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# A comparative study of early childhood education and care national documents between China and Finland

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Early childhood education and care (ECEC) serves as a crucial foundation for children's holistic growth and lifelong learning. Despite its significance, comparative analyses of leading ECEC documents across cultures remain limited. To address this gap, our study conducts a comparative analysis to identify key aspects and examine similarities and differences in national ECEC documents from China and Finland. Methodologically, we used a triangle of researchers from China and Finland. We employed qualitative content analysis to systematically identify, examine, and compare the key aspects in these two countries from the leading ECEC documents, i.e., the Chinese national ECEC guidelines and the Finnish ECEC national core curriculum. The findings reveal numerous similarities alongside notable differences. Both countries place a high value on ECEC, emphasizing principles that shape the learning environment and use diverse pedagogical methods. However, nuanced variations exist in the approaches. The Chinese documents feature more specific guidelines tailored to different age groups, accompanied by detailed pedagogical suggestions, while the Finnish national core curriculum offers general guidelines for all preschool age groups, complemented by the unique feature of individual development plans for each child. The findings have significant implications for policymakers, ECEC educators, and practitioners in international contexts. Future studies are needed to further explore the specific pedagogies in ECEC between these two nations and to analyze how the curriculum and educational guidelines are implemented in pedagogical practices.

## KEYWORDS

early childhood education and care, comparative research, national education documents, curriculum, children, Finland, China

## 1 Introduction

Early childhood education and care (ECEC) serves as a crucial foundation for children's growth and development, laying the ground for a positive and enriching lifelong learning journey (OECD, 2021). According to the OECD (2021) report on ECEC, five policy levers are essential to ensure the quality of children's daily interactions. Among these, curriculum and pedagogy, alongside workforce development, are particularly emphasized. The report

highlights that curricula and pedagogy are instrumental in shaping interactions within the ECEC environment, while a well-developed workforce is crucial for effective implementation. This study aims to compare the national ECEC documents of China and Finland to gain a deeper understanding of the ECEC curricula within these two distinct cultural and educational contexts. To achieve this, we engage a group of 11 ECEC experts from both countries. Through this study, we identify, examine, and compare the key aspects of ECEC as delineated in the national documents of China and Finland.

Educational research views educational systems as a part of a larger cultural context within comparative educational research. In [Bereday's \(1964\)](#) approach, it is important for researchers to familiarize themselves with the culture and society they are studying and be aware and critical of their own personal or cultural biases. According to [Bereday \(1964\)](#), there are four stages for researchers to follow when they compare educational systems of different countries. First, to become familiar with the general principles of each country's educational system and, second, to compare them. Third, to identify the contrasts between the countries' educational systems. Finally, to study and compare the differences and similarities on a more detailed level ([Bereday, 1964](#)). During the continuing educational reforms, it is important to conduct comparative educational research, which, according to [Holmes \(1985\)](#), offers researchers with greater and new insights into their own country's educational system.

Numerous approaches, orientations, and philosophies have been developed within curriculum studies, predominantly focusing on school contexts (e.g., [Saylor et al., 1981](#); [McNeill, 1985](#); [Eisner, 1992](#); [Autio, 2002, 2003](#); [Kelly, 2004](#); [Pinar, 2004](#); [Pinar and Irwin, 2005](#)). [Autio \(2002\)](#) highlighted the primary components of curriculum documents, which include: first, stating the objectives for learning; second, selecting learning activities and implementing them in relation to the objectives; third, organizing the learning environment and operations in alignment with the objectives; and finally, planning developmental assessment methods in accordance with the objectives. [Pinar et al. \(1995\)](#) have been critical of Tyler's instrumental approach but still, Tyler's approach is "the symbolic icon" of curriculum planning ([Autio, 2003](#), page 302). Finnish curriculum researcher [Autio \(2014\)](#) critically addressed the simplistic, evidence-based, uninspired imaginings of neoliberal education reforms where the appreciation of education often decreases by numeral indicators. Consequently, [Autio \(2014\)](#) emphasized the importance of the teacher as the curriculum's interpreter and implementer.

Earlier comparative educational research is also concerned about the ECEC curricula and their interpretation in practices (e.g., [Samuelsson et al., 2006](#); [Einarsdottir et al., 2015](#); [Jensen and Iannone, 2018](#); [Tobin and Kurban, 2018](#); [Kangas et al., 2019](#); [Kuusisto et al., 2021](#); [Guevara, 2022](#); [Tobin, 2022](#)). In particular, [Kangas et al. \(2019\)](#) studied playful learning in Finnish Early Childhood Curricular and Operational Contexts. [Kangas et al. \(2022\)](#) have also implemented a descriptive comparison between the Finnish and Brazil ECEC curricula concerning the play pedagogy element in ECEC.

## 2 Literature review of Finnish and Chinese educational contexts in ECEC

In this section, we present a literature review of the Finnish and Chinese educational contexts in the field of ECEC.

### 2.1 Finnish educational context and core curriculum in ECEC

Finnish education system is highly promoting equity, with learning and education being central elements within the national framework, influenced by cultural and historical factors ([Niemi, 2012](#)). Educational equality in Finland means that all students have access to high-quality education regardless of their social, economic or ethnic background ([Sahlberg, 2015](#); [Autio et al., 2017](#)). The Finnish education system is decentralized ([Niemi et al., 2018](#)), allowing for localized decision-making and flexibility. Finnish teachers have broader autonomy in their profession ([Sahlberg, 2015](#); [Erss et al., 2016](#); [Autio et al., 2017](#); [Haapaniemi et al., 2020](#)). Finnish education system was founded on the Bildung tradition and the ideas of culturally framed school education ([Snellman, 2000](#)). The curriculum development in Finnish education has been shifted from relying on educational psychology and child-centred education towards a competency-based curriculum, although without neglecting its foundation in individual identity-building ([Saari et al., 2014](#); [Sivesind et al., 2016](#)). This has shaped the structures and curriculum development of Finnish education.

