Innovation Series

Research on the Design of Interdisciplinary Thematic Teaching for Primary School English

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Abstract: In the context of the new era, amidst intensified global competition and rapid social development, China needs to cultivate talents with high comprehensive abilities. Simultaneously, the 2022 revised curriculum standards emphasize the development of students' core competencies and the implementation of interdisciplinary thematic learning. Education is striving to break down the boundaries between disciplines and reshape the subject system. English, as a language course and foundational subject, inherently embodies rich content and strong adaptability, inevitably establishing connections and integration with other disciplines during the English learning process. Traditional primary school English education has been primarily focused on subject-specific teaching, with knowledge in different subjects fragmented and disjointed, lacking systematic organization, and sometimes artificially separated even when interconnected. Moreover, as the concept of interdisciplinary thematic teaching in primary school English is relatively new, frontline teachers and students have limited understanding of it, and many issues persist in its practical application. Therefore, conducting action research on interdisciplinary thematic teaching of primary school English by frontline teachers holds practical significance and value. Researchers have summarized the basic principles of designing interdisciplinary thematic teaching for primary school English and the steps for its implementation, reflecting on the study as a whole and providing insights into its future prospects.

Keywords: Primary School English; Interdisciplinary; Thematic Teaching; Teaching Design and Implementation

1. Research Background

In the context of the new era and amidst intensified global competition and rapid social development, China has put forward new requirements and standards for talent cultivation. There is an increasing demand in society for interdisciplinary talents and individuals with high comprehensive abilities. Such individuals possess the ability to integrate and apply their knowledge to analyze and solve practical problems comprehensively. Both China and the world value the cultivation of students' interdisciplinary abilities. China has proposed the concept of "interdisciplinary learning, deep integration" in the "Thirteenth Five-Year Plan for Educational Informatization". Additionally, the compulsory education program (2022 version) emphasizes the strengthening of connections between subjects. This indicates that China is beginning to pay attention to breaking down the boundaries between disciplines and attempting to reshape the subject system. Internationally, many educational ideologies have been put forward to help teachers break through the traditional education model, daring to break the boundaries between disciplines,

permeating and integrating various subjects on the basis of textbook foundational knowledge, and exploring points of connection between subjects. There is also an emphasis on cultivating students' innovative abilities, reasoning skills, problem identification, problem-solving abilities, and focusing on students' learning interests to promote their comprehensive development. It is required that the learning content is connected to students' lives, and students must possess the ability to solve real-world problems after learning. Traditional teaching has been primarily focused on subject-specific teaching, with knowledge in different subjects fragmented and disjointed, lacking systematic organization, and sometimes artificially separated even when interconnected. Students receive this knowledge in a disjointed manner, and they lack the ability and consciousness to transfer and relate it, leading to fragmented processing of knowledge, skills, methods, and thinking during application. This issue is specifically reflected in the primary school English classroom, where the lack of context in English lessons can be dull, with the entire class consisting of one-way teacher output and passive student acceptance, repeating a particular behavior continuously.

2. Theoretical Basis

2.1 Humanistic Theory

In the 1960s, American psychologists proposed humanism, with Maslow and Rogers as the main representatives. The humanistic viewpoint was then reflected in education, with its educational goal being to cultivate holistic individuals, enabling them to achieve self-realization. It emphasizes the intrinsic value, dignity, and personal growth of individuals. Humanism places societal demands on individuals in a secondary position, focusing on the development of the body, emotions, and mind during the process of self-realization, leading to what we call comprehensive development. Humanism also emphasizes the development of human potential and self-awareness, setting higher demands on education. Students' desire for self-realization becomes stronger. Rogers categorizes learning into two types: meaningless learning, which is rote learning emphasizing memorization and staying on the surface of knowledge, and meaningful learning, which involves students discovering the intrinsic connections between knowledge, relating knowledge to real-world problems and personal development. Therefore, in designing interdisciplinary thematic teaching, we must evoke meaningful learning in students, connect it to real life, meet students' diverse needs, and help students achieve self-realization, as advocated by interdisciplinary thematic teaching.

