evaluation

Introduction

The accelerated advancement of global educational digital transformation has introduced new requirements, opportunities, and challenges for the development of intercultural talent training programs, particularly in area studies courses. Taking the course Overview of Arab Countries as an analytical lens, this study identifies limitations in traditional pedagogical approaches that rely heavily on unidirectional knowledge transmission, leading to increasingly salient issues such as superficial cultural cognition and abstract spatial perception among learners. In response, this research proposes an innovative approach grounded in multimodal interactive teaching technologies, aiming to construct a three-dimensional content framework, diversify instructional methodologies, and implement dynamic assessment strategies. The proposed model is applied to the teaching practice of Overview of Arab Countries for second- and third-year undergraduate students majoring in Arabic at Chinese universities, with an evaluation of the instructional outcomes conducted accordingly.

Optimizing the Instructional Pathway

O'Halloran (2021) defined multimodal discourse analysis has become a major paradigm in discourse studies that extends the study of language per se to the study of language in combination with other resources, such as

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images, scientific symbolism, gesture, action, music and sound. Chinese scholar Gu Yueguo (2007) asserted that the classification of unimodal, bimodal, and multimodal interaction depends on whether one, two, or three or more sensory channels are engaged in the communicative process. Xiong Wenjun (2025), another Chinese scholar, applied a multimodal interactive teaching model to vocational college English instruction, developing an innovative pathway that integrates visual, auditory, tactile, and spatial modalities to support foreign language education. Through comparative analysis of experimental and control groups, Xiong evaluated the rationality, effectiveness, and necessity of the multimodal approach. Many studies have shown that using interactive learning strategies can help with increasing students' enjoyment, cognitive processing, and retention of new knowledge (Soon, 2021). Building on these existing frameworks, this study seeks to construct an optimized instructional pathway for the course Overview of Arab Countries—one that reflects the characteristics of Chinese university students and aligns with the practical needs of China's higher education system in the field of area studies. The proposed model aims to shift the pedagogical focus from "knowledge transmission" to "cultural practice".

First, artificial intelligence (AI)-assisted development of more engaging instructional resources. By leveraging artificial intelligence, this approach constructs an integrated resource matrix comprising a "dynamic corpus—virtual scenario library—intelligent analytics platform". Through natural language processing (NLP) technologies, data from mainstream Arabic-language media, social media platforms, and academic literature are continuously extracted to build a real-time, updatable corpus for regional studies. Scenario-based modules such as virtual museum and science center tours enable a cognitive shift from two-dimensional knowledge to spatial understanding. Additionally, learning analytics technologies are employed to dynamically trace learners' cultural cognition trajectories. Adaptive systems then deliver differentiated multimodal learning packages—such as intelligent dialogue kits and Arabic calligraphy simulation tools—thereby addressing the problem of resource homogenization in traditional instructional settings. It is also worth keeping in mind that metacognitive pieces coupled with active learning have been demonstrated to further increase student success (Mutambuki et al., 2020).

Second, multimodal integration to activate embodied cognitive experience. An immersive, triple-layered framework of "language—culture—society" is designed to facilitate deep learning through the synergistic operation of multimodal semiotic systems. At the language cognition level, Arabic and English speech-interaction systems are employed to simulate realistic communicative scenarios—such as cultural exchange, market bargaining, and conflict mediation—augmented by facial expression recognition technology to support the acquisition of cross-cultural paralinguistic competence. At the cultural understanding level, students are guided through authentic Arab life settings such as mosques, restaurants, cafés, and museums, enhancing embodied cultural cognition through multisensory integration. At the social practice level, a "Digital Silk Road" collaborative platform is established to connect case data from Chinese and Arab enterprises. Students are encouraged to design cross-border cooperation proposals through multimodal reporting, promoting the transformation of knowledge into applied competencies.

Third, employing multi-dimensional assessment to monitor student learning in real time. AI can automate the grading and assessment process, providing instant feedback to students and saving educators time and effort (AlAli, Wardat, & Al-Qahtani, 2023). In the context of multimodal interactive instruction, greater emphasis should be placed on formative and multi-dimensional evaluation systems. First, instructors can utilize platforms such as Rain Classroom to implement regular quizzes, online assignments, and progress reports, thereby identifying students' areas of interest and difficulty throughout the learning process. Second, peer assessment is incorporated to facilitate secondary learning. Instructors pre-design clear evaluation criteria and guidelines to

ensure students understand how to assess their peers' work—focusing on language accuracy, content creativity, and logical structure. Students anonymously submit assignments via an online platform, which then randomly assigns them to peers for evaluation (Zhou, 2024). The platform provides a structured feedback template to guide students in offering constructive feedback. In parallel, Arabic language and cultural experts participate in the anonymous evaluation process, establishing a reference framework to enhance the reliability and validity of the assessment system.

Effectiveness Assessment

This study evaluates the effectiveness of instruction across three key dimensions: knowledge acquisition, intercultural communication competence, and changes in affective attitudes.