ECEC forms the foundation for continuous lifelong learning in the Finnish education system. All children of school age have a subjective right to early childhood education and care (ECEC). The Finnish early childhood education and care (children from 0 to 6 years) is based on the [Act on Early Childhood Education and Care 540/2018 \(2018\)](#), and the National Core Curriculum (NCC) for ECEC 2022 ([Finnish National Agency for Education, 2022](#)). The ECEC providers in municipals prepare the local curricula for ECEC based on the Finnish ECEC NCC. Parents have several options to choose from: ECEC centers, family day care, or for example clubs or playground activities. In Finland, we have both municipal and private kindergartens, which also follow the Finnish NCC. If the parents choose to take care of their child at home, they are entitled to home care leave and allowance until the child turns 3 years old.

In ECEC daycare centers, each child has an individual development plan. It is prepared together between daycare staff members and the child's parents or guardians. An ECEC special needs teacher also participates in the assessment of the child's need for support. The expertise of a social pedagogue and nurses in ECEC can also be used. The child's opinion shall be considered when preparing the ECEC plan. Individual objectives are set to answer e.g., "How pedagogical activities are used to support child's development, learning, and well-being." ([Heiskanen et al., 2019](#)) ECEC providers are mostly municipal providers (84%). The participation of ECEC level is 84.5% (3-year-old children), 88.1% (4-year-old children), and 91.6% (5-year-old children) ([OECD, 2023](#)) and it must be ensured that all children can have the opportunity to participate in pre-primary education before the school starts. Pre-primary education (from 6- to 7-year-old children) can be organized both in kindergartens or primary schools. Finnish pre-primary education is based on the [Basic Education Act 628/1998 \(1998\)](#) and the Finnish ECEC NCC for Pre-primary Education 2014 ([Finnish National Agency for Education, 2014](#)). Participation in ECEC is subject to a fee which depends on family income and the number of children. Pre-primary education is free of charge from 6 to 7, and now with experimental piloting education can also be free in some municipalities for 5-year-olds. In

Finland, each child is supported in their learning and there is a flexible school starting age from 6 to 8 years. Inclusive education and individual support for a child's learning and well-being are the main values of Finnish ECEC. [Supplementary Figure S1](#) illustrates the Finnish ECEC system.

The pedagogical framework of the Finnish ECEC NCC underlies children's rights and holistic learning values (see [Supplementary Figure S2](#)). The conception of learning and operational culture as well as versatile learning environments, cooperation, and playful working methods lay the foundation for goal-orientated activities. The planning of these pedagogical activities begins with the children's interests and needs as well as meaningful aspects of the environment in which the children grow up. Finnish ECEC pedagogy promotes playful learning, versatile learning environments, and transversal competencies.

Holistic ECEC pedagogy promotes children's growth, development, and learning. A holistic pedagogical approach means "a whole-day pedagogy," according to which the child learns, grows, and is nurtured in all everyday situations and while playing, not just during the specific lessons ([Alila et al., 2022](#)). In the Finnish NCC for ECEC ([Finnish National Agency for Education, 2022](#)), the holistic and child-centric nature of ECEC pedagogy comprises education, teaching, and care. Holistic pedagogy means an all-inclusive and playful pedagogical approach that encourages children to develop their curiosity, creativity, and self-expression as well as artistic, linguistic and mathematical skills combined with transversal competencies that help children to succeed in their future learning and growing as a human being or individual and as a member of the society ([Kumpulainen, 2018](#)). Children's development is supported by ensuring that they learn to act as well as to use their competence also for the benefit of others. In ECEC the care situations are always both educational and instructive situations where children learn, e.g., interaction skills, self-care, time management, and good habits.

The quality of the Finnish ECEC is improved through systematic evaluation. Finnish teachers have a high level of autonomy at all levels of education ([Paronen and Lappi, 2018](#)), and in ECEC, they are pedagogical leaders of their team, in which also a nurse or a social pedagogue can work together with a teacher. The quality of ECEC is improved through systematic evaluation at many levels. Evaluation takes place at both national and local levels. ECEC providers must evaluate the local curricula and their implementation. When assessing ECEC units, particular focus is placed on how the activities are arranged and how pedagogy is implemented. The child's ECEC plan should also be evaluated together with their guardians at least once a year. Evaluation helps make the strengths and development needs of ECEC visible. Finnish Education Evaluation Centre (KARVI) is responsible of national-wide ECEC evaluation (e.g., [Repo et al., 2020](#); [Juutinen et al., 2021](#)). Also, the impact of pedagogy, learning, and well-being have been evaluated (e.g., [Ruokonen et al., 2021](#)).

According to the [OECD \(2022\)](#) evaluation of the Finnish Right to Learn ECEC-program 2020–2022 ([Ministry of Education and Culture, 2020](#)), Finland has many of the necessary conditions in place to support structural and process quality in ECEC. It has standards and regulations that help ensure minimum quality levels across the ECEC system, including for factors related to process quality. Different forms of evaluation, including external and self-evaluation, help promote transparency and accountability in the system, as well as a culture of self-improvement.

In addition, the majority of the Finnish ECEC workforce has advanced academic and professional qualifications, as well as access to professional learning opportunities. There were also many challenge areas mentioned to be developed for the future. Disparities in terms of municipalities' capacity and resource levels, and their approaches to evaluation create variation in the quality of provision across the country. There is also evidence that disadvantaged ECEC settings often have difficulties in recruiting and retaining qualified staff, and that staff are not always sufficiently prepared to adapt their practices to children's needs. To address these concerns, the Finnish Right to Learn Program 2020–2022 ([Ministry of Education and Culture, 2020](#)) aims to strengthen the quality of Finland's ECEC provision. Proposed plans include investing in leaders' and teachers' continuous professional learning, developing a digital quality assessment system, among others: to strengthen the arts education and strengthen diversity in pedagogy and work, and ensuring the information about ECEC services for immigrant families and socio-economically disadvantaged families in all areas of the country.

