

Intangible Culture Heritage in Fine Arts Curriculum in Chinese Secondary School: A Systematic Literature Review and Implications on Pre-Service Teacher Education

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ABSTRACT: In recent years, Intangible Cultural Heritage (ICH) has received widespread attention as an expression of cultural diversity and a representation for maintaining national cultural identities. It has been widely used as a resource for teaching and learning in the curriculum. China, being one of the countries with the largest repository of intangible cultural heritage, has attracted the interest of educators in many regions to this endangered yet rich and brilliant heritage. As curriculum resource research has emerged, the study of ICH as a curriculum resource has gradually become a popular topic in education research across various disciplines, including fine arts education. Although there is extensive literature exploring the application of ICH in fine arts education in secondary schools in China, there is no systematic review that summarizes these teaching methods and practices. Therefore, this research aims to explore the pedagogical applications of ICH in the fine arts curriculum in secondary schools in China, identifying the current types of ICH as course resources, curriculum designs, teaching methods and practices, future challenges as well as potential recommendations, and research perspectives. Utilizing the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology, an exhaustive search was conducted across three multidisciplinary databases from 2019 to 2023 with specified inclusion and exclusion criteria. This systematic review further reveals the significance of ICH as a valuable educational resource that fosters cultural identity, critical thinking, and creative expression, while also offering critical insights for enhancing pre-service fine arts teacher education to effectively integrate ICH into their teaching practices.

Keywords: Fine Arts Education in Chinese Secondary School, Fine Arts Curriculum, Intangible Cultural Heritage, Pre-Service Teacher Education.

1. Introduction

1.1 Intangible Cultural Heritage

The term ICH was identified by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2003 as the instruments, objects, artefacts, and cultural spaces that communities, groups and individuals recognize as part of their cultural heritage. Furthermore, it is transmitted from generation to generation, being susceptible to change by communities and groups in response to their environment, their interaction with nature and their history. It provides these same communities with a sense of identity and continuity, promoting respect for cultural diversity and human creativity (Dang et al., 2021; Y. Liu et al., 2022). Since then, this definition has been adopted by 178 states as of 2019 (X. Zhang et al., 2022).

ICH, as a comprehensive cultural system, embodies the unique national character and cohesive national spirit of a particular people. Any manifestation of ICH derives its value from its specific cultural context (W. Ji, 2023). Thus, ICH represents the cultural roots of a nation, encompassing its common beliefs and core values. It is characterized by uniqueness, ethnicity, locality, and inheritance (W. Ji, 2023).

At present, ICH is endangered. Cultural spaces with spiritual significance, such as ancestral halls and temples in villages, have been destroyed, and people's values and cultural ethics have shifted. Consequently, the people who are the primary creators of ICH are no longer practicing the culture and lifestyle it represents, although there is growing attention to this issue (Kim et al., 2019). Industrialization and mechanized mass production have also reduced the space for ICH in daily life, causing it to gradually fade from people's everyday experiences (Kim et al., 2019).

The aging of representative inheritors of ICH has posed a significant challenge to the protection of China's ICH (Yan & Chiou, 2021). Cultivating a new generation of inheritors is crucial for the sustainable development of this heritage. However, social changes have gradually weakened the function of ICH as a livelihood skill, and the career aspirations of the younger generation have shifted. The process of acquiring ICH skills and cultivating new inheritors is lengthy, placing the responsibility of heritage preservation on school education (X. Zhang et al., 2022).

Promoting the transmission of ICH through education is a consensus within the international community, and implementing ICH transmission activities through school education is an effective means to address the current transmission challenges. This approach aligns with the inherent needs of school education development (Aral, 2022). The UNESCO Convention for the Safeguarding of the ICH emphasizes the protection and transmission of ICH through "formal and non-formal education (Dong et al., 2023)." China's ICH programs are extensive and encompass all aspects of life, containing specific national cultural genes and spiritual qualities. ICH serves as a bond that maintains national emotions and cultural identity, helping to cultivate patriotism among students. As a "living" cultural heritage, ICH can adapt to the times and be applied to daily life in various forms at different societal stages (Dong et al., 2023). Therefore, the education and transmission of ICH as a cultural education activity enables students to gain preliminary knowledge of ICH through learning skills and related knowledge. Continuous practice allows them to accept the culture carried by ICH, fostering a sense of cultural identity and responsibility for protecting and transmitting ICH (Dang et al., 2021). The education and transmission of ICH involve not only the transmission of skills but also the transmission of culture.

1.2 Fine arts curriculum in Secondary school in China

In the curriculum content of Chinese secondary school fine arts curriculum, high school students need to develop different art abilities based on their varying interests, hobbies, and developmental needs (Lee, 2020). To meet these multifaceted developmental needs, the new

curriculum standards released in 2022 clearly divide the art course content into five learning modules: Art Appreciation, Painting-Sculpture, Design-Crafts, Calligraphy-Seal Engraving, and Modern Media Arts. Art Appreciation is designated as a compulsory module (Kuang et al., 2023).

These curriculum standards also newly proposed four core literacies for the fine arts curriculum: aesthetic perception, artistic expression, creative practice, and cultural understanding (Z. Lu et al., 2019). Although "Art Practice" is a new concept in the curriculum, it is consistent with the objectives of the other four modules, namely "Appreciation-Criticism", "Modeling-Performance", "Design-Application" and "Synthesis-Exploration" (Lee, 2020). The introduction of "art practice" emphasizes the practical orientation of the art curriculum, enabling students to enhance their artistic cultivation and creativity through diverse practices centered on art experiences (W. Lu et al., 2022).

Building on these core literacies, China's secondary school fine arts classroom teaching incorporates three-dimensional goals that are interconnected, mutually reinforcing, and promote each other (Lee, 2020). The new curriculum standards clearly stipulate the three-dimensional objectives: knowledge and skills, process and method, and emotional attitude and values, establishing a comprehensive art teaching system (W. Ji, 2023). These standards emphasize that the teaching content, focus, and practice of each lesson are reasonably distributed, ensuring coherence across lessons with distinct characteristics. This approach allows for a systematic and in-depth mastery of knowledge, fostering students' research, thinking, creativity, and problem-solving abilities, thereby fully leveraging the overall advantage of the teaching process (W. Xu, 2023). Establishing systematic three-dimensional objectives is essential for achieving comprehensive art teaching activities.

Table 1 represents the new standard for the Chinese secondary school fine arts curriculum, an updated version from the curriculum proposed in 2022 by the Ministry of Education in China (Dang et al., 2021).

