Transcending Boundaries: Exploring Nordic Education Models for Enhancing China's Educational Landscape

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Abstract. When the Nordic countries are mentioned, they are often regarded as examples of social democratic welfare systems with certain unique qualities. In modern times, education has been recognized as one of the cornerstones of the welfare state. Through Finland's impressive performance when the results of the first international PISA test were released in December 2000, the Nordic model of education, including the Danish, Finnish, Icelandic, Norwegian, and Swedish education systems, has come to be frequently referred to and recognized as a model for education in the world. This paper analyses the Nordic education system based on existing data and literature, with the aim of suggesting its applicability to China's education system by analyzing the sophistication of the Nordic countries' educational philosophies and teaching methods. Despite the differences between the Nordic countries and China, this paper proves that some of the advanced policies and concepts of the Nordic education system can be applied to China's education system and gives the following four recommendations. (1) Emphasis on teacher evaluation literacy enhancement; (2) Teachers and parents value equality and inclusion in education; (3) Accurately grasping the function of comprehensive student assessment; (4) Developing a diversified curriculum to enhance quality.

Keywords: Nordic education model, ECEC welfare policy, social inclusion, PISA test, China's education system.

1. Introduction

Education is seen as an important factor in personal, social and economic development. In today's era of rapid national development, the quality of education and the quality of the people (teachers) who provide it are considered national concerns. It is a common practice of all proactive countries to learn from outstanding education systems and integrate them into their own educational policies. The Nordic countries are often seen as models with social democratic welfare systems [1]. When the results of the first PISA international tests were released in December 2000, Finland ranked first in reading, science and mathematics. This led to its education system, and the Nordic education model as a whole, beginning to be often discussed and compared as exemplary. In fact, in the latest PISA results published in 2019, Finland remains one of the highest-scoring countries. It ranked 7th in reading, 16th in math, and remains firmly in 4th place in science. Notably, the Asian education system, Beijing-Shanghai-Jiangsu-Zhejiang China (B-S-J-Z) managed to rise to the top three in three subjects in PISA [2].

The advanced nature of the Nordic educational model is reflected in its attempt to construct a national educational system based on specific values and practices, while at the same time it actively borrows from international influences on educational philosophies, such as the theories of John Dewey and Paulo Freire [3]. Teacher quality has also been particularly emphasized and highly demanded in Nordic education policy. Teacher quality includes qualifications, subject expertise, language skills, and classroom skills etc. [4]. In Finland, a rigorous graduate degree and a minimum of five years of full-time study are the foundation of the teaching profession. Sahlberg believes that better educated teachers are not only more effective in the classroom, but also gain considerable autonomy to keep the countries' education systems healthy [5].

The advanced educational model and policy systems of the Nordic countries, including Finland, Norway, Sweden, Denmark, and Iceland, have been the subject of many well-researched and comprehensive analyses in the past. However, there has been little discussion of how the Nordic

education system compares and contrasts with the education systems of a particular country, and of its feasibility and applicability. The rise of Asian education systems, especially China, in the PISA rankings in recent years has been remarkable, so it makes sense to compare it with the Nordic countries, which have been consistently at the top of the rankings since 2000. Since Nordic education systems often imply Denmark, Finland, Iceland, Norway, and Sweden, it is challenging to discuss all five countries simultaneously in a one-piece study, so this paper will focus extraordinarily on Finland and Netherlands when presenting specific examples. Through a case study with the Nordic countries as the starting point, this paper will explore the advanced educational concepts and teaching methods in the Nordic countries based on the available data and literature, taking into account the current situation of Chinese education, such as the implementation of the double reduction policy, with the aim of exploring the applicability of Nordic educational concepts and policies to the Chinese education system.

2. Nordic Education Model

The Nordic countries, including Denmark, Finland, Iceland, Norway, and Sweden, are examples of social democratic welfare systems characterized by extensive economic redistribution and high levels of taxation, as well as widespread policies covering pensions, free education, health insurance, and childcare. Education, as an important component of the Nordic welfare system, is also often mentioned and referred to as the "Nordic education model" [1]. The Nordic education model is based on social justice and social security and aims to provide equal and quality education to all citizens regardless of their social class, gender, or geographical origin. Government-funded comprehensive school systems are the main form of the ideal Nordic model [3].