## 2.2 Chinese educational contexts and guidelines in ECEC

The Chinese education system, deeply rooted in Confucianism, prioritizes the cultivation of virtue before the acquisition of knowledge and skills ([Ma, 2011](#)). This philosophy emphasizes the importance of love for family, humanity, and all beings ([Zhang and Zhenyu, 2013](#)). Confucian educators advocate for personalized teaching tailored to each student's cognitive level, learning ability, and aptitude, integrating learning with thinking and doing, and instructing through both words and deeds ([Tan, 2017](#)). Contrary to misconceptions of rote memorization, Chinese education fundamentally values these comprehensive principles ([Li and Wegerif, 2014](#)). In addition to its philosophical underpinnings, the Chinese education system is characterized by its centralized structure, with the Ministry of Education holding the highest authority in planning and designing the national curriculum. Teachers typically adhere to the objectives and materials recommended by the Ministry, which provides clear guidance and structured objectives, particularly beneficial for inexperienced educators ([Law, 2014](#)). However, modernization of Chinese education has been an ongoing process involving a century-and-a-half-long interaction between Western modernity and Chinese Confucian tradition ([Deng, 2011](#)). Western theories and values have been selectively adapted to the Chinese context ([Ding, 2001](#); [Wu, 2011](#)), while Confucian traditions have been reinterpreted and transformed in this cultural exchange ([Tan, 2008](#)), resulting in a pedagogy that embodies both Western and Confucian characteristics ([Cheng, 2011](#)).

In mainland China, ECEC contains two stages, childcare services for children under age 3 and preschool education serving children aged 3–6 years. In terms of preschool curriculum, there are two key documents issued by the Ministry of Education of the People's Republic of China (MOE). The first one is the Kindergarten Education Guidelines (KEG) (for trial implementation) issued in 2001, which provides guidance for early childhood practitioners in planning and implementing educational activities, with the aim to promote high-quality early childhood education ([MOE, 2001](#)). The KEG emphasized the holistic development of children, addressing five interrelated

educational domains including health, language, social, science, and art. For each of these domains, the guidelines outline educational goals, content, and requirement, as well as guidance points. In the organization and implementation section, the [KEG \(2001\)](#) highlighted the importance of creating inclusive and supportive learning environments that respect the individual differences of children in their developmental levels, abilities, experiences, and learning styles. It is recommended to utilize daily life experiences, games, and incidental events that interest children to implement education and to provide spaces, resources, materials, and rules that support child play and exploring activities. In the evaluation section, the [KEG \(2001\)](#) specified that evaluation should focus on whether the educational content, approach, strategies, and environment can motivate children to learn actively and whether the educational process can provide learning experiences that benefit children and meet their developmental needs.

The second document is the Early Learning and Development Guidelines (ELDG) for Children aged 3 to 6 years released in 2012, which is one of the most important policy documents in ECEC. The aim of the [ELDG \(2012\)](#) is to provide guidance to early childhood practitioners and families based on scientific research and educational practices that promote the development of the whole child ([MOE, 2012](#)). To achieve this goal, the [ELDG \(2012\)](#) set out expectations for how children aged 3–6 years should develop and learn in each developmental area and recommend appropriate educational practices. The [ELDG \(2012\)](#) defined early learning and development into five domains, i.e., health, language and early literacy, social development, science and mathematics, and arts. Each domain consists of several subdomains, which refer to specific areas of development. For instance, the health domain contains physical and mental health, motor development, habits of healthy living, and self-help skills. In addition, each subdomain describes specific development and learning benchmarks as well as recommended educational practices for teachers and parents. The benchmarks of the subdomain motor development, for example, include demonstrating age-appropriate balance, flexibility, and coordination, demonstrating strength and endurance, and demonstrating eye-hand coordination skills. Correspondingly, teachers and parents are suggested to help children develop their body balance and coordination through a variety of activities and so on. It should be noted that although the benchmarks highlight developmental milestones at a particular age, they cannot be used to classify individual children according to their level of achievement ([Gao and Huo, 2017](#)). Throughout the guidelines, children are viewed as active agents in their development. Children's curiosity, interests, and approaches toward learning should be highly respected and valued and are developed and promoted during play-based activities.

The [ELDG \(2012\)](#) has been widely used as a basis for curriculum design and implementation, teacher training, educational research, and as an important reference for early childhood educators and parents to understand the development of children aged 3–6 years. The implementation of the guidelines can be summarized in two pathways ([Huo and Shi, 2013](#)): in the top-down pathway, the guidelines are used as an important tool for the government to improve the quality of preschool education and to promote kindergarten training and assessment. In the bottom-up pathway, kindergartens use the guidelines as a reliable reference for

kindergarten training, curriculum development, teaching, and observing children in their daily work. This practice further refines the core content of the guidelines, which helps teachers and parents to understand the characteristics of physical and mental development of children aged 3–6 years and to set reasonable expectations for children's early development and learning.

Both documents advocate achieving the ultimate goal of cultivating children with comprehensive development through play and playful pedagogy. The process of implementing the two guidelines in early childhood education is the process of promoting children's comprehensive development through play. Chinese early childhood education practitioners believe that only by adhering to the principle of “early childhood education is based on the play” and deeply implementing the two guidelines, children become fully developed individuals who meet the requirements of the times in terms of physical, intellectual, moral, aesthetic, and labor aspects. Therefore, under the guidance of the two guidelines, early childhood education practices are exploring how to integrate play into kindergarten curriculum and teaching.

Following the progressive development of preschool education since 2010 when the [China State Council \(2010\)](#) announced the “National Plans for Medium- and Long-Term Education Reform and Development (2010–2020),” the public began to pay attention to childcare services for children aged 0–3 years ([Qi and Melhuish, 2017](#)). In 2019, the Chinese State Council issued the “Guidance on Promoting the Development of Care Services for Infants under Age 3” to promote the development of high-quality childcare services ([China State Council, 2019](#)). To better implement this Guidance, the National Health Commission of China published the “Guidelines on Care Services for Childcare Institutions (for Trial Implementation)” ([National Health Commission, 2021](#)). The aim of the guidelines was to provide guidance to childcare institutions based on scientific research and educational practices that promote the healthy development and well-being of infants and toddlers. To achieve this goal, the guidelines set out goals for how children aged 0–3 years should develop in developmental domains including nutrition and feeding, sleep, lifestyle and hygiene habits, movements, language, cognition, social and emotional development, and recommend appropriate caring suggestions. Despite the recent policy development and high demand from parents, childcare services in China are underdeveloped and of low quality ([Hong et al., 2022](#)).

