Fostering Quality Early Childhood Education Through Inheritance and Innovation: The Practical Path of Visualized Teaching of Intangible Cultural Heritage in Kindergartens

—A Case Study of the Foshan Qiuse Activities in the Second Kindergarten of Foshan Educational Workers' Union

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Abstract: Objective: To explore how localized intangible cultural heritage (ICH) resources can be transformed into teaching content suited to the cognitive characteristics of children aged 3–6 through AR/VR digital modeling, immersive scene construction, and interactive task design. Methods: Taking the teaching practice of the Foshan Qiuse activity at the Second Kindergarten of Foshan Educational Workers' Union as a sample, an eight-week action research was conducted with 35 senior-class children, and data were collected through classroom observation, teacher–child interaction records and analysis of children's works. Results: A four-in-one ICH enlightenment model of "perception–experience–creation–communication" was constructed. Children's average frequency of voluntary hand-raising and speaking reached 2.1 times that of traditional activities, and the effective attention maintenance duration of easily distracted children in collective activities increased by an average of 12 minutes. Conclusions: Scientific and moderate integration of visualized teaching into the whole process of kindergarten activities can effectively improve teaching quality without undermining the play-based nature of preschool education, achieving a two-way integration between the policy requirement of quality early childhood education and the inheritance of local culture.

Keywords: Preschool Education Law; visualized teaching of intangible cultural heritage; Foshan Qiuse; kindergarten curriculum; quality early childhood education

I. Research Background and Problem Statement

Children aged 3–6 are at the core stage of concrete thinking development. Their understanding of abstract content and indirect experience relies heavily on intuitive and perceptible visual support, and this cognitive characteristic makes visual presentation a core vehicle for organizing preschool educational activities. In traditional teaching scenarios, frontline teachers have long faced three common difficulties. First, for thematic content far removed from children's daily experience, such as local intangible cultural heritage (ICH) and natural phenomena, oral language and simple wall charts alone can hardly convey details, and children can only acquire fragmented and vague cognition. Second, in collective teaching, the attention span of children at different developmental levels varies significantly, and a uniform way of presenting content can hardly accommodate individual needs:

children with stronger abilities often remain under-challenged, while those with weaker abilities often fall behind. Third, during activities, a large amount of valuable generative teacher–child interactions and children's inquiry details are difficult to capture and retain in real time, and therefore cannot be transformed into resources supporting subsequent teaching.

As digital educational resources penetrate the preschool field, visualized teaching technology offers new possibilities for addressing the above pain points. However, in current preschool educational practice, the application of visualization technology generally shows a deviation toward primary-school-style teaching: many teachers equate visualization with the one-way playback of electronic courseware and fail to integrate it into the whole process of activity organization. On the contrary, it squeezes out children's space for direct perception and hands-on operation, and even causes problems such as impaired visual development due to excessive use of screen resources.

Based on the local teaching and research reality of preschool education in Foshan, this study takes local cultural thematic activities such as "Lifelike Qiuse" as the core case, explores the adaptive path of visualized teaching technology in the whole process of organizing preschool educational activities, responds to frontline teachers' practical needs of not knowing how to use technology, not using it well, and not using it properly, and provides a replicable practical framework for the normalized implementation of visualized teaching in preschool education within the region.

II. Core Concept Definition and Research Foundation

In this study, "visualized teaching technology supporting the organization of preschool educational activities" refers specifically to the teaching organization method that, in three typical preschool scenarios—collective teaching, regional play, and outdoor inquiry—uses real-shot videos, physical projection, and simple interactive visualization tools as carriers to transform teaching content into visualized resources that children can directly perceive and interactively participate in, running through the whole process of activity introduction, inquiry, and extension. Its core lies not in the advancement of technology, but in taking children's concrete thinking development as the fundamental starting point, lowering the transformation threshold of indirect experience, and supporting children to complete independent meaning construction through direct perception and hands-on operation.

A review of existing research shows that the academic community has formed three basic consensuses. First, the efficiency of visual information processing of children aged 3–6 is significantly higher than that of auditory processing, and visualization resources adapted to their cognitive characteristics can increase the effective attention maintenance duration of collective activities by more than 30%. Second, high-quality visualized teaching does not replace teachers' guidance; instead, it serves as an interactive medium to expand the depth of teacher–child dialogue. Third, the application of visualization in the preschool stage must strictly avoid long-term passive screen watching and adhere to the bottom-line principle that technology serves experience rather than dominates activities.

However, existing research still has two obvious gaps. Most achievements focus on the design and development of visualization resources but rarely bind them deeply to the complete process

of organizing preschool educational activities, and no step-by-step operational guide that frontline teachers can directly refer to has been formed. In addition, cases of visualized teaching for local cultural themes in Foshan are almost blank; localized cultural resources such as Qiuse and lion dance are difficult to be transformed into teaching content adapted to children's cognition. This is precisely the core entry point of this study.

