

# Constructivist Scenario Teaching of Classical Poetry: A Case Study of Jinse

Mengyao Zhang<sup>1,a,\*</sup>

<sup>1</sup>College of Design and Arts, Zhejiang Normal University, Wucheng District, Jinhua City, Zhejiang Province, China

<sup>a</sup>Lynseyapril41@gmail.com

\*Corresponding author

**Abstract:** Focusing on the teaching difficulties of Li Shangyin's Jinse, this study explores an innovative poetry teaching model using digital technology to enhance students' aesthetic perception and core competencies. Guided by constructivist and immersive learning theories, 3D modeling is applied to core poetic images to create a virtual-real integrated space. This method transforms abstract poetry into a visible, immersive learning environment. Results indicate that this approach effectively breaks traditional classroom limitations, turning abstract conceptions into concrete experiences. Overall, digital modeling demonstrates significant potential in modernizing ancient poetry instruction and improving teaching effectiveness.

**Keywords:** Li Shangyin Jinse, Classical Poetry Teaching, Modeling Technology, Digital Scenarios, Immersive Learning, Core Competencies of Chinese Language

## 1. Research Background on the Constructivist Scenario-Based Teaching of Jinse

Classical poetry, as the essence of excellent traditional Chinese culture, carries the national aesthetic spirit and philosophical wisdom, and is the core content for cultivating cultural confidence in Chinese language education. However, in the context of the digital era, classical poetry teaching is facing multiple challenges and urgently needs to innovate teaching models through technological empowerment.

### 1.1. Traditional Dilemmas in Classical Poetry Teaching

Li Shangyin's "Jinse" constructs multiple metaphorical spaces with images such as "Zhuangzi dreaming of a butterfly", whose ambiguity far exceeds literal meanings. Traditional classrooms rely on one-way interpretation, making it difficult for students to perceive the symbolic core. Wang Jing points out that current scenario introductions lack innovation and diversity, causing students to feel that classical images are disconnected from their experiences [1]. Furthermore, poetry integrates multi-sensory experiences to expand aesthetic perception [2]. Without situational support, emotional education goals fail, reducing beautiful lines like "one string and one bridge recall the youthful years" to mere test memorization points. Effective scenario creation is essential to stimulate curiosity and deepen aesthetic experiences [3]. To break through the "recitation-analysis-memorization" mode, teaching must shift towards authentic activities, achieving deep knowledge transfer through theme association [4, 5].

### 1.2. Policy Drivers and Technological Dividends of Educational Informatization

The national "Educational Informatization 2.0 Action Plan" [6], as a specific implementation plan to promote "Internet + Education", actively promotes the deep integration of new technologies and education teaching, explicitly proposing to "promote the deep integration of artificial intelligence, virtual reality, and other technologies into the entire teaching process, and build an intelligent and scenario-based learning environment". The release of the "Declaration on the Construction of New Liberal Arts" in 2020 highlights the urgent need for innovative development of liberal arts education in the new era. The qualitative interpretation and analysis of five core themes such as higher education and era requirements, and educational digitization and liberal arts transformation development in the "Annual Development Report on the Construction of New Liberal Arts (2023)" further emphasize the necessity of "digital technology empowering humanities education", providing solid top-level support for the digital teaching transformation of classical poetry.

In terms of emotional immersion, the "immersive" experience created by scenario-based design transforms students from passive listeners into active explorers, enabling them to "stroll" through the time and space of "Jinse" from a first-person perspective. According to the "Learning Pyramid" theory proposed by American educator Edgar Dale [7], the knowledge retention rate corresponding to "practice" can reach 75%, second only to "teaching others". Immersive learning perfectly aligns with this concept and effectively improves the knowledge retention rate.

Regarding cross-disciplinary integration, 3D modeling technology closely links literature, art, and computer science, highly conforming to the STEAM education concept, providing an effective path for cultivating talents with composite humanistic qualities. The dual role of policies and technologies is pushing educational informatization to new heights, bringing new development opportunities to classical poetry teaching and even the entire liberal arts education.