In terms of knowledge acquisition, instruction within a multimodal interactive environment enabled learners to progress from fragmented understanding to systematic cognition. Multimodal resources employed in class—such as documentaries, interactive maps, and real-time news analyses—allowed students to dynamically track political and economic developments in Arab countries. This multidimensional presentation of knowledge significantly enhanced students' capacity for systematic analysis of complex issues. Compared with traditional instruction, students' submitted case analysis reports exhibited clearer logical structures and a more proactive use of cross-media sources to substantiate their arguments, indicating improved integrative knowledge skills. The teaching experiment conducted by Sankey, Birch, and Gardiner (2010) demonstrated that students expressed a strong preference for a combination of learning resources and options.

Regarding intercultural communication competence, learners moved from cultural spectatorship toward contextual empathy. At its core, intercultural competence requires transcending the perspective of the "Other". The multimodal learning environment, by simulating authentic cultural scenarios, facilitated a shift from "observer" to "participant". Multimodal interaction helped students break away from cultural stereotypes and cultivate more flexible intercultural adaptation strategies. Notably, in a group project involving the production of a short video comparing Chinese and Arab festival cultures, students began to consciously avoid symbolic clichés—such as representing Arab culture solely through camels or deserts—and instead explored more nuanced cultural differences, such as gender-based spatial arrangements in family gatherings. This shift reflects a deeper level of empathetic engagement.

At the level of affective-attitudinal change, students' perceptions evolved from cultural distance to a sense of cultural affinity. This transformation represents one of the most latent yet powerful effects of multimodal instruction. Initial survey results revealed that over 60% of students' perceptions of Arab culture were limited to labels such as war, religion, and women's status. However, through immersive multimodal scene-based learning, students gradually recognized the diversity within Arab societies. The engaging nature of multimodal tasks and the sense of achievement they foster also significantly enhanced students' intrinsic motivation. For instance, in the "Design an Arab Tourism Digital Poster" assignment, students voluntarily researched the aesthetic symbolism of mosaic patterns to accurately depict the architectural beauty of the blue-and-white towns in Tunisia. Such interest-driven inquiry far surpassed the outcomes of passive learning. Data from post-course affective scales showed significant increases in students' curiosity about and respect for Arab culture, along with greater willingness to participate in Arabic language corners and Sino-Arab student exchange activities—indicating that attitudinal change had translated from superficial cognition into action-oriented intent.

Conclusion

The study on the optimization of instructional pathways and effectiveness assessment for the course Overview of Arab Countries in a multimodal interactive environment demonstrates that the deep integration of technological empowerment and cultural immersion provides a new paradigm for intercultural education. By employing multimodal tools such as virtual reality, interactive media, and affective computing, the course transcends the spatial and cognitive limitations of traditional instruction, enabling the synergistic development of knowledge acquisition, skill cultivation, and affective engagement. Pathway optimization should adopt a student-centered approach, focusing on three key aspects: technological adaptability, cultural authenticity, and instructional dynamism. It is essential to construct a dynamic cycle of instruction—feedback—iteration, where task difficulty is adjusted in real time through data-informed decision-making. In terms of effectiveness assessment, a hybrid evaluation framework encompassing process and outcome, quantitative and qualitative, as well as short-term and long-term indicators should be established. Particular attention should be paid to students' ability to transfer knowledge into intercultural practice.

Looking ahead, future research should explore mechanisms for linking multimodal instruction with localized experiential learning, and develop longitudinal models for tracking the sustained impact of intercultural learning. Such efforts will contribute to more resilient strategies for cultivating regional and global talent in the context of an increasingly interconnected world.

References

AlAli, R., Wardat, Y., & Al-Qahtani, M. (2023). SWOM strategy and influence of its using on developing mathematical thinking skills and on metacognitive thinking among gifted tenth-grade students. *EURASIA Journal of Mathematics, Science and Technology Education, 19*(3), em2238.

Gu, Y.-G. (2007). On multimedia learning and multimodal learning, *CAFLE*, p. 3.

Mutambuki, J. M., Mwavita, M., Muteti, C. Z., Jacob, B. I., & Mohanty, S. (2020). Metacognition and active learning combination reveals better performance on cognitively demanding general chemistry concepts than active learning alone. *Journal of Chemical Education, 97*(7), 1832-1840. Retrieved from https://doi.org/10.1021/acs.jchemed.0c00254

O'Halloran, K. L. (2021). Multimodal discourse analysis. In K. Hyland, B. Paltridge, and L. Wong (Eds.), *Bloomsbury companion to discourse analysis* (2nd ed.) (pp. 249-266). London: Bloomsbury.

Sankey, M., Birch, D., & Gardiner, M. W. (2010). Engaging students through multimodal learning environments: The journey continue. In *Proceedings of the 27th Australasian Society for Computers in Learning in Tertiary Education* (pp. 852-863). Sydney, Australia. Retrieved from https://research.usc.edu.au/esploro/outputs/conferencePaper/Engaging-students-through-multimodal-learning-environments/99449645202621

Soon, Z. (2021). The benefits of multimodal interactive case studies. *HAPS Educator, 25*(2), 53-76.

Xiong, W. J. (2025). A study on the application of multimodal interactive teaching model in vocational college English instruction. *China Educational Technology & Equipment, 39*(3), 33-37. doi:10.3969/j.issn.1671-489X.2025.03.033

Zhou, X. (2024). Exploring multimodal English teaching strategies in local universities based on artificial intelligence and big data technologies. *University, 19*(11), 110-113.