Table 1

Objectives of the Fine Arts Curriculum in China secondary schools

Overall Curriculum Goal Statement	Core Competencies
Students will be able to recognize the formal characteristics of an image, analyze the stylistic features and development of an image, and understand the information contained in the image	Image recognition
Use a variety of tools, materials and fine arts languages to create artworks and other visual images that express intentions with certain ideological and cultural connotations.	Artistic expression
Analyze the beauty of nature, daily life and works of art according to the principles of formal beauty, and develop healthy aesthetic concepts.	Esthetic judgment
Be innovative, use creative thinking to create ideas, and present and complete them using fine art methods and materials.	Creative Practice
To analyze and understand works of fine arts from a cultural perspective, to identify with and promote Chinese traditional culture, and to respect the diversity of human cultures.	Cultural understandings

1.3 ICH in Fine Arts in Secondary school in China

The integration of ICH into Chinese secondary school art curricula is essential for the preservation and transmission of China's rich cultural heritage. It ensures that these cultural practices will not disappear in the face of modernization and globalization (Du & Gao, 2019). The integration of ICH helps to preserve the diverse cultural practices of China's vast cultural landscape, which is crucial for maintaining cultural diversity (Lo et al., 2019a; Du & Gao, 2019). This preservation enriches national cultural identity and provides a broader understanding of human creativity and ingenuity.

Teaching local ICH to young students through schooling in all regions helps bridge generational gaps and perpetuate cultural knowledge, skills, and practices. Incorporating ICH into the curriculum also fosters a sense of cultural identity and national pride among students (Zhou et al., 2019). Understanding and appreciating their heritage can inspire students to value their traditions and develop cultural awareness, enriching their learning experience and providing a more holistic education that goes beyond technical skills and theoretical knowledge (Selmanović et al., 2020).

In conclusion, integrating ICH into Chinese secondary school art programs is essential for both preserving ICH and enhancing students' educational experiences. It ensures the continuity of ICH while providing students with valuable skills and a deeper connection to their cultural roots (Chen, 2022).

Current research on ICH in the Chinese secondary school fine arts curriculum includes studies on curriculum development (Lee, 2020; W. Zhang & Wang, 2021; Kuang et al., 2023; Dang et al., 2021; W. Ji, 2023), teaching case studies (Kuang et al., 2023; Lin & Lian, 2018; Pang & Wu, 2023) and educational inheritance (Xiao, 2022; Tan & Wen, 2022). However, there is a lack of comprehensive review studies. It is necessary to have a systematical overview on the current studies and summarize the methods and practices on how ICH as education resources is applied into the Chinese secondary school fine arts curriculum from perspectives of teaching and learning.

1.4 Pre-Service Teacher Education

Pre-Service teacher education is a critical phase in preparing individuals to become effective educators (Kosnik & Beck, 2009; Özgün-Koca & Şen, 2006). It serves as the foundation of a teacher's professional journey, providing a comprehensive blend of theoretical knowledge and practical skills (Allen & Wright, 2014). This stage equips future teachers with the competencies needed to address diverse learner needs, foster inclusive classrooms, and adapt to evolving educational challenges (Kamal et al., 2024). By emphasizing both pedagogical understanding and subject matter expertise, pre-service teacher education ensures that aspiring educators are well-prepared to navigate the complexities of contemporary teaching environments.

The role of pre-service teacher education becomes even more significant in the context of global educational reform and digitalization (Na et al., 2024; Samala et al., 2024). As societies increasingly recognize the transformative power of education, teacher preparation programs must align with the evolving demands of curricula and instructional practices.

The effective utilization and presentation of intangible cultural heritage in secondary school fine arts curricula depend on the preparedness of educators to address the complexities and relevance of ICH in contemporary education. Pre-service teacher education holds significant potential to tackle these challenges by equipping future educators with both the theoretical knowledge and practical skills required to teach ICH effectively. This approach not only enhances educators' capacity to integrate ICH into the curriculum but also contributes to the broader transformation of cultural education.

Therefore, this systematic literature review aims to fill this gap and address the aforementioned problems by exploring the following research questions: what ICH is currently

used as curriculum resources in Chinese secondary school fine arts curriculum (RQ1); what are the curriculum designs of ICH in Chinese secondary school fine arts curriculum (RQ2); What are the teaching methods and practices for teaching ICH in Chinese secondary school fine arts curriculum? (RQ3).

The major contributions of this research include adopting a systematic literature review approach to analyze 69 journal and conference papers based on specific criteria and full-text review, identifying the research characteristics of present studies, systematically classifying the types of ICH in Chinese secondary school fine arts curriculum, as well as the teaching methods and practices, proposing challenges identified from the review papers and suggesting potential recommendations, and highlighting future perspectives in the theoretical and methodological integration of ICH and fine arts curriculum, along with the digitization of ICH in fine arts education. Moreover, the insights for pre-service education for fine arts teachers are informed.

The rest of this paper is structured as follows: (1) Section 2 introduces the Method used to conduct this study, (2) Section 3 illustrate the characteristics identified from reviewed papers and the findings to the research questions, (3) Section 4 provides a discussion that emphasizes other important insights of this study and the limitations of the current reviewed papers, (4) Section 5 concludes this paper by highlighting the purpose of the study and outlining the challenges and perspectives for future research.

2. Methods

We followed the PRISMA method to systematically review the relevant literature. The PRISMA process requires researchers to provide a detailed report on the methodology and process of the synthesis analysis, including the criteria for study selection, the literature screening process, and the data extraction methodology. This ensures that readers can fully understand the reliability and validity of the research. By standardizing the reporting and methodology of the synthesis analysis, the PRISMA process allows the results of multiple studies to be compared and synthesized, thereby advancing the development of scholarly research (Page et al., 2021). We developed a review protocol describing article selection criteria, search strategy, data extraction, and data analysis procedures.

In this section, we first introduce the data sources and our search strategies. Next, we describe the process and criteria used to select the literature. Finally, we illustrate the strengths and weaknesses of our proposed method.

2.1 Data Sources and Search Strategies

At this stage, the topics to be investigated were identified based on the results of the thesaurus search. If no existing systematic reviews were found, the search was executed in the Google Scholar, Scopus, and China National Knowledge Infrastructure (CNKI) databases, considering the protocol descriptors. The criteria for selecting these databases included the impact and quality of the studies, the coverage and breadth of data, relevance to the topic in the field of education, accessibility, and usability.

Based on the research questions, the following descriptors and keywords (Table 2) were identified to improve the accuracy of the research selection.

Table 2

Descriptors

Descriptor	Chinese Keywords used (Translation)	English Keywords used
Descriptor1: Intangible Cultural Heritage	非物质文化遗产 (Intangible Cultural Heritage)	Intangible Cultural Heritage
Descriptor2: Fine Arts Curriculum	美术课程 (Arts Curriculum) 美术课堂 (Arts Class) 美术教学 (Arts Teaching)	Arts Curriculum Arts Class Arts Lesson
Descriptor3: Secondary School	高中(High School) 初高中 (Secondary and Middle School)	High School Secondary School Middle School

Based on the research questions, the following inclusion and exclusion criteria were identified (Table 3) to allow for more precise screening of studies.

