

# Teaching Strategies of High School English from an Interdisciplinary Perspective

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**Abstract:** This article focuses on the study of high school English teaching strategies from an interdisciplinary perspective. Through an in-depth analysis of the significance and implementation path of interdisciplinary teaching in high school English education, combined with practical teaching cases to explore how to effectively integrate knowledge from other disciplines with English teaching, this study aims to provide a useful reference for improving the quality of high school English teaching and cultivating students' comprehensive literacy. Interdisciplinary teaching can significantly stimulate students' interest in learning and improve their language proficiency and interdisciplinary thinking, laying a solid foundation for their future development.

**Keywords:** Interdisciplinary; High school English; Teaching strategies; Comprehensive literacy

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## 1. Introduction

In the current wave of globalization and the vigorous development of the knowledge economy, the demand for talent in society has shown a diversified and comprehensive trend. A single-discipline knowledge system has been difficult to meet the complex and changing real-world demands, and compound talents with interdisciplinary abilities and comprehensive literacy are highly favored. As a core subject in the basic education stage, high school English bears the important task of cultivating students' language proficiency, cross-cultural communication skills, and thinking quality<sup>[1]</sup>. However, the traditional teaching model in high school English often focuses on the imparting of language knowledge and skills training. The teaching methods are relatively singular, with clear boundaries between disciplines, which makes it difficult to fully stimulate students' interest and potential in learning and cannot effectively cultivate the comprehensive abilities required to face future challenges. The introduction of the interdisciplinary teaching concept brings new opportunities for high school English teaching reform. This concept breaks the boundaries between disciplines and advocates the organic integration of English with other disciplines, enabling students to view and solve problems from a multidisciplinary perspective in the process of learning English, broaden their knowledge horizons, and enhance

their ability to comprehensively apply knowledge. Therefore, exploring high school English teaching strategies from an interdisciplinary perspective has important practical significance and theoretical value for promoting innovation in high school English teaching and improving the quality of talent cultivation.

## **2. Significance of interdisciplinary teaching in high school English instruction**

### **2.1. Stimulating students' learning interests**

Traditional high school English teaching often focuses on vocabulary, grammar explanations, and text analysis. The teaching content can be relatively dull, and the teaching methods tend to be uniform, which can easily lead to low interest among students. Interdisciplinary teaching organically combines English with subjects that students are interested in, such as music, art, history, and geography, greatly enriching the teaching content and forms<sup>[2]</sup>. For example, when teaching English poetry, painting skills from the art discipline can be introduced, allowing students to depict scenes from the poetry through drawing. In the process of creation, students need to deeply understand the imagery and artistic conception of the poetry, transforming abstract words into concrete images. This not only deepens their understanding of the poetry but also stimulates creativity and imagination, making English learning lively and interesting.

### **2.2. Improving language proficiency**

Language is a tool for communication, and it can only be truly mastered through application in real situations. Interdisciplinary teaching creates rich and diverse language application contexts for students, enabling them to improve their language proficiency through practical communication. Taking English teaching with a tourism theme as an example, combining knowledge of famous sites around the world with geography, students can introduce the unique scenic spots and local customs of different places in English. When preparing the introduction, students need to research a lot of information, learn relevant English vocabulary and expressions, and organize their language for clear and smooth expression. In the actual introduction process, they also need to interact with classmates and teachers, adjusting the content and manner of expression based on feedback. This language practice in real situations helps improve the fluency and accuracy of students' English oral expression, enhancing the flexibility and appropriateness of language use.

### **2.3. Cultivating interdisciplinary thinking**

The future society requires comprehensive talents with interdisciplinary thinking abilities, who can analyze and solve problems from different disciplinary perspectives. The application of interdisciplinary teaching in high school English classrooms can guide students to break through the single-discipline thinking paradigm, cultivating innovative thinking and the ability to solve complex problems. For example, when exploring the global topic of environmental protection, the English classroom can be combined with subjects such as biology, chemistry, and geography. Students first analyze the causes of environmental problems in English, such as ecosystem imbalances in biology, pollutant emissions in chemistry, and natural environmental changes in geography. Then, they explore the hazards of environmental problems, such as their impact on biodiversity, threats to human health, and changes to the global climate. Finally, corresponding solutions are proposed, such as promoting clean energy, strengthening the formulation and implementation of environmental protection laws and regulations, and raising public awareness of environmental protection.

### **3. Challenges in high school English teaching from an interdisciplinary perspective**

#### **3.1. Insufficient teachers' interdisciplinary knowledge reserve**

Interdisciplinary teaching poses higher requirements for teachers' professional literacy. Teachers not only need to be proficient in English subject knowledge but also need to have a certain understanding of other subjects. However, most high school English teachers currently have insufficient interdisciplinary knowledge reserves. During the normal education stage, the discipline specialization is relatively fine, and the curriculum of English education majors mainly focuses on English language and literature, English teaching methods, etc., with less involvement in other subject knowledge<sup>[3]</sup>. In addition, systematic training for interdisciplinary teaching is relatively scarce in post-employment training. This makes it difficult for teachers to organically integrate other subject knowledge with English teaching when conducting interdisciplinary teaching, affecting the teaching effect.

