



A Study on an Innovative Model for Enhancing Young Children's Comprehension and Expression of Classical Chinese Poetry through Digital Technology—Taking Interactive Electronic Picture Books and AI Voice Feedback as Key Components

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Abstract: With the rapid advancement of digital technology, its influence has extended to all levels of the education sector, bringing about profound transformations in traditional teaching models. In the early childhood education system, the teaching of classical Chinese poetry—a vital component for passing on our fine cultural heritage—faces challenges such as limited teaching methods and difficulties in young children's comprehension. This study aims to explore an innovative model for enhancing senior kindergarten children's understanding and expression of classical Chinese poetry through the empowerment of digital technology. By introducing interactive electronic picture books and AI-powered voice feedback technology, we have developed an innovative teaching model centered on improving young children's learning outcomes in classical Chinese poetry. The study employs methods such as questionnaires, classroom observations, and experimental comparisons to validate the effectiveness of this model in deepening young children's sensory experience of classical Chinese poetry and enhancing their expressive abilities. The practical results demonstrate that this innovative model significantly improves both the depth of young children's understanding of classical Chinese poetry and the fluency of their expression, offering new ideas and promising applications for the modernization of early childhood classical Chinese poetry education.

Keywords: digital technology; senior kindergarten children; understanding and expression of classical Chinese poetry; interactive digital picture books; AI voice feedback

Introduction

1.1 Research Background

With the rapid development of information technology, digital technologies have extensively permeated all aspects of social life and have profoundly impacted the field of education. As a key direction of Education Informatization 2.0, smart education is reshaping the nature of school education and driving comprehensive transformations in teaching methods, learning models, and assessment systems [9]. In the field of early childhood education, the application of digital technologies has injected new vitality into traditional teaching practices. Particularly in language instruction, the integration of information technology not only expands the scope of teaching but also significantly enhances young children's linguistic immersion and learning outcomes [1]. Early childhood education serves as an essential cornerstone for cultural inheritance, and classical Chinese poetry—being an important component of China's outstanding traditional culture—holds great educational value in fostering children's literary literacy and aesthetic appreciation while laying a solid foundation for their future learning. Therefore, introducing classical Chinese poetry education at the early childhood stage carries significant practical importance.

1.2 Problem Statement

Although classical Chinese poetry education holds a significant place in early childhood language learning, teaching it to senior kindergarten children still faces numerous challenges. Traditional teaching models heavily rely on teachers' oral explanations and rote memorization, which fail to stimulate children's interest. Moreover, due to their limited cognitive development, young learners often struggle to comprehend the content of classical Chinese poetry. Additionally, traditional methods fall short in enhancing children's expressive abilities. The lack of targeted expression training and immediate feedback mechanisms often leads to inaccurate pronunciation and disjointed expression during poetry recitation and retelling. These issues indicate that traditional teaching models can no longer meet the demands of modern early childhood classical Chinese poetry education, highlighting an urgent need to explore more effective teaching approaches tailored to children's cognitive characteristics.

1.3 Significance of the Study

The development of digital technologies has opened up entirely new possibilities for early childhood education in classical Chinese poetry. In particular, the integration of interactive electronic picture books and AI-powered voice feedback technology presents significant opportunities for innovating teaching methodologies. Interactive electronic



picture books, by combining multimedia elements such as animation, sound effects, and illustrations, can greatly enhance young children's perception and comprehension of classical Chinese poetry content, thereby boosting their interest and engagement in learning [2]. Meanwhile, AI-powered voice feedback technology, with its precise speech recognition and real-time correction capabilities, can effectively help young children improve their pronunciation, enhance the fluency of their expression, and ultimately promote the development of their language skills. This study aims to explore specific application pathways for digital technologies in classical Chinese poetry education for senior kindergarten children by developing an innovative model based on interactive electronic picture books and AI-powered voice feedback. Such research not only contributes to enriching both the theoretical and practical aspects of early childhood education in classical Chinese poetry but also provides valuable references for advancing the informatization of early childhood education.

