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# Promoting Early Childhood Learning Education: A Systematic Review of Structural Quality of Preschool Education in China

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Article Information ABSTRACT

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The study aims to investigate the evolution of preschool education policy in China, which plays a vital role in early childhood development. It required the government's intensified focus since 2010 on enhancing both access and quality standards of preschool education, which illuminated through the lens of historical policy shifts and their implementation. This study is grounded in the PRISMA guidelines and involved a thorough literature search, selection based on stringent criteria, and a robust data extraction and coding process. The analysis reveals that the Chinese government increasingly perceives preschool education as a fundamental public service, which has been established in revised policies and targeted endeavors to bridge the urban-rural areas of China. The study concluded that persisting challenges, notably in the equitable distribution of resources, enrollment inequalities, and optimal teacher-to-child ratios, especially in rural areas. Despite these challenges, the significant strides made, and the policy impetus reflect the prioritization of preschool education within China's national agenda. The review encapsulates the complexities of policy evolution, its tangible successes, and the pathways for achieving universal and high-quality preschool education.

**Keywords:** Early Childhood Learning, Preschool Education, Policy Analysis, Educational Accessibility, Quality Standard, Urban-Rural Inequality

# 1. INTRODUCTION

The role of early childhood education (ECE) has gained considerable importance in recent empirical studies, highlighting the early children's education in life, which has a significant impact on an individual's cognitive, social, and overall development along his/ her educational career (Akbari & McCuaig, 2014; Nawarat et al., 2022). The preschool education system in China is an exciting area to discuss how fast it is growing and transforming as the combination of traditional and modern educational principles is concerned (Basaran et al., 2021).

Studies suggested that China has witnessed remarkable improvement in preschool enrollment and the government's investment in ECE as part of Qin Yi Conference Zheng Guan's national strategy for improvement in education to meet social needs (Jiang et al., 2022; Li & Rosewell, 2020). Chinese early childhood education policy is vital in considering childhood learning as the foundation for cognitive, emotional, and social development (Zhang et al., 2015). Alongside the enhancement of preschool education in China, the growth has also presented essential challenges such as urban-rural inequity, syllabuses capacity, and professional development (Zhao & Wang, 2019; Central Committee of the Communist Party of China, & State Council, 2020). Additionally, the main point is to assess how Chinese preschool education

addresses the international standards of early childhood development while respecting the national culture. Hence, coordinated quality standards are to be undertaken to examine the current status of preschool education in China against global trends and frameworks.

Friese et al., (2017) expressed that great attention is being devoted to quality teaching and the use of technology in preschools. Nevertheless, this area of literature still has an open-ended issue concerning the efficacy of these practices in broader Chinese education and whether their implementation contributes to a more inclusive and adaptable learning environment. It also provides a critical point, making it useful for policymakers, teachers, educators, and other researchers researching diverse topics on global early childhood education (Zhang et al., 2017). This research focuses on the problem resulting from building on the introduction and the gaps found in the literature, which create challenges and ambiguous opportunities in the preschool education system in China. Even with the remarkable achievement of narrowing the quality and access to Early Childhood Education gap in towns and villages, the reality of low equality of ECE between urban and rural settings still needs to be solved. The inequality of educational resources between urban and rural areas in China has become a problem (Heckman, 2011), with children living in rural areas seeing the absences that the situation rendered, inadequately trained educators, and limited exposure to innovative teaching methods (Xie & Li, 2022). This imbalance has not only adverse effects on the immediate learning of these children but also long-term implications on how different children take up academics and socially interact with each other through the diversity of the preschool curriculum and the pedagogical strategies in China.

The Chinese government has done much work making plans and proposing national guidelines. However, the curriculum implementation and adaptation at the local level vary greatly, which is caused by (Feng, 2019). This lack of standardization raises a quandary regarding the efficacy of ECE programs and whether they can adequately address all children's developmental needs. Henceforth, it is harder to evaluate and improve the quality level of early childhood education in the nation (Xie & Li, 2022). More professional development needs to be provided for preschool education teachers in China (Li & Rosewell, 2020). In addition, maintaining cultural heritage and modern teaching methods in the framework of early childhood education in China is a particular difficulty. The coexistence of traditional Chinese cultural principles with updated pedagogic arrangements outlined a necessity for a curricula row with the described content being culturally relevant and conducive to overall development (Pan et al., 2015). Therefore, this study aims to conduct a systematic literature review that thoroughly investigates the evolution of preschool education policy in China, which plays a vital role in early childhood development. It required the government's intensified focus since 2010 on enhancing both access and quality standards of preschool education, which illuminated through the lens of historical policy shifts and their implementation.

## 2. RESEARCH METHOD

This systematic review was designed based on the preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines, ensuring a transparent approach to synthesizing the current state of preschool education in China. The PRISMA framework, with its 27-item checklist and four-phase flowchart, served as the foundation for this review, facilitating the identification, selection, appraisal, and synthesis of relevant literature. This methodology section details the processes involved in literature search and selection, criteria for inclusion and exclusion, data extraction and coding, thematic analysis, and ethical considerations. This methodological approach ensured that the systematic review was comprehensive,

transparent, and reproducible, aligning to evaluate the current state and challenges of preschool education in China, as shown in Figure 1.

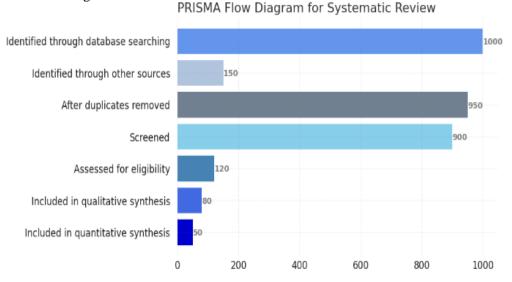


Figure 1: Data Collection Flow

#### 2.1. Search and Selection Criteria

The literature searches and selection process for this systematic review were precisely planned and executed to ensure comprehensive coverage and relevance of the articles included. Online databases, including PubMed, Web of Science, Scopus, and ERIC, renowned for their extensive collections of educational and social sciences literature, were targeted for the search. The search used keywords and screen terms tailored to each database's indexing system.

