



# Implications of Finnish Phenomenal Teaching for Interdisciplinary Teaching in Basic Education in China

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## Abstract

The purpose of this study is to analyze in depth the phenomenal teaching model at the basic education level in Finland, including its theoretical basis, implementation process, effectiveness and drawbacks, through literature analysis and comparative research. By comparing and contrasting subdisciplinary teaching, the study reveals the advantages of phenomenal teaching in cultivating students' interdisciplinary literacy, and at the same time reflects on its shortcomings. The study adopts literature research method, case study method, and comparative analysis method to systematically sort out the theory and practice of Finnish phenomenon teaching, and conducts a comparative analysis of the current situation of interdisciplinary teaching in China's basic education stage. The expected outcomes of the study include the formation of a comprehensive understanding of Finnish phenomenon teaching, the refinement of its implications for interdisciplinary teaching in China, and the attempt to put forward targeted suggestions for improvement. Through this study, it is expected to provide useful reference for the practice of interdisciplinary teaching at the basic education level in China, and to promote the improvement of education quality and the development of students' interdisciplinary literacy.

## Subject Areas

Pedagogy, Sociology

## Keywords

Finland, Comparative Education, Phenomenal Teaching, Basic Education

## 1. Preamble

With the deepening development of globalization and the knowledge-based

economy, education is facing unprecedented challenges and changes. The traditional discipline-centered education model has, to a certain extent, bound the development of students' interdisciplinary thinking and comprehensive quality. Therefore, interdisciplinary education, as an innovative educational concept and practice model, is increasingly receiving widespread attention. As a leader in the field of education, Finland's phenomenal teaching, as an important form of interdisciplinary education, has been remarkably effective in developing students' interdisciplinary literacy and comprehensive abilities.

Interdisciplinary education, as an interdisciplinary or supra-disciplinary educational concept, emphasizes the breaking down of disciplinary barriers and the integration and application of knowledge. As a pioneer in education reform, Finland's phenomenal teaching is a vivid practice of the concept of interdisciplinary education. Phenomenon teaching is based on students' interests and real life, and integrates knowledge in an interdisciplinary way, allowing students to develop interdisciplinary literacy and comprehensive abilities in the process of solving practical problems. This mode of education is not only in line with the law of students' cognitive development, but also helps to cultivate students' innovative thinking and problem-solving ability.

However, despite the growing importance of interdisciplinary education, the practice of interdisciplinary teaching at the basic education level in China still faces many challenges. How to effectively integrate disciplinary resources, design quality interdisciplinary programs, and enhance students' interdisciplinary literacy has become an urgent problem in the current education field.

## **2. Background and Significance of the Study**

### **2.1. Background of the Study**

#### **(1) Realistic Context**

The rapid development of society in the twenty-first century has placed new demands on people's skills for sustainable development for the future. The United States has adopted the P21 framework to explore the skills necessary for young people's success, while Japan has taken "survival skills" as a direction for educational development. Developing countries are also building frameworks for the development of core student literacy. A global consensus has been formed on the need to cultivate interdisciplinary talents, and interdisciplinary teaching has become a top priority in the world's basic education reform. Against this background, Finland proposed phenomenal teaching based on interdisciplinary literacy in the 2014 curriculum reform. Phenomenal teaching centers on a certain "phenomenon" and focuses on breaking down disciplinary barriers and integrating interdisciplinary knowledge, which is in line with the requirements of today's fast-developing era, and has achieved a lot of good feedback and gained wide attention from the international education community.

#### **(2) Policy Orientation**

In 2022, the Ministry of Education issued the Compulsory Education Curri-

culum Program and Curriculum Standards (2022 Edition), [1] which called for optimizing the structure of curriculum content, emphasizing the establishment of interdisciplinary thematic learning activities, strengthening interconnections between disciplines, and driving the implementation of curriculum integration. [2] proposes that each course spend no less than 10% of class time on interdisciplinary thematic learning to develop students' ability to apply knowledge to solve practical problems. Core literacy training and interdisciplinary teaching reform have become hot topics in China's education.

