

Study on Interdisciplinary Thematic Learning of Senior High School English based on Core Literacy

Lingyu Yang*

School of Foreign Languages, China West Normal University, Nanchong 637000, China

*Corresponding Author

Abstract

With core literacy gradually becoming an important topic in the field of education, English teachers are also trying to practice and infiltrate core literacy into the design of teaching activities. Interdisciplinary is an educational activity that breaks the boundaries of disciplines and integrates theories or methods of different disciplines, which is helpful to the integration of subject knowledge. Starting from the significance and connotation of interdisciplinary thematic learning, this paper explores the application of interdisciplinary thematic learning in English courses and its help in cultivating core literacy. At the same time, this paper tries to give some suggestions on how to improve students' core literacy through interdisciplinary thematic learning, aiming at promoting students' core literacy to be better improved.

Keywords

Interdisciplinary Thematic Learning; Core Literacy; English Teaching.

1. Introduction

The 2017 edition of English Curriculum Standards for Senior High Schools puts forward the core literacy of English, including language ability, thinking quality, cultural awareness, and learning ability[1]. The core literacy of English subject is the refinement of the value of "moral cultivation" of English subject, and it is also an accurate response to the question "Why should Chinese students learn English well?" based on the national strategic perspective and the nature of the subject. Nowadays, with the rapid development of society, more and more teachers have realized the importance of cultivating core literacy for English education.

With the development of the times and social progress, the demand for compound talents has gradually emerged. However, interdisciplinary learning breaks the traditional disciplinary boundaries, makes multiple knowledge more closely combined, and helps to cultivate compound talents. Interdisciplinary learning makes it possible to cultivate core literacy. According to the requirements of curriculum standards, each course should arrange at least 10% of the class hours for interdisciplinary theme learning. It can be seen that the English curriculum with integrated disciplines is an important trend in the curriculum reform of basic education in China.

Therefore, this paper aims to explore the application of interdisciplinary thematic learning in English curriculum teaching today. In this paper, the literature analysis method is used. Firstly, the relevant literature is consulted, and the concept and basic characteristics of interdisciplinary thematic learning are discussed, as well as the understanding of the curriculum goal of core literacy. This paper expounds on the help of interdisciplinary thematic learning to improve students' core literacy. At the same time, this paper points out the practical dilemma of implementing interdisciplinary learning in English classrooms nowadays. Taking Unit 4 Meeting the Muse, an optional compulsory course in FLTRP's new textbook, as an

example, this paper preliminarily explores the interdisciplinary teaching model based on core literacy in English classrooms.

2. The Significance and Connotation of Interdisciplinary Thematic Learning from the Perspective of Core Literacy

2.1. Significance and Connotation of Core Literacy

Core literacy mainly refers to the necessary character and key ability that students should have to adapt to personal lifelong development and social development. Discipline core literacy is the concentrated expression of the value of discipline education, and it is the necessary character and key ability that students gradually form through discipline learning.

The goal of English course is to cultivate students' core literacy. At the same time, language ability is the basic element of core literacy, cultural awareness reflects the value orientation of core literacy, thinking quality reflects the mental characteristics of core literacy, and learning ability is the key element of core literacy development. This requires teachers to constantly update their teaching concepts, emphasize the central position of students, and adopt various feasible ways to cultivate students' core literacy.

2.2. Significance and Connotation of Interdisciplinary Thematic Learning

Interdisciplinary thematic learning is a teaching concept that comprehensively solves problems by using the knowledge, methods, and concepts of two or more disciplines. It combines "interdisciplinary courses" and "thematic courses." It is not only based on the relationship between subject knowledge, but also extends this relationship to social practice, and integrates students' knowledge and experience around specific topics to carry out teaching design[2].

It is not difficult to see that interdisciplinary teaching is a bridge between disciplines, which can connect the knowledge of different disciplines and make teaching and learning interact with each other. Interdisciplinary thematic learning does not divide all disciplines into separate teaching but focuses on the integration of learning contents and ways of thinking among different disciplines around a certain theme.

As far as English courses in compulsory education are concerned, interdisciplinary thematic learning specifically includes the following three aspects: First, interdisciplinary thematic learning in English should be based on the standpoint of English subjects, focus on the content of English courses, integrate the learning content and thinking mode of other subjects, and promote the overall development of students' core literacy. Second, through the way of integration, guide students to form new understanding and problem-solving ability, and generate new knowledge through the integrated application of knowledge. Third, the theme provides a context for interdisciplinary learning, enabling multiple disciplines to develop around the theme and realize deep learning.