The primary search terms included "preschool education," "early childhood education," "China," "curriculum," "pedagogy," "teacher training," and "educational technology." These terms were combined using Boolean operators (AND, OR) to ensure a comprehensive. For instance, the search might look like "preschool education AND China AND curriculum" to narrow down the results to those most relevant to the study's focus. In addition to online databases, the search strategy encompassed examining literature papers, government reports, policy documents, and conference proceedings to capture a broader range of perspectives and insights into the state of preschool education in China. This approach aimed to mitigate publication bias and provide a more holistic view of the topic.

#### 2.2. Inclusion and Exclusion Criteria

Carefully defined inclusion and exclusion criteria guided the selection of studies for this systematic review to ensure the study's relevance, as shown in Table 1. The process of selecting studies is based on the geographical location, education level, type of study, publication date and language. A primary focus was placed on geographical location, requiring that studies explicitly address preschool education within the People's Republic of China. Including urban and rural settings across various provinces allows a broad understanding of the country's educational practices and policies at the preschool level. The review concentrated on empirical research that provides insights into curriculum design, teaching methodologies, educational policies, technology integration, teacher training, and child development, specifically within the early childhood or preschool education spectrum (ages 3-6). A comprehensive collection of empirical

research articles, including qualitative, quantitative, and mixed-methods studies, systematic reviews, metaanalyses, and policy analysis studies published between January 2000 and December 2023, were considered to capture the significant developments in the field over the past two decades. Both English and Chinese language articles were included, acknowledging the extensive research in China's native language, which is vital for an in-depth exploration of the topic.

Table 1: Inclusion and Exclusion Criteria for Systematic Review of ECE in China

Criteria Type	Description		
Geographical Focus	Inclusion: Studies focusing specifically on preschool education within the People's Republic of China,		
	Exclusion: Research focusing on early childhood education outside of China		
<b>Educational Level</b>	Inclusion: Research that provides insights into curriculum design, teaching methodologies, educational		
	policies, technology integration, teacher training, and child development, specifically within the early		
	childhood or preschool education spectrum (ages 3-6).		
	Exclusion: Studies focusing on primary, secondary, or higher education levels without relevant insights into		
TT CC 1	early childhood education.		
Type of Study	Inclusion: Empirical research articles, including qualitative, quantitative, and mixed-methods studies, systematic reviews, meta-analyses, and policy analysis studies.		
	Exclusion: Opinion or observational editorials, non-empirical commentary articles, and incomplete studies		
	such as abstracts, conference proceedings, and unpublished dissertations		
Publication Date	Inclusion: Studies published between January 2000 and December 2023.		
	Exclusion: Studies published outside this date range.		
Language	Inclusion: Articles published in English and Chinese.		
	Exclusion: Studies published in languages other than English or Chinese.		

## 2.3. Thematic Analysis

The process of thematic analysis began with a thorough examination of the secondary data, where the initial task was to identify potential themes that frequently appeared across the dataset. These themes shown in the literature review section indicate significant issues and trends within preschool education in China. We have identified 10 main and sub-themes from the literature review as shown in the section below. The iterative nature of this process ensured a rigorous and reflexive approach to theme development, allowing for the refinement and, where necessary, redefinition of themes to more accurately reflect the underlying data.

#### 3. LITERATURE REVIEW

## 3.1. Child Education through Equitable Funding

China's two primary groups have supported increasing public funding for early childhood education (ECE). First, according to the United Nations Convention on the Rights of the Child, every child has the

right to free and equitable obligatory education and care, irrespective of their religion, nationality, gender, ethnicity, race, and place of residence, living conditions, or family history (UNICEF, 2019).

Heckman and Savelyev (2013) demonstrated that funding early childhood education (ECE) can significantly benefit a nation's human capital and the lifetime well-being of its citizens. The Chinese Government has increased the funds allocation to the ECE system, considering the ever-expanding demand for ECE and recognizing the significance of ECE for individual, society, and country enhancement (Ministry of Education of the People's Republic of China 2010). Public funding to ECE is a significant driving source compared to limited funds for parents and families (Ministry of Education, China, 2022). The Chinese government has made approximately USD 23 billion in ECE investments over the last ten years, growing those investments at an average annual rate of 20.6%. ECE received a larger share of the overall education budget in 2020, rising from 2.2% in 2011 to 5.9% (Zhao & Wang, 2019).

Nonetheless, state financing decreased dramatically in 2017; it accounted for 0.2 per cent of the country's Gross Domestic Product, less than the budget for primary education (Di et al., 2023). To provide equal opportunity and access to ECE, the state started funding more in remote areas and less developed provinces. As discussed above, the underdeveloped provinces, popularly central and western provinces, received less economic development and reduced government ability to spend on the ECE sector, resulting in a reduction in enrollment compared to those in more developed provinces (Zhou et al., 2017; Liu et al., 2022).

In each administrative unit, the local government prioritized spending funds for urban kindergartens and playgroups, leaving a more significant gap between western-central provinces and eastern provinces and rural-urban areas of the country (Yang & Hu, 2019). Therefore, one should not be surprised to observe many disparities in ECE enrollment. However, since 2010, the Chinese state has adopted a targeted approach to counter this gap by allocating more funds to the country's lagging financial areas in central and western localities (Qian et al., 2023). By adopting targeted policy, China has successfully established a fast pace for ECE in less developed areas in western and central provinces. From 2011 to 2021, more than 80% of new preschool playgroups were established in the western and central zones of the country, and approximately 60.1% remained established in the countryside (Ministry of Education, China, 2022). Table 2 shows the allocation of the public funds for early child education in China by region (2011-2021).

Table 2: Allocation of Public Funds for ECE in China by Region (2011-2021)

Province/R	% of Public Funding Allocated to	% of Funds Directed to Rural	Comparison to 2011
egion	ECE (2018)	ECE (2018)	(%)
Jiangxi	Not specified	71.75%	Increase from 2011
Xinjiang	Not specified	75.46%	Increase from 2011
Gansu	Not specified	77.15%	Increase from 2011
Hebei	Not specified	70.32%	Increase from 2011
Qinghai	Not specified	78.81%	Increase from 2011
		49.27% directed towards	Increase from 33.88%
Overall	48.3% of ECE fiscal revenue	rural ECE	in 2010

Source: (Ministry of Education, China, 2022).