### **(3) The Reality of the Dilemma**

In 2016, China formally promulgated the Core Qualities for Student Development in China, proposing the cultivation of "comprehensively developed people". [3] Nevertheless, China still focuses on traditional subject-specific teaching, which has led to problems such as redundant curriculum content, subject fragmentation, and the tendency to teach to the test. Although this teaching method can make students stand out in test-oriented education, the fragmentation and redundancy of learning content will hinder the cultivation of students' interdisciplinary literacy. As for interdisciplinary teaching, there is the problem of shallow and superficial understanding of it, and teaching practice that emphasizes operation over form rather than substance. There is a certain lack of understanding of why and how to implement interdisciplinary teaching. China's interdisciplinary teaching is still in the beginning and exploratory stage, so although Finland's phenomenon of teaching has its own unique national background, its curriculum reform measures and experience for China's basic education stage of interdisciplinary teaching reform is still an important reference significance.

## **2.2. Research Significance**

### **(1) Theoretical Value**

Phenomenal teaching emphasizes the use of real-life phenomena as the starting point for learning, and promotes students' deep learning through interdisciplinary knowledge integration. This study will deeply analyze the theoretical connotation of phenomenal teaching, reveal its impact on student learning, teacher teaching and school management, and provide a more in-depth theoretical foundation for understanding phenomenal teaching.

Through the in-depth study of the Finnish phenomenon of teaching, we can distill the theoretical basis and practical strategies of its interdisciplinary integration and provide new perspectives and ideas for the theoretical construction of interdisciplinary teaching in China's basic education, so as to further enrich and improve the theoretical framework of interdisciplinary teaching in China.

### **(2) Practical Implications**

The implementation strategies and methods of Finnish phenomenon teaching are of great significance for interdisciplinary teaching in basic education in China. This study will take into account the actual situation of basic education in China and put forward specific practical suggestions to help teachers better integrate the knowledge of different disciplines, design teaching situations that

meet the cognitive characteristics of students, and improve students' interest and participation in learning.

The introduction of the successful experience of phenomenal teaching in Finland will also promote the reform of interdisciplinary teaching in the field of basic education in China. By reforming teaching content, teaching methods and evaluation methods, China's basic education can promote the updating of educational concepts and the innovation of teaching methods, and improve the quality and effectiveness of interdisciplinary teaching.

Finnish phenomenon teaching focuses on cultivating students' comprehensive qualities, including critical thinking, creativity, and teamwork. This study will explore how these goals can be realized through interdisciplinary teaching and provide specific practical paths and strategies for basic education in China to help students develop holistically and improve their comprehensive quality.

### **3. Current Status and Review of Domestic and International Research**

#### **3.1. Research on the Pedagogical Content of the Finnish Phenomenon**

Sahlberg points out that phenomenological teaching aims to “enhance the ability of students to adapt to contemporary society”, and that the content of the teaching is not only the knowledge itself, but also the ability to develop children's ability to apply the knowledge and adapt to society. Scholar P. Silander suggests that effective phenomenological teaching should include such features as comprehensiveness, authenticity, contextualization, problem-oriented inquiry learning and self-driven learning process. [4] Wang Yan points out that “phenomenon teaching is based on studying different topics and phenomena together with students; through the study of different problems, it can enhance students' understanding of the relationship between each field, build up a variety of interdisciplinary teaching methods, and cultivate students' interdisciplinary literacy”. [5] Zhou Jiawei and Wang Zuhao analyzed the Finnish curriculum construction and concluded that vertically, the description of interdisciplinary literacy is detailed to each academic level; horizontally, it focuses on the close connection of each subject area, realizes interdisciplinary teaching through the teaching of phenomena, and implements the teaching of interdisciplinary literacy. [6]

#### **3.2. Study on the Evaluation of the Teaching of the Finnish Phenomenon**

Boston argues that phenomenological teaching does not begin with the subject matter, but rather takes the form of anticipating the curriculum so that students' questions and their concerns about developing life skills in real-world settings become the basis of the curriculum. [7] Vasileios and Johanna concluded that the interrelationship between teaching and learning is crucial, and that clarifying the relationship between the learner and the pedagogue is, therefore, an important prerequisite for the implementation of phenomenological teaching. [8]