### 1.3. The Mission of Inheriting and Promoting Excellent Traditional Chinese Culture

In the 21st century, where economic globalization and cultural diversification are deeply intertwined, excellent traditional Chinese culture is facing unprecedented opportunities and challenges. Classical Chinese poetry carries the unique spiritual character and life wisdom of the Chinese nation. As the pinnacle of late Tang poetry, Li Shangyin's "Jinse", with its ambiguous and polysemous aesthetic characteristics and cultural codes constructed by allusions such as "Zhuangzi's morning dream", is exactly a typical sample of national cultural genes. Taiwanese scholar Ye Jiaying points out that in classical poetry, "the generation of images and the creation of artistic conceptions are actually the poetic externalization of the psychological structure of national culture" [8]. The space-time consciousness, life philosophy, and aesthetic paradigms contained in "Jinse" constitute an important medium for understanding the spirit of Chinese culture. To evaluate the pedagogical impact, a comparative study between the traditional approach and the proposed model was conducted. The comparison of teaching effects between the two methods is comprehensive and detailed in Table 1.

Table 1 Teaching method effect comparison chart.

Teaching Method	Comprehension Rate (%)	Student Satisfaction (%)
Traditional Explanation	62%	55%
Scenario-Based Teaching	85%	92%

Currently, middle school classical poetry teaching universally suffers from superficial cultural interpretation. Some teachers still adopt the traditional mode of "word analysis - content retelling - theme summarization", making it difficult for students to establish meaningful connections between poetry and contemporary life. The scenario-based teaching design guided by constructivism can activate students' prior cognitive experiences by creating historical contexts, life situations, and emotional fields. This teaching transformation not only echoes the literacy requirements for cultural inheritance and understanding in the "Compulsory Education Chinese Curriculum Standards", but is also a necessary path to achieve cultural identity through embodied cognition, providing a practical teaching-level path for the creative transformation of traditional culture.

## 2. Research Basis of Constructivist Scenario-Based Teaching for Jinse

At a time when artificial intelligence and metaverse technologies are reshaping the educational ecosystem, ancient poetry teaching urgently needs to break through the shallow digital rut of "PPT image displays + recitation videos". The scenario-based design proposed in this study forms a bidirectional feedback mechanism of "individual cognitive graph - collective meaning network".

Although scholars have explored VR poetry teaching, the VR project themed "The Art Life of Su Dongpo" at the East Branch of the Shanghai Library has started laboratory internal testing. The VR roaming interactive game is divided into four scenarios, selecting scenarios from Su Dongpo's first official post in the West Lake to his later life in Hainan. Guided by VR, the audience experiences the highs and lows of official career alongside Su Shi, from the bright spring and beautiful scenery of the West Lake to the silence in the darkness of Bianjing, from the mist in the chilling spring breeze of Huangzhou to the magnificent mountains and rivers under the brilliant galaxy, and finally, quietly watching the dawn break in Lingnan [9]. The visual composition and thematic ambiance of this immersive VR experience are illustrated in Figure 1. However, most studies focus on landscape restoration and lack deep deconstruction of image metaphors.



Figure 1 The art life of Su Dongpo "Snow Mud Swan Claws".

The constructivist scenario-based system for "Jinse" uses "Jinse" as an experimental carrier. Through theoretical grafting, technological empowerment, and cultural translation, it achieves a triple breakthrough of constructivism in ancient poetry teaching: building a "Chinese-style situational cognition" model at the theoretical level, forming a synergistic development framework of cultural needs and technological innovation at the methodological level, and opening up an educational channel for the modern transformation of traditional culture at the value level. This exploration not only fills the practical gap in scenario-based poetry teaching, but also provides a solution with both academic depth and realistic warmth for the intergenerational transmission of Chinese cultural genes.