### 3 Methodology approach

In this study, we aim to conduct a comparative analysis to identify key aspects and examine similarities and differences in national ECEC documents from China and Finland. These two countries' essential educational documents in ECEC are used in this study. We employed qualitative content analysis to systematically identify, examine, and compare the key aspects in these two countries from the leading ECEC documents. The analyzed Finnish education document in ECEC includes (Finnish) NCC for early childhood education and care. This document provides the national-level ECEC education basis and guidelines for all ECEC in Finland by Finnish National Agency for Education from Ministry of Education and Culture. The analyzed Chinese education document in ECEC include (1) Kindergarten

Education Guidelines (KEG) (in Chinese 幼儿园教育指导纲要) for aged 3–6 old children, which focused more on providing policy guidance from the perspective of kindergarten care and education; (2) Early Learning and Development Guidelines (ELDG) for aged 3–6 old children (in Chinese 3–6岁儿童学习与发展指南), which focused more on the learning and development characteristics of children of different age groups from the perspective of child development; (3) Childcare Institution Care Guidance Outline (CICGO) (in Chinese 托育机构保育指导大纲), which focuses more on the care of young children aged 0–3.

The documents are coded, for example, the code of NCC stands for the Finnish National Core Curriculum for ECEC the code of KEG is referred as the Chinese Kindergarten Education Guideline. [Supplementary Table S1](#) lists all the detailed information of all the documents analyzed in this study.

The Finnish national core curriculum for pre-primary education ([Finnish National Agency for Education, 2014](#)) is not included in this study because it is important to have same the equivalence of the age in the document analysis with the Chinese national education.

The English version of the NCC document is an official translation and publication by Finnish National Agency for Education. The three Chinese educational ECEC documents in Chinese were published by the Chinese Ministry of Education and National Health Commission in Chinese language. The English version of the was downloaded from the UNICEF website, which was translated by UNICEF: <https://www.unicef.cn/sites/unicef.org.china/files/2018-10/2012-national-early-learning-development-guidelines.pdf>. Five experienced researchers among the authors in this study, who are fluent in both Chinese and English, have checked the translated document without further modification. The English versions of KEG (2012) and [CICGO \(2021\)](#) do not exist. These two Chinese documents were translated from Chinese to English by the five experienced researchers, who are both proficient in English and Chinese. The translated documents in English version were also reviewed by all authors in this article to ensure that the appropriate ECEC terms are used in all the translated documents. The translated documents in English versions are available upon request from the corresponding author.

This study involved 11 ECEC researchers from China and Finland. A content analysis ([Krippendorff, 1980](#)) is used to identify key aspects and examine similarities and differences in national ECEC documents from China and Finland. We pursue the following research questions in this study:

1. What are the key aspects between the Chinese ECE education guidelines and the Finnish ECE core curriculum?
2. What are the similarities and differences in the key aspects between the Chinese ECE education guidelines and the Finnish ECE core curriculum?

In this study, we employed qualitative content analysis, a research method that aims to draw valid conclusions from data within their context. The aim is to provide insights, facts, and practical guidance for action ([Krippendorff, 1980](#)). Content analysis involves constructing a model to conceptualize the phenomenon under study. [Cohen et al. \(2011\)](#) outlined key elements in the content analysis process, which include coding, categorizing (creating meaningful categories for units of analysis

such as words, phrases, and sentences), analyzing, comparing, identifying, building links, and drawing conclusions. The content analysis process aims to identify meaning and consistency through patterns, themes, and categories ([Patton, 2015](#)). For data analysis, we developed a framework to compare the ECEC core curriculum and guidelines in Finland and China. At first, we examined the table of contents and content descriptions of all documents. Next, we identified keywords and phrases to define the key aspects of each document. Subsequently, we grouped these key aspects into primary components. The framework which consists of the process, key aspects and primary components is illustrated in the [Supplementary Table S2](#), and also explained in the text in section 4.

There are also challenges associated with this data analysis approach. [Creswell et al. \(2007\)](#) says that qualitative researchers approach their topic with a specific worldview, which contains a set of beliefs or assumptions. Each inquiry is distinctive, and the results depend on the skills, insights, analytic abilities, and style of the investigator ([Hoskins and Mariano, 2004](#)). The challenge can be that each researcher interprets the data according to her or his subjective perspective ([Sandelowski, 1995](#)). In this study, we have 11 experienced researchers, among which, six Finnish native speakers, and five Chinese native speakers, and all of them have proficient English language skills. All the researchers have an understanding of both countries' educational and culture backgrounds as well as the ECEC context. At the beginning of the study, we held regular group meetings every second week. During the data analysis and article writing stages, we increased the frequency of our meetings to once per week. Each meeting typically lasted about 2 hours, although some sessions extended to half a day, lasting 3–4 h. Qualitative research relies on the identification of the “subjective interpretation of data,” which enables meaningful data interpretation ([Levitt, 2015](#)). While we aimed to understand what happened in the Finnish and Chinese ECEC context, we wanted to be aware of our own educational and cultural backgrounds. Following [Bereday's \(1964\)](#) method, the research group first became familiar with the general principles of each country's ECEC educational system through discussions and a joint research seminar and then began to compare them using content analysis. During the content analysis, key aspects were initially identified in all curriculum documents independently by four researchers. These initial findings were then discussed, examined, and collectively agreed upon by all 11 researchers involved in the study to ensure the reliability of the analysis. The text parts concerning each key aspect have been compared the differences and similarities of them on a more detailed level. In the meetings of the research group, the interpretations have been discussed, clarified, and specified to interpret the cultural contexts of the curricula and guideline texts. Ten researchers contributed to the data analysis, and we endeavored to achieve a collective synthesis in the data interpretation through the meeting discussions and a review process to ensure the quality and reliability of this study.

## 4 Findings

Findings are presented in accordance with the research questions.

## 4.1 Key aspects among Chinese ECE education guidelines and Finnish ECE core curriculum

Building upon the categories outlined and content descriptions in both countries' ECEC national documents, we identified the following seven key aspects, which can be grouped into three groups ranging from the overarching administrative and general level to the pedagogical level and to the evaluation of ECEC. [Supplementary Table S2](#) demonstrated how the seven key aspects among three primary components emerged from the categories and contents of the documents. The key aspects identified in the three primary components are listed below.