2.2 Content and Language Integrated Learning (CLIL) Theory

CLIL stands for Content and Language Integrated Learning, which integrates the content and language learning objectives. Currently, there is no clear definition of CLIL, and scholars have varying interpretations. However, by summarizing different scholars' viewpoints, we can roughly understand that CLIL emphasizes the inseparability of language teaching and content learning, considering language learning both as content and as a tool for learning other knowledge. In a lesson, there are dual or multiple objectives, with CLIL listing various aims such as developing intercultural communication skills, providing opportunities for learning from different perspectives, understanding specific subject vocabulary in the target language, improving oral communication skills, enhancing learners' motivation, etc. Teaching in this way can be more efficient and resource-saving. Additionally, CLIL emphasizes lifelong learning, where lifelong learning refers not only to the duration of learning but also to the breadth of learning.

3. Basic Principles of Primary School English Interdisciplinary Thematic Teaching Design

3.1 English Subject-Centered

In the practice of primary school English interdisciplinary thematic teaching, teachers often deviate from the right path. Even though they have designed themes and integrated various interdisciplinary content, they may weaken the focus on English learning and expression. Regardless of the perspective, interdisciplinary thematic teaching in primary school English is ultimately an English class, with the teaching task and purpose being to enhance students' English abilities and core literacy. Teachers should not confuse priorities. In the entire design process, the designer should prioritize English learning as the main content, integrating other subjects' content on this basis. Guo Hua and Yuan Yuan point out that interdisciplinary education must adhere to subject-orientedness. Only by mastering subject knowledge can interdisciplinary problem-solving be achieved, or using tools from other disciplines within a subject to solve problems. According to the nature of language, if a lesson does not achieve the English teaching objectives, students cannot clearly express themselves or use language for communication and problem-solving. Of course, when selecting English language for interdisciplinary thematic teaching design, teachers should carefully select language that is relevant to the topic, not too singular, and not too difficult. It is important to ensure the smooth progress of learning within the theme while enhancing students' English proficiency. Therefore, the focus remains on the teachers, who need to continuously enhance their professional competence to ensure better teaching design and execution.

3.2 Theme Design Close to Students' Lives

An important aspect of interdisciplinary thematic teaching design is determining the theme. Although the textbook provides a general theme for each unit, it may lack specificity, clear significance, and may be too abstract. Therefore, teachers need to redesign the theme with a student-centered approach that is close to students' lives. Because regardless of the type of learning, students are the main focus of learning. Only when the chosen theme is closely related to students' lives can it stimulate students' interest in learning and help them solve real problems. Teachers should transform abstract knowledge from textbooks into problems that students may encounter in their daily lives. When the knowledge is closely related to students' lives and the scenarios are natural enough, it can stimulate students to learn actively. In addition to being close to life, the selection of the theme should also follow the principle of clear and specific scope. With a clear and specific theme, students can focus on knowledge and explore it.

3.3 Permeation of Interdisciplinary Knowledge

Implementing interdisciplinary thematic teaching in primary school English aims to enhance students' comprehensive literacy and cultivate talents needed by the country. In English classes, students not only learn English knowledge but also acquire other knowledge related to the theme. They should apply this integrated knowledge to solve real-life problems. However, relying solely on students' existing language reserves is not enough to complete tasks in each lesson. Therefore, students need to establish a language foundation in the first half of the lesson or before the lesson to explore and complete tasks later. How can interdisciplinary knowledge be permeated in English classes? First, teachers need to plan in advance to determine which subjects need to be integrated to accomplish a specific thematic task and what content is involved. In this process, researchers found that teachers often have a misconception that the more subjects are integrated in a lesson, the richer the content, and the more it can reflect the concept of interdisciplinary thematic teaching. In fact, the significance of interdisciplinary education lies in having students use these subjects to solve problems and enhance their core literacy. Interdisciplinary education is not simply about including various subjects in one lesson; it is about finding the intrinsic connections between subjects, attempting to break down the boundaries between subjects, and ultimately achieving subject integration.

3.4 Controlling Curriculum Difficulty

Since many teachers and students are often unfamiliar with interdisciplinary thematic learning, it is important to control the difficulty of the curriculum throughout the design and teaching process. In practical experience, it has been observed that sometimes the ideas are excellent, but students may lack the necessary abilities and cooperation required to achieve them as envisioned by the teacher. When designing interdisciplinary thematic teaching, teachers should control the difficulty of the curriculum. If it is too difficult, students may fail to complete the learning tasks, lose interest in learning, and a sense of accomplishment. Of course, when designing and implementing interdisciplinary thematic teaching, teachers should also adhere to the academic quality standards of the English subject. If tasks are too simple, the learning objectives cannot be achieved, and the depth and breadth of expansion are insufficient to create interdisciplinary thematic teaching. Additionally, teachers should consider the varying levels of students. Differences in students' family backgrounds, interests, hobbies, and learning abilities will also affect the design of curriculum difficulty by teachers. The same lesson given at the main school and branch school requires adjustments according to students' circumstances.