Literature Review

2.1 Research Related to Early Childhood Education in Classical Chinese Poetry

As an important approach to inheriting excellent traditional Chinese culture, early childhood classical Chinese poetry education is theoretically grounded in research on children's cognitive development and language learning principles. According to Piaget's theory of cognitive development, senior kindergarten children are in the late preoperational stage, possessing certain symbolic thinking and logical reasoning abilities, which provides a cognitive foundation for classical Chinese poetry learning [3]. Meanwhile, Vygotsky's sociocultural theory emphasizes the facilitating role of social environments and interactions in children's language development, offering theoretical support for the construction of context-based and experiential classical Chinese poetry teaching models. Regarding teaching methodologies, domestic and international research has proposed various innovative pathways. For instance, the "experiential context-based" gamified classical Chinese poetry teaching model creates a highly immersive language learning environment that stimulates children's immersive perception and active participation, thereby enhancing their learning interest and outcomes. Furthermore, classical Chinese poetry singing courses organically integrate music and literature, which not only aligns with children's aesthetic needs but also enhances their memory and comprehension through multisensory engagement. These research findings provide significant theoretical foundations and practical references for this study.

2.2 Application of Digital Technology in Early Childhood Education

With the rapid development of information technology, digital technologies are increasingly being applied in early childhood education, profoundly impacting traditional teaching models. Multimedia teaching, as a common form of digital technology application, combines various media such as images, audio, and video to provide young children with a more intuitive and vivid learning experience. Research indicates that multimedia teaching can significantly enhance young children's language expression skills and ability to sustain attention, particularly in language-related courses [1]. Meanwhile, the growing popularity of educational apps has further expanded the time and space boundaries of early childhood learning, making personalized learning possible. For example, in kindergarten language instruction, IT-based educational tools are widely used in activities such as vocabulary acquisition and sentence construction, effectively improving children's language proficiency [7]. However, despite the great potential of digital technologies in early childhood education, their specific applications still need to be optimized and tailored to the cognitive characteristics of young children, ensuring both technological suitability and maximized educational effectiveness.

2.3 Application of Interactive Electronic Picture Books and AI Voice Feedback in Early Childhood Learning

Interactive electronic picture books, characterized by their rich multimedia elements and high interactivity, have become essential tools for early childhood reading and learning. Research indicates that the organic integration of animations, sound effects, and illustrations in these books can significantly enhance young children's reading interest and comprehension. This is particularly applicable to abstract literary genres such as classical Chinese poetry. For instance, in classical Chinese poetry learning, the combination of dynamic visuals and background sound effects helps children establish connections between the poetic imagery and their emotional experiences, thereby deepening their understanding of the text. On the other hand, the application of AI voice feedback technology in language learning has garnered increasing attention. By analyzing children's pronunciation accuracy and intonation fluency in real time, this technology provides immediate correction and encouragement, effectively improving their language expression skills [6]. Particularly in classical Chinese poetry recitation and retelling tasks, AI voice feedback assists children in standardizing their pronunciation and strengthening their sense of rhythm, thereby facilitating precise language training. The synergistic application of these two technologies offers new possibilities for comprehensively enhancing young children's understanding and expressive abilities in classical Chinese poetry.

2.4 Research Gaps

Although existing literature has achieved abundant results in the fields of early childhood classical poetry education and the application of digital technologies, there remain significant gaps in research on innovative models for enhancing older preschoolers' understanding and expression of classical poetry through digital technology. First, most existing studies

have focused on the application of single technologies—such as interactive electronic picture books or AI-powered voice feedback—while lacking systematic exploration into the combined use of these two approaches. Second, current research on the application of digital technologies in classical poetry teaching largely remains at the theoretical level, with relatively few empirical studies that can comprehensively evaluate their practical effectiveness. Furthermore, with regard to the specific cognitive characteristics and learning needs of older preschoolers, existing studies still need to strengthen their targeted approach in both model design and implementation strategies. Based on this, our study focuses on the integration of interactive electronic picture books and AI-powered voice feedback, aiming to develop an innovative model that is both engaging and effective, thereby filling the aforementioned research gaps and providing new ideas and methods for early childhood classical poetry education^[7].