Overall administration, legislation, guidelines, aims, and principles

1. Legislation and administrative structure.
2. General guidelines, aims, operational culture and collaboration.

Planning and implementing pedagogical activities

3. Learning areas and transversal competencies.
4. Age group pedagogy vs. child's individual development plan.
5. Children's involvement and participation.
6. Special needs support.

Evaluation

7. Evaluation.

In the following section, each key aspect will be examined, described, and compared between the Chinese ECEC national documents and the Finnish ECEC NCC.

## 4.2 Similarities and differences in the key aspects between Chinese ECE education guidelines and Finnish ECE core curriculum

Through a comparative analysis, we examine and present the similarities and differences of each key aspect across the national documents of these two countries. Each of these aspects is systematically outlined in its respective sub-section.

### 4.2.1 Legislation and administrative structure of ECEC and national documents

The first key aspect we identified and examined is the legislation and administrative structure of ECEC and related national documents in both China and Finland. Noteworthy similarities and differences emerged in this perspective.

In both countries, the educational guidelines and the core curriculum for children aged 3 to 6 years fall under the administration of the Ministry of Education. However, a notable divergence exists in China, where ECEC guidelines for children under 3 years of age are overseen by the National Health Commission. In Finland, the ECEC Core Curricula (NCC) for all 0–6-year-olds are defined and administered by the Ministry of Education and Culture, in collaboration with the Finnish National Agency for Education.

Another distinctive feature is the presence of two national documents in Chinese ECEC for children aged 3 to 6 years. One document ([KEG, 2001](#)) offers guidelines and principles from the perspective of education for local ECEC authorities, ECEC education at universities and institutes, kindergartens, ECEC educators and personnel, etc. while the other document ([ELDG, 2012](#)) provides additional insights into children's learning, focusing on their development across five key learning areas. The Finnish ECEC national core curriculum ([NCC, 2022](#)) provides all the educational guidelines for all age ranges in the Finnish ECEC.

Chinese ECEC guidelines are more structured and detailed than Finnish ECEC NCC concerning the age group pedagogy and safety guidelines, e.g., "Do not rush children at meals. Remind them to chew slowly and not to play while eating; in eye-hand coordination skills: remind children not to play with sharp items like scissors and knives; able to avoid dangers during outdoor play and sports activities." ([ELDG, 2012](#)).

A noteworthy observation is that the Chinese Early ECEC education documents ([KEG, 2001](#); [ELDG, 2012](#); [CICGO, 2021](#)) were published in earlier years, specifically in 2001, 2012, and 2021, respectively, while the Finnish ECEC core curriculum ([NCC, 2022](#)) was more recently published in 2022.

### 4.2.2 General guidelines, aims, operational culture and collaboration

The second key aspect involves examining the general guidelines, aims, operational culture, and collaboration outlined in the Chinese ECEC education document and the Finnish ECEC national core curricula.

The Chinese ECEC education guideline ([KEG, 2001](#)) emphasized the following key points: (1) ensuring the quality education in ECEC for children's future development and life-long learning; (2) creating conducive conditions for the children's development through close collaboration with families, schools, communities, local education resources; (3) providing children with a healthy and enriching living and learning environment to meet children's needs; (4) respecting children's rights and individual needs, with a specific emphasis on play for children's learning in ECEC.

The aims of Finnish ECEC core curricula ([NCC, 2022](#)) encompassed (1) promoting children's holistic growth, development, health, and well-being; (2) supporting equality and inclusion for all children, respecting children's individual needs and cultural backgrounds; and providing specialized needs support; (3) ensuring optimal conditions and environments for children's learning, health and development; (4) employing versatile pedagogical activities, with a focus on the crucial role of "play" in ECEC; (5) safeguarding the stable relationship between children and the ECEC personnel; (6) developing children's interpersonal and interaction skills; (7) ensuring children's active participation and influence matters concerning them; (8) closely collaborating with children's parents or guardians.

Both countries' ECEC national education documents shared commonalities in this key aspect. Firstly, there was a shared emphasis on prioritizing children's health, development, well-being, learning, and individual needs, while recognizing the integral role of "play" in their educational experience. Secondly, attention was devoted to creating conducive conditions and environments to facilitate children's growth and development. Lastly, collaboration with parents was

highlighted as a significant factor in the ECEC framework of both nations.

The Finnish ECEC core curricula (NCC, 2022) brought additional dimensions, including a strong emphasis on equality and inclusiveness in ECEC, dedicated support for children with special needs, and the cultivation of children's interpersonal and interaction skills. Furthermore, ensuring children's active participation and influence in relevant matters holds particular importance from the Finnish perspective.

### 4.2.3 Learning areas and transversal competencies

The third key aspect involves an examination of the learning areas and transversal competencies outlined in Chinese ECEC education documents and the Finnish ECEC national core curricula.

In the Chinese ECEC education guideline for 3–6 years old children (KEG, 2001), five distinct learning areas were identified: (1) Health; (2) Language; (3) Society; (4) Science; and (5) Arts. This guideline provides clear objectives, learning content, and requirements, along with guidance points for ECEC personnel within each learning area. Additionally, the Early Learning and Development Guidelines for Children aged 3–6 years old (ELDG, 2012) offer a more detailed perspective on children's growth and development, breaking down each learning area into smaller sections and providing specific aims and educational suggestions for different age groups, including 3–4 years old, 4–5 years old, and 5–6 years old. The Chinese ECEC education guideline (CICGO, 2021) for 0–3 years old combined the learning areas, daily life skills, social emotional skills, and also breaking down each learning area into smaller sections and providing specific aims and educational suggestions for different age groups, under 1 year old, 1–2 years, and 2–3 years.

The Finnish ECEC core curriculum (NCC, 2022) also delineated five learning areas: (1) Rich World of Languages; (2) Diverse Forms of Expression; (3) Me and My Community; (4) Exploring and Interacting with My Environment; and (5) I Grow, Move, and Develop (Finnish National Agency for Education, 2022).