Table 3

Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
- Intangible Cultural Heritage Education	- Cultural Identity
- Secondary School	- Conference Review
- Last 5 Years	- Session Paper
- Open-Access Articles	- Book Chapter

Considering the previously described criteria, we started to develop search equations (Table 4) for each of the databases considered in the systematic literature review, considering the knowledge domains.

Table 4

Search queries used

Databases	Search Equation
Google Scholar	("Intangible Cultural Heritage") AND ("High School" OR "Secondary School" OR "Middle School") AND ("Arts Curriculum" OR "Arts class" OR "Arts Lesson") AND ("China" OR "Chinese")
Scopus	TITLE-ABS-KEY (("Intangible Cultural Heritage Education" OR "Intangible Cultural Heritage Teaching") AND ("High school" OR "Secondary Education" OR "Middle School") AND "Fine Arts Curriculum" OR "Fine Arts class" OR "Fine Arts Lesson" AND "China" OR "Chinese"))

Databases	Search Equation
CNKI	非物质文化遗产 (Intangible Cultural Heritage), 美术课程 (Arts Curriculum), 美术课堂 (Arts Class), 美术教学 (Arts Teaching), 高中(High School), 初高中 (Secondary and Middle School)

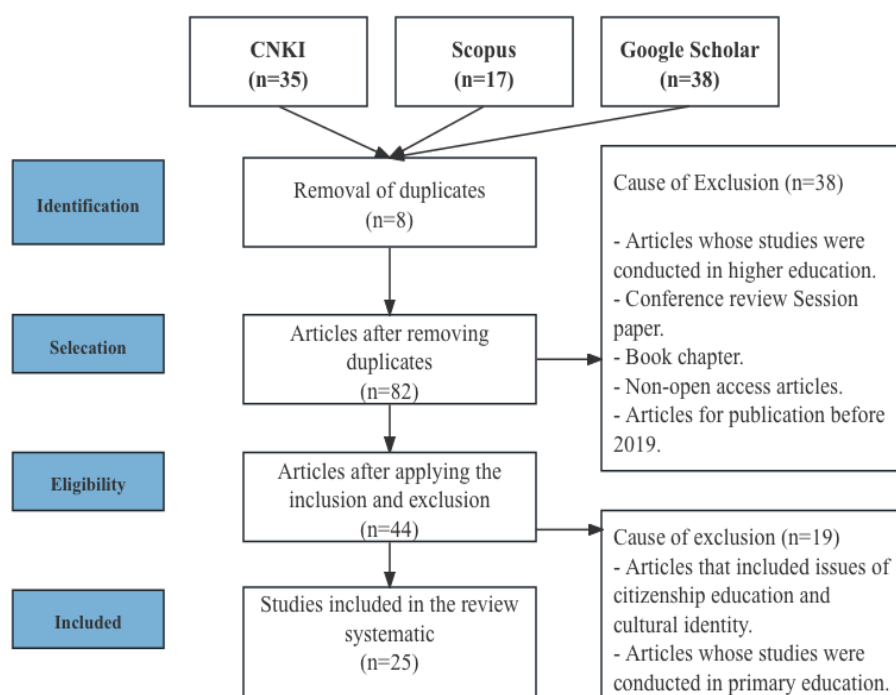
2.2 Selection of Studies

A series of studies were conducted based on searches in the Google Scholar, Scopus, and CNKI databases using specific search equations. Subsequently, inclusion criteria were applied, focusing on articles published in the last five years related to research on the ICH fine arts curriculum in secondary schools, as well as open access articles. The information obtained from the databases was organized into a data matrix for systematic analysis.

On this basis, this study implemented the PRISMA review process as shown in Figure 1, which included identification, screening, characterization, and analysis. Among the reasons for exclusion were non-research years, conference papers, book chapters, and non-open-access literature as well as articles in research-related topics that are in higher education, and finally, after several rounds of screening, 69 papers from the three major databases, CNKI, Scopus, and Google Scholar, were finally retained to meet the criteria.

Figure 1

Flow of information through the different phases of a systematic review



2.3 Strengths and Limitations

Followed with the PRISMA, we can enhance the accuracy of data sources and search strategies, making the process and criteria of screening literature clearer and more precise. In addition, it can create transparency for other researchers to reproduce this work. However, we acknowledge that certain limitations are along with our method. First, we only include papers,

conferences, and journals, excluding book chapters, white papers, and government documents etc. Second, we only selected papers written in Chinese and English. Although these may be important resources for the proposed study, we believe academic journals and conference papers can be more reliable and suitable sources for our research and our focus is on the Chinese secondary schools. Therefore, such deficiencies are justified.

3. Results

This section first analyzes the characteristics of the included papers. It then examines the categories of ICH in the current Chinese secondary school fine arts curriculum, followed by an analysis of the types of ICH curriculum design. Finally, it explores the teaching methods and practices of ICH in the current Chinese secondary school fine arts curriculum.

3.1 Characteristics of included papers

In this section, keyword frequency co-occurrence analysis and publication year cluster analysis were performed with the help of VosViewer software.

VosViewer, released in 2010 by Nees Jan van Eck and Ludo Waltman from Leiden University, is a software tool for creating and exploring maps based on web data (Arruda et al., 2022). It is primarily used for analyzing academic records but can also be applied to any type of web data, such as social networks. VosViewer can explore co-authorship, co-occurrence, citation, bibliographic coupling, and co-citation links, presenting these relationships in one of three possible representations: network, overlay, or density visualization (Arruda et al., 2022).

Figure 2 provides this analysis, forming four main visual clusters (red, orange, blue, and green) based on interrelated content. Examining the terms associated with each cluster, we observe that the themes around ICH (the most prevalent concept, playing a central role in the general discussion) are related to heritage education, preservation, and innovation (red cluster); ICH games (orange cluster); ICH folk music and the ICH network (blue cluster); and ICH images, landscapes, and curriculum (green cluster).