### 3. Exploration of Teaching Objectives in Constructivist Scenario-Based Teaching of Jinse

The scenario-based design in middle school classical poetry teaching based on constructivism—taking Li Shangyin's "Jinse" as an example, is rooted in the constructivist learning theory. Combining socially and culturally oriented educational ideas and teaching model innovations, it constructs a scenario-based teaching design framework for middle school ancient poetry, aiming to help students achieve deep understanding and meaning construction of classical poetry in an authentic and dynamic learning situation. Using Li Shangyin's "Jinse" as the teaching text, the theoretical basis of the research design is systematically explained through the following three theoretical dimensions:

#### 3.1. Basic Concepts of Constructivism

Based on the constructivist view of knowledge, learning is viewed as a process in which learners actively construct meaning within specific contexts. The teaching scenario of "Jinse" needs to create an open, diverse, and poetically tense learning environment, such as by restoring the cultural background of the late Tang Dynasty, recreating the poet's life experiences, and building integrated image maps, to prompt students to actively construct poetic understanding in "immersion".

Teachers are no longer single knowledge transmitters, but should become "collaborators" in meaning exploration, "guides" of learning paths, and providers of "scaffolding" for cognitive development [11]. Through setting tasks, building problem chains, guiding discussions, and providing cultural resources, teachers help students advance multiple interpretations of "Jinse" within their zone of proximal development.

Students are the core subjects of learning, emphasizing the situational and social nature of knowledge, and focusing on the exertion of student subjectivity. In analyzing and expressing elements such as images, emotions, and structures of "Jinse", they need to actively ask questions, conduct cooperative discussions, and construct personalized understanding. Through methods such as associative rewriting of poetic lines and scenario deduction, students achieve a role transition from knowledge receivers to meaning constructors.

#### 3.2. Theoretical Integration Model: Dual Paths of Social and Cultural Construction

This study integrates Vygotsky's sociocultural theory and Bruner's cultural constructivism, proposing a dual construction path: Students achieve cognitive growth through social interaction. In the teaching of "Jinse", social interaction methods such as group cooperative inquiry, teacher-student conversational interpretation, and role-reversal acting can guide students to jointly construct poetic understanding through dialogue and collaboration.

The learning process is a re-creation of cultural meaning. Ancient poetry itself is a cultural quintessence. Teaching should focus on the cultural codes, philosophical implications, and historical

contexts behind the poetry, guiding students to conduct deep meaning excavation and re-creation through cultural anchoring. Exploring the instrument symbolism of "the jeweled zither, for no reason, has fifty strings" and the integration of cultural images like "Zhuangzi's morning dream" and "the moon over the vast sea" facilitates the construction of students' cultural understanding.

### **3.3. Manifestation of Learning Characteristics**

Poetry learning is embedded in authentic contexts. Grounded in the historical background of the late Tang Dynasty, an immersive virtual scenario is designed. Through multi-modal approaches like recitation audio and guzheng accompaniment, emotional resonance is activated. Furthermore, self-questioning and story adaptation based on images like "dream" and "tears" maintain learner subjectivity.

## **4. Constructivist Scenario-Based System Architecture for Jinse**

Based on the constructivist learning theory and integrating the aesthetic characteristics of classical poetry with digital media technologies, a diversified, immersive, and interactive scenario-based teaching system for "Jinse" is constructed from multiple dimensions such as teaching scenario creation, text interpretation, teaching models, and teaching scenario principles. This system aims to guide students to actively explore the poetic connotations and construct a deep understanding of classical poetry from multiple perspectives through teaching situations rich in experience and participation.

At the specific implementation level, the teaching design closely follows the key poetic lines in Li Shangyin's "Jinse", carrying out systematic teaching relying on the core concepts of constructivism.

Through the interpretation of "The jeweled zither, for no reason, has fifty strings; Each string, each bridge recalls the youthful years", a "Time Reconstruction" activity is introduced, guiding students to combine the poem lines with Li Shangyin's biographical events to explore the symbolic meaning of "fifty strings", reflecting the situational principle emphasized by constructivism.