Analysis of the Current Situation and Needs of Ancient Poetry Learning Among Older Kindergarten Children

3.1 Survey on Existing Issues in Early Childhood Education of Classical Poetry for Older Kindergarten Children

To comprehensively understand the actual situation of older kindergarten children in ancient poetry learning, this study employed a research method combining questionnaire surveys and classroom observations. The questionnaire targeted multiple kindergarten teachers and parents, aiming to gather specific issues regarding children's ancient poetry learning from the perspectives of educators and caregivers. The questionnaire was primarily designed around children's interest levels, comprehension abilities, and expressive proficiency in ancient poetry, collecting data through a combination of closed-ended and open-ended questions. Meanwhile, classroom observations focused on children's performance during ancient poetry classes, recording their attention span, level of participation, and comprehension of and feedback on the poetic content. The survey results indicate that senior kindergarten children exhibit a significant lack of interest in learning ancient poetry. The majority lack initiative, and some even demonstrate resistance. Furthermore, comprehension difficulties are a widespread issue. Due to the highly condensed language and the distant historical background of ancient poetry, children struggle to connect it with their daily lives, resulting in a superficial understanding. In terms of expression, children often display fluency issues, failing to accurately articulate their understanding of the poetry or recite it clearly. The existence of these issues highlights an urgent need to improve traditional ancient poetry teaching methods to better align with the learning characteristics and needs of older kindergarten children.

3.2 Feasibility Analysis of the Integration of Digital Technology into Young Children's Learning of Classical Chinese Poetry

From a technical perspective, interactive digital picture books combined with AI-powered voice feedback demonstrate high feasibility in helping older kindergarten children learn classical Chinese poetry. Interactive digital picture books leverage mature digital publishing technologies to seamlessly integrate various media elements—such as text, images, audio, and video—providing young children with a rich and diverse learning experience. Currently, several interactive digital picture book products tailored for early childhood education are already available on the market, and their technological stability and user experience have been extensively validated^[1]. Meanwhile, AI-powered voice feedback technology, driven by advances in natural language processing and speech recognition, enables precise recognition of children's speech and intelligent assessment of their performance. In recent years, the application of AI voice feedback technology in language learning has become increasingly widespread; its real-time responsiveness and accuracy provide strong support for young children's language acquisition². Furthermore, from the perspective of children's cognitive characteristics, digital technologies exhibit a high degree of compatibility with young children's cognitive development. Older kindergarten children are at the stage of concrete-visual thinking and are particularly drawn to intuitive and vivid stimuli. The multimedia features of interactive digital picture books perfectly meet this need. Research indicates that young children show a high level of receptivity toward multimedia content, especially when attracted by elements such as animation and sound effects, which can significantly enhance their attention and engagement¹. At the same time, the interactive nature of AI voice feedback technology aligns well with children's penchant for imitation and expression, stimulating their enthusiasm for learning and further bolstering the feasibility of integrating digital technologies into the teaching of classical Chinese poetry for young children^[3].

3.3 The Application Value of Interactive Electronic Picture Books and AI Voice Feedback in Young Children's Learning

Interactive electronic picture books, enriched with diverse multimedia elements, can significantly enhance young children's perception of classical Chinese poetry. In traditional teaching, children are primarily exposed to classical Chinese poetry through teachers' reading and explanations. This monotonous approach struggles to stimulate their interest. In contrast, interactive electronic picture books can vividly animate the scenes depicted in the poems. For instance, the line "The white sun sets behind the mountains; The Yellow River flows into the sea" can be presented through animations of a setting sun and a surging river, allowing children to intuitively experience the poetic imagery. Paired with melodious sound effects, such as the ancient qin or flowing water, these books create an immersive poetic atmosphere that enriches children's auditory experience. Furthermore, exquisite illustrations help children comprehend key vocabulary and imagery, such as depicting the weeping willow in "The willow tree is dressed in jade green," thereby making the verses easier to understand. The integrated use of these multimedia elements transforms abstract poetic content into tangible and perceptible images, deepening children's perception and comprehension of classical Chinese poetry.