Several similarities emerge in the detailed descriptions of learning areas in both countries. The learning areas of Chinese and Finnish ECEC documents, especially (from 3 to 6 in China) were very similar containing the areas of language learning, scientific learning, health and physical learning, the arts, and social skills. For instance, the learning areas of "Language" and "Arts" in Chinese ECEC documents align with the learning areas of "Rich World of Languages" and "Diverse Forms of Expression" in the Finnish ECEC national core curriculum. Similarly, the learning areas of "Society" in Chinese ECEC documents correspond to the learning areas of "Me and My Community" in the Finnish ECEC national core curriculum (NCC, 2022). The learning areas of "Health" in Chinese ECEC documents (KEG, 2001; ELDG, 2012) corresponded to the learning areas of "I Grow, Move, and Develop" in the Finnish ECEC national core curriculum (NCC, 2022). Additionally, the learning areas of "Science" in Chinese ECEC documents align with the learning areas of "Exploring and Interacting with My Environment" in the Finnish ECEC national core curriculum (NCC, 2022).

However, notable differences exist in this key aspect. An important difference is that the Finnish ECEC core curriculum (NCC, 2022) explicitly emphasized the development of transversal competencies in

children, which is not mentioned in the Chinese ECEC education documents (KEG, 2001; ELDG, 2012; CICGO, 2021). The Finnish ECEC lays the foundation of children's transversal competencies. The concept of transversal competence meant an entity of knowledge, skills, values, attitudes and will. It means the ability to apply knowledge and skills and act in each situation. The development of transversal competence promoted children's growth as individuals and as members of their community. The transversal competencies of ECEC NCC (2022) were (1) Thinking and learning (2) Cultural competence, interaction, and self-expression (3) Taking care of oneself and managing daily life (4) Multiliteracy and competence for information and communication technology (5) Participation and involvement (Active and responsible participation and involvement create a foundation for a democratic and sustainable future).

Nevertheless, the detailed descriptions in the Chinese ECEC education documents (KEG, 2001; ELDG, 2012; CICGO, 2021) did mention the skills to be developed, such as learning, interaction, self-expression, and daily life management skills. Notably, digital competence was not mentioned in the Chinese ECEC education documents (KEG, 2001; ELDG, 2012; CICGO, 2021). However, it is interesting to notice that there were some connections and similarities found in Chinese documents concerning transversal skills, such as supporting children's motor development and skills, thinking and problem-solving skills even, e.g., "Encourage young children to find ways to solve problems in activities (ELDG, 2012)."

### 4.2.4 Age group pedagogy vs. child's individual development plan

In the comparison between the Chinese ECEC documents (KEG, 2001; ELDG, 2012; CICGO, 2021) and Finnish ECEC NCC (2022) document, there is one key aspect of age group pedagogy in Chinese ECEC documents and the child's individual development plan in the Finnish ECEC national core curricula.

In Chinese ECEC national education documents, pedagogical goals and implementations were closely tied to children's age groups. Specifically, China's ECEC education guidelines (KEG, 2021) address the needs of children under 3 years old, emphasizing care, child development, and learning. Notably, alongside the general ECEC education guideline (KEG, 2001), there exists a separate document (ELDG, 2012) providing extremely detailed information on children's development and educational goals for each age group. All three Chinese ECEC documents (KEG, 2001; ELDG, 2012; CICGO, 2021) included specific aims and educational suggestions for children ranging from under 1 year old to 5–6 years old.

In contrast, the Finnish ECEC NCC (2022) does not explicitly mention age groups. Instead, it focuses on promoting development and learning in a more general sense, with detailed issues left to local and individual levels.

For example, the curriculum emphasizes the importance of creating a learning environment that considers the child's age and development. Additionally, it allows for flexibility in forming groups based on various factors such as age, sibling relationships, or support needs. Unlike the Chinese curriculum, the Finnish approach does not provide specific age group guidelines.

*"In ECEC, the learning environment must promote development and learning and be healthy and safe, taking the child's age and*

development into account” or “The groups of children may be formed in different ways, for instance, by taking into account the children’s ages, sibling’s relationships or needs for support” (NCC, 2022, page 14).

Instead, Finnish ECEC NCC (2022) emphasized the children’s individual ECEC plan. As it described in the Finnish NCC (2022) below.

“In order to ensure this, an individual ECEC plan is prepared for each child in an early education center and family daycare. The basis for the child’s ECEC plan shall be the best and needs of the child. The child’s opinion and wishes should also be heard and taken into account in the individual ECEC plan process. The personnel are responsible for finding appropriate methods for determining the child’s viewpoints. It is important that the observations and views of both the child’s guardian and the personnel concerning the child’s development and learning stages and ability to act in a group are taken into account” (NCC, 2022, page 7).

A notable difference between the two countries’ ECEC education documents was the level of detail provided for different age groups. The Chinese ECEC guidelines also highlighted the importance of creating inclusive and supportive learning environments that respect the individual differences of children in their developmental levels, abilities, experiences, and learning styles. While the Chinese documents offered specific aims and educational suggestions for each age group, the Finnish core curriculum emphasized the child’s individual ECEC plan. This plan was tailored to each child’s needs and interests, with input from both the child and their guardian. Personnel were tasked with ensuring the child’s viewpoints were considered, taking into account observations and feedback on their development and ability to engage in group activities.

#### 4.2.5 Children’s involvement and participation

In our examination of the ECEC documents of the two countries, we identified one key aspect which concerning the children’s involvement and participation. While both countries prioritize meeting children’s needs and interests, and fostering their development, the Finnish ECEC places a stronger emphasis on children’s initiatives, active participation, and involvement in the planning of pedagogical activities in the ECEC.

The Chinese ELDG (2012) for Children aged 3–6 offered a comprehensive overview and educational suggestions for the five learning areas from the children’s perspective at each age group. This document equipped teachers and educators with abundant information on how to plan and execute pedagogical activities. While the Chinese ECEC KEG (2001) for 3–6-year-olds encouraged teachers to use varied and creative approaches to make activities interesting and engaging, it tended towards a more teacher-directed pedagogical approach to involve children and to attract children’s participation and interests.