3.5 Cultivating Students' Collaborative Skills

Raisner, a teacher, once said that the best way to cultivate creativity is to organize passionate students who can work with their peers, organize and conduct research and development on projects they have created as if they were playing games. Collaborating with peers often sparks more ideas and intelligence. In interdisciplinary thematic teaching, the content often spans multiple class hours, the tasks are complex, and require students to utilize various abilities. It is challenging for an individual to complete them quickly. Therefore, when designing interdisciplinary thematic teaching, teachers should consider students' collaboration, guide them to collaborate with each other, and cultivate their social interaction skills. Many problems encountered in interdisciplinary thematic teaching require not only English knowledge but also the application of other knowledge by students to solve them. This requires students to engage in a series of observations, analyses, organization, and other mental exercises. Through collaboration, children can solve problems together, maximizing their individual strengths.

4. Pathways for Primary School English Interdisciplinary Thematic Teaching Design

According to Professor Wang Qiang's guidance on interdisciplinary thematic learning practices, three methods of achieving interdisciplinary thematic learning have been derived. The first method, which is also the most commonly used by teachers, is to use the content of a specific unit as the learning material, reorganize the content within the unit, design corresponding themes to connect the scattered texts together, and integrate the required subjects throughout the learning process. This form is still primarily focused on learning textbook knowledge and is more conducive to cultivating students' comprehensive literacy compared to the previous method of teaching by hours.

The second form is a method used by researchers in the second phase, which involves creating a new real scenario based on the theme and content of a unit after learning a particular unit. Building on students' existing language foundation, students are guided to discover real problems in this authentic context and apply the English knowledge and interdisciplinary knowledge learned in the unit to solve them. This approach not only helps reinforce previously learned knowledge but also enhances students' abilities, making it easier for teachers to assess student learning.

The third method requires higher demands on both teachers and students, drawing inspiration from the third round of practice. In this method, teachers refine the original unit theme and prepare more usable learning materials for the classroom, decentralizing the knowledge points from just the textbook, especially interdisciplinary content, to enable students to not only acquire new knowledge but also enhance their capabilities during the learning process. Due to the diversity of classroom formats, this method is more effective in stimulating students' interest in learning.

Regardless of which form is chosen, the design and implementation process of interdisciplinary thematic teaching includes preparation, selection of themes, reading and integrating materials, determining learning objectives and tasks, activity design, classroom practice, and evaluation.

4.1 Theme Selection

Theme selection is the starting point in interdisciplinary thematic teaching. The choice of theme is mostly based on the content of the unit, which is designed according to the themes provided by the new curriculum standards. The themes required by the new curriculum standards are suitable for classroom teaching and learning. At the same time, consideration should be given to the actual needs of students, and themes that are too distant from students should not be chosen.

The selection of themes should first and foremost align with societal values. The theme content must be positive and uplifting, helping primary school students develop the correct values and positive emotional attitudes. On this basis, exploring the educational value of the theme is crucial, as subject education is a good way to enhance students' core literacy. After completing each unit's thematic study, students should not only gain knowledge but also experience intellectual growth. Secondly, themes should be linked to students' lives. Starting from students' actual lives, students should be able to identify and solve problems within the theme, fostering their creativity. Thirdly, meaningful themes should be chosen. In traditional learning models, students simply accept and repeat learned knowledge without stimulating their thinking. Themes selected for interdisciplinary thematic teaching should stimulate students' thinking and prompt them to process the learning themes through organization, analysis, comparison, integration, and other forms of thinking. Furthermore, theme selection should suit the conditions for teaching implementation and the teacher's expertise. Throughout the research process, researchers have selected many themes that could not be completed due to limitations in teaching implementation conditions. Finally, theme selection should not overlook the learning of English. The prominence of the theme should not overshadow the importance of the English subject. At its core, this is an English classroom meant for learning and applying English knowledge, highlighting the disciplinary value of English. Especially in task design, the foundational role of English must be considered. Whether designing, problem-solving, or expressing, English should serve as the basis language to achieve English learning objectives.