Helmane and Briska argue that a prerequisite for interdisciplinary teaching is that teachers need to be aware of the type of disciplinary integration, and conclude that phenomenological teaching is clearly the most effective for improving students' competencies and life skills. [9]

### **3.3. A Study on the Inspiration of Finnish Phenomenon Teaching for Interdisciplinary Teaching in China**

Li Yusi talked about how China's basic education curriculum reform focuses more on the core literacy of academic subjects and interdisciplinary literacy is easily marginalized. Therefore, the Finnish approach of integrating disciplinary and interdisciplinary systems based on phenomenal teaching can provide ideas for China's reform of integrating disciplinary and interdisciplinary core literacy. [10] Yu Guowen and Cao Yiming, based on the new round of curriculum reform in Finland, take phenomenon-based teaching as an example, sort out the development history of interdisciplinary concepts in Finland, explore the connotation of interdisciplinary teaching, and compare its implementation environment with that of our country to analyze the practical path of interdisciplinary teaching in our country and the dilemmas that exist. [11] Yu Jianfen and Cai Guoying believe that "phenomenal teaching" respects the students' subjective position, helps students to construct their own meaning, focuses on the development of students' core qualities, and enhances the comprehensiveness of the teaching content, which can provide a lot of inspirations for China's basic education. [12]

### **3.4. Literature Review**

Through the search and combing of related literature, it is found that the current domestic-related research mainly stays at the theoretical level, the concept and connotation of phenomenal teaching are involved, but for the specific implementation of the phenomenal teaching process, the effectiveness and drawbacks of the research literature appears to be relatively scarce.

In view of this, this study is committed to systematically collecting and organizing the literature to conduct an in-depth investigation of phenomena teaching from the perspective of interdisciplinary teaching. It aims to explore the practical basis for the implementation of phenomenal teaching, analyze its effectiveness in actual teaching and the challenges and problems it faces. On this basis, we summarize and refine interdisciplinary teaching revelations and strategies with practical application value, with a view to providing educators in China's basic education stage with useful references and lessons, so as to promote the further development of the theory and practice of phenomenal teaching and make up for the shortcomings of the existing research.

## **4. Purpose and Content of the Study**

### **4.1. Research Purpose**

The purpose of this study is to explore the Finnish phenomenal teaching model

and analyze its impact on interdisciplinary teaching in China's basic education. Through an in-depth understanding of the core concepts and practical applications of phenomenal teaching, this study will assess its feasibility and adaptability in China's education system, and at the same time distill teaching strategies that are inspirational to China's basic education. The purpose of the study is not only to reveal how phenomenal teaching can promote the improvement of students' comprehensive literacy, especially in terms of critical thinking, innovation and interdisciplinary integration, but also to propose a set of interdisciplinary teaching reform plans that take into account China's national conditions, with a view to promoting the curriculum reform and modernization of teaching methods in China's basic education, and ultimately realizing the improvement of the overall quality of education.

## **4.2. Content of the Study**

### **(1) Theoretical Foundations and Connotations of Phenomenal Teaching and Learning**

Through systematically collecting and sorting out relevant literature, in-depth watching and studying academic reports and lectures, we have collected and organized relevant information on the core theories of phenomenological theory of education, constructivist learning theory, and multiple intelligences developmental theory as the basis of phenomenological teaching theory. Through careful analysis and summarization of these materials, we gradually formed a preliminary understanding of the Finnish phenomenological teaching theory and its connotation, providing solid theoretical support and academic background for the subsequent in-depth study of Finnish phenomenological teaching.

### **(2) The Implementation Process and Effectiveness of the Phenomenon Teaching Drawbacks**

The present study combines a number of typical cases of phenomena-based teaching in representative schools and districts with the relevant literature widely collected in the previous period, and provides an in-depth analysis and generalization of them in order to gain a more comprehensive understanding of the design of the objectives, principles of implementation, and procedures for implementing phenomena teaching in Finland.