“Kindergarten teachers should provide variety of forms educational activities with objectives and purpose, teachers will guide the children with vivid, interesting and active activities of the educational process” (KEG, 2001, page 6).

“Guide children’s interest and desire to investigate the characteristics and changing patterns of common things and phenomena around them” (KEG, 2001, page 4).

Furthermore, the Chinese ECEC KEG (2001) suggested that activities should be directed both directly and indirectly by teachers, highlighting a teacher-directed approach to organizing and implementing activities that are interesting for children, and encourage children’s participation.

“A combination of activities directly directed by teachers and indirectly directed by teachers ensures that children have appropriate time for independent choice and free activities each day. The group activities directly directed by teachers should be able to ensure children’s active participation and avoid the waste of time” (KEG, 2001, page 7).

While the Finnish ECEC NCC (2022) placed a strong emphasis on children’s participation, involvement, initiatives, and interests:

“The initiatives, views and opinions of children... are respected. This requires conscious development of structures and practices that promote participation... Participation is strengthened when the children are encountered sensitively and when they experience that they are seen and heard” (NCC, 2022, page 29).

Finnish ECEC teachers should connect children’s interests and needs with the learning areas (NCC, 2022, Figure on page 35). The Finnish ECEC teachers should plan the pedagogical activities by starting with Children’s interests and needs.

“The planning of the activities begins with the children’s interests and needs as well as meaningful aspects in the environment where children grow up. The learning areas described in Chapter 4.5 are also used as a basis for the planning” (NCC, 2022, page 35).

According to the Finnish ECEC NCC, the pedagogical approach strongly emphasized children’s initiatives, involvement, and participation in pedagogical activities. Chinese ECEC national documents highlighted the teachers’ role to ensure the pedagogical activities are interesting to the child and attractive and encourage children’s participation.

In accordance with the Finnish ECEC NCC, the pedagogical approach notably prioritizes children’s initiatives, involvement, and active participation in pedagogical activities. Conversely, the Chinese ECEC national documents underscore the role of teachers in ensuring that pedagogical activities are engaging and appealing to children, thus encouraging their active participation.

#### 4.2.6 Children’s special needs support

Our examination of both countries’ ECEC documents revealed a significant disparity between Chinese ECEC educational guidelines and the Finnish ECEC core curriculum regarding the key aspect of children’s special needs support.

In Chinese ECEC national documents, children’s special needs support is only briefly mentioned in two instances, with no specific guidance on how to provide such support:



*“Kindergarten education is for the healthy development of all children, and should provide active support and assistance to every child, including those with special needs” (KEG, page 6).*

*“Teachers should pay attention to the special needs of young children, including various developmental potentials and different developmental disabilities, and work closely with families to promote the healthy growth of young children” (KEG, page 7).*

In contrast, the Finnish ECEC [NCC \(2022\)](#) dedicated a section of 13 pages to detailing how to support children with special needs. This comprehensive coverage encompassed principles, responsibilities, cooperation, decision-making processes, forms of support, support levels, and evaluation criteria. Additionally, special needs support was integrated into children’s individual development plans, as articulated in the Finnish national ECEC core curriculum:

*“An ECEC service organiser has the duty to provide the support a child needs at an early education centre or in family daycare. The child’s need for support is assessed, and support is arranged without delay. In early childhood education and care, support is provided as general, intensified, and special support in keeping with the principles of inclusion. As a basic premise, children have the right to receive support in their child group delivered through different flexible arrangements. If the child’s support needs so require, the child has the right to participate in ECEC provided in a small group or a special group” (NCC, 2022, page 53).*

The evidence underscores the considerable discrepancy between the two approaches, with the Finnish ECEC [NCC \(2022\)](#) offering a far more comprehensive model and process for supporting children with special needs compared to the Chinese ECEC national documents.

#### 4.2.7 Evaluation

The seventh key aspect we identified and examined is the evaluation of ECEC. Both countries’ approaches to ECEC evaluation exhibit numerous similarities, with the primary aim being to enhance the quality of ECEC services. In both contexts, evaluation was regarded as crucial for understanding the effectiveness of education, making necessary adjustments, and promoting the development of each child:

*“Educational evaluation is an important part of kindergarten education, a necessary means to understand the appropriateness and effectiveness of education, to adjust and improve work, to promote the development of each child, and to improve the quality of education” (KEG, 2001, page 7).*

*“This evaluation helps promote the quality of ECEC, recognize the strengths of the activities, and highlight development needs and improve the activities” (NCC, 2022, page 67).*

Evaluation in both countries occurs at various levels, including national, service organizer, personnel, and involvement of children and parents. While the Finnish ECEC evaluation involves individual-level assessment through the implementation of each child’s individual

development plan, the Chinese ECEC documents suggested the importance of monitoring children’s behavioral performance and developmental changes:

*“Assessment at the level of individuals means the evaluation of the implementation of children’s individual ECEC plans. It is important to always evaluate the implementation of the child’s ECEC plan before revising it or preparing a new plan” (NCC, 2022, page 69).*

*“Children’s behavioral performance and developmental changes have important evaluative implications and should be viewed by teachers as important evaluative information and a basis for improvement” (KEG, 2001, page 8).*

Both countries emphasized the involvement of relevant parties in the evaluation process, including administrators, teachers, children and their parents/guardians:

*“Administrators, teachers, children and their parents are all participants in the evaluation of kindergarten education. The evaluation process is a process of joint participation, mutual support and cooperation among all parties” (KEG, 2001, page 7).*

*“Evaluation at the education and care provider and unit level is an essential part of the management and development of ECEC at the local level. Children and their guardians shall be provided with an opportunity to participate in evaluating ECEC regularly” (NCC, 2022, page 67).*

The evidence highlighted the crucial role of evaluation in ECEC, with both countries emphasizing its importance and describing clear processes to enhance ECEC quality.

#### 4.2.8 Summary of the findings

In this section, we provide a summary of the main findings of this study. Upon comparing the national Early Childhood Education and Care (ECEC) policy documents of China and Finland, we identified seven key aspects categorized under three primary domains, as listed in section 5.1. While there are numerous similarities across these aspects, there are also notable differences.