4.2 Textbook Reading and Integration

Interdisciplinary thematic teaching design and implementation are based on textbooks. Teachers need to analyze the textbooks in detail, not only interpreting the units overall but also studying each text closely for each lesson. For example: What is the content of the text? What is the form of the text? What does the text aim to convey? Why is the text arranged this way? In what subjects can it cross over? And how can these materials and texts enhance students' thinking and language abilities, etc. Lastly, teachers should analyze the logical connections between the texts in the entire unit and create a framework diagram of the unit's thematic content to facilitate the integration of the unit's content. Of course, teachers can make appropriate additions and deletions to the textbooks. Teachers can adjust the content of the textbooks based on teaching needs, students' actual situations, and learning experiences. Especially in interdisciplinary teaching design, teachers generally add appropriate texts and knowledge to help students apply learned knowledge to explore unknown knowledge, enrich students' language, and enhance their core literacy.

4.3 Determination of Learning Tasks and Learning Objectives

Learning objectives are the guiding principles of the entire teaching design, and learning tasks are activities designed for students to complete under the guidance of learning objectives. The learning objectives of interdisciplinary thematic teaching differ from traditional teaching objectives. Firstly, based on the curriculum standards of the English subject, the learning objectives of English need to reflect language abilities, thinking qualities, learning abilities, and cultural awareness. At the same time, the development of students' core literacy should be considered by integrating the content of various subjects. Although English teachers may not be familiar with the learning objectives of other subjects, as long as teachers base their teaching on developing students' core literacy, they can formulate reasonable learning objectives. After determining the unit objectives, teachers need to further refine the objectives for each lesson, requiring teachers to clearly define the learning tasks for each lesson to step by step reach the final objectives. When describing teaching objectives, teachers must not be too vague but instead describe them clearly, precisely, and in a way that is easily understood.

4.4 Activity Design

Teaching activity design is a crucial part of the entire teaching design process, which is both intricate and requires attention to various details. Firstly, activity design should have a certain level of progression, following a gradual progression from shallow to deep within the entire theme, with logical connections and coherence between activities. Activity design helps students solve problems and gain knowledge in the process, with activities interconnected and progressive to build upon each other. Secondly, activity design should take into account the actual situation of students. Teachers should consider issues from the students' perspective, such as students' knowledge background, abilities, family situations, real-life problems, etc. Activities that match students' level can be smoothly carried out, as activities that are too difficult or too complex may be hard for students to understand, while activities that are too simple may not lead to improvements. Activity design should ensure that students reach a certain level in language abilities, learning abilities, and core literacy through practice. Thirdly, each activity design should serve the overall objective. Teachers need to first clarify the teaching tasks of the unit, then divide them into subtasks and design detailed activities under these subtasks. When designing activities, consideration should also be given to the

integration of teaching and assessment. Activity design should not only consider its effectiveness and feasibility but also whether it can be evaluated. Lastly, activities designed by teachers should put students at the center. Under the influence of traditional teaching models, teachers often prefer to take on a main role in activities. This contradicts our teaching philosophy, as teachers should focus on their role in activities, acting as guides and organizers to provide guidance and assistance to students' learning.

4.5 Classroom Practice

Teachers can implement the plan step by step, transforming the plan into specific actions and activities. During implementation, teachers should consider students as the masters of learning and organize and guide them through the plan.

4.6 Evaluation

Evaluation is the final stage in interdisciplinary thematic teaching design and practice and is crucial. The final stage does not mean it only occurs at the end; evaluation accompanies the entire teaching process. Teachers should strive to ensure that evaluations of students in interdisciplinary thematic teaching are objective and reasonable. There are many types of evaluations, with common classifications being formative evaluation and summative evaluation. Regardless of the type of evaluation, the goal is to improve teaching and prepare for future learning.

5.Conclusion

Traditional subject-based teaching is no longer meeting the demand for comprehensive talents in the new society. Interdisciplinary thematic teaching in primary school English can effectively enhance students' comprehensive qualities and improve teaching quality. At the same time, it can address the drawbacks of subject-based teaching, strengthen the systematic and holistic nature of student learning, thereby significantly improving teaching quality and efficiency. Furthermore, the new teaching model can promote the updating of teachers' teaching philosophy, further achieving professional development, which is a significant challenge for teachers. Lastly, students can benefit greatly from this approach. Interdisciplinary thematic teaching can help students understand the deep connections between knowledge, foster positive and active transfer of learning, help them apply their knowledge to practical situations, and solve real-world problems.

The road to future exploration is still long, and we will continue to strive for progress in our teaching, aiming to achieve better research results in the future.

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