Local governments in each province must devote a sizeable amount of public funds to early childhood education (ECE) in rural areas. A study by Qian et al. (2023) shows how, in all provinces, local

governments increased the percentage of public funding allocated to early childhood education (ECE) in rural areas in 2018 compared to 2011, as shown in Figure 2. Approximately 48.3% of the overall fiscal revenue for ECE was allocated to public funding for ECE in 2018, including support from the central and municipal governments.

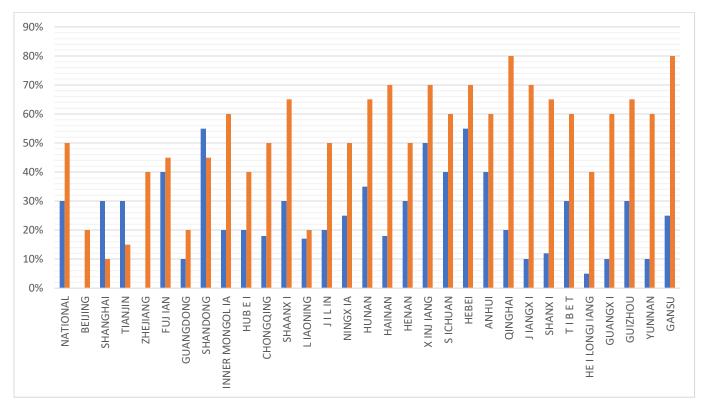


Figure 2. Patterns in public ECE financing for kindergartens in rural areas (Source: Qian et al., 2023).

#### 3.2. Families and Non-State Actors Coordination

The Chinese administration encouraged the private sector to provide better opportunities and ECE services that suit local demands. The Chinese government has regularized non-state actors to build a vibrant, flexible, and sustainable ECE system (Li et al., 2019). The Chinese state required big property owners to construct at least one early childhood school in its recently established society or community (Gan et al., 2016). It was observed that the increasing demands of ECE have led the Chinese government to authorize non-state actors to offer adaptable daycare centres and amenities, such as daycare provided in the community, domestic childcare, full-day childcare, and half-day childcare programs to meet the requirements of parents. With this collaboration, at the end of 2022, around 75,000 childcare centres have been established across the country. Most are established in less economically developed areas (Ministry of Education, China 2022). Every province's administration formulates policies and strategies to support non-state actors in improving ECE and childcare. The Chinese Government introduced a policy that alleviates the financial burden on families and parenthood whose kids are less than three years old and are eligible for a tax reduction program that allows them to receive up to Chinese Yaun 1000 in tax reduction every month (Ng, 2015). Expanding ECE refers to the supply and availability of children's participation in

ECE programs. Access to ECE is a broad concept relating to the availability of a physical building or centres, proper usage of the ECE system, cost management, language, and cultural competence (Friese et al., 2017).

### 3.3. Early Childhood Education Participation and Availability

By 2010, the Chinese government introduced a new policy for early child education (ECE) reform, and a new course of action was discussed to tackle existing issues and hurdles regarding early childhood education expense and accessibility. The Chinese Government had a long-term plan to make ECE access universal concepts for all children from 3-6 years old to attend kindergartens and playgroups with reasonably priced tuition by 2020 (Rao et al., 2023; Fu, 2022). Chinese local administrative units have identified another critical factor that is to ensure the quality and equity concerning access to ECE and enrolment in remote areas of the country because enrolment of the children, especially in kindergartens, is lower in less developed provinces and rural areas of the country (Zhang & Liu, 2017). A study by Rao et al. (2023) shows the impact of China's long-term strategies and policies for early child education, as shown in Figure 3, indicating that more than 128,000 new kindergartens—a growth of 76.8%—were opened between 2011 and 2021. As of 2022, 289,200 kindergartens are expected to have served approximately 46 million children aged three to six. In contrast, the GER for the ECE of children aged 3 to 6 was 89.7% in 2020.

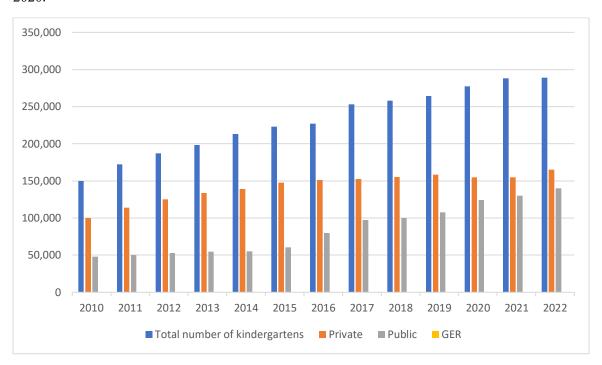


Figure 3. Kindergarten enrollment (2010–2021) (Rao et al., 2023).

# 3.4. Early Childhood Education Suitability and Affordability

China has further enhanced the ECE system, making it vibrant, flexible, and, more importantly, affordable to all families (Pan et al., 2010). China has successfully launched a new system named Pu Hui Xing kindergartens. Pu Hui Xing can be explained as reasonably priced kindergartens. This system is very

flexible and has the cost of tuition fees in either private or public kindergartens (Rao et al., 2023). Chinese local government has put together a fee portfolio in which the merits of the local quantity rating scheme decide tuition fees. Those kindergartens with a higher rating scheme charge tuition fees slightly higher than those with lower ratings. It must be addressed that all public kindergartens, including the Pu Hui Xing situation, in rural and less economically developed areas, charge lower tuition fees to minimize the burden on families. However, the Pu Hui Xing system of preschool playgroups must adhere to the instructions of the regional Chinese government concerning tuition fees and other charges. All those non-state actors or private kindergartens are autonomous in deciding their profits concerning tuition fees. However, the Chinese government has set a minimum profit base for private kindergartens.

Meanwhile, the regional government has minimized the number of nonprofit preschools to guarantee the central Xing system of ECE providers. For example, the local Government of Jiangsu decided that the highest profit rate should not exceed 15%. All these measures were taken to ensure the affordability of ECE (Gong et al., 2016).