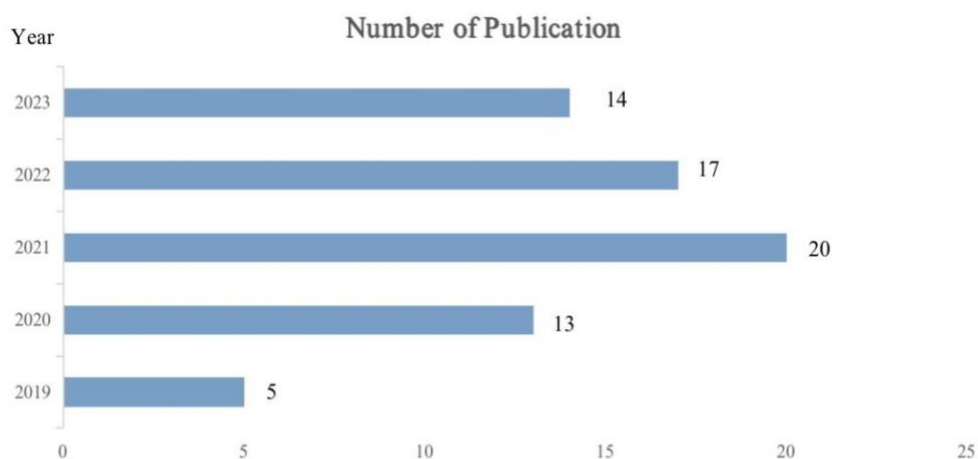
As seen in Figure 2 although there is no close relationship between these terms (evidenced by the lack of major proximity or overlap of the icons), there are many links between them. Additionally, ICH is most closely linked to the terms "Education" and "Innovation." Following the VosViewer analysis, a content-based qualification was performed through a complete reading of the collected results to aid in the analysis. This categorization helped identify the most discussed debates, the most specific themes, and the most transversal themes in the collected results.

Keywords related to ICH are undoubtedly education and protection, because the transmission of a nation's culture mainly relies on educational means, and school education is an important way for the transmission and dissemination of ICH, and the safeguarding of ICH is even more indispensable to school education, which has begun to pay attention to heritage education at all stages of school education. In China, the pilot work of "China Intangible Cultural Heritage Inheritance Crowd Training Program" is also carried out in colleges and universities, which is an effective practice for the protection and inheritance of ICH in the new era.

Regarding the year of publication, the selected articles span from 2019 to 2023. Among these years, 2021 and 2022 have the highest number of articles, with 20 and 17 articles respectively. This indicates a growing interest in the topic over the past three years. The temporal distribution of articles is shown in Figure 4.

Figure 4

Number of published papers per year



As a result, the years 2021-2022 have seen the highest number of publications about ICH. Since the UNESCO Convention for the Safeguarding of the ICH was published in 2003, the number of papers on ICH has been steadily increasing. However, the number of papers specifically focusing on ICH and the art curriculum has only begun to rise in recent years. This trend is related to the recent initiatives by China's Ministry of Education, which has issued new curricula to strengthen art education and update curriculum standards.

3.2 Categories of ICH in Chinese Secondary School Fine Arts curriculum

Table 5

Types and descriptions of teaching styles in ICH fine arts curriculum

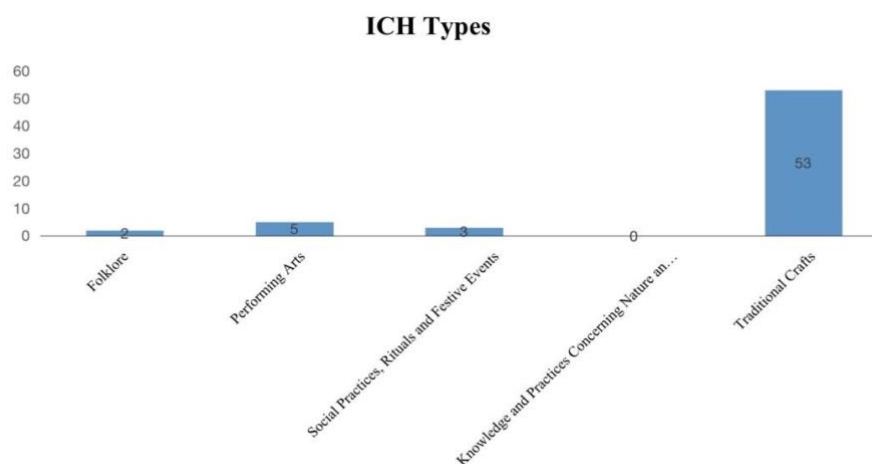
Articles	<i>f</i>	Types of teaching methods	Description	Forms of Teaching
(Song et al., 2019), (J. Su, 2020), (Wahed et al., 2021), (Skublewska-Paszkowska et al., 2022), (Jiang & He, 2022), (Lee, 2020), (Zhou et al., 2019), (Z. Lu et al., 2019)(Li, 2021), (R. Xu, 2021), (Zheng, 2022), (Deng et al., 2022).....	46	Offline Curriculum	Developing an art curriculum or school-based curriculum with knowledge of ICH based on the Chinese secondary school art curriculum standards, with the aim of taking charge of art education and imparting knowledge of ICH.	Lecture method, Discussion method, independent learning method, Problem-based method
(Xiao, 2022) (Wen, 2023)	12	Online Curriculum	The dissemination of ICH knowledge through	Video Teaching,

Articles	<i>f</i>	Types of teaching methods	Description	Forms of Teaching
(X. Su et al., 2019) (Zhou, et al.,2019) (Nie et al., 2022) (Li, 2021) (Wahed et al., 2021) (W. Zhang & Wang, 2021) (Kuang et al., 2023) (Hou, 2023)			online fine arts curriculums, most of which are knowledge-expanding, are varied and dynamic, with innovative ways of incorporating modern technology, such as 3D and VR (Virtual Reality).	Experiential Teaching, Discussion and Interaction, Personalized Learning
(Wang X., 2019) (Song et al., 2019) (Zeng, 2019) (Y. Xu et al., 2022) (Pang & Wu, 2023) (W. Lu et al., 2022) (Z. Xu & Zou, 2022) (Y. Ji et al., 2021) (J. Zhang & Jing, 2022) (Yiyi & Lingxuan, 2022) (Yu, 2022)	11	Others	Seek pedagogical innovations that incorporate offline experiential teaching curriculum, such as visits to ICH expositions, hands-on ICH crafts, offer ICH education programs, and create teaching processes that encourage dialogue between students and creators.	On-site Teaching Method, Experiential Learning

Categorization of the documentation focuses on classifying ICH into five categories based on the rules set out in Article 2 of Chapter I, General Provisions, of the Convention for the Safeguarding of the ICH, promulgated by the United Nations (Z. Lu et al., 2019). According to this convention, "ICH" comprises the following categories: 1. Folklore. 2. Performing Arts. 3. Social Practices, Rituals and Festive Events. 4. Knowledge and Practices Concerning Nature and the Universe. 5. Traditional Crafts.

Figure 5

ICH Types



As shown in Figure 5, the 53 pieces of literature related to the ICH fine arts curriculum

are all based on traditional handicrafts as the theme of teaching resources. This focus may be due to the unique nature of the fine arts curriculum, which includes activities such as paper-cutting and New Year's paintings that align well with the syllabus and aesthetic characteristics of fine arts education. The next most common types of relevant literature focus on performing arts, folklore, and social practices.