Among the seven key aspects, significant similarities were identified in four areas, with minor differences or variations in emphasis: Aspect 1—Legislation and administrative structure; Aspect 2—General guidelines, objectives, operational culture, and collaboration; Aspect 3—Learning areas and transversal competencies; and Aspect 7—Evaluation.

The most significant differences emerged in three areas: Aspect 4—Age group pedagogy vs. child’s individual development plan; Aspect 5—Children’s involvement and participation; and Aspect 6—Special needs support. A visual summary of the findings can be found in [Supplementary Figure S1](#) to this article.

## 5 Discussion

In this study, we followed the recommendations of [Bereday \(1964\)](#) and [Holmes \(1985\)](#) for comparative educational research. First,

we provided an overview of the background and general principles of Finnish and Chinese ECEC as well as their education systems. We then carried out a more detailed study and comparison of their differences and similarities (Bereday, 1964).

Based on our findings, both Chinese and Finnish ECEC national documents shared a primary domain characterized by the main components of objectives, pedagogical implementation, and evaluation, as described by Autio (2002). While there were many similarities between the ECEC national documents of both countries, there were also notable differences.

The first primary component in both countries' ECEC national documents related to overall administration, legislation, guidelines, aims, and principles. This component encompassed two key aspects: legislation and administrative structure, and general guidelines, aims, operational culture, and collaboration. At this level in national ECEC documents, despite the two countries' different culture backgrounds and education systems, both countries share strong similarities in overall administration, legislation, guidelines, aims, and principles in ECEC. We can interpret that ECEC is a crucial foundation for children's holistic growth and lifelong learning as was stated also in OECD (2021). Both emphasized the prioritization of children's health, development, well-being, learning, and individual needs (Heiskanen et al., 2019), which aligns with the main principles of both the Finnish education system (Niemi, 2012; Saari et al., 2014; Sivesind et al., 2016) and the Chinese education system (Ma, 2011; Zhang and Zhenyu, 2013). Additionally, creating conducive conditions and environments for children's growth and development, as well as collaboration with parents, were highlighted as significant factors in both nations' ECEC frameworks. At the same time, we also noticed that Chinese ECEC guidelines exhibited a more structured and detailed approach, particularly regarding pedagogy and safety guidelines for different. This is confirmed by earlier research, which found that the Chinese education system and curriculum were more centralized and provided clear guidance and structured objectives for teachers (Law, 2014).

The second primary component in both countries' ECEC national documents focused on the planning and implementation of pedagogical activities. This component included four key aspects: learning areas and transversal competencies; age group pedagogy vs. child's individual development plan; children's involvement and participation; and support for special needs. Notably, this pedagogical component showed prominent differences. While there were strong similarities in the key aspects of learning areas and transversal competencies, significant differences were observed in the pedagogical implementation. Chinese ECEC emphasized age-group pedagogy, whereas Finnish ECEC emphasized the child's individual development plan and highlighted children's involvement and participation. Furthermore, special needs support for children in Finland was extensively described, spanning a full section of 13 pages, whereas Chinese documents only briefly mentioned this aspect. This discrepancy suggests that the Chinese ECEC places more emphasis on group activities and age differences rather than individual child differences.

The final primary component in both countries' ECEC national documents related to evaluation, which was emphasized and clearly described in both contexts. Strong similarities were observed in this aspect between the two countries. This finding indicated that evaluation was an essential and significant component in both countries' ECEC national documents.

Overall, while the structures and primary components of both countries' ECEC national documents exhibit similarities, the main differences are evident in pedagogical implementation. This suggests that despite shared overarching aims, principles, and evaluation systems, there exist variations in planning and executing pedagogical activities to achieve ECEC educational objectives and meet evaluation requirements. It's important to note that this study does not aim to determine which approach is superior; rather, its focus is on highlighting similarities and differences between two countries with distinct cultural and educational backgrounds.

Additionally, it's noteworthy that the Chinese ECEC national documents for the 3–5-year-old age group are dated 2001 and 2012, whereas the Finnish ECEC NCC was updated as recently as 2022. Considering the cultural and educational system backgrounds of both countries is essential for a comprehensive understanding of their respective ECEC national documents.

## 6 Conclusion and future research

This study aimed to conduct a comparative analysis to identify key aspects and explore similarities and differences in ECEC national documents from China and Finland. Despite the varying cultural and educational contexts, this study did not seek to determine which country's ECEC curriculum documents are superior. Instead, it strives to understand the similarities that exist despite the cultural and educational differences in these two countries. Additionally, we intend to use this study as a basis for further research into ECEC in both countries, seeking to learn from their diverse contexts. While this research highlighted strong similarities between the ECEC national documents of both countries, it also revealed noteworthy differences in pedagogical planning and implementation, influenced by cultural and educational system disparities. These findings offer valuable insights for policymakers and educators in shaping ECEC documents to guide teaching and learning practices.

It's important to note that this paper only focused on comparing key aspects based on the overall structure and content of the ECEC national documents of China and Finland. Further research is necessary to examine how these documents are carried out in practical implementation in both countries. Moreover, additional studies are needed to delve into specific pedagogical approaches, such as the integration of play and playfulness in children's learning experiences, within the educational contexts of China and Finland.

In conclusion, this study contributes to the comparative analysis of ECEC national documents between China and Finland. It provides valuable insights into how countries with diverse cultural and educational backgrounds structure their ECEC national documents and highlights both similarities and differences in key aspects of ECEC implementation.

## Data availability statement

The original contributions presented in the study are included in the article/[Supplementary material](#), further inquiries can be directed to the corresponding author.

## Author contributions

SN: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. O-PM: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Validation, Visualization, Writing – review & editing. IR: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Supervision, Validation, Visualization, Writing – review & editing. AM: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – review & editing. SS: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Supervision, Validation, Visualization, Writing – review & editing. XW: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – review & editing. HZ: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – review & editing. T-RH: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Supervision, Validation, Visualization, Writing – review & editing. JM: Conceptualization, Methodology, Writing – review & editing. XL: Conceptualization, Data curation, Formal analysis, Methodology, Validation, Visualization, Writing – review & editing. LW: Writing – review & editing.

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## Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2024.1392920/full#supplementary-material>

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