# 3.5. Regulating Early Childhood Education System: A Shift to Process Quality from Structural Quality

Early Childhood Education (ECE) is not considered necessary schooling; however, one would observe that ECE is the basis of the children, and without proper and comprehensive guidelines, children cannot grow their critical thinking (Blair & Raver, 2012; Fu, 2022). With the rapid availability and high demand of kindergarten schools, the Chinese government realized that the necessary outcome could only be achieved with a quality ECE system (Camilli et al., 2010). Hence, the government tried to make concrete efforts to improve the quality of ECE to ensure positive outcomes for children. The Chinese Government has divided the ECE system into Structural Quality and Process Quality (Rao et al., 2023; Heckman et al., 2013). Structural quality relates to the physical structure, such as buildings, size of classes, number of enrolled students, number of teachers, teachers' qualifications, cleanliness, safety, workforce, and overall availability of required resources (Rao et al., 2023). Process quality can be referred to the interactions between teachers and children, the activities of the children, the teacher's overall efforts and effectiveness, and the overall outcomes of children's learning and understanding (Rao et al., 2023; Aziz et al., 2018). The state has focused on the availability of structural quality and developed quality infrastructure with all necessary facilities (Huang & Gao, 2018).

Structural quality emphasizes the environment, which plays a vital role in promoting and enhancing the ability of children to learn and understand in a proper setup. Therefore, since the start of kindergartens, the Chinese government has considered environmental development as key to the ECE system's success (Zhang et al., 2019). A proper environment can promote children's social and moral behaviour, while a disorganized, chaotic, and improper environment will lead children somewhere else (Raikes et al., 2023). The Chinese government can provide structural quality of early childhood education; however, they have yet to develop process quality where teachers' training is more important.

## 3.6. Transitioning Focus to Process Quality from Structural Quality

Kindergartens' physical construction and tuition costs are considered structural quality, size, resources, classrooms, number of enrolled students, number of teachers available, staff qualifications, and health, cleanliness, and safety. At the same time, the quality of the process includes teaching, learning,

developing an understanding of children, and overall child development. Structural quality indicators are explained below separately.

**Tuition Fees.** The Chinese authorities have strictly regulated rules for tuition fees of kindergartens, especially for publicly funded kindergartens. Chinese local government has set parameters to monitor and evaluate tuition fees for kindergartens, which are determined by the local Government (Ghodrati et al., 2023). The Chinese government has been autonomous in deciding their tuition fees for private organization-owned kindergartens but must make it manageable for families and parents. Even though these policies were introduced to reduce financial burdens, the efforts were widely criticized for being motivated more by legal objectives than by promoting quality education services concerning cost-sharing systems (Feng, 2019). Indeed, all kindergartens across the country have the same criteria and quality. Nevertheless, it is observed to believe the distinctions in running costs and public funding received by different kindergartens (Feng, 2019).

Physical structural, size and resources. The physical structure of kindergartens' recommendations include how they should be built, where they should be built, what kind of location they should be, and other related factors regarding physical structure. Chinese government policies are essential to follow the rules and regulations concerning recommendations of physical structure (Xia et al., 2023). Kindergartens should have a minimum of four square meters of playgrounds per student outside of the building, and half of the total building area should be open for sunlight for at least 2 hours a day in winter. Kindergarten rules and regulations recommendations have led to at least 2 hours a day of children playing outdoor activities, famously known as extra-curricular activities (Ministry of Education, China, 2022).

Staff credentials, class size, and teacher-to-child ratios. The dimensions of a classroom and the ratios of students to instructors determine the structural quality of early childhood education (ECE), considering essential quality characteristics and promoting teacher-child interaction (Rao et al., 2023). The country's education ministry has mandated that a classroom can include no more than 25, 30, or 35 students, teaching children ages 3-6, 4-5, and 4-5 years, respectively (Hu & Szente, 2009). China has also directed all the local educational institutions to have at least two instructors and one caretaker in each classroom. However, kindergartens in practice need help following government regulations concerning classroom size and interactions between teachers (Hu et al., 2014).

Health and safety. The government has formulated a joint responsibility plan with the local health administrative units, kindergarten administration, and additional health providers like the Center for Disease Control and Prevention to ensure children's healthy development (Li et al., 2016). The Ministry of Education (MoE) and the National Health Commission (NHC) controlled food safety, hygiene, and other aspects of kindergarten health (Liu & Eveland, 2005). The local Departments of Health assess the newly constructed kindergartens' safety, hygiene, and health standards. Kindergartens that serve 150 or more children must also have a qualified healthcare provider on staff, especially in rural and less economically developed areas where health facilities are low compared to developed and urban areas (Rao et al., 2019). Kindergartens must create a thorough and efficient healthcare policy, perform daily physical examinations on students, monitor their growth and development, conduct checks to prevent infectious diseases, establish a sound daily schedule, maintain cleanliness standards, and give students a balanced diet.

#### 3.7. Teaching, learning, and growth of children

Different from the structural reforms, the process quality could be better defined and has been left to local autonomous educational administrative units (Rao et al., 2023). Nonetheless, the central Ministry of Education has given general guidelines concerning kindergarten teaching and learning process (Wang et al., 2008). For instance, the Kindergarten Working Regulations (KWR) emphasize that kindergarten instruction should be developmentally appropriate and consider each child's unique developmental differences (Rao et al., 2023; Sayre et al., 2015). Additionally, they acknowledged extra-curricular activities as the best instructional approach and mandated that kindergartens establish a stimulating and educational environment to aid their students' learning.

In 2022, the central Ministry of Education prohibited literacy teaching in kindergarten classrooms. Along with the ministry has provided a memorandum stipulating guidelines that explicitly define the process quality, Assessment regulations for ECE and health supervision in kindergarten (Magwood et al., 2022)

The rules and regulations address the teaching staff, learning environments, and teaching and learning procedures (Rao et al., 2023; Sachs, 2016). It has been noted that the rules and procedure guidelines support the value of teacher-student connection, home-school community cooperation, and activity-based early childhood education. The most popular curricular method in Chinese kindergartens takes a theme-based approach, integrating the main areas of education and cognitive growth of children (Min et al., 2023). These include socioemotional well-being, language and literacy, science, health and nutrition, and creative talents. Chinese central education ministry and local educational administrative units shifted focus from the structure to the process of ECE quality, showing that the former cannot ensure children's learning outcomes and experiences on its own (Slot et al., 2015; Xie et al., 2022)

#### 3.8. Innovative Solutions to Quality Assurance and Development

It is believed that there is a growing agreement regarding rigorous oversight and high-quality control systems, which are vital for the development of ECE systems globally (Raikes et al., 2023). A robust monitoring and assessment system can help the government evaluate the effectiveness of the ECE system and indicate need-based targeted areas to make the ECE system more efficient and competent around the world (Mou and Ding, 2020). Although prevailing Policymakers in China can obtain internationally comparable information via international data, for example, the Demographic and Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS), they still require information that includes indicators specific to the policymaker's home country.