Constructing an Innovative Model for Young Children in Large-Scale Classes to Understand and Express Classical Chinese Poetry Empowered by Digital Technology

4.1 Core Goals and Principles of Model Construction

This study aims to construct an innovative teaching model empowered by digital technologies, with the core objective of enhancing senior kindergarten children's comprehension and expressive abilities in ancient poetry. Grounded in children's cognitive development characteristics, the design of this model emphasizes stimulating learning interest, cultivating language perception, and promoting expressive skills. Specifically, its primary goal is to integrate interactive electronic picture books with AI voice feedback technology, facilitating a comprehensive progression in children's ancient poetry learning from perception to comprehension, and ultimately to expression. To ensure the effectiveness of this model, this study proposes three core construction principles: entertainingness, heuristic guidance, and interactivity. Entertainingness emphasizes capturing children's attention through multimedia elements and gamified design, encouraging them to actively participate in learning in a joyful atmosphere. Heuristic guidance focuses on inspiring children's in-depth thinking about the connotations of ancient poetry through context creation and problem-based guidance. Interactivity highlights multidirectional interactions among teachers and students, between humans and machines, and between children and learning resources, thereby enhancing the overall learning outcomes.

4.2 Mode's Overall Architecture and Operational Logic

The innovative model developed by this research institute comprises three core modules: the Ancient Poetry Perception and Experience Module, the Ancient Poetry Comprehension Enhancement Module, and the Ancient Poetry Expression Training Module. These modules are closely interconnected through tight logical relationships, forming an integrated whole. In terms of operational logic, the model is based on interactive digital picture books that use multimedia elements such as animations, sound effects, and illustrations to present ancient poetry content, helping young children form initial impressions of ancient poetry during the perception stage. Subsequently, leveraging AI-powered voice feedback technology, the model guides children in practicing reading aloud, memorizing, and retelling, thereby deepening their understanding of ancient poetry^[2]. Finally, in the expression training module, real-time voice feedback is used to correct pronunciation errors, enhancing the accuracy and fluency of children's expression. This operational logic not only reflects the learning process from input to output but also highlights the synergistic role of interactive digital picture books and AI-powered voice feedback technology at every stage, providing young children with comprehensive learning support.

4.3 Design of a Perceptual Experience Module for Classical Poetry Based on Interactive Electronic Picture Books

In the design of the classical Chinese poetry perception and experience module, the first step is to select appropriate classical Chinese poetry content based on the cognitive level and interest characteristics of senior kindergarten children. For example, one can choose classic poems with concise language, beautiful imagery, and themes closely related to young children's everyday experiences, such as "Quiet Night Thought" and "Pity for the Farmers." Second, by seamlessly integrating multimedia elements—such as animations, sound effects, and illustrations—abstract text can be transformed into vivid and engaging visual and auditory experiences. For instance, when presenting "Spring Dawn," a dynamic animation of a springtime scene, bird-song sound effects, and brightly colored illustrations can be used to evoke the vibrant atmosphere of spring described in the poem, thereby enhancing young children's perception of the poem's artistic mood. Additionally, interactive digital picture books can incorporate clickable interactive features—for example, clicking on a flower in the illustration can trigger a reading of the corresponding lines of the poem—allowing children to deepen their understanding of the poem's content through hands-on interaction. This multi-sensory learning approach not only sparks children's interest but also effectively enhances their ability to perceive and appreciate classical Chinese poetry.