3. Benefits of Interdisciplinary Thematic Learning to the Implementation of Core Literacy

3.1. Language Ability

In interdisciplinary thematic learning, students learn language knowledge systematically by engaging in authentic and meaningful activities with the theme. In the process, they can accumulate language knowledge related to the theme, gradually internalize it, and eventually apply it in practice. In this way, when they are faced with practical problems, they can use their internalized language knowledge to describe the problems, analyze them, and finally solve them. In this way, student's language ability is developed.

3.2. Cultural Awareness

The selection of themes for interdisciplinary thematic learning is based on the thematic categories in the curriculum standards and combined with students' real life, integrating multidisciplinary knowledge of language, history, music, politics, and fine arts, which helps to assimilate Chinese and foreign excellent cultures, especially the excellent traditional Chinese culture. At the same time, students can further understand and tolerate different cultures by comparing and appreciating different cultures, cultivate the awareness and ability of cross-cultural communication, form correct values and moral sentiments, and enhance students' sense of nationalism and the sense of community of human destiny.

3.3. Thinking Quality

Interdisciplinary thematic learning focuses on practical problems students face in their daily lives. Students need to think creatively and independently, find solutions to problems through cooperation in group activities, and then express their views independently [3]. Therefore, Interdisciplinary Thematic learning helps students to continuously analyze, compare, criticize, create, and other thinking activities in language practice activities, which in turn improves their thinking quality.

3.4. Learning Ability

Interdisciplinary thematic learning English is dedicated to guiding students to use language to solve real-life problems and to improve their independent and cooperative learning ability. Students become the center and leader of the classroom. They can maximize their participation in classroom practice in English interdisciplinary thematic learning, based on their life situations, oriented to "problem solving", and actively participate in the classroom with their own life experiences. They can also cooperate with other students to come up with solutions and develop the ability of cooperative learning. At the same time, students will reflect after the activity, so that they can learn to adjust the strategies and methods of English learning and improve the efficiency of English learning.

4. The Realistic Dilemma of Interdisciplinary Thematic Learning in Schools from the Perspective of Core Literacy

4.1. The Dilemmas Faced by Teachers

"Interdisciplinary thematic learning is different from the traditional English classroom, teachers must change the habit of transferring knowledge by way of lecture, take students as the main body, stimulate students to participate in group activities, and make students become the real masters of the classroom. Therefore, major changes in teaching and learning styles are bound to pose greater challenges to teachers ."

First, teachers need to actively change their curriculum concepts and teaching concepts, deeply understand the meaning and value of interdisciplinary thematic learning, clarify the goals, paths, methods, and implementation, and actively try new teaching methods and practices.

Secondly, teachers need to continuously enhance their professionalism. English interdisciplinary thematic learning is not to weaken English teaching, but to adhere to the position of the English discipline, with the content of the English discipline as the backbone, integrating the knowledge of other disciplines, and carrying out practical activities around a central theme. Therefore, teachers need to take the initiative to expand the knowledge of other disciplines, take students as the center, help students integrate the knowledge of other disciplines, and guide students to solve practical problems by using the knowledge of different disciplines.

In the design of interdisciplinary thematic learning, not only the core literacy of the English subject should be reflected, but also the interdisciplinary core literacy should be demonstrated. This requires English teachers to study the curriculum standards of other subjects and conduct joint teaching and research with teachers of various subjects. Continuously explore interdisciplinary thematic learning cases suitable for the discipline in team practice, to implement the new curriculum concepts in teaching practice.

4.2. The Dilemmas Faced by Students

In China, English is a foreign language, and students generally lack adequate English input and output environments, making it difficult for them to master English proficiently through limited classroom instruction. Despite the unique nurturing value of interdisciplinary thematic learning in English, in practice, it is difficult to avoid the fact that the English level of secondary school students cannot catch up with their cognitive level [4]. At the same time, the introduction of interdisciplinary subjects in English interdisciplinary thematic learning increases the cognitive load of students' English learning to a certain extent. Students often have to learn other disciplines in addition to English. This interdisciplinary knowledge itself is a challenge for students. Even if teachers consciously adjust the difficulty of interdisciplinary knowledge in learning, the overall difficulty of students' English learning will still increase.

English interdisciplinary thematic learning focuses on guiding students to integrate knowledge from different disciplines and improving their ability to use what they have learned to solve problems creatively. In this way, students can better master knowledge and apply it to real life. Obviously, the overall difficulty of interdisciplinary thematic learning is higher than that of general English teaching. Therefore, they not only need to have a solid foundation in the subject but also need to express themselves appropriately in English and synthesize their interdisciplinary knowledge to solve practical problems under the guidance of the subject. All of this places higher demands on students' existing English proficiency.