In order to evaluate the effectiveness and drawbacks of phenomenal teaching in Finland more comprehensively and objectively, this study also integrates and describes cases of phenomenal teaching based on cross-curricular literacy at the regional and school levels, relying on Finnish statistical data as support. By comparing and analyzing the similarities and differences between the cases, the study explores the advantages and disadvantages of this Finnish curriculum reform practice from a more realistic perspective.

### **(3) Implications of Phenomenal Teaching for Interdisciplinary Teaching in Basic Education in China**

Summarize the features and strengths of the Finnish model of curriculum in-

tegration practice based on interdisciplinary literacy, and phenomenal teaching, by combining its comparative analysis with the practice of interdisciplinary teaching at the stage of basic education in China, comparative examination, put forward the reasons for the successful operation of the Finnish phenomenon of teaching, and combined with the actual situation in China, the migration of the Finnish experience, trying to put forward references and suggestions for the promotion and development of interdisciplinary teaching in China.

## 5. Design Thinking and Basic Framework

### 5.1. Design Thinking

At the initial stage of the study, the theoretical foundation related to phenomenal teaching was formed by extensively collecting and organizing relevant research literature. Secondly, the relevant information is systematically sorted and analyzed to understand the implementation process of phenomenal teaching in Finland, summarize the effectiveness, and analyze it with the literature. Finally, a comparative analysis is carried out to compare phenomenal teaching with interdisciplinary teaching in China's basic education stage, with a view to providing reference and inspiration for the promotion and development of interdisciplinary teaching in China.

### 5.2. Basic framework (See Figure 1)

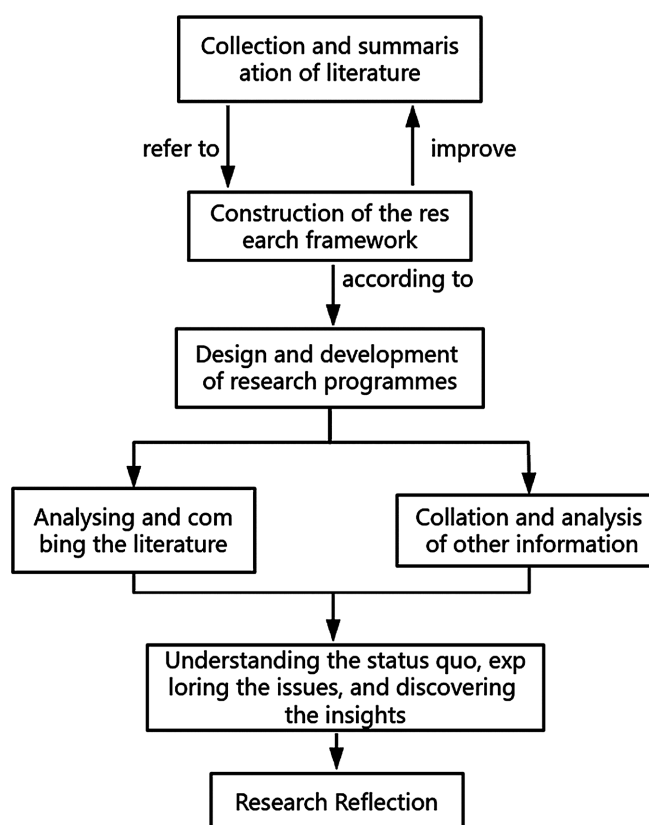


Figure 1. Framework for the basic flow of the study.

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## 6. Research Methodology

### 6.1. Literature Research Method

The literature method is the main research method in this study. In this study, the literature method is mainly used to investigate and analyze the theoretical basis, practical strategies, implementation effects, and domestic and international research results of phenomenal teaching in Finland. By collecting a wide range of domestic and international literature on phenomenal teaching, interdisciplinary teaching and basic education reform, as well as combing the official policies, regulations and government documents of the Finnish Ministry of Education, we systematically sorted out and categorized the collected data, established the research dimensions, and further analyzed and researched the object of the study on the basis of the data.