Many types of ICH have been used for teaching and learning (Pang & Wu, 2023) to develop a holistic approach to student cognition (J. Su, 2020). In the last three years, ICH has seen an increase in technology products related to the use of software, apps, and other digital resources that mediate learning (W. Lu et al., 2022; Z. Xu & Zou, 2022; Y. Ji et al., 2021). However, as shown in Table 6, the extent of teachers' use of these resources remains low.

Table 6

ICH categories

Articles	<i>f</i>	ICH categories	Description	Type of Activities
(Kuang et al., 2023) (Hou, 2023)	2	Folklore	Folklore, as a cultural tableau of practices passed down from generation to generation, is predominantly told orally	1. Discussion-oriented, students' folklore in their own regions. 2. Classification of folklore, ICH of Chinese folklore.
(Faber et al., 2020) (‘The Hybrid Working Modules during and Post-Pandemic’, 2023) (Chen, 2022) (R. Xu, 2021) (Wen, 2023)	5	Performing Arts	The performing arts are comprehensive and include skills in singing, acting, make-up and costumes. The form of performance is unique, with clear role-playing and fixed norms and requirements for actions, movements and singing to show the character and emotions of the role.	1. Video teaching, understand the story behind the performing arts 2. Imitation teaching, the teacher comprehends the main points as a demonstration and the students imitate it as a classroom assignment 3. ICH Inheritors of Performing Arts in person in the classroom.
(Nie et al., 2022) (Li, 2021) (Zeng, 2019)	3	Social Practices, Rituals and Festive Events	Ceremonial celebrations and festivals are the traditional cultural essence of Chinese civilization, and there are many representative festivals and traditional folklore in China. Such as the Spring Festival, Dragon Boat Festival	1. Teach the origins of festivals and rituals, the stories behind them 2. Students discuss the characteristics and forms of regional festivals and ceremonies.
(Song et al., 2019)	5 3	Traditional Crafts	Traditional Chinese folk crafts are handed down	1. Video teaching production process

Articles	<i>f</i>	ICH categories	Description	Type of Activities
(J. Su, 2020) (Wahed et al., 2021) (Skublewska-Paszkowska et al., 2022) (Jiang & He, 2022) (Lee, 2020) (Zhou et al., 2019) (Z. Lu et al., 2019) (Li, 2021), (R. Xu, 2021) (Zheng, 2022) (Deng et al., 2022) (Kim et al., 2019).....			from Chinese folklore and are one of the most popular traditional folk arts in China, with a long history. It is popular because of its easy availability of materials, low cost, immediate effect, wide range of adaptability, thousands of styles, and universally vivid image; most of the handicrafts can be used as both practical objects and beautification of life.	2. Teacher demonstration teaching 3. Students' hands-on experience of the production process 4. Lecture in the classroom of ICH Master Craftsmen Schools

Regarding the educational resources used by teachers, it was observed that they employ a variety of materials such as books, oral sources, films, documentaries, video games, and virtual museum repositories to summarize knowledge of ICH and design curricular objectives (Y. Liu et al., 2022; Cozzani et al., 2017). In addition, lesson plans have been developed to promote awareness of safeguarding ICH. Although used to a lesser extent, instructional design and workshops also seek to create significant and innovative activities to engage students. It is worth noting that, with the current strong development of the information age, there are many sophisticated technologies available to integrate ICH into high-tech environments. This integration greatly enhances the number of ways to safeguard ICH and provides teachers with better tools to increase students' interest in learning (J. Zhang & Jing, 2022).

Table 7

Type of Curriculum Design

Articles	<i>f</i>	Type of Curriculum Design	Description	Dynamization
(Song et al., 2019) (J. Su, 2020) (Wahed et al., 2021) (Skublewska-Paszkowska et al., 2022) (Jiang & He, 2022) (Nie et al., 2022) (Li, 2021)	55	Curriculum focusing on ICH content	The traditional way of designing curricula, centering on ICH as the basic component of the curriculum	1. ICH in Schools Programme 2. Fine Arts Curriculum Program 3. Project-based learning methodology.

Articles	<i>f</i>	Type of Curriculum Design	Description	Dynamization
(Wahed et al., 2021) (W. Zhang & Wang, 2021) (Kuang et al., 2023) (Hou, 2023).....				
(Faber et al., 2020) (‘The Hybrid Working Modules during and Post-Pandemic’, 2023) (Song et al., 2019), (J. Su, 2020), (Wahed et al., 2021)	5	Organizing ICH curriculum content through hands-on activities	Emphasis is placed on using students' life experiences as the starting point for organizing curriculum content through participation in relevant ICH practical activities	1. ICH craft experience 2. Visit to Intangible Cultural Heritage Museum 3. Visit to a well-known village for ICH production
(Southwest Minzu University, Chengdu, Sichuan 610041, China et al., 2019) (Jiang & He, 2022) (Li, 2021) (Wahed et al., 2021) (W. Zhang & Wang, 2021) (Kuang et al., 2023)	8	Breaking down disciplinary boundaries and emphasizing integration between disciplines.	The ICH fine arts curriculum is designed to merge with related disciplines, breaking down traditional subject boundaries and emphasizing the connection and integration between disciplines.	1. Integration with computer subjects, such as VR visits to online museums. 2. Integration with art performance, e.g. hands-on design of non-heritage performance costume elements 3. Integration with English, e.g. introduction of regional ICH arts and crafts in English.
(Chen, 2022) (Wang X., 2019) (Lee, 2020) (Zhou et al., 2019) (Yiyi & Lingxuan, 2022)	6	Topic-centered core curriculum designed for learning through in-depth study of topics or issues	Ask questions, develop lesson plans, activity and content planning to prepare for learning.	1. Posing questions 2. Curriculum design 3. Seeking Answers

3.3 Types of ICH Curriculum Design in Chinese Secondary School Fine Arts Curriculum

Fine arts teachers are more adept at using the steps of the ICH handicraft production process and craft history in the design of fine arts curriculum (Lin & Lian, 2018). Additionally,

multidisciplinary integration is frequently employed, particularly the integration of science and technology with computer disciplines. The STEAM education concept is widely used, and the creation of digital repositories is a program proposed and implemented by many researchers. This combination of art and science breaks down conventional disciplinary boundaries (Yu, 2022; Deng et al., 2022).