China's ambitions to ensure a universal high-quality ECE system have motivated developing countries to adopt measures to strengthen their kindergartens and preschool education (Hu et al., 2015). Before adopting new Chinese policies in 2010, local administrative and educational units adopted the local rating system in kindergartens.

The speedy extension of ECE facilities since 2010 has made creating a quality assurance framework (QAF) more urgent in order to gauge early childhood education quality in China nationwide. For the last ten years, China's adopted policies have marked the increasing demand for monitoring and assessing quality assurance at the local level of kindergartens. However, before 2010, in local kindergartens, monitoring

policies of quality assurance was not mandatory, and large numbers of kindergartens at the local level were not evaluated (Pan et al., 2015; Nasir & Jabar, 2022).

# 3..9. The Kindergarten Quality Rating System

Local governments evaluate the Kindergarten Quality Rating Systems (QRSs), which are province-specific objectives, to determine the quality standard of the kindergarten school for preschool education children (Hu et al., 2015). China has adopted the Quality Rating System (QRS) primarily to monitor the quality of kindergartens across the country (Nutton, 2020). Quality standard objectives are to measure the management of teaching and learning, the interaction of families in kindergarten, and financial issues. The Kindergarten QRS of Guangdong province, for instance, uses a thirty-nine-item tool for evaluating quality (ii) specific structural dimensions of quality (staff qualification, class size, availability of services, learning materials, and total number of staff and total number of enrolled kids (Liu, 2014). The legitimacy and effectiveness of the QRS system require further attention, and rating standards vary in each province based on the policy determined by the Government (Sheridan et al., 2009). This indicates an inappropriate national standard for ECE quality (Min et al., 2023). Various scholars in China have correctly identified an alarming phenomenon that the application of QRSs may have unexpected results in variations in ECE supply, ECE quality, Structural and process quality, and there would be chances for an increase of inequalities while monitoring the overall progress of ECE (Pan et al., 2010).

Several provincial authorities have intentionally dispensed enough funds to support the effective authorization of a restricted volume of kindergartens, mostly public-sponsored playgroups (Di et al., 2023).

#### 3.10. Kindergarten Evaluation and Supervision Scheme

The federal authorities of China 2017 introduced the Kindergarten Supervision and Evaluation Scheme (KSES) to assess the quality and progress and to enhance the quality of former kindergartens to support and promote local governments' parameters of supervision to improve ECE quality and efficiency (Safitri & Istiyono, 2022). Kindergarten evaluations nationwide are becoming more and more standardized, enabling the authorities to gather information on pre-established indications of quality. The assessment, which covers five areas: kindergarten condition, security, cleanliness, care, staff management, education and healthcare, can be advanced and carried out by provincial governments (Fatkhurohman, 2022).

It has been observed that when local government takes responsibility for monitoring and evaluations, there is a slight strain between the teacher's supervising and monitoring system (Pan et al., 2010). Teachers may be concerned about meeting the required criteria for a quality monitoring system, leaving behind a crucial teacher's philosophy related to the ECE system (Sachs, 2016). Therefore, the school must provide enough professional support for teachers. This has shown that when kindergarten tutors are invited to make their valuable participation in important decisions, the policy-making process, and curriculum innovations, ECE teachers feel comfortable, which, in return, improves their job satisfaction and their well-being even under a strict environment (Xia et al., 2022).

### 3.11. Quality Early Childhood Enrolment

Statistical facts reveal that the Chinese have a strong preference for male children. However, the birth ratio significantly claims that the number of male children is higher than that of female children (Tang, 2023). Chinese official data from the Ministry of Education (2022) have claimed no difference in the enrollment of boys and girls in ECE education. The involvement of ECE children in China varies, indicating

that the ECE system mainly provides education for children 3-6 years old. At the same time, six years old is the official enrollment age for primary Grade 1. One cannot be surprised that children aged 3 and 6 have a small portion of enrollment in ECE, roughly 2% to 6%, respectively. A national survey revealed an inadequate enrollment rate in rural areas for children aged three, indicating that rural kids spend less time in kindergartens (Tang et al., 2023).

Domestic surveys and local administrative databases have shown encouraging trends in the country's gross enrollment ratio of children in ECE from 3 to 6 years (Liu et al., 2022). The Chinese government formulated a national policy that upholds the same kindergarten standards nationwide. Kindergarten enrollment in the western region climbed by 76.3% between 2010 and 2018, while enrollment in the eastern and central regions decreased by 65.1% and 35.7%, respectively (Chen, 2018). The enrollment of children between the ages of 4 and 6 in rural western areas and urban eastern regions decreased from 36.0% in 2010 to 19.0% in 2016 (Chen et al., 2019). It is observed through various research conducted in China that classroom size affects teachers' beliefs about the development and related activities of children (Hu & Szente, 2009).

#### 4. DISCUSSION

China has worked incredibly hard to ensure children from diverse backgrounds have better access to high-quality early childhood education (ECE). This shows the importance of the state in allocating funds, developing quality standards, formulating and implementing policies, and regulating non-state actors. Despite enormous progress in increasing admission to early childhood education, there are still obstacles to securing fair and universal admission to the ECE quality system (Tan, 2023). Nonetheless, Children's development is hampered by persistent problems such as regional discrepancies between urban and rural areas, difficulties unique to immigrant children, and a shortage of teachers with formal training. These issues are currently covered by state legislation, and with the advancement of technology, efforts to resolve them will also provide for the observation and control of the preschool system.

Li et al. (2016) examine the effects of urbanization and maternal education on the relationship between kindergarten structural and process quality in Zhejiang, a developed region in eastern China and kids' language, early numeracy, and social cognitive development. They discovered the importance of high-quality early childhood education for both urban and rural children, regardless of their mother's level of education (Li et al., 2016). Their research showed that kindergartens, ECE quality education and ECE participation of children have a positive role regardless of their family background. Due to a lack of research and national statistical data in China, it is nearly impossible to establish a consensus on whether kindergartens' participation has significantly narrowed socio-economic gaps and children's outcomes.