### 6.2. Case Study Methodology

Based on the literature method and supplemented by the case study method, we collect typical and representative cases of phenomenal teaching implementation, which can reflect the unique concept and practical effectiveness of Finnish phenomenal teaching in a more realistic way. By integrating the description and analysis of the cases, we can get more real and concrete research information and data to further understand the implementation process of Finnish phenomenal teaching, thus further revealing the implementation mechanism of Finnish phenomenal teaching and the educational logic behind it.

### 6.3. Comparative Analysis

In this study, the implementation concept, goal design, implementation principles and specific implementation process of Finnish phenomenon teaching, as well as the advantages and outstanding features of phenomenon teaching are compared with the practice of cross-science teaching at the basic education level in China, so as to draw relevant inspirations and lessons.

## 7. Research Process and Results

### 7.1. Research Process

This study aims to deeply explore the inspiration of Finnish phenomenon teaching on interdisciplinary teaching in basic education in China, and the specific research process is as follows:

#### Phase I: Literature Synthesis Study

Through the literature research method, this study extensively collects theoretical literature, policy documents, academic papers, and educational reports related to phenomenological teaching in Finland. For example, by analyzing the document “National Core Curriculum for Basic Education” issued by the Finnish Board of Education to understand the specific requirements and guidelines of phenomenological teaching and learning, this study has sorted out the defini-

tions, objectives, principles of implementation, and development of phenomenological teaching and learning in the Finnish education system. In addition, special attention will be paid to how phenomenological teaching promotes the development of students' interdisciplinary thinking and practical skills, and its impact on the improvement of students' overall quality.

#### Phase II: Case Collection and Analysis

In the case collection and analysis stage, this study selected the phenomenon teaching practices of several Finnish schools as cases, and obtained first-hand teaching and learning materials through field visits, interviews, observations, and the collection of teaching videos and students' works. For example, we analyzed a case study of phenomena-based teaching in a Finnish elementary school on the theme of "climate change", exploring how to integrate the knowledge of geography, biology, social sciences and other disciplines, and how students demonstrated their understanding of and solutions to climate change through project-based learning. Through an in-depth analysis of these cases, the study will reveal the implementation mechanism and educational logic of phenomenological teaching.

#### Phase III: Comparative Analysis

In the comparative analysis stage, this study adopts the comparative analysis method to compare the implementation concept, goal design, and implementation principles of Finnish phenomenal teaching with the practice of interdisciplinary teaching at the basic education level in China. It also refers to the comparative studies of scholars at home and abroad, such as the comparative study of Finnish phenomenon teaching and project-based learning, and the case study of interdisciplinary teaching practice in China, in order to obtain a more comprehensive and in-depth perspective.

Through the in-depth study of these three stages, this study will provide empirical basis and theoretical support for interdisciplinary teaching in basic education in China, and provide useful inspiration and reference for teaching reform and practice innovation.

## 7.2. Findings

### (1) Characteristics of the Teaching of the Phenomenon in Basic Education in Finland

Phenomenal teaching creates a relevant and life-affirming learning environment for students to explore real-world topics in depth, utilizing modern technological means and other tools. Its core objective is to foster interdisciplinary and integrative skills, which are not only essential for the realization of educational goals and objectives, but also a key building block for the accumulation of current knowledge as learners and for their future sustained growth as members of society. [13]

Finland's phenomenal teaching at the basic education level has implemented comprehensive and systematic curricular integration and pedagogical innova-

tions that go beyond the adjustment of a single pedagogical link, with the cultivation of seven interdisciplinary literacies as the core. [14] Essentially, this is the integration of the originally dispersed elements of the school education system through organic links to form a coherent and comprehensive teaching system.

As a truly student-centered curriculum model, phenomenal teaching covers the entire process from the selection of phenomena or themes, and hands-on learning in the classroom, to the assessment of learning outcomes, with the student always at the center of the teaching and learning activities. The student is always at the center of the teaching and learning activities. In this process, the focus of teaching and learning is entirely on the student's personal experiences, knowledge acquisition, emotional experiences, interests and interactions with peers. The teacher acts as a "facilitator", identifying each student's specific needs through observation and providing customized and individualized support.