As for experiential instructional design, there are many educational programs designed for art practice that stimulate students' interest and are popular among them. This approach also helps to enhance the promotion of students' creativity and cultural awareness. In contrast, many traditional craft products of the ICH are now regarded as digital art, extracting the essence of their unique craftsmanship and then disseminating them through the Internet to rationalize the use of interactive technologies for innovation. For example, the use of Virtual Reality (VR) technology and Augmented Reality (AR) technology promotes the inheritance and innovation of skills to a greater extent. In the fine arts curriculum, the use of digital Internet communication for fine arts teaching, which is China's ICH in the modernization process of inheritance of the road is also the embodiment of the modernization of education, but also the development of traditional skills and cultural heritage of the new direction (Yiyi & Lingxuan, 2022).

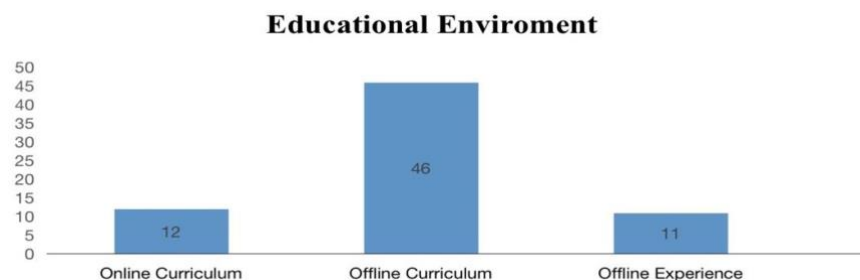
And (Z. Xu & Zou, 2022) proposed a new model for learning ICH in secondary schools based on big data, as well as the structure, functions, design principles and core ideas of the model. The new model of secondary school public art " ICH " curriculum teaching based on big data network platform is a hybrid teaching process of "online + offline", which adheres to the teaching concept of human-centeredness and emphasizes contextual learning. Students choose learning themes according to their personal learning interests, set up specialized learning groups, create learning situations, fully reflect the subjectivity of student learning, improve student learning enthusiasm and participation. Applying the new model to secondary school art education, a questionnaire survey of participating students was conducted to investigate the students' feelings about the new model. It is found that the application of the new model is still relatively successful.

3.4 Teaching Methods and Practices of ICH in Chinese Secondary School Fine Arts Curriculum

Several relevant features stand out in the teaching and learning process of ICH in the fine arts curriculum. In terms of context, 46 studies addressed classroom interactions, the use of strategies to promote critical and participatory citizenship, and heritage preservation. In terms of content, 54 studies focused on ICH, demonstrating the use of teachers in teaching and learning through oral presentations of legends, stories, and rituals that are integral parts of students' cultural identity. Teachers use resources such as written texts, websites, and digital museums (Lin & Lian, 2018).

Figure 6

Educational Environment



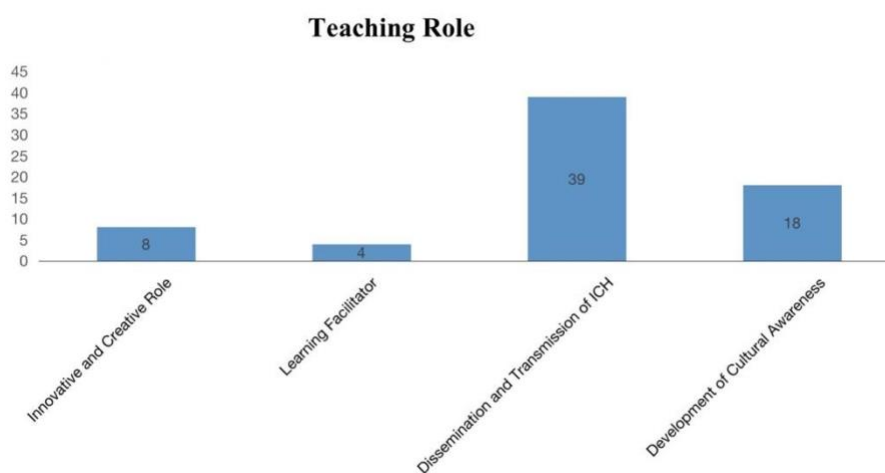
Twelve studies used or referred to online ICH museums as a teaching resource for students to learn and understand ICH, and even for teachers to learn about the fine arts of ICH to teach it orally. Among the many studies on the ICH fine arts curriculum, only eleven focused on ICH offline experiential teaching as a theme of practical activities. These activities aim to allow teachers and students to learn and understand the ICH handicraft production process face-to-face with ICH inheritors and fine arts craft masters. This hands-on approach enables participants to complete a piece of work, which, though not fully mature, is created by their own efforts.

All 46 documents are based on art teachers teaching ICH-related categories using offline art curriculum standard books, school-based programs, or extracurricular knowledge. Most of the literature indicates that teachers predominantly use the standardized classroom format, and many studies highlight the use of local ICH with strong regional characteristics as the primary teaching resources.

Teachers are mainly focusing on formal educational settings to develop programs related to the fine arts content of ICH in the curriculum, aiming to strengthen students' identity values and cultural citizenship (Hou, 2023). To achieve this goal, they are also using active approaches such as learning and inquiry methods based on ICH issues, aimed at developing critical attitudes and cultural awareness (Skublewska-Paszkowska et al., 2022; Wang X., 2019). In non-formal education settings, large-scale ICH-related educational projects are planned based on visits to cultural centers such as expositions, exhibitions, and museums (Song et al., 2019), as well as field trips and field practices (Hou, 2023). These activities promote committed actions dedicated to the safeguarding and preservation of ICH, as well as learning activities inside and outside the classroom. To a lesser extent, digital ICH repositories have been proposed or realized in informal settings, where students and teachers can use their cell phones or computers to view ICH production materials and processes online anytime, anywhere.

Figure 7

Teaching Role



As shown in Figure 7, teachers mainly focus on the educational environment of cultural transmission in the ICH fine arts program. To this end, teachers are actively trained in ICH-related knowledge and field trips, as mentioned by (Zeng, 2019; Wang X., 2019), where art teachers are given regular opportunities to practice cultural heritage-related lessons to enhance their knowledge areas and craft skills. Additionally, literature on the development of students' cultural awareness is relatively prominent, as these ICH courses enhance students' sense of cultural identity and awareness of cultural preservation. Some schools suggest that cultural inheritance and dissemination is not only the responsibility of those involved in ICH in society

but also the responsibility of the entire education system. Prof. Tang Wenzhong of Fujian Vocational College of Arts, while introducing the school's training of inheritors of traditional operas, folk dances, handcrafts, and guqin, pointed out that school education should focus on the convergence of tradition and modernity, and that certain innovations should be made while hiring inheritors to teach "traditions" in the school (Y. Xu et al., 2022). Associate Professor Jin Jiangbo of Shanghai University, citing the resident program for folk ICH craftsmen implemented by the Shanghai Collaborative Innovation Center for Public Art, advocated the protection of ICH through "nurturing." By uncovering the humanistic values, social stories, and traditional lifestyles behind the inheritors, the program nurtures ICH inheritors to discover, excavate, and disseminate the beauty of ICH e, ultimately realizing the social benefits and identity of ICH (J. Su, 2020).