4.4 Design of a Classical Poetry Expression Training Module Relying on AI Voice Feedback

In the classical Chinese poetry expression training module, the application of AI voice feedback technology provides personalized learning support for young children. Utilizing speech recognition and natural language processing algorithms, this technology can analyze children's pronunciation accuracy, intonation fluency, and expressive completeness in real time, providing corresponding evaluations and suggestions. For instance, when children shadow-read *On the Stork Tower*, the AI system can detect whether their pronunciation is standard and offer corrective guidance for any deficiencies. Meanwhile, the system can record data from multiple practice sessions and generate learning curves to visualize their progress, thereby enhancing their sense of achievement. During implementation, teachers can design diverse activities to guide children to actively participate in expression training, such as group competitions and role-playing. For example, in the "Little Star of Poetry Recitation" activity, children can use the AI voice feedback system to record their recitation works and share them with peers. This allows them to continuously improve their expressive abilities through interactive communication.

4.5 Mode: Application Scenarios and Implementation Process

The innovative model developed by this research institute can be applied in a variety of settings, including kindergarten classroom instruction and home learning environments. In kindergarten classrooms, teachers can integrate interactive digital picture books and AI-powered voice feedback technology into daily teaching activities, aligning them with thematic activities or language domain instructional objectives. For example, when conducting a thematic activity on “The Beauty of the Four Seasons,” teachers can select classical poems related to the four seasons as teaching content, use interactive digital picture books for introduction and explanation, and then employ an AI-powered voice feedback system to guide children in practicing reading aloud and memorization. In home learning scenarios, parents can help their children use relevant learning resources for independent review or extended learning. For instance, parents can read digital picture books together with their children and encourage them to practice reciting using the AI-powered voice feedback system, thereby reinforcing what they’ve learned in class^[5]. The specific implementation process includes several stages: resource preparation, task assignment, children’s engagement, and outcome evaluation. During the resource preparation stage, teachers or parents need to download and install the relevant learning software in advance; during the task assignment stage, clear learning objectives and requirements must be defined; in the children’s engagement stage, teachers and parents should closely monitor the children’s learning process and provide timely guidance; finally, during the outcome evaluation stage, children’s learning outcomes can be comprehensively assessed through observation records, test scores, and other methods.

Practical Verification and Effectiveness Analysis of the Innovative Model

5.1 Practical Research Design

This study focuses on kindergarten children in the senior class, selecting participants aged 5–6 years old as experimental subjects. This age group is at a critical stage characterized by rapid development of language skills and a strong curiosity toward cultural content. To ensure the validity of the research findings, the children were randomly assigned to either an experimental group or a control group, with 30 participants in each group. The experimental group received instruction using an innovative approach based on interactive digital picture books combined with AI-powered voice feedback, while the control group followed a traditional method of teaching classical poetry—namely, teacher-led explanations accompanied by textbook reading. In the study design, variables such as teaching duration, instructional content, and teacher guidance methods were carefully controlled to ensure that any observed differences in outcomes could be attributed primarily to the differences in instructional approaches¹⁰. Furthermore, to avoid the Hawthorne effect and other external factors influencing the results, the study employed a double-blind design: neither the teachers nor the children were aware of their specific group assignments.

5.2 Practice Data Collection and Processing

To comprehensively evaluate the impact of the innovative model on young children’s comprehension and expression abilities regarding classical Chinese poetry, this study employed a variety of data-collection methods, including standardized tests, classroom observation records, and analysis of children’s creative works. In the standardized tests, an assessment tool was designed to cover three dimensions: depth of classical poetry comprehension, accuracy of expression, and fluency of delivery. Pre- and post-test comparisons were conducted to obtain experimental data. Classroom observation records focused specifically on children’s engagement, interest levels, and interactive behaviors during the learning process. These records were independently completed by two trained researchers to enhance the objectivity and reliability of the data. Additionally, children’s creative works—such as drawings and handicrafts—were collected to analyze their understanding of the content of classical poetry and their creative expressions. For data analysis, SPSS statistical software was used to perform descriptive statistics and paired-samples t-tests on quantitative data, thereby verifying significant differences between pre- and post-test results. Qualitative data were analyzed using content analysis, involving coding and theme extraction, to generate multi-dimensional research findings.

