

Research on the Cultivation Path of Preschool Teachers' Li and Miao Cultural Teaching Literacy in the Digital Context

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Abstract: Under the dual demands of educational digital transformation and ethnic cultural inheritance, preschool teachers' Li and Miao cultural teaching literacy has gradually become an important foundation for integrating Hainan's indigenous culture into preschool education. Based on the background of the digital era, this paper attempts to define the core connotation of preschool teachers' Li and Miao cultural teaching literacy, analyzes practical problems emerging in current teacher literacy cultivation, such as weak cultural cognition, insufficient digital integration ability, and fragmented cultivation systems, and explores feasible paths for digitally empowering the cultivation of preschool teachers' Li and Miao cultural teaching literacy from four aspects: resource construction, training models, teaching and research mechanisms, and guarantee systems. The aim is to contribute to the quality improvement of preschool education and the living inheritance of indigenous culture in ethnic minority areas of Hainan.

Keywords: Digitalization; Preschool teachers; Li and Miao culture; Teaching literacy

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1. Introduction

The cultures of the Li and Miao peoples in Hainan, as part of China's excellent traditional culture, contain unique folk customs, artistic aesthetics, and spiritual connotations, and serve as important resources for carrying out indigenous cultural education and cultivating young children's cultural identity during the preschool education stage. Organically integrating Li and Miao culture into kindergarten teaching practice is not only a grassroots exploration of implementing the national cultural inheritance strategy but also an effective way to highlight the regional characteristics of Hainan's preschool education and enhance the connotation of kindergarten operations. Preschool teachers are the organizers and implementers of teaching activities, and the level of their Li and Miao cultural teaching literacy directly affects the actual effectiveness of integrating indigenous culture into preschool education, serving as a key link connecting Li and Miao cultural resources with early childhood education practice.

Currently, educational digitalization has become an important trend in preschool education reform. Documents such as "China's Education Modernization 2035" and the "Educational Informatization 2.0 Action Plan" explicitly propose

promoting the deep integration of information technology with education and teaching. The continuous development of digital technologies provides new conditions and possibilities for the systematic development of ethnic cultural resources, the enhancement of teachers' professional literacy, and the innovation of teaching models. However, in practice, the cultivation of Li and Miao cultural teaching literacy among preschool teachers in Hainan still faces some challenges: teachers' cultural knowledge reserves are insufficient, their ability to integrate digital technology with cultural teaching is relatively weak, cultivation methods tend to be traditional and singular, and the training system is relatively fragmented, making it difficult to adequately meet the demands of high-quality development in preschool education in the new era. Against this background, this paper focuses on the issue of cultivating preschool teachers' Li and Miao cultural teaching literacy under digital conditions, analyzes the existing difficulties, and explores feasible cultivation paths, with a view to providing some theoretical reference and practical ideas for improving the professional literacy of preschool teachers in ethnic minority areas and promoting the in-depth practice of Li and Miao culture in the field of preschool education^[1].

2. The core connotation of preschool teachers' Li and Miao cultural teaching literacy in the digital context

Preschool teachers' Li and Miao cultural teaching literacy refers to the comprehensive literacy required for teachers to effectively integrate Li and Miao culture into kindergarten teaching practice and to form an organic unity between achieving cultural inheritance and promoting the holistic development of young children. In the digital context, this literacy exhibits the characteristics of integrating four aspects: cultural foundation, digital skills, teaching transformation, and practical innovation.

First, Li and Miao cultural cognitive literacy. Teachers need to have a relatively systematic understanding of the core knowledge of Hainan Li and Miao culture, including ethnic historical origins, folk customs and etiquette, traditional song and dance arts, folk craft techniques, and language and literary forms. On the basis of understanding, they should be able to identify and select cultural resources suitable for young children's cognitive characteristics and developmental needs, paying attention to maintaining cultural authenticity and avoiding problems of fragmentation and one-sidedness in cultural dissemination. At the same time, teachers should establish an appropriate awareness of ethnic cultural inheritance, possess basic cultural appreciation ability and value judgment ability, so that the cultural teaching content is both vivid and engaging, while also being as accurate and normative as possible^[2].

Second, digital technology application literacy. Teachers need to be relatively proficient in using various digital teaching tools, platforms, and resources, including basic skills such as multimedia courseware production, editing and processing of digital cultural resources, operation of online teaching and research platforms, and application of smart teaching equipment. At the same time, they should be able to integrate, process, and creatively present Li and Miao cultural resources through digital means, breaking through certain limitations of traditional teaching in terms of time and space, enhancing the interest, intuitiveness, and effectiveness of cultural teaching, and helping young children experience the charm of ethnic culture in vivid and concrete digital contexts.

Third, cultural teaching transformation literacy. Teachers should possess the ability to transform relatively abstract Li and Miao cultural resources into teaching activities that young children can perceive, participate in, and experience. They should combine the physical and mental development patterns and learning characteristics of children aged 3–6, utilize digital technology, design gamified, contextualized, and interactive teaching plans, and promote the deep integration of Li and Miao culture with the five major areas of kindergarten education—health, language, society, science, and art, so as to avoid tendencies toward adultification, didacticism, and formalization in cultural teaching as much as possible, allowing cultural inheritance and child development to complement each other.