A study by Slot et al. (2015) indicated a massive demand for qualified preschool teachers in China. The merging of technology and innovative modes of teaching in ECE is also another part that is highly important to that problem statement of mine. Though the connection between technology and teachers and students in primary (early) school is becoming more robust, it is hard to find results of the effectiveness and results of influence technology brings to child development in China (Hu et al., 2015). Even though free and mandatory ECE still needs to be mandated by law, the country is working hard to achieve this objective. It is essential to believe that the early childhood education legislation (draft) passage will remove barriers and launch a new stage in the growth of ECE in China. To address the early childhood development targets of the Sustainable Development Goals (SDGs) of the United Nations, a complete, rational, unbiased, and

accessible ECE system is being built. The Chinese Government works very hard to ensure that all children can realize their latent learning potential via the combined efforts of educators, parents, and community members. An ECE system's success depends on having a workforce of certified, experienced, and competent ECE teachers. Additionally, a new policy should be developed that provides for the welfare of ECE employees and enough pay and other benefits for teachers.

#### 5. CONCLUSION AND RECOMMENDATIONS

The systematic review of China's evolving policy in early childhood education (ECE) underscores a significant period of transition and reform, reflecting the state's increased intervention and the pivot towards a more inclusive, equitable, and high-quality ECE system. This transition, initially marked by the reduction of public funding in the 1990s to a resurgence of state responsibility in the 2010s, signifies a critical acknowledgment of ECE as a cornerstone for societal advancement and individual development. This review highlights the strengths achieved and the remaining challenges still faced in the affordable and quality ECE program in a multiplicity of rural and urban backgrounds across China. While there has been significant formal progress regarding universal ECE attendance, provided by great financing and policy reforms designed to enhance structure and processes, inequities in participation and quality, spanning from urban to rural areas and uneven areas across the country, still need to be solved. These challenges are further complicated by inadequate supply of formally qualified ECE teachers and disparities in the quality of ECE service delivery across different regions, with the less developed areas being the worst example. This study concluded that China has extensively worked on the structural policy; however, much work is still required on the process policies, which are required to train teachers and enable them to understand early childhood education better.

The recommendations are designed to tackle the challenges above and utilize the existing opportunities that are in the way of making ECE available, as well as quality and equitability throughout China. Public investments in early child education should be prioritized in grassroots areas, such as rural and developing areas. Rural classrooms, which have been overlooked as technological focal points, should be integrated with technology for better learning outcomes and to close the gap between urban and rural education. In addition, implementing a national standard of ECE quality is promising, including developing and implementing these standards. Such quality standards should involve structural and process indicators like the teacher-student ratio, classroom environment, and curriculum relevance, as well as the pedagogical abilities of teachers. Setting up precise and quantifiable credentials will allow us to integrate monitoring and continuously improve the ECE's quality by uniform standards nationwide. Furthermore, the issue of continuing education and assistance for the staff of early child educational centres is of great significance. To achieve this, training programs should be set up to continuously update educators to incorporate the significant principles of modern teaching skills and the present-day understanding of early childhood education.

In addition to enhancing the conditions of the education workers by providing them with better pay and employment opportunities to advance their careers, there will be an influx of high-quality staff. In addition, the Chinese government has introduced ECE to the school system, so it has become mandatory in education. Such legal compulsions for ECE to be free and compulsory would straight away give rise to the systemic problem of access to early learning in an equitable way. We will also be pepping up the state's public plan for early childhood development because it is a public asset that, over time, can help the nation prosper.

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#### REFERENCES

- Akbari, E., & McCuaig, K. (2014). *Early Childhood Education Report 2014*. Toronto: Ontario Institute for Studies in Education. https://tspace.library.utoronto.ca/bitstream/1807/80131/5/Akbari%20and%20McCuaig\_2014\_Early-Childhood%20Education%20Report.pdf
- Aziz, S., Mahmood, M., & Rehman, Z. (2018). Implementing CIPP Model for Quality Evaluation at School Level: A Case Study. *Journal of Education and Educational Development*, *5*(1), 189-206.
- Başaran, M., Dursun, B., Gur Dortok, H. D., & Yılmaz, G. (2021). Evaluation of Preschool Education Program According to CIPP Model. *Pedagogical Research*, 6(1). https://doi.org/10.29333/PR/9701.
- Blair, C., & Raver, C. C. (2012). Child development in adversity: experiential canalization of brain and behaviour. *American psychologist*, 67(4), 309. https://psycnet.apa.org/doi/10.1037/a0027493
- Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-analysis of the effects of early education interventions on cognitive and social development. *Teachers College Record*, 112(3), 579-620. https://doi.org/10.1177/016146811011200303
- Central Committee of the Communist Party of China, & State Council. (2020). *Opinions on Promoting High-Quality Development of Modern Vocational Education*. Retrieved from http://www.gov.cn.
- Chen, W., Yuan, S. & Xue, Y.T. (2019). Empirical Construction and Reflection of the Evaluation Index System of Professional Construction in Higher Vocational Colleges. *Higher Education Exploration* (08), 44-52.
- Chen, Y.C. (2018). Research on the Practice of Course Assessment Reform for Preschool Education in Higher Vocational Education. *Education and Teaching Forum* (34), 237-238.
- Di, H., Li, H., & Wang, Y. (2023). Kindergarten Teachers' Quality of Work Life in China: A National Empirical Study. *International Journal of Environmental Research and Public Health*, 20(5), 4596. https://doi.org/10.3390/ijerph20054596
- Fatkhurohman, I. (2022). Patterns of character education in Aisyiyah Kindergarten, Sidabowa, Banyumas Regency. *International Journal of Research in Business and Social Science (2147-4478)*, *11*(10), 303-315. https://doi.org/10.20525/ijrbs.v11i10.2217
- Feng, W. D. (2019). Infusing moral education into English language teaching: an ontogenetic analysis of social values in EFL textbooks in Hong Kong. *Discourse: Studies in the Cultural Politics of Education*, 40(4), 458-473. https://doi.org/10.1080/01596306.2017.1356806
- Friese, S., Lin, V. K., Forry, N., & Tout, K. (2017). Defining and Measuring Access to High-Quality Early