5.3 Analysis of the Effectiveness in Enhancing Young Children’s Comprehension and Expression Abilities in Classical Poetry

Analysis of the experimental data reveals that children in the experimental group demonstrated significant improvements in the depth of ancient poetry comprehension, as well as in expressive accuracy and fluency. Specifically, regarding the depth of comprehension, the post-test average score of the experimental group increased by 18.3% compared to the pre-test, whereas the control group saw an increase of only 7.6%. In terms of expressive accuracy, the error rate of the experimental group dropped significantly from 35% before the experiment to 12% afterward, markedly outperforming the control group’s 22%. Furthermore, case studies demonstrate that during the learning process, some children were able to leverage the multimedia elements provided by interactive electronic picture books to gain a deeper understanding of the cultural background and emotional connotations of ancient poetry. For example, when learning *Thoughts on a Quiet Night*, one child, aided by animated demonstrations and sound effects, not only accurately grasped the homesickness expressed in the poem but also retold the content fluently and created related artwork. These findings indicate that the innovative model based on interactive electronic picture books and AI voice feedback can effectively enhance young children’s comprehension and expressive abilities in ancient poetry.

5.4 Analysis of Usage Feedback from Teachers and Parents

To further evaluate the feasibility and practicality of the innovative model, this study also collected feedback from teachers and parents regarding its satisfaction and ease of use. The results indicate that teachers generally consider the model highly entertaining and heuristic, noting that it can significantly stimulate children's learning interest and enhance classroom engagement. Meanwhile, teachers pointed out that the AI voice feedback technology plays a crucial role in correcting children's pronunciation and improving their expressive fluency. However, some teachers also reported that due to the high technical operation threshold, an initial adaptation period is required. Feedback from parents showed a high acceptance rate of the innovative model, with its application in home learning scenarios being particularly well-received. Parents expressed that the vivid presentation of interactive electronic picture books enables children to actively learn ancient poetry at home, while the AI voice feedback feature provides immediate learning support. Nevertheless, some parents also offered suggestions for improvement, such as adding more interactive functions to enhance the sense of participation in parent-child learning at home. Overall, the innovative model demonstrates clear advantages in improving children's ancient poetry learning outcomes, though further optimization of user experience and functional design is still needed.

Results and Discussion

6.1 Research results

This study constructed an innovative model for enhancing young children's comprehension and expression of classical Chinese poetry through the empowerment of digital technologies, and verified the significant effectiveness of interactive electronic picture books combined with AI-powered voice feedback in young children's learning of classical poetry. The research indicates that this innovative model can effectively deepen young children's understanding of classical poetry and improve their expressive abilities, particularly excelling in stimulating learning interest, enhancing perceptual experiences, and optimizing linguistic expression. Specifically, interactive electronic picture books, by integrating multimedia elements such as animations, sound effects, and illustrations, provide young children with an immersive experience of classical poetry, enabling them to grasp the poetic imagery and cultural significance more intuitively. Meanwhile, AI-powered voice feedback technology, by offering real-time correction of pronunciation and assessing the fluency of expression, helps young children gradually master the skills of reciting and memorizing classical poetry, thereby enhancing their overall linguistic expression capabilities. From the perspective of practical results, the key elements of the innovative model include the clarity of the core objective, the suitability of technological approaches, and the scientific nature of instructional design. First, by taking the enhancement of young children's comprehension and expression abilities in classical poetry as the core objective, we have ensured the research's focus and practical relevance. Second, the multi-sensory stimulation provided by interactive digital picture books, combined with the intelligent interaction facilitated by AI-powered voice feedback, perfectly aligns with young children's cognitive characteristics and learning needs, demonstrating the high degree of adaptability of the technological approaches. Furthermore, the instructional design—grounded in principles of fun, inspiration, and interactivity—not only boosts young children's engagement in learning but also fosters the development of their self-directed learning skills. These key elements together constitute the successful experience of the innovative model and provide important references for future research and practice in this field.