#### **3.2. Imperfect teaching evaluation systems**

Traditional high school English teaching evaluation mainly focuses on assessing students' English language knowledge and skills, such as vocabulary, grammar, reading comprehension, and writing tests, which cannot comprehensively evaluate the effectiveness of interdisciplinary teaching. Interdisciplinary teaching focuses on improving students' comprehensive literacy, including interdisciplinary thinking, team collaboration, and innovation. These abilities are difficult to effectively evaluate through traditional paper-and-pencil tests. In addition, the existing teaching evaluation system lacks attention to the interdisciplinary teaching process, which is not conducive to timely discovering problems in teaching and making adjustments and optimizations.

#### **3.3. Compact teaching schedule**

The task of high school English teaching is heavy and teaching time is limited. Interdisciplinary teaching requires teachers to spend more time on teaching design and preparation, such as integrating knowledge from other disciplines, designing interdisciplinary teaching activities, and preparing teaching resources. In classroom teaching, more time is also needed for students to discuss, practice, and collaborate, which may lead to compact teaching schedules and difficulty completing established teaching tasks. Teachers face a major challenge in reasonably arranging interdisciplinary teaching content and activities within a limited teaching time and improving teaching efficiency.

### **4. Implementation strategies for high school English teaching from an interdisciplinary perspective**

#### **4.1. Integrating knowledge from other disciplines to design teaching content**

##### **4.1.1. Combination with history**

High school English textbooks contain many articles involving historical events and figures, such as "The Million Pound Bank-Note" and "Astronomy: The Science of the Stars." Teachers can fully utilize this opportunity to integrate historical knowledge into English teaching. When teaching "The Million Pound Bank-Note," teachers can briefly introduce the social background of the United States at that time, including economic development, people's lifestyles, social class structure, and other historical knowledge. This helps students better understand the era background of the story, thus deeply understanding the character traits, behavioral motives, and emotional changes of the characters in the article<sup>[4]</sup>. At the same time, students are guided to describe historical events and figures in English, such as writing biographical sketches of historical figures and

narrating historical stories. This not only improves English expression skills but also deepens the understanding of historical knowledge <sup>[5]</sup>.

#### **4.1.2. Combination with geography**

When English teaching content involves the cultures and customs of different countries and regions, integration with geography becomes particularly important. For example, when learning English expressions about weather and climate in various countries, teachers can use explanations of climate types around the world from geography to help students understand the reasons for different climate characteristics, such as the influence of latitude, land and sea distribution, topography, and other factors on the climate <sup>[6]</sup>. At the same time, students are guided to describe the climate characteristics, seasonal changes, and people's lifestyles in different climatic conditions in English, such as clothing, dietary habits in tropical areas, and residential building characteristics in cold regions. Through this interdisciplinary teaching, students can not only master English knowledge but also have a more intuitive understanding of geographical knowledge, cultivating students' global perspectives and cross-cultural awareness.

#### **4.1.3. Combination with art**

English teaching often involves content related to art, such as literary works, music, and painting. Teachers can integrate art knowledge into English teaching to enhance students' art appreciation ability and interest in English learning. When studying English literary works, students are guided to analyze the theme, character images, writing style, and expression techniques from the perspective of literature and art, such as analyzing the language characteristics and character-shaping methods in Shakespeare's plays. At the same time, students are encouraged to express their understanding and feelings about the work in English literary reviews. When learning English vocabulary and expressions related to music, different types of music work, such as classical music, pop music, and folk music, can be played. This allows students to learn English lyrics and musical terminology while appreciating the music. Additionally, they can experience the emotions and cultural connotations conveyed by different music styles, achieving the perfect integration of art and language.

### **4.2. Adopting diversified teaching methods to promote interdisciplinary learning**

#### **4.2.1. Project-based learning**

Project-based learning is a student-centered teaching method that enables students to achieve comprehensive knowledge application and skill enhancement by completing specific projects. In interdisciplinary high school English teaching, teachers can design interdisciplinary project-based learning tasks. For example, students can work in groups to create an English promotional poster about "World Cultural Heritage Protection." In this project, students need to use English to collect and organize information and write promotional copy. Simultaneously, they need to integrate knowledge from history and geography to understand relevant information about world cultural heritage, such as historical backgrounds, geographical locations, and cultural values. Additionally, they utilize art knowledge for poster design, including color coordination, composition layout, and font selection. By completing this project, students not only improve their comprehensive English proficiency but also cultivate team collaboration, information gathering and processing skills, interdisciplinary thinking, and innovation.