5. A Preliminary Study on the Teaching Mode of Interdisciplinary Thematic English Learning in Middle Schools from the Perspective of Core Literacy

The English Curriculum Standards state that the English subject and other subjects are interpenetrating and interconnected and that teaching activities should promote such connections. Therefore, we should take the integration of disciplines as the guiding principle in English teaching in the new era, to make the contents of various disciplines coherent with each other and to promote the overall development of students. There are many places in the English teaching materials that can be used for interdisciplinary teaching, and we need to keep exploring, utilizing all available resources, and innovating teaching methods. In this section, the author will take Unit 4 Meeting the Muse of Selective Compulsory Studies I of the New Teaching Materials of the Foreign Studies Society as an example to explore the use of interdisciplinary teaching mode in English teaching.

5.1. Unit Themes and Objectives

Unit 4 Meeting the Muse combines language, music, art, dance, theatre, technology, and other subjects. The thematic context of this unit is "People and Society" and the theme is the inspiration of art. The unit introduces world celebrities in different fields, such as painters Leonardo de Vinci and Pablo Picasso, sculptor Auguste Rodin, Nobel Prize-winning author Mo Yan, visual artist Florentin Hofman, composer Tan Dun, and dancer Yang Liping, etc., and describes the famous works of these celebrities, the sources of their inspiration, and their insights. The unit also explores the relationship between technology and the arts. This unit aims to guide students to explore life, discover the beauty of life, and realize life's ideals with

perseverance through the topic of "art" and the success of these celebrities. The teaching design should be centered on the thematic context of the unit and be based on the multimodal discourse provided in the unit, such as personal stories and posters. The activities involved should enable students to use a variety of language skills and combine them with their existing knowledge base to read art-related texts, use learned vocabulary and expressions appropriately to introduce artists and describe and appreciate works of art. At the same time, they will learn about the similarities and differences between Chinese and foreign artists' creative ways of thinking which will deepen their understanding of the thematic significance of the unit. In addition, students need to apply the knowledge learned in this unit to write short essays about art, compare different points of view, and ultimately promote the comprehensive enhancement of their core literacy.

5.2. Interdisciplinary Instructional Design

5.2.1. Integration with Language Subject

In the starting out part, the teacher can let the students know the works, styles, and status of the painter Leonardo da Vinci Pablo Picasso, the pianist Wagner and the Nobel Prize-winning writer Mo Yan from the perspective of language, so as to understand the sources of their inspiration, and make the students perceive the theme of this unit: meeting the muse. Not only that, in the listening section, Picasso's *Gernika* and Feng Zikai's *The Battlefield of Spring* are presented for art appreciation, and students are asked to talk about their views on these works by looking at them, which is also a combination with the language subject. Finally, in the writing section, students are asked to write an invitation to an art festival, which allows them to return to the realities of life based on art appreciation and the endeavors of celebrities, and to reflect what they have seen and heard in their writing.

5.2.2. Integration with Art and Music Subjects

In the section of understanding ideas, teachers can start from the subject of art, music, opera, dance, etc. By presenting pictures of sculptures, such as "Little Yellow Duck", "Carp", and "Big White Rabbit", videos of opera, and dance, students can learn about famous works and their inspirations from sculptor Auguste Rodin, visual artist Florentin Hofman, as well as the famous works of composer Tan Dun and dancer Yang Liping and their inspirations. Designing activities from the perspective of art appreciation can help students, after learning about the successes of these celebrities, to explore life, discover the beauty of life, and realize life's ideals with perseverance.

5.2.3. Integration with Information Technology Subject

The developing ideas section mainly explores the relationship between science technology and art. For example, when talking about the digital version of the Qingming Riverside Drawing, which combines art and modern technology, teachers can present students with a dynamic scroll to make them marvel at the power of science and technology and inspire them to learn about science and culture. It can improve students' critical thinking and inspire positive thinking.

5.2.4. Integration with History Subject

In the developing ideas section, teachers can explore the development of Chinese and foreign classical art and modern art from the perspective of excellent Chinese artworks and modern technology into paintings, so that students can have a more in-depth understanding of different arts and deepen their learning of the meaning of the theme of the unit.

From the above cases, it can be seen that in English teaching, based on the core concept of the unit theme and the thematic context, the teaching content and practice can be combined with several subjects, such as history, music, art, etc., so that the students can master cross-disciplinary cultural knowledge, form cross-disciplinary critical thinking, and comprehensively

use cross-disciplinary knowledge to solve problems, and ultimately promote the comprehensive enhancement of their core literacy.