Targeting the line "Zhuangzi in a morning dream was confused with a butterfly", a "Dream Recreation Theater" task is designed. Students are grouped to play Zhuangzi, the butterfly, and dream observers. Through role-playing, they explore the blending of dream and reality, demonstrating the active constructivism and social interactivity in the constructivist view of students. Through the line "Emperor Wang's spring heart is entrusted to the cuckoo", students are organized to study documents on mythical stories and historical culture and conduct role exploration, restoring the legend of Du Yu and the political metaphors in Li Shangyin's poems. This guides students to construct profound poetic meanings from cultural origins, reflecting the situational characteristics of the constructivist learning view.

In terms of teaching strategies, it also combines the anchored instruction model. By setting guiding questions based on lines like "The moon shines on the vast sea, tears are in the pearls" and "The sun is warm in Lantian, smoke rises from the jade" (such as "Why use natural scenes to express emotions?" and "What moods do 'pearl' and 'jade' symbolize respectively?"), students are prompted to carry out meaning construction and collective collaborative interpretation during the inquiry.

In the emotional experience dimension of teaching, centered around the line "This feeling might have become a memory to be cherished? But even then it was already an illusion", expression tasks blending sound and image are set up. Students are guided to restore the poet's emotional turbulence through audio-visual methods and carry out personalized creative writing, such as "Poet's Monologue" or "Jinse's Heart Talk" diaries, to promote deep emotional resonance and poetic experience[10].

## **5. Scenario Design Principles for Jinse: System Support Under Constructivism**

To ensure effective implementation, three principles are proposed: The first is the "Multimodal Anchoring Principle" [11], integrating texts, audio, and interactive technologies to stimulate sensory participation and aesthetic association. The second is the "Dynamic Scaffolding Principle," providing layered resource packages tailored to students' comprehension levels, allowing teachers to dynamically adjust support. The third is the "Non-linear Path Principle," empowering students to start their inquiry from any image of interest, constructing their own personalized cognitive networks. The hierarchical structure and logic of these three key dimensions are systematically outlined in Figure 2.

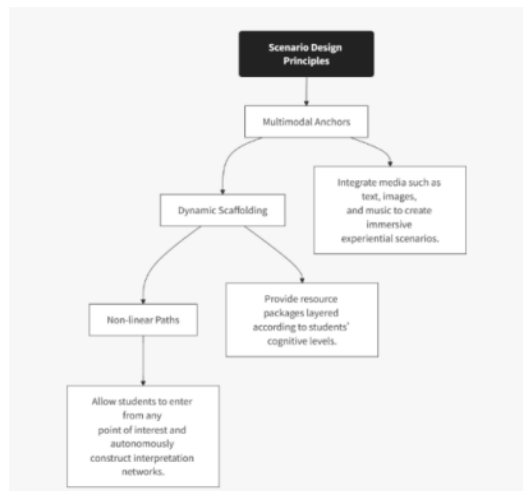


Figure 2 Teaching scenario design principles.

In summary, the constructivist scenario-based system architecture for "Jinse" attempts to build a scenario-based teaching model for "Jinse" that is theoretically solid, structurally systematic, and rich in form. Utilizing constructivist teaching concepts and technological means, it responds to the realistic dilemmas of contemporary students in understanding and emotionally experiencing classical poetry, aiming to achieve deep integration of classical aesthetics and modern education.

## 6. Evaluation and Optimization Directions for the Constructivist Scenario-Based Teaching of Jinse

To comprehensively measure the practical effectiveness of scenario-based ancient poetry teaching designed based on constructivist concepts in middle school Chinese classrooms, a systematic evaluation framework is constructed from three levels: knowledge mastery, ability enhancement, and emotional experience. Based on this, improvement directions to further optimize teaching are proposed. Through multimodal, process-oriented, and interactive evaluation methods, it strives to authentically reflect students' learning development status and the suitability of the teaching system.