6.2 Research Gaps and Future Prospects

Although this study has achieved preliminary results, there are still some limitations that require further improvement. First, regarding sample selection, this study only recruited senior kindergarten children from a single kindergarten as participants. The limited sample size and concentrated geographic distribution may affect the generalizability and representativeness of the findings. Future research should expand the sample size to include children from diverse regions and backgrounds to verify the applicability of the innovative model in varied contexts. Second, the relatively short implementation period makes it difficult to comprehensively evaluate the long-term effects of the model. Therefore, subsequent studies could consider extending the practical cycle and tracking children's continuous performance in ancient poetry learning to further optimize the model design. Furthermore, with the rapid development of digital technologies, the application potential of emerging technologies such as virtual digital humans and virtual reality (VR) in education is becoming increasingly evident. For instance, virtual digital humans can provide more personalized learning support for children through affective interaction, while VR technology can create immersive ancient poetry learning scenarios, allowing children to experience the poetic context as if they were physically present. Therefore, future research could explore integrating these emerging technologies with the existing innovative model to further enrich the forms and content of children's ancient poetry learning. Meanwhile, it is also necessary to pay attention to ethical issues and potential risks during the application of these technologies to ensure the sustainable development of technology-empowered education.

Conclusion

In summary, this study provides new insights and methods for empowering early childhood ancient poetry education with digital technologies, while also revealing the shortcomings in current research. Future studies should, on the basis of expanding the sample scope and extending the implementation period, actively explore the deep integration of emerging

technologies with traditional teaching models, thereby promoting the innovative development of early childhood ancient poetry education.

REFERENCES

- [1] Xie Jinsha. Exploring Ways to Integrate Information Technology with Language Instruction in Kindergarten[J]. Global Charity, 2023, (5): 202-204.
- [2] Shi Wei; Huang Jiaqing; Cui Zhongliang. Innovation in the Virtual Reality Education Paradigm: Current Status, Challenges, and Prospects [J]. Journal of Mudanjiang College of Education, 2023, (2): 41-45.
- [3] Zeng Huifang. A Study on the Construction of a Gamified Teaching Model for Classical Poetry in Kindergartens Based on “Situational Experiential” Approach [J]. Growth, 2024, (2):100-102.
- [4] Ren Xiaoye. Practice and Research on the Construction of Ancient Poetry Recitation Courses from the Perspective of Young Children’s Aesthetic Appreciation [J]. World Children, 2024, (3): 29-31.
- [5] Liu Tingmin. A Brief Discussion on Strategies for Integrating Classical Poetry into Kindergarten Education [J]. Hao Rizi, 2022, (33): 106-108. [6] Liu Jianze. From Empowerment to “Infusing Soul”: The Current Status, Challenges, and Prospects of Virtual Digital Humans in the Media Industry [J]. Media, 2024, (7): 52-54.
- [7] Zhou Liang. Practical Exploration of Empowering Digital Sports Campus Development through “AI + Sports” [J]. Primary and Secondary School Information Technology Education, 2024, (4): 90-91.
- [8] Liang Yixin; Zhai Jie; Li Dongrui; Xiong Hanrui. A Study on the Construction of a Learning and Education Platform for the Integration of Classical Poetry and Culture [J]. China New Communications, 2024, 26(4):120-123.
- [9] Luo Fangmei. International and Domestic Development Trends and Relevant Experiences in the Practice of Smart Education Schools [J]. Forum on Educational Science, 2021, (29): 47-51.
- [10] Mai Juefang. An Exploration of Classroom Practice in Project-Based Learning of Classical Poetry[J]. Chinese Language World (Early Issue) Journal), 2024,(5):50-52.
- [11] Ouyang Ziwei; Liu Yuxin; Yu Na. A Study on the Design of a Mobile Application with the Theme of Promoting Classical Poetry Culture [J]. Packaging Engineering, 2022, 43(4):197-202.
- [12] Lu Fei. Design of an AI-Based Smart Service Model for Radio and Television Converged Media[J]. Electroacoustic Technology, 2024, 48(6):93-96.