6. Reflections and Suggestions on English Interdisciplinary Thematic Teaching Strategies from the Perspective of Core Literacy

From the above analyses, it can be seen that the senior secondary English teaching materials of the FRS edition can better reflect the "interdisciplinary" nature. Teachers can explore more interdisciplinary teaching strategies according to the core themes of each unit to promote the development of students' core literacy. Although more and more teachers have begun to pay attention to the use of interdisciplinary teaching in English language teaching, there are still many shortcomings that we should reflect on and improve. This paper tries to put forward the following reflections and suggestions on the interdisciplinary thematic teaching of English under the perspective of core literacy for teachers' reference.

6.1. Addressing the Mismatch between Students' Linguistic Competence and Their Cognitive Level

English interdisciplinary thematic learning is based on authentic contexts, highlighting the gap between students' language level and cognitive level. Therefore, when designing practical activities for interdisciplinary thematic learning, teachers should, on the one hand, appropriately reduce the cognitive difficulty of English interdisciplinary thematic learning based on students' English proficiency. On the other hand, teachers can provide appropriate scaffolding to improve students' English proficiency required for interdisciplinary learning.

When teaching interdisciplinary themes, teachers should make objective analyses based on the actual situation of students, so as to select learning contents and activities that match students' language proficiency and cognitive level in a targeted manner. For example, teachers can provide appropriate scaffolding for students with lower English proficiency. For students with higher levels of English proficiency, teachers can provide them with an appropriate amount of English extension materials that are related to English interdisciplinary thematic learning and are of interest to students.

6.2. Interdisciplinary Teaching and Learning in Authentic Contexts

Only by creating interdisciplinary thematic practical activities that are contextually authentic can students feel the connection between English learning and real life. Teachers must choose learning themes based on the reality of students' lives, and inspire students to solve problems creatively [5]. In addition, teachers should guide students to integrate multidisciplinary knowledge and solve problems appropriately with their own experience. Finally, teachers should consider students' needs, interests, and prior learning experiences when choosing topics. Only by meeting students' learning interests and basing them on their real lives can they create authentic contexts and motivate students to explore interdisciplinary thematic learning, to enhance students' core literacy.

6.3. Cultivating Independent Learning Ability Through Co-operative Exploration

Self-directed learning ability is an important element in the cultivation of interdisciplinary core literacy. The specific measures are as follows: firstly, according to the students' actual situation and the teaching content, the knowledge content taught is divided into some learning tasks, and then the students are divided into several groups according to the learning tasks. Secondly, the learning tasks prepared in advance are distributed to the students in each group. As most of the learning tasks are in the form of questions, they can stimulate students' desire to explore in a short time. Thirdly, students are guided to discuss and learn on their own, and at the same time,

in-depth answers are given to the problems encountered, to enhance students' enthusiasm and initiative for learning, and then improve their independent learning ability.

6.4. Promoting Teacher-Student Teaching and Learning in Evaluation

The important value of interdisciplinary thematic learning is to help students clarify the use of knowledge in real life and complete knowledge transfer and problem-solving [6]. Through various forms of teacher-student assessment, student-student mutual assessment, and self-evaluation, we set up standard assessment scales with presentable target results to monitor and evaluate students' learning process as well as milestones. This helps to motivate students to explore interdisciplinary thematic learning.

7. Conclusion

In order to help foreign language educators realize the importance of interdisciplinary thematic learning to improve students' core literacy and put it into practice actively, this paper discusses the importance of core literacy, the help of interdisciplinary thematic learning in English to improve core literacy and the problems existing in English teaching. And through specific units to give examples to explore its application in English teaching. On the one hand, it is hoped that interdisciplinary thematic learning can help English teachers put the training goal of core literacy of English subjects into the classroom; On the other hand, it is hoped that teachers will constantly revise and improve English interdisciplinary theme learning in practice, so as to promote the quality of foreign language education in China.

In this paper, the application of interdisciplinary teaching in senior high school English textbooks is preliminarily explored. Although a large number of documents have been consulted and many reflections and adjustments have been made, the analysis of the textbooks is not deep enough because of the lack of contact with the real classroom. Therefore, this study is still insufficient in comprehensiveness and depth and needs further exploration and research. It is expected that under the impetus of the new curriculum reform, through the joint efforts of more experts and front-line teachers, more effective interdisciplinary English teaching methods based on core literacy can be found, so as to better realize the core literacy of the subject and finally achieve the overall goal of discipline education.

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