## **(2) The Effectiveness of Teaching the Phenomenon in Basic Education in Finland**

In the field of pedagogy, the differentiation and integration of subject teaching is a topic that continues to provoke discussion and reflection, with its focus changing accordingly with the times.

On November 14, 2016, the Finnish National Board of Education announced that, in order to meet the challenges of the future, the Finnish education system will adopt phenomenal teaching, but this does not represent the end of traditional subject-specific teaching. In other words, phenomenal teaching in Finland aims to add phenomenal courses on top of the existing curriculum system, not to replace the separate subject teaching approach. [15]

Phenomenal Teaching is an educational model in which the curriculum is designed with the participation of teams of teachers from different disciplines within the school, working to achieve interdisciplinary teaching and learning objectives. This model links disciplinary knowledge to the daily reality of students' lives, enabling the selection of educational content that is both close to students' life experiences and capable of touching on a wide range of social phenomena or based on students' real experiences. The participation of the students is essential in this process, as they work with the teacher to define the content of the teaching, build a theme around the selected content, and realize the horizontal integration of knowledge from different disciplines on this basis.

Phenomenal teaching in Finland adheres to the core concept of "life as the starting point for learning and service to life as the ultimate goal of learning". This student-centered pedagogy emphasizes reflection on the value and function of learning, such as the meaning and purpose of learning and how to apply what is learned in practice.

Through interdisciplinary cooperation, phenomenal teaching can effectively integrate the fragmented goals in subdisciplinary education to form a unified teaching system, which not only enriches students' learning experience, but also promotes the enhancement of students' interdisciplinary quality.

In the Finnish education system, on the other hand, the goals of basic educa-

tion, teaching methods and assessment criteria are centered on the development of students' interdisciplinary literacy, ensuring consistency between the three. This coherence is the cornerstone for realizing the combination of phenomenal teaching and interdisciplinary literacy development, and contributes to the development of effective learning methods among students.

At the stage of curriculum design, interdisciplinary literacy is refined into specific tasks for school segments, which are further broken down into specific teaching objectives for each subject. This differentiation process reflects the specificity of literacy requirements in different educational stages. [16] In the process of teaching implementation, although each discipline has its own clear curriculum objectives, the goal of interdisciplinary literacy is integrated into each discipline. Completion of the tasks of the academic stage requires the synergistic cooperation of the objectives of various disciplines.

Phenomenal teaching reintegrates these teaching objectives, which are scattered across different disciplines, and realizes the integration and unification of the objectives. This integration not only helps students to establish interdisciplinary knowledge connections, but also promotes the development of their comprehensive quality, enabling them to apply a multidisciplinary perspective in thinking and solving complex problems. In this way, phenomenological teaching provides students with a comprehensive and multifaceted learning platform, which helps them to have the ability to adapt and innovate in a changing world. [17]

## 8. Conclusions and Shortcomings of the Study

### 8.1. Conclusions of the Study

#### (1) Theoretical Foundations and Connotations of Phenomenal Teaching and Learning

Phenomenal teaching is based on constructivist learning theory and humanistic philosophy of education, emphasizing real-life phenomena as the starting point for learning, and guiding students to actively explore and solve problems through interdisciplinary knowledge integration. Phenomenal teaching focuses on cultivating students' critical thinking, creativity and teamwork ability, aiming to promote students' all-round development. Through an in-depth analysis of the theoretical basis and connotation of phenomenal teaching in Finland, the study found that its core concepts are highly compatible with the direction of China's current reform of basic education, and provide strong theoretical support for the development of interdisciplinary teaching in China.

#### (2) The Implementation Process and Effectiveness of the Phenomenon Teaching Drawbacks

The implementation process of phenomenal teaching in Finland focuses on the subjectivity and practicality of students, allowing them to solve problems in real situations through project-based learning and cooperative learning. Practice shows that phenomenal teaching has remarkable results in improving students' learning interest, participation and practical ability. However, phenomenal

teaching has also revealed some problems in the process of implementation, such as the insufficiency of teaching resources and the challenge of teachers' interdisciplinary integration ability. The existence of these problems requires us to further think about how to optimize the implementation strategy of phenomenal teaching in order to give full play to its advantages.