- Care and Education (ECE): A Guidebook for Policymakers and Researchers. Research Brief. OPRE 2017-08. Office of Planning, Research and Evaluation. https://www.acf.hhs.gov/opre/research
- Fu, W. (2022). Inclusive Education in China: Ideas, Practices, and Challenges. Routledge.
- Gan, Y., Meng, L., & Xie, J. (2016). Comparison of school readiness between rural and urban Chinese preschool children. *Social Behavior and Personality: An international journal*, 44(9), 1429-1442. https://doi.org/10.2224/sbp.2016.44.9.1429
- Ghodrati, Z. S., Darvish, B., & Balanian, N. (2023). Investigating Indicators Affecting the Design of Elementary Schools and Children's Creativity Centers with Emphasis on Promoting Environmental Quality and Increasing Children's Social Skills. *Armanshahr Architecture & Urban Development*, 16(43), 177-194. DOI: 10.22034/AAUD.2023.347798.2681
- Gong, X., Xu, D., & Han, W. J. (2016). The effects of preschool attendance on adolescent outcomes in rural China. *Early Childhood Research Quarterly*, *37*, 140-152. https://doi.org/10.1016/j.ecresq.2016.06.003
- Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L., & Strupp, B. (2007). Developmental potential in the first five years for children in developing countries. *The Lancet*, 369(9555), 60-70.
- Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, 35(1), 31.
- Heckman, J., Pinto, R., & Savelyev, P. (2013). Understanding the mechanisms through which an influential early childhood program boosted adult outcomes. *American Economic Review*, *103*(6), 2052-2086. DOI: 10.1257/aer.103.6.2052
- Hu, B. Y., & Szente, J. (2009). Exploring the quality of early childhood education in China: Implications for early childhood teacher education. *Journal of Early Childhood Teacher Education*, 30(3), 247-262. https://doi.org/10.1080/10901020903084330
- Hu, B. Y., Vong, K. I., & Chi Kuan Mak, M. (2015). An evaluation of China's Kindergarten quality rating system through the Chinese Early Childhood Environment rating scale—the Zhejiang case. *Early Years*, 35(1), 50-66. https://doi.org/10.1080/09575146.2014.978266
- Hu, B. Y., Zhou, Y., Li, K., & Killingsworth Roberts, S. (2014). Examining program quality disparities between urban and rural kindergartens in China: Evidence from Zhejiang. *Journal of Research in Childhood Education*, 28(4), 461-483. https://doi.org/10.1080/09575146.2014.978266
- Huang, L., & Gao, M. (2018). Challenges and reforms in the Chinese higher education quality assurance system. *Quality Assurance in Education*, 26(3), 366-383. https://www.emerald.com/insight/content/doi/10.1108/QAE-10-2017-0072/full/html.
- Jiang, Y., Di, H.j.& Huang, J. (2022). Research on the Construction of Kindergarten Teacher Quality Monitoring Index System--Based on the Perspective of Cultural Ontology Pedagogy. *Journal of East China Normal University (Educational Science Edition)* (12), 73 -90. doi:10.16382/j.cnki.1000-5560.2022.12.007.
- Li, H., & Rosewell, B. (2020). Developing quality standards for early childhood education in China: Challenges and opportunities. *Early Years*, 40(3), 305-319.
- Li, K., Pan, Y., Hu, B., Burchinal, M., De Marco, A., Fan, X., & Qin, J. (2016). Early childhood education quality and child outcomes in China: Evidence from Zhejiang Province. *Early Childhood Research Quarterly*, *36*, 427-438. https://doi.org/10.1016/j.ecresq.2016.01.009

- Li, K., Zhang, P., Hu, B. Y., Burchinal, M. R., Fan, X., & Qin, J. (2019). Testing the 'thresholds' of preschool education quality on child outcomes in China. *Early Childhood Research Quarterly*, 47, 445-456 https://doi.org/10.1016/j.ecresq.2018.08.003
- Liu, X., Dong, J., Cui, P., Wang, M., & Guo, X. (2022). Collaborative supply mechanism of government-subsidized rental housing from the perspective of tripartite evolutionary game in metropolitan cities of China. *Computational Intelligence and Neuroscience*, 2022. https://doi.org/10.1155/2022/4895099
- Liu, Y. I., & Eveland Jr, W. P. (2005). Education, need for cognition, and campaign interest as moderators of news effects on political knowledge: An knowledge gap analysis. *Journalism & Mass Communication Quarterly*, 82(4), 910-929. https://doi.org/10.1177/107769900508200410
- Magwood, O., Riddle, A., Petkovic, J., Lytvyn, L., Khabsa, J., Atwere, P., & Tugwell, P. (2022). PROTOCOL: Barriers and facilitators to stakeholder engagement in health guideline development: A qualitative evidence synthesis. *Campbell Systematic Reviews*, *18*(2), e1237. https://doi.org/10.1002/c12.1237.
- Min, T., Keyuraphan, L., Sutheeniran, N., & Dechhome, P. (2023). The Guidelines for Developing the Integration of Production, Education, and Research under the Background of "Double High Plan" in Guizhou, China. *International Journal of Higher Education*, 12(5), 185-195. https://dx.doi.org/10.5430/ijhe.v12n5p185
- Ministry of Education of the People's Republic of China. (2022). *The Ministry of Education Releases Statistical Report on China's Educational Achievements in 2022*. Available online: http://en.moe.gov.cn/news/press releases/202304/t20230403 1054080.html
- Ministry of Education of the People's Republic of China. (2010). *National Medium and Long-term Educational Reform and Development Plan Outline (2010-2020)*. People's Education Press.
- Mou, Y.X. and Ding, M.L. (2020). System Construction for Monitoring and Improving the Quality of Talent Training in Preschool Education. *Journal of Tianjin Normal University (Basic Education Edition)* (02), 92-96. doi:10.16826/j.cnki.1009-7228.2020. 02.019.
- Nasir, R., & Jabar, C. (2022). Critical Analysis: Education Quality Management. *Journal of Pedagogical Sociology and Psychology, 1*(1). https://dx.doi.org/10.56741/jpes.v1i1.6.
- Nawarat, N., Nasee, P., & Saenghong, N., (2022). Unspoken Inequalities: Effects of Online Learning Responses to Covid-19 on Migrant Children and Their Families, Chiang Mai, Thailand. *Journal of Advances in Humanities Research*, *I*(1), 9–16. https://doi.org/10.56868/jadhur.v1i1.13.
- Ng, P. T. (2015). What is quality Education? How Can It Be Achieved? The Perspectives of School Middle Leaders in Singapore. *Educational Assessment, Evaluation and Accountability, 27*(4): 307–322. https://doi.org/10.1007/s11092-015-9223-8
- Nutton, G. (2020). Life-long benefits of high-quality preschool experiences. In Midford, R., Nutton, G., Hyndman, B., & Silburn, S(Ed). *Health and Education Interdependence: Thriving from Birth to Adulthood* (pp. 109-134), Springer Singapore. https://doi.org/10.1007/978-981-15-3959-6\_7
- Pan, Y. J., Liu, Y., & Lau, E. Y. H. (2010). Evaluation of the kindergarten quality rating system in Beijing. *Early Education and Development*, 21(2), 186-204. https://doi.org/10.1080/10409281003631134
- Qian, H., Walker, A., & Chen, S. (2023). The 'Double-Reduction' Education Policy in China: Three Prevailing Narratives. *Journal of Education Policy*, 1-20.