4. Discussion

An analysis of the articles shows that the ICH process revolves around three pedagogical models: offline curriculum, offline experiences, and online curriculum. Most learning experiences take place in secondary school classrooms, where teachers plan, implement, and assess knowledge focused on ICH as a fine arts discipline. However, the level of ICH knowledge received by students has not met expectations (Pang & Wu, 2023; J. Su, 2020; X. Zhang et al., 2022). Additionally, the studies analyzed focused more on classroom-based art education, while some researchers considered that outdoor learning and visits to ICH museums promote students' understanding of socio-cultural realities by adopting a holistic perspective that encompasses history, nature, and traditional cultures. This approach better contributes to the learning of ICH (Chen, 2022; Xu R., 2021; Lee, 2020).

In a content-centered teaching model, teachers focus on fostering ICH rooted in cultural practices, such as paper-cutting, shadow puppets, and New Year's paintings. These areas have a greater amount of research literature compared to other categories of ICH. However, fewer studies have focused on ICH related to rituals and practices (Lee, 2020). It was found that curricula should also include activities based on visits and field practices, as these help to enhance students' creativity and observational skills. By visiting exhibitions and experiencing ICH projects in the field, students are drawn closer to ICH, leading to greater appreciation and protection of cultural heritage (Wen, 2023; Zhang L., 2023). Similarly, studies by (Zheng, 2022) indicate that ICH is significant for teacher training, as it serves as an educational tool, resource, teaching aid, and a primary source of stimulating students' interest.

The roles of both learners and teachers are framed by the constructivist approach (Cui, 2019), positioning them as guides, mediators, and learning facilitators (Dong et al., 2023; Pang & Wu, 2023). Student-centered teaching models are more prominent, making students key players, participants, and builders in the learning process (Xu H., 2019; Zeng, 2019). Additionally, students must develop spatial skills, sensory perception, historical awareness, and leadership skills to construct their history and understand ICH. Other studies have shown that students should develop skills to create digital content (Wen, 2023; Xiao, 2022; Wu, 2021), represent ICH in digital formats, and disseminate it in schools, thus fostering identity bonds among students.

In the literature analysis, it was found that teachers often plan their learning activities for skills training (Shi et al., 2022; S. Liu et al., 2023). However, teachers' experience of teaching ICH must take place in the context of both offline and online curriculum, supported by a few educational projects and programs to develop students' inquiry skills (W. Ji, 2023). In this way, students are guided to adopt responsible practices and attitudes towards ICH, considering grades, age, and teaching cycles, and are assessed through course competencies.

Most of the activities carried out fall under the category of traditional crafts of ICH, with teachers developing ICH learning programs related to traditional crafts that have been handed down from generation to generation. These programs involve the selection of materials and the complexity of the production process. Such activities enhance cultural identity and

promote respect for cultural diversity and human creativity. Therefore, it is recommended that teachers actively participate in innovative offline educational activities related to ICH using a student-centered approach to achieve a more comprehensive critical learning experience and a better in-depth understanding of ICH (Chung, 2022; Tu, n.d.). Additionally, it is recommended to create new pathways of pedagogical mediation through interdisciplinary integration (Z. Wang, 2023).

In curriculum design, there is a consensus on the use of educational resources by teachers as instructional support to enhance their performance in the teaching and learning process, as well as to increase students' interest and motivation. In recent years, an increasing number of educational approaches have sought to integrate digital technologies to enable the virtual recreation of ICH. Virtual approaches that encourage interaction with ICH not only stimulate students' interest in knowing and understanding their tangible and ICH but also reflect strong interdisciplinary and interprofessional interaction (Tan & Wen, 2022; X. Su & Tang, 2022; S. Liu et al., 2023; Shi et al., 2022). In terms of digitization practices of ICH, the conservation of Tibetan "Ze Tie" has adopted many 3D technologies. By utilizing digital new media technology, the entire cultural state and the artist's production process are transformed into a digital cultural form through 3D animation technology. To understand and experience the production process of "Ze Tie," people can enter cyberspace and click to reproduce the entire process (Dang et al., 2021). In academic research, Wan Huizhen proposed that 3D can be applied to the inheritance and protection of traditional martial arts (Lo et al., 2019b). Tan Guoxin and Sun Chuanming used 3D technology to achieve the original ecological reproduction of the tools, costumes, dance techniques, oral experience, expression, and dance space of the Tujia ethnic group (Xu J., 2021). A. Bustillo and others developed a semi-immersive system platform for teaching cultural heritage using 3D, CAD, and virtual reality technologies (Permatasari & Cantoni, 2021). In general, the main application field of VR and AR (Augmented reality) technologies is still in ICH, and they are in the initial development stage for digitizing ICH. In the field of education, these technologies are primarily used as teaching aids.

Teaching program recommendations focus on ICH within the fine arts classroom but fail to integrate with intangible and natural heritage to create a link between historical awareness and preservation, thereby fulfilling the function of heritage (Xiao, 2022; Wu, 2021; Xu J., 2021). Analysis of the literature suggests that ICH education must encompass both formal and non-formal education to achieve a holistic educational program that promotes heritage awareness and citizenship through strategic alliances between schools and society (Sun, 2021). In recent years, the use of digital educational resources has increased, generating pedagogical mediations where ICH can be part of games, experiences, or knowledge exchange. This approach brings students into simulated scenarios, thus enhancing interest and increasing motivation.

Through reviewing the existing research, it is evident that current studies on digital education of ICH have the following deficiencies: they primarily focus on the technology and form of digitizing ICH, with insufficient research on the basic theories and methodological systems. Consequently, a mature knowledge system has not been formed. This lack of common theories and methods affects the efficiency of practical applications and limits communication and dialogue among ICH digital research groups. Furthermore, the research perspective is often unitary, lacking systematic multi-perspective analysis. Digital education of ICH is not only a technical issue but also a systematic social issue involving complex subjects. Existing studies have mostly affirmed the positive impacts of digitization but have seldom conducted systematic assessments of the negative impacts and risks. These studies have been conducted mainly from the perspective of those implementing the digitization of ICH and seldom analyze the issue from the standpoint of other stakeholders, such as the communities in which the ICH is located.