### 6.1. Knowledge Mastery Evaluation: Emphasizing Polysemous Understanding and Cultural Association

From the perspective of constructivism emphasizing "meaning generation" and "knowledge reconstruction", the evaluation is no longer based on a single standard answer, but rather focuses on students' multiple interpretation abilities of the poem and their ability to connect it with historical and cultural backgrounds. By mapping a "Poetic Understanding Graph", students' internal construction of poetic structure, image linkages, and cultural background is presented.

### 6.2. Ability Enhancement Evaluation: Focusing on Cognitive Transfer and Problem-Solving Skills

Constructivism advocates the transfer of knowledge and its application in practice. Therefore, attention should be paid to students' problem-solving abilities when facing view conflicts and meaning ambiguities. Cross-textual research papers: This approach encourages students to compare the thematic structure and poetic imagery of "Jinse" with other ancient poems, such as the "Untitled" series and Li Bai's "Ancient Song of the Bright Moon," to evaluate their abilities in cross-textual transfer.

### 6.3. Emotional Experience Evaluation: Triggering Experiential Connection and Cultural Identity

Constructivism attaches great importance to the deep participation of learners' experiences and emotions. In ancient poetry teaching, emotional experience is not only the driving force for learning but also the source of generating cultural identity. This study adopts qualitative tools such as reflection logs and interview recordings, encouraging students to record their emotional experiences like "the moment I empathized with 'Jinse'" or "Li Shangyin in my eyes". Through teacher-student interviews, it understands their emotional changes and inner gains during the learning process. This tracking method of emotional participation not only highlights the process-oriented and authentic nature of evaluation but

also reflects the emphasis on "individual development" in constructivist education [12].

Through the above evaluation system and improvement directions, the scenario-based teaching of "Jinse" from the constructivist perspective has not only achieved the "depth" of knowledge transmission but also reached the "thickness" of cultural experience and individual meaning construction. This system can provide a sustainable theoretical fulcrum and practical paradigm for ancient poetry teaching.

## References

- [1] Wang, J. (2025) *Analysis of Scenario Introduction in High School Chinese Classroom Teaching*. *Jiaying Literature*, (04), 178-180.
- [2] Zhang, J. (2022) *Aesthetic Inspiration and the Beauty of Atmosphere in Ancient Chinese Poetry*. *Literature and Art Studies*, (12), 44-55.
- [3] Mao, C. (2018) *Preliminary Study on Ancient Poetry Teaching Strategies of State-Compiled Chinese Textbooks under the Background of Core Competencies*. *Journal of the Chinese Society of Education*, (S1), 66-69.
- [4] Geng, H., & Ji, L. (2023) *Research on Middle School Ancient Poetry Teaching Strategies Based on Core Competencies in Chinese Language*. *Theory and Practice of Education*, 43(35), 54-57.
- [5] Huang, W. (2022) *Pursuing the Structuring of Reading Teaching Content to Promote the Advanced Development of Core Competencies in Chinese Language*. *Middle School Chinese Teaching*, (08), 4-9.
- [6] Ministry of Education. (2018) *Educational Informatization 2.0 Action Plan*.
- [7] Letrud, K., & Hernes, S. (2019) *The Learning Pyramid: Myth, Misleading or Valuable Icon*. *Medical Teacher*, 41(9), 1070–1076.
- [8] Ye, J. (2008) *Lectures on Chinese Classical Poetry*. Beijing: Zhonghua Book Company.
- [9] Le, M. (2023) *In the VR Exhibition, Boating at Night at the Red Cliff with Su Dongpo*. *Digital Culture Review*, (02), 12-15.
- [10] Zhou, Y. (2005) *Chinese Language Teaching Design Under the Guidance of Constructivist Theory*. Hebei Normal University.
- [11] Mayer, R. E. (2009) *Multimedia Learning (2nd ed.)*. Cambridge University Press.
- [12] Zhu, D. (2023) *Practice and Innovation of Writing Teaching Under Constructivist Learning Theory*. *Road to Success in Writing*, (30), 47-49.