- https://doi.org/10.1080/02680939.2023.2222381
- Raikes, A., Rao, N., Yoshikawa, H., Cohrssen, C., Behrman, J., Cappa, C., Devercelli .A., Boo,F.L., McCoy,D., Richter, L. (2023). Global tracking of access and quality in early childhood care and education. *International Journal of Child Care and Education Policy*, *17*(1), 14. https://doi.org/10.1186/s40723-023-00116-5
- Rao, N., Richards, B., Sun, J., Weber, A., & Sincovich, A. (2019). Early childhood education and child development in four East Asia and the Pacific countries. *Early Childhood Research Quarterly*, 47, 169-181.
- Rao, N., Yang, Y., Su, Y., & Cohrssen, C. (2023). Promoting Equity in Access to Quality Early Childhood Education in China. *Children*, 10(10), 1674. https://doi.org/10.3390/children10101674
- Sachs, J. (2016). Teacher professionalism: Why are we still talking about it? *Teachers and teaching*, 22(4), 413-425. https://doi.org/10.1080/13540602.2015.1082732
- Safitri, D. W., & Istiyono, E. (2022). The Impacts of Zoning System Policies of New Students' Admission on the Education Quality Equalization. *Journal of Education Research and Evaluation*, *6*(4), 619-628. https://doi.org/10.23887/jere.v6i4.52712
- Sayre, R. K., Devercelli, A. E., Neuman, M. J., & Wodon, Q. (2015). *Investing in early childhood development: a review of the World Bank's recent experience*. World Bank Group. https://doi.org/10.1596/978-1-4648-0403-8
- Sheridan, S., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377-401. https://doi.org/10.1080/10409280802582795
- Slot, P. L., Leseman, P. P., Verhagen, J., & Mulder, H. (2015). Associations between structural quality aspects and process quality in Dutch early childhood education and care settings. *Early Childhood Research Quarterly*, *33*, 64-76. https://doi.org/10.1016/j.ecresq.2015.06.001
- Tang, Y. (2023). Research and Practice on an Online Evaluation Model of Teachers' Ethics and Style in Higher Vocational Colleges in the New Era--Take e-commerce major as an Example. *SHS Web of Conferences*, 157. https://doi.org/10.1051/shsconf/202315701025
- UNICEF. (2019). A world ready to learn: Prioritizing quality early childhood education. United Nations Children's Fund. UNICEF, New York. Accessed date: March 2024. https://data.unicef.org/resources/a-world-ready-to-learn-report/.
- Wang, J., Elicker, J., McMullen, M., & Mao, S. (2008). Chinese and American preschool teachers' beliefs about early childhood curriculum. *Early Child Development and Care*, 178(3), 227-249. https://doi.org/10.1080/03004430600722671
- Xia, J., Wang, M., & Zhang, S. (2023). School culture and teacher job satisfaction in early childhood education in China: the mediating role of teaching autonomy. *Asia Pacific Education Review, 24*(1), 101-111. https://doi.org/10.1007/s12564-021-09734-5
- Xie, S., Wu, D., & Li, H. (2022). The relationship between Chinese teachers' emotional labour, teaching efficacy, and young children's social-emotional development and learning. *Sustainability*, 14(4), 2205. https://doi.org/10.3390/su14042205
- Yang, Y., & Hu, B. Y. (2019). Chinese preschool teachers' classroom instructional support quality and child-centred beliefs: A latent profile analysis. Teaching and Teacher Education: An *International Journal* of Research and Studies, 80(1), 1-12.

- http://dx.doi.org/10.1016/j.tate.2018.12.021
- Zhang, L., & Liu, Q. (2017). Early childhood education in economically disadvantaged rural areas of China. In N. Rao, J. Zhou & J. Sun (Ed). *Early childhood education in Chinese societies* (pp.111-130). Springer. https://doi.org/10.1007/978-94-024-1004-4 8
- Zhang, X., Hu, B. Y., Ren, L., Huo, S., & Wang, M. (2019). Young Chinese children's academic skill development: Identifying child-, family-, and school-level factors. *New Directions for Child and Adolescent Development*, 2019(163), 9-37. https://doi.org/10.1002/cad.20271
- Zhang, Y., Han, Y., & Yang, X. (2015). Analysis on the Effectiveness of Preschool Education Teachers Construction in Western China —An Empirical Investigation Based on Shaanxi Province. *Creative Education*, 6, 2219-2230. https://dx.doi.org/10.4236/CE.2015.620219.
- Zhao, Z., & Wang, M. (2019). The development and reform of vocational education in China. *International Journal of Vocational Education and Training Research*, *5*(1), 28-33).
- Zhou, J., Sun, J., & Lee, D. P. L. (2017). Trends in government expenditure in early childhood education in China: Practices in Shanghai, Guizhou, and Ningshan. In N. Rao, J. Zhou & J. Sun (Ed). *Early childhood education in Chinese societies*. 71-84. Springer. https://doi.org/10.1007/978-94-024-1004-4-8

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