III. Research Design and Implementation Process

A. Research design

This study adopts the action research method. Thirty-five children of the senior class in a public kindergarten in Foshan are selected as the research objects. With the "Lifelike Qiuse" thematic series of activities as the core practice carrier, an eight-week follow-up teaching is carried out. Research data are collected throughout the process through classroom observation, teacher–child interaction records, and analysis of children's works, so as to sort out the application effect and optimization boundary of visualization technology.

B. Three-stage implementation process

The practice process is divided into three progressive stages according to the logic of activity organization.

1. Visualized preparation in the introduction stage. Instead of directly explaining the historical origin and category characteristics of Foshan Qiuse orally, the teacher uses a three-to-five-minute real-shot video of the Qiuse parade and macro images of lifelike works, allowing children to intuitively see the complete steps of Qiuse artists making simulated pumpkin lifelike works, so as to quickly establish concrete cognition of the thematic content. The screen-watching duration is strictly controlled throughout to avoid children's visual fatigue.

2. Interactive visualization support in the inquiry stage. The teacher uses physical projection to display children's self-made Qiuse clay embryos on the classroom screen in real time, guides all children to jointly observe the texture and color details of the works, and share their respective creative ideas, thereby transforming individual fragmented inquiry experiences into shared learning resources for the whole class.

3. Generative visualization retention in the extension stage. The teacher uses photos and short videos to record children's complete creation process and compiles them into a class dynamic visualized story wall, allowing children to review their inquiry journey at any time and accumulating local generative resources for subsequent teaching of the same theme.

During the practice period, the research team conducted a teaching research review every two weeks, simultaneously tracking and recording three core indicators—the frequency of teacher–child interactions in different stages, the duration of children's active participation, and the number of questions raised—and dynamically adjusting the presentation rhythm and usage of visualization resources to prevent technology application from departing from children's actual needs.

IV. Practical Results and Reflection

A. Practical results

After two years of action research, the practical effect of integrating visualization technology into activity organization is clearly evident. First, children's activity participation was significantly improved. Data show that in the "Lifelike Qiuse" series of activities, children's average frequency of voluntary hand-raising and speaking reached 2.1

times that of traditional similar thematic activities. Children at different developmental levels could all find entry points for participation with the support of visualized materials, and the effective attention maintenance duration of children who were easily distracted in collective activities increased by an average of 12 minutes. Second, children's perceptual depth of local culture was significantly enhanced. Many children actively integrated the Qiuse details observed in the visualization videos into their works during the creation stage, and could even take the initiative to explain the production steps of Qiuse artists to their peers. Their cognition of Foshan Qiuse no longer stayed at the vague level of "good-looking" but formed concrete experience with details and warmth. Third, teachers' activity organization efficiency was optimized. Visualization tools enable generative teacher–child interaction content to be transformed into teaching resources in real time. Teachers no longer need to spend a lot of time preparing complex physical demonstration materials and can devote more energy to observing children's reactions and responding to generative questions.

B. Problems and reflection

Meanwhile, the practice also exposed three problems worthy of vigilance. Some teachers with relatively short teaching experience tend to over-rely on screens, squeezing out children's hands-on operation time and violating the core principles of preschool education. The detail design of some visualization resources is not fully adapted to children's cognition, and excessively fancy dynamic effects instead distract children's attention from the core content. The visualization technology application ability of teachers with different teaching experience varies greatly, and novice teachers occasionally experience technical operation stalls that interrupt the activity rhythm. This further shows that the application of visualized teaching technology in preschool education must establish clear usage boundaries and operational norms, and technology cannot be allowed to be used freely.

V. Conclusion and Educational Recommendations

This study confirms that scientifically and moderately integrating visualized teaching technology into the whole process of organizing preschool educational activities can, without undermining the play-based and experiential nature of preschool education, effectively solve three frontline teaching dilemmas—the difficulty of explaining abstract themes such as local culture, the difficulty of accommodating children at different developmental levels, and the difficulty of retaining generative resources. It is a feasible path for improving the quality of preschool educational activities.

For the subsequent normalized promotion at the regional level, three specific recommendations are put forward. First, establish basic application norms for visualized teaching in preschool education, clarify the upper limit of screen-based visualization resources in a single collective activity, and establish the application order of direct perception first and visualized supplementation second, so as to avoid the risk of technology abuse at the institutional level. Second, develop a series of visualized teaching case packages adapted to Foshan’s local culture, transforming localized cultural resources such as Qiuse, lion dance, and Cantonese opera into visualization materials adapted to children's cognitive characteristics, so as to greatly reduce the application threshold for frontline teachers. Third, carry out hierarchical

teaching research and training relying on the regional central teaching research group, focusing on training novice teachers in the basic operation of visualization tools and backbone teachers in the development ability of generative visualization resources, so as to gradually build a regionally shared visualized teaching resource library for preschool education, make technology truly serve children's development, and help improve the overall quality of regional preschool education.

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