As emphasized in most studies, this study did not assess the level of participation necessary to include society and schools in ICH-related projects or programs from an experiential perspective (Z. Lu et al., 2019). It is recommended to analyze the teaching

experience in curriculum design scenarios, lesson plans, and delivery to develop an awareness of safeguarding and transmitting ICH from a global perspective with a territorial context. Additionally, a management policy should be implemented in schools to increase the level of participation. Teachers are eager to initiate the teaching and learning process in the field of ICH education with their students, but they rarely publish articles or conduct experimental research, which mostly focuses on teaching ICH and developing heritage awareness. However, several articles do take students or ICH as the object of research. For instance, Chen Xin examined the current state of teaching ICH in the 10th Middle School of Urumqi City, Xinjiang, and pointed out that the essence of education is the inheritance of culture, emphasizing that a nation's culture is primarily inherited through education, with school education playing a crucial role in non-genetic inheritance. Xie Fei used the national non-heritage Hua Yao flower picking as a case study, highlighting that non-heritage education cannot rely solely on school education but must integrate social and family education (Sun, 2021). Zhang Zhuo and Liu Wenxuan reviewed the fifth popularization training course (clay sculpture) of the "Research and Training Program" at Shaanxi Middle School and noted that the Ministry of Culture's "China's ICH Bearing Crowd Training Program" is an effective practice for the inheritance of ICH in the new era (Lei, 2023).

The findings from this systematic literature review highlight critical insights for enhancing pre-service teacher education in the context of integrating ICH into Chinese secondary school fine arts curricula. As future educators play a pivotal role in safeguarding and transmitting ICH, pre-service training must address specific pedagogical, cultural, and technological competencies. This discussion focuses on three key areas where pre-service teacher education can be informed by the study's results.

Integrating ICH Pedagogical Models into Teacher Training: The findings from this review underscore the need for pre-service teacher education programs to incorporate training on the three dominant pedagogical models for teaching ICH: offline curriculum, offline experiential learning, and online curriculum. Prospective teachers should be equipped to design and deliver standardized lessons that align with fine arts curricula while emphasizing traditional crafts and performing arts. Additionally, training should prepare teachers to create immersive learning experiences, such as field trips and workshops with ICH inheritors. Equally critical is the integration of digital technologies, enabling teachers to use tools like virtual museums and 3D technologies to engage students in innovative ways.

Emphasizing Cultural Awareness and Heritage Preservation: Pre-service programs should prioritize the development of educators' cultural awareness and their capacity to foster cultural identity among students. Training should emphasize the significance of ICH in promoting national identity, creativity, and respect for cultural diversity. This includes preparing teachers to integrate culturally significant activities, such as storytelling, traditional rituals, and regional crafts, into their curricula. Prospective teachers should also be trained to guide students in critically reflecting on their cultural heritage and understanding their role in its preservation and transmission.

Building Competence in Interdisciplinary and Technological Integration: Given the interdisciplinary and technology-driven nature of modern ICH education, pre-service training should focus on equipping teachers with the skills to bridge fine arts with related disciplines such as technology, language, and science. Teachers should also develop proficiency in employing digital resources, including virtual reality and online repositories, to enhance lesson delivery. Moreover, teacher education programs should foster an understanding of the challenges and opportunities presented by digitization in ICH education, ensuring that future educators can critically assess and effectively leverage these tools in their teaching practices.

5. Conclusion

The integration of ICH into the fine arts curriculum of Chinese secondary schools is a multifaceted endeavor that preserves cultural heritage while enhancing the educational

experience. This systematic literature review has provided a comprehensive analysis of current methods, practices, and curriculum designs used to incorporate ICH into the fine arts curriculum. The findings underscore ICH as a valuable educational resource that promotes cultural identity, critical thinking, and creative expression among students.

The first step of the review identified three main pedagogical models for integrating ICH into the fine arts curriculum: offline curriculum, offline experiences, and online curriculum. Offline curriculum, the most prevalent, utilize standardized classroom formats to deliver ICH content, focusing on traditional handicrafts and performing arts. Offline experiences, such as field trips to ICH museums and workshops with ICH inheritors, offer immersive experiences that deepen students' understanding and appreciation of cultural heritage. Online curriculum and digital repositories provide an innovative platform for students to explore ICH using modern technology, such as 3D and VR, enhancing their engagement and motivation to learn.

The second step of the review emphasized the various curriculum designs and educational resources used by teachers to integrate ICH into the fine arts curriculum. Traditional curriculum designs focus on ICH content as the core component, while others emphasize organizing curriculum content through hands-on activities and interdisciplinary integration. Teachers utilize a diverse range of educational resources, including books, oral sources, films, documentaries, and virtual museum repositories, to enrich their lessons and provide students with a comprehensive understanding of ICH. Finally, a few recommendations were made to address these challenges:

Integration of Theories and Methods: Education and teaching should draw on the increasingly mature theories and methods of digitizing ICH, antiquities, and digital humanities. Considering the evolving technological environment, in-depth discussions on the basic theories and methods of digitizing ICH—such as concepts, principles, strategies, and processes—are necessary to enrich the knowledge system of the fine arts curriculum.

Systematic Assessment of ICH Digitization: There should be systematic assessments of the comprehensive impact of digitizing ICH on education and teaching. The impact of digitization is multifaceted; therefore, it is essential to objectively evaluate its advantages and limitations. This evaluation aims to maximize the positive role of digitization in the inheritance and conservation of ICH while minimizing or even avoiding negative impacts. Interdisciplinary approaches should be adopted, leveraging knowledge from education, culture, anthropology, and ethnology to conduct multi-perspective interpretation and empirical research on ICH digitization. For instance, the dissemination effect of ICH digitization can be studied through pedagogy and communication, while the social impact on communities can be examined using sociological and ethnological approaches.

Develop Specialized Training Modules on ICH Integration: Pre-service teacher education programs should introduce specialized training modules that focus exclusively on the integration of ICH into fine arts curricula. These modules should combine theoretical foundations of ICH, such as its cultural significance and preservation methods, with practical strategies for implementing ICH-based pedagogy. For example, the training could include workshops on designing interdisciplinary projects, utilizing digital technologies like VR for immersive learning, and collaborating with ICH inheritors to create authentic, hands-on teaching experiences. Additionally, these modules should emphasize reflective practices, encouraging future teachers to assess and adapt their approaches to meet diverse student needs and foster cultural awareness effectively.

In conclusion, the pedagogical application of ICH in the Chinese secondary school fine arts curriculum holds great promise for enriching the educational experience and preserving cultural heritage. By addressing the challenges and implementing the recommendations outlined in this review, educators and policymakers can ensure that ICH education continues to thrive and make a positive impact on students and society. Furthermore, the insights provided in this study emphasize the importance of equipping pre-service fine arts teachers with the

knowledge, skills, and strategies needed to effectively integrate ICH into their teaching practices, fostering cultural awareness and creativity in future generations.

6. Co-author contribution

The authors affirmed that there is no conflict of interest in this article. Author 1 wrote the overall draft of the paper. Author 2 edited, checked and confirmed the paper and author 3 formatted it.

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