3. PISA's Finnish Success

When the PISA results were first published in December 2000, Finland outperformed 31 other OECD countries, ranking first in reading, science and mathematics. Finland's high ranking in the PISA international test results, which has continued from then until now, has certainly drawn attention to its education system from countries and the media. Some countries, such as Japan, even look to Finnish education as a reference for their educational reforms [6]. Although education is somewhat specific and local, along with globalization, learning and adopting policies from other good education systems can also lead to progress for one's own education system.

4. ECEC Policy

In Northern Europe, education, teaching and care are seen as a whole, therefore, the term Early Childhood Education and Care (ECEC) is also often used when describing the Nordic education model [7]. The Early Childhood Education and Care (ECEC) policy is based on a holistic, child-centered approach and emphasizes participation, democracy, autonomy and freedom. Northern Europe views ECEC policy as an investment in the future and relies on a skilled workforce to guarantee the delivery of high-quality early childhood education programs. The Nordic welfare model is thought to be fundamentally dependent on the provision of social services for families with children. The concept of ECEC services is widespread and entrenched in Nordic legal systems. For example, in Finland, all children under the age of three were granted the right to daycare in 1990. By 1996, all preschoolers were covered by this promise. Sweden swiftly adopted this arbitrary right after Finland became the first nation in the world to do so, and it recently revised its ECEC laws to offer free preschool for kids between the ages of 1 and 5. The Education Act now includes this legislation.

The Nordic welfare model values social inclusion highly, and they think that every person should have an equal opportunity to participate in society. Nordic childhood is defined by two pillars: the Nordic welfare model and universal child-centeredness. The following tenets for a successful childhood are ideal Nordic aims for child-centeredness: equality, democracy, freedom, amicable and

constructive social ties, and solidarity. The Nordic early childhood policy texts aim to build values such as security, democracy, care, and competence [8].

One of the key pillars on which the rules are built is democracy, according to the curriculum frameworks for the Danish, Icelandic, Norwegian, and Swedish countries. The basic principles of democracy are emphasized throughout all of Finland's papers, even though the name "democracy" is not used in any of them. For instance, they promote children's participation and impact. First and foremost, institutions are held accountable for upholding democratic values. Preschools and preschool teachers are thought to be in charge of giving kids the environments and chances they need to learn about and experience democracy. They also aim to help kids become active participants in democratic society. Preschools also have a duty to support democracy by making an effort to live democratically in their everyday lives. Since democratic preschool practices are based on equality, solidarity, diversity, and responsibility, they will help children in preschool feel like they are a part of a group and a community. Preschool programs are conducted democratically to encourage the growth of children's sense of responsibility and desire to actively participate in the community. The individual, which emphasizes each person's freedom of choice, involvement, and accountability, is the last component of democracy. Children should always be treated with respect by preschoolers. Children are recognized as active agents and decision-makers who have the power to alter how teaching and learning are carried out. Children can, for instance, take part in designing the kindergarten's layout and furnishings as they eventually learn to assume more accountability for both the group and themselves.

All Nordic preschool curriculum recommendations include caring for children as an essential preschool function. Preschools should work with parents to give children with care that promotes their overall development and self-esteem and aids in the building of a happy and healthy childhood. Additionally acknowledged as having inherent value is care. A child's moral and emotional connection to others is seen as their care. According to the Finnish curriculum, secure and warm connections, a sense of group solidarity, and belonging to a group all contribute to a child's wellbeing. In order to rapidly respond to children's needs and pay attention to them, the Finnish curriculum requires teachers to be sympathetic, committed, and sensitive. The curricula of Iceland and Sweden likewise place a strong emphasis on the development of empathy and concern for others, as well as openness and respect for people's viewpoints and diversity in life.

All Nordic curricula typically employ value terms connected to competence. Social skills are appreciated and prioritized among other things. According to the Norwegian curricular framework, social skills are developed through regular interactions, expressed and learned through children's relationships with adults and other children. The preschool should aid in the child's development of a creative and positive self-image. All curricular recommendations also emphasize the importance of play-based learning. In preschool, play is beneficial for fostering children's development and learning because it is seen as natural and inseparable from childhood. By connecting with one another during play, kids can develop a solid foundation of social skills. Children run into issues while playing and work through them. Children's inventiveness and drive to study are also stimulated by play.

Overall, the Nordic ECEC policy attempts to construct the values of democracy, care and competence [8].