Fourth, digital teaching and research reflection literacy. Teachers should be able to rely on online teaching and research platforms to participate in cultural teaching discussion activities, actively share teaching cases, learn from the beneficial experiences of others, and use digital evaluation tools to objectively diagnose and reflect on their own cultural

teaching practice. At the same time, they should be able to continuously update cultural knowledge and teaching skills through digital learning channels, maintain initiative and continuity in learning, and achieve gradual improvement and self-renewal of teaching literacy.

3. Practical difficulties in cultivating preschool teachers' Li and Miao cultural teaching literacy in the digital context

3.1. Insufficient reserves of Li and Miao cultural knowledge among teachers, weak awareness of digital cultural teaching

Surveys and practical observations show that the majority of kindergarten teachers in Hainan lack systematic professional training experience in Li and Miao culture. Their understanding of the overall situation, historical origins, spiritual connotations, and teaching value of indigenous ethnic culture is relatively superficial, often limited to surface-level cultural forms such as folk songs, dances, and costumes, making it difficult to deeply explore and utilize the educational significance behind them. At the same time, influenced by traditional teaching thinking habits, some teachers do not fully recognize the important value of integrating digital technology with Li and Miao cultural teaching, and their awareness and action in proactively using digital means to carry out cultural teaching are still insufficient. In actual teaching, it is relatively common to adopt relatively singular traditional methods such as “oral explanation, on-site display, and picture observation”. The overall appeal and infectiousness of cultural teaching need to be strengthened, and it is sometimes difficult to effectively arouse young children’s learning interest and participation enthusiasm ^[3].

3.2. Scarcity of digital cultural teaching resources, obvious insufficiency in resource suitability

At present, the supply of digital resources specifically oriented toward Li and Miao culture for the preschool education stage is relatively limited. Most existing resources are ethnic culture popular science materials aimed at the general public, which have not been sufficiently adapted for young children and teaching purposes in terms of content depth, presentation methods, and language expression, taking into account young children’s cognitive characteristics. The content is often relatively complex and the format relatively monotonous, making it difficult to directly transplant them into kindergarten teaching practice. Moreover, existing resources are relatively scattered in distribution, lacking a unified platform for integration and sharing, making it inconvenient and inefficient for teachers to access high-quality, suitable digital resources on Li and Miao culture during daily lesson preparation. The speed of resource updates also lags behind, failing to keep up with new advances in educational digital transformation and the actual needs of preschool education curriculum reform, leading to the difficulty of “having no resources to use, and finding existing resources hard to use” when teachers attempt to carry out digital cultural teaching.

3.3. Inadequate teachers’ digital integration teaching ability, lack of targeted cultivation and training

A review of existing preschool teacher training systems reveals that the current training content is more focused on general teaching skills and basic digital technology applications, while specialized training specifically targeting the integration of Li and Miao cultural teaching and digitalization is still relatively scarce, and there is a certain disconnect between training content and actual teaching needs. The training format is predominantly offline, theory-based lectures, lacking hands-on, immersive teaching drills, making it difficult for teachers to truly master core practical skills such as digital cultural teaching design, resource development, and activity organization during the training. At the same time, the breadth and depth of training coverage are also limited; many teachers in rural kindergartens and private kindergartens still have insufficient opportunities to participate in high-quality training, and teachers from different regions and different types of kindergartens face imbalances in literacy enhancement.

3.4. Imperfect digital teaching and research cultivation system, long-term mechanism not yet established

At the kindergarten level, a normalized, digital institution-based teaching and research mechanism has not yet been universally established. Thematic teaching and research activities, polishing of high-quality lesson examples, and experience exchanges among key teachers focused on Li and Miao cultural teaching are carried out relatively infrequently, making it difficult to form a relatively complete teaching and research closed loop of “theoretical learning–practical exploration–reflective diagnosis–capability enhancement”. At the same time, an effective multi-party collaborative mechanism is lacking in teacher literacy cultivation; the linkage and coordination among universities, educational administrative departments, cultural heritage institutions, and kindergartens is still insufficient, and various digital cultivation resources have not been fully integrated and utilized. Coupled with an incomplete evaluation and incentive mechanism, teachers’ endogenous motivation to improve their own Li and Miao cultural teaching literacy is generally not strong enough, and the long-term, sustainable development of literacy cultivation faces certain difficulties^[4].