#### **4.2.2. Situational teaching method**

Creating authentic situations is one of the essential means of interdisciplinary teaching. Teachers can design

various real-life scenarios based on teaching content, allowing students to use English to solve practical problems. For instance, simulating an international business negotiation scenario where students role-play as business representatives from different countries and negotiate in English. In this process, students need to understand business etiquette, cultural customs, market demands, and other knowledge areas, spanning cross-cultural communication, history, geography, and economics. Through role-playing, dialogue, and negotiation activities in the situation, students develop their English language proficiency, broaden their interdisciplinary knowledge horizons, and cultivate cross-cultural communication and problem-solving skills.

### **4.2.3. Cooperative learning method**

The cooperative learning method emphasizes collaboration and interaction among students. It aims to foster teamwork spirit and communication skills by completing learning tasks in groups. In interdisciplinary English teaching, teachers can group students with different subject strengths to accomplish learning tasks together. For example, during an English drama performance, some students excel in English expression, some possess strong acting talents, while others have unique insights into stage art design. Grouping these students allows them to collaborate and complete the rehearsal and performance of an English drama <sup>[7]</sup>. Through this process, students learn from and support each other, not only enhancing their English proficiency but also cultivating interdisciplinary abilities and teamwork spirit. They learn to listen to others' opinions, leverage their respective strengths, and achieve common goals.

## **4.3. Utilizing information technology to expand interdisciplinary teaching resources**

### **4.3.1. Multimedia teaching resources**

With the rapid development of information technology, multimedia teaching resources are becoming increasingly abundant. Teachers can utilize multimedia materials such as images, audio, and video to present interdisciplinary teaching content to students <sup>[8]</sup>. For example, when learning an English text, teachers can play historical documentaries, geographical scenery videos, or musical works related to the text content, helping students better understand the background and context of the text. When studying the text "The Great Wall," a historical documentary about the Great Wall can be played to introduce students to its construction history and military role. Videos showcasing the majestic scenery of the Great Wall can be shown to give students a sense of its grandeur, while musical works related to the Great Wall, such as "The Ballad of the Great Wall," can create a strong learning atmosphere and deepen students' understanding and memory of the text. Additionally, teachers can use multimedia to display knowledge charts and data from different subjects, guiding students to conduct interdisciplinary analysis and reflection.

### **4.3.2. Online learning platforms**

There are many high-quality online learning platforms on the internet that provide a wealth of interdisciplinary learning resources. Teachers can guide students to use these platforms for independent learning. Some online learning platforms offer English lectures and open courses on different subjects. Students can choose learning content based on their interests and needs. For example, if students are interested in history and culture, they can watch English lectures on world history or Chinese history. If they are interested in science and technology, they can watch English open courses on physics, chemistry, biology, and other subjects. Furthermore, teachers can utilize online learning platforms to assign interdisciplinary learning tasks. For instance, students can be asked to search for multidisciplinary information related to a specific theme on the platform, organize, analyze, and

summarize the information, and present their learning outcomes in the form of reports or presentations. This process allows students to achieve knowledge integration and expansion while completing tasks<sup>[9]</sup>.

### 4.3.3. Educational software

Currently, there are many software programs specifically designed for education, which are equipped with rich functions and resources to support interdisciplinary teaching. Some language learning software integrates knowledge from various subjects such as history, geography, and culture. Through games and interactive activities, it enables students to learn English and other subject knowledge in a relaxed and enjoyable atmosphere<sup>[10]</sup>. For example, some software includes game levels like “Traversing History,” where students play as historical figures and complete various tasks in English to learn about historical events. Other software uses virtual maps to allow students to explore different parts of the world, learning about geographical knowledge, cultural customs, and English expressions of various regions. Teachers can choose appropriate educational software to assist teaching based on their needs, improving teaching effectiveness and stimulating students’ interest in learning.

## 5. Conclusion and outlook

High school English teaching from an interdisciplinary perspective is an important teaching model that meets the development needs of the times. By organically integrating English with other subjects, it can effectively stimulate students’ interest in learning, significantly improve their language proficiency and interdisciplinary thinking, and comprehensively cultivate their comprehensive literacy. In the future, with the continuous updating of educational concepts and the sustained development of educational technology, further exploration can be conducted on the specific application strategies of interdisciplinary teaching in different teaching content and scenarios. Additionally, research can be done on how to better combine interdisciplinary teaching with the requirements of high school English teaching for the college entrance examination. This will provide more targeted and practical suggestions for the reform of high school English teaching, promote the continuous improvement of high school English teaching quality, and cultivate more compound talents who can adapt to the development needs of future society.

## Disclosure statement

The author declares no conflict of interest.

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