5. Social Inclusion

Contemporary education policy in the five Nordic countries, Denmark, Norway, Iceland, Finland, and Sweden, is situated within a social-democratic and liberal welfare state model. Contemporary education policies in these countries demonstrate the importance of social inclusion. Firstly, in the social inclusion of educational policies, the Nordic countries stand out as examples of social democratic welfare states that emphasize democratic values and participation in school and society. Secondly, there are numerous ways to prevent social exclusion, and social inclusion in education also entails equal access to education for all people, regardless of gender, socioeconomic status, or

geographic origin. Thirdly, the Nordic education model emphasizes the integrated nature of public and private education. For example, there are generally few formal divisions in the Nordic education system, such as between academic and vocational courses in upper secondary schools. The vast majority of primary and secondary schools in the Nordic countries are public schools; in upper secondary schools, the Nordic countries are among the least socially segregated. Finally, the Nordic model of educational policy emphasizes social community and collective values, as well as individualization, e.g. schooling, should give children sufficient opportunities to develop their own attributes and use them to their advantage. In addition to this, individualization supports services for students with disabilities. Education is largely seen as an element of welfare policy in the Nordic countries, and emphasis is placed on socially inclusive education policy [9].

6. Teacher Quality

In Finland, playing the role of a teacher is highly popular. For the 700 slots in elementary education at Finnish universities, thousands of recent high school graduates apply each spring. The five-year master's program only accepts around one in ten candidates. The fact that this degree is among the most competitive academic credentials on the Finnish job market is one of the factors contributing to its popularity. In addition to this, teaching is often cited as a top career choice in Finland because it also requires professional autonomy on the part of the teacher. As a result, Finnish teachers enjoy their work and enjoy a good reputation.

There are two main aspects of Finnish teacher education that set it apart from teacher education elsewhere in the world. First, the basis for becoming a teacher in the Finnish teaching profession is a rigorous postgraduate degree and a minimum of five years of full-time study. In addition to giving teachers a significant lot of liberty in crafting their own lesson plans and school schedules, this demanding and specialized teacher education aids in teachers' development of a deeper grasp of leadership, curriculum, and child development. In Finland, becoming a teacher necessitates having a high degree of general knowledge, strong social abilities, and distinct ethical objectives. The Finnish educational system is cognizant of the complexity of teaching as a vocation and the need for sophisticated academic training. It is not a profession that can be taken up by anyone, even with clear guidelines and specific standards.

Teachers in Finland have a great deal of autonomy, and early educational reforms in Finland were realized by building capacity and trust in school professionals. However, too much teacher autonomy and trust can also lead to confusion and difficulties in implementing new reforms, leading to unintended consequences [10].

Second, when teachers are given more control over course design, teaching methods, and student assessment, they tend to be more motivated and inspired to teach than when they are forced to provide prescribed expertise. Similarly, these teachers have a better understanding of child development and psychology, and when they encourage students to find their own ways of learning without fear of failure, students achieve better results than they would under the pressure of being regularly subjected to external standardized tests [5].

In order to resolve their teacher education conundrum—namely, whether teacher education institutions should aim to provide a single curriculum appropriate for all schools or whether they should reflect the diversity of schools by providing a variety of teacher education programs with different teacher qualities—the Netherlands proposed context-specific teacher education. In the Netherlands, teachers' diversity and originality in the classroom are respected, and new standards are frequently created for them. Due to the dynamic changes in the quality of teachers in the Netherlands, teacher training institutes are under constant pressure to reinvent their curricula and prepare teachers for all types of classrooms, from highly creative local schools to traditional classrooms [4].

Comparatively speaking, teachers in Finland have a shorter workload than those in the US [11]. Four to six 45-minute lessons are taught by teachers each day in elementary and middle schools. Students are permitted a 15-minute break following each 45-minute instruction. Additionally, during

this break, teachers can head back to the teachers' lounge to relax or visit with their peers. As a result, the majority of Finnish schools feature a laid-back vibe and casual teacher-student interactions. In a low-stress and laid-back working environment, Finnish instructors are able to inspire others.