4. Cultivation paths for preschool teachers’ Li and Miao cultural teaching literacy in the digital context

4.1. Building a digital resource platform to consolidate the foundation for teacher literacy cultivation

To address the prominent problem of resource scarcity, efforts can be joined by multiple parties, including universities, culture and tourism departments, kindergartens, and intangible cultural heritage inheritors, to systematically construct a digital resource platform for Hainan preschool education Li and Miao culture, classify and develop high-quality digital resources suitable for early childhood teaching, and provide reliable resource support for the enhancement of teacher literacy. In terms of resource development, it is advisable to systematically sort out the various forms of expression of Li and Miao culture, professionally process content such as folk songs, nursery rhymes, dances, folk stories, and traditional crafts according to the cognitive patterns of young children, and produce diversified digital resources such as animations, micro-lectures, audio, interactive courseware, and VR contextual materials, optimizing the presentation format while appropriately reducing content difficulty to make them more aligned with young children’s learning interests and receptive characteristics. In terms of platform functionality, modules such as resource downloads, teaching case references, online learning courses, and Q&A communication communities can be set up to facilitate teachers in accessing resources and learning advanced teaching methods according to their needs. At the same time, a normalized resource updating mechanism should be established, regularly uploading newly developed high-quality resources to continuously meet teachers’ needs for daily teaching and self-directed learning. Furthermore, teachers should be encouraged to independently upload original digital teaching cases and courseware on Li and Miao culture, gradually forming a resource construction cycle of “co-construction and sharing, mutual benefit and mutual promotion”.

4.2. Innovating digital training models to enhance teachers’ specialized teaching ability

Construct a precision-oriented training system deeply integrating “online + offline” methods, carry out tiered and classified specialized training centered on the core goal of Li and Miao cultural knowledge and digital teaching integration ability, and effectively improve teachers’ specialized teaching literacy. At the online training level, platforms such as continuing education platforms and online research communities can be relied upon to systematically offer a series of content including general courses on Li and Miao culture, digital teaching skills courses, and cultural teaching design courses, allowing teachers to independently choose their learning according to their own needs and time schedules, breaking through the constraints of time and space. At the offline training level, activities such as hands-on workshops, thematic academic lectures, on-site teaching observations, and simulated teaching drills can be organized regularly, inviting intangible cultural heritage inheritors of Li and Miao culture, experts in the field of preschool education, and outstanding key teachers to jointly participate in teaching guidance, helping teachers master core skills such as the production of digital

cultural teaching courseware, activity plan design, and classroom organization and implementation. For teacher groups in rural and private kindergartens, flexible and diverse methods such as sending training to the countryside and remote live broadcast training can be actively carried out to expand the coverage of high-quality training resources as much as possible. At the same time, the hands-on assessment of training effectiveness should be strengthened, testing training results through methods such as teaching case design presentations and on-site demonstrations of digital teaching, to ensure that teachers gain tangible benefits from their learning and can apply what they have learned.

4.3. Constructing a digital teaching and research mechanism to promote the continuous improvement of teacher literacy

Based on institution-based teaching and research and relying on digital teaching and research tools, establish a normalized and professional teaching and research mechanism for Li and Miao cultural teaching, helping teachers continuously improve their professional literacy in teaching practice. Kindergartens can establish specialized digital teaching and research groups, regularly carrying out activities such as collective lesson planning, lesson case discussions, teaching reflections, and experience sharing through online teaching and research platforms, engaging in collective exploration and in-depth exchanges on difficult issues related to integrating Li and Miao culture into kindergarten teaching. Activities in various forms, such as digital teaching competitions, selection of excellent cultural teaching cases, and micro-lecture design competitions, can be held regularly to stimulate teachers' enthusiasm for participating in teaching and research. At the same time, cross-kindergarten teaching and research alliances can be established, leveraging online platforms to achieve resource sharing and complementary advantages among kindergartens within a region, promoting the dissemination of excellent Li and Miao cultural teaching experiences on a larger scale. Furthermore, teachers should be guided to use digital recording tools to systematically document their own teaching practice processes, write teaching reflection logs, and gradually optimize teaching methods and strategies through continuous summarization and review, achieving the autonomous construction and steady improvement of teaching literacy.

4.4. Perfecting a multi-party collaborative guarantee system to stimulate teachers' internal motivation for cultivation

Establish a cultivation guarantee mechanism featuring collaboration among four parties: government, universities, cultural institutions, and kindergartens, further clarifying the responsibilities of each party to form a joint cultivation force. Educational administrative departments should make overall plans for the allocation of training resources and study the introduction of special support policies and guiding opinions; higher education institutions can leverage their professional advantages to provide systematic theoretical support and teacher training services; cultural institutions should actively appoint intangible cultural heritage inheritors to participate in resource development and teaching guidance; and kindergartens need to effectively assume the primary responsibility for institution-based teaching and research and teacher cultivation. In terms of hardware support, investment in digital infrastructure should be moderately increased, gradually improving conditions such as multimedia teaching equipment and online teaching and research platforms in kindergartens to provide basic support for teachers to smoothly carry out digital cultural teaching. In terms of evaluation and incentives, a scientific and reasonable evaluation mechanism can be established, incorporating indicators of preschool teachers' Li and Miao cultural teaching literacy performance and digital teaching practice achievements into the annual teacher assessment and award selection system, giving corresponding recognition to teachers with outstanding performance. At the same time, the teacher professional development archive system should be improved to record the process of teacher literacy enhancement in a relatively systematic way, ensuring that teachers' growth and efforts receive due recognition, thereby stimulating teachers' internal motivation to proactively improve their Li and Miao cultural teaching literacy and advancing the cultivation of literacy toward a long-term, sustainable direction.

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