### **(3) Implications of Phenomenal Teaching for Interdisciplinary Teaching in Basic Education in China**

Based on an in-depth analysis of the Finnish phenomenon of teaching and learning, this study draws the following implications for interdisciplinary teaching and learning in basic education in China:

Phenomenon teaching, as a teaching method focusing on the integration of interdisciplinary knowledge, provides a brand-new development idea for China's basic education, leading us to re-examine and optimize the way and path of interdisciplinary teaching. For this reason, we urgently need to establish a new concept of interdisciplinary teaching and unswervingly commit ourselves to cultivating the comprehensive quality and interdisciplinary ability of students, so as to meet the demand for talents in the future society.

Phenomenal teaching shows unique advantages in paying attention to students' subjectivity and practicability. In the process of teaching design, teachers need to pay close attention to the needs and interests of students, and carefully construct teaching situations and tasks that are in line with their cognitive characteristics, so that they can actively participate in a relaxed and pleasant atmosphere and actively explore. [18] At the same time, we should also put the cultivation of students' practical ability and innovative spirit in an important position, and encourage them to be brave to try, dare to innovate, and grow and make progress in hands-on practice.

All of the above also poses a higher challenge to teachers' cross-curricular integration skills. In order to meet this challenge, the Government needs to strengthen its training and support for teachers to help them enhance their interdisciplinary integration skills and teaching practice. In addition, teachers should be actively encouraged to participate in interdisciplinary teaching and research activities, and to discuss effective strategies and methods of interdisciplinary teaching through collective lesson planning and teaching seminars, so as to continuously improve the quality and standard of teaching.

The effective implementation of phenomenon teaching cannot be separated from the support of rich teaching resources. Therefore, we need to strengthen the construction of teaching resources to provide sufficient resources and guarantee for interdisciplinary teaching. [19] This includes the development of diversified, high-quality teaching materials, teaching aids and digital teaching resources to meet the needs of different disciplines and different teaching scenarios. At the same time, we should also actively utilize information technology means to enhance the effectiveness and efficiency of teaching, such as the use of multimedia teaching, online teaching platforms and other modern educational technologies, to provide strong support for the smooth implementation of phe-

nomenal teaching.

## 8.2. Innovations

This study not only provides an in-depth analysis of the theoretical foundations of phenomenal teaching, but also provides a concrete description of the implementation process and the effectiveness and disadvantages of phenomenal teaching in the context of Finnish practice cases. This research method of combining theory and practice makes the results of the study closer to reality and provides more concrete guidance for interdisciplinary teaching.

At the same time, the introduction of the successful experience of Finnish phenomenon teaching provides an international perspective for the interdisciplinary teaching of basic education in China. Through comparative analysis, this study reveals the similarities and differences between Finnish phenomenon teaching and interdisciplinary teaching in China's basic education, which provides useful insights for the reform and development of interdisciplinary teaching in China.

## 8.3. Shortcomings

Despite the results achieved in this study in examining the relevant theories and the current situation, there are still some shortcomings:

This study was conducted mainly based on literature and case studies and failed to conduct an in-depth field survey to obtain first-hand data. Therefore, the results of the study may be affected by the limitations of the sample and cannot fully reflect the actual application of Finnish phenomenon-based teaching in interdisciplinary teaching in basic education in China.

In terms of research methodology, this study mainly adopted the literature research method, which, although it has certain advantages in theoretical analysis and international comparison, may have overlooked the role of other research methods (such as questionnaire surveys, interviews, etc.) in obtaining empirical data. Therefore, future research can further expand the research method to improve the comprehensiveness and accuracy of the study.

Due to the limitations of research time and resources, this study was not able to consistently track and evaluate the long-term effects of Finnish phenomenological teaching in interdisciplinary teaching in basic education in China. Therefore, future research could further focus on the long-term effects of phenomenological teaching in order to more comprehensively assess its contribution to the development of interdisciplinary teaching in basic education in China.

## Conflicts of Interest

The authors declare no conflicts of interest.

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