7. Applicability Discussion

When looking at education models and policies in other countries, it is necessary to recognize the convergences and differences between countries. Most of the Nordic countries are low population, high welfare, high tax countries. The country's education welfare policy is also very good, children from birth to enjoy the welfare policy of the state, with business education, do not need to pay tuition fees and books, enjoy the school lunch free of charge. The entire Finnish school is in a more equal state, in the eyes of the Finnish people, each school is the same, there is no which school is good, which school is bad, the Finnish people, the closest school is the best school, and this is also very different from China. China has a large area and a large population, whether it is primary and secondary schools or universities, there is also a big gap between schools, and the difference between schools in different regions is also very big, which affects the choice of different schools for children, and because of this gap, it has contributed to the development of test-based education. However, for the sake of children and education, it is possible to learn from and change.

7.1. Emphasis on teacher evaluation literacy enhancement

This paper contends in the analysis portion that Finland is a prime illustration of the high standards and demands of Nordic teacher quality and teacher education. Teachers are the crucial main body of assessment, and teachers' evaluations of students have a significant impact on students' self-development. The reform of China's education evaluation system can advocate for the engagement of teachers, students and peers, parents, and other multi-bodies in evaluation. instructors' understanding of the assessment process and the caliber of rubric writing need to be enhanced, and instructors should get pertinent professional training to advance their skills in professional evaluation.

7.2. Equality & Inclusion

In China, respect for teachers has always been a part of the education philosophy. In Finland, equality and inclusion are concepts that teachers and parents always convey to their children. Nordic education recognizes individuality and does not hold children to uniform standards, and early education is encouraging, supporting children to develop and make the most of their individuality. This philosophy of education is worth implementing in China's early education, and teachers and parents should learn to explore children's strengths, understand and tolerate children to better support their development.

7.3. Accurately grasping the function of comprehensive student assessment

In Chinese education, the basic function of students' comprehensive quality assessment is "educating people" at the elementary school level and "educating people + selection" at the junior and senior high school levels. However, in practice, its primary and core function is always "educating people". In the implementation of the comprehensive assessment process, schools should be based on the cultural construction of the basis, accurate understanding, grasp the function of the comprehensive assessment, in the overall design of the school's work in its accurate positioning, constantly update the concept, unify the understanding of the efforts to promote the comprehensive quality of each student comprehensive improvement.

7.4. Developing a diversified curriculum to enhance quality

The Nordic educational philosophy emphasizes the growth of well-rounded, unique students. In order to accomplish this, it is crucial to focus on students' genuine needs, develop their interests and skills in a way that is appropriate for their own growth, and respect the outcomes of instructors'

assessments of students when implementing the curriculum. Therefore, schools should incorporate multiculturalism and local characteristics into the development of the curriculum, diversify the curriculum's content and delivery, increase the development of research-based learning courses, improve the quality of students' thinking, and advance the quality of education through effective educational and teaching strategies.

8. Conclusion

This paper mainly analyzes the educational philosophy of the Nordic countries and the advancement of their teaching methods through the Nordic education model. The three aspects of the Nordic education model, namely the ECEC welfare policy, social inclusion, and the quality of teacher education, are analyzed in depth to determine the advancement of Nordic education.

The final conclusion of this paper is that although the Nordic countries, including Denmark, Finland, Iceland, Norway and Sweden, are not exactly the same as China, some of the advanced policies and concepts of the Nordic model of education are advisable for today's Chinese education system.

Taking into account the resemblances and distinctions observed between the Nordic nations and China, this research document presents a compilation of four recommendations aimed at fostering learning and transformation within the Chinese educational framework. These suggestions draw inspiration from the globally acclaimed Nordic education system. (1) A heightened focus on enhancing teacher evaluation acumen; (2) Encouraging educators and parents to foster an environment of educational fairness and inclusivity; (3) Gaining a precise comprehension of the role of comprehensive student evaluation; and (4) Crafting a multifaceted curriculum to enhance educational excellence.

The research sheds light on the ideals ingrained in the Nordic educational model and highlights their parallels and contrasts. However, it is important to acknowledge the study's methodological constraints. This paper's primary sources are secondary data and secondary literature, and there is no quantitative analysis. The Nordic educational model encompasses various aspects of policy and management practices, among others, and this paper only discusses three notable aspects in depth. Therefore the analysis of the Nordic education model may not be comprehensive and complete. The results of this study are revealing and require further research. It is suggested that future research could focus on collecting primary data to provide a more comprehensive analysis of the Nordic education model and doing qualitative and quantitative research to obtain more accurate data.

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