

Exploration of English Vocabulary Teaching in Senior High School under the Background of Informationization

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Abstract: Currently, senior high school English teaching faces new challenges. Students have heavy learning tasks and tight schedules, and the traditional teaching model struggles to spark their interest. Therefore, English teachers need to keep up with the trend of educational development, apply information technology, innovate vocabulary teaching methods, and create a dynamic and engaging English vocabulary teaching atmosphere. This article analyzes the significance and existing problems of information technology in senior high school English vocabulary teaching, and conducts a preliminary exploration of effective strategies for English vocabulary teaching in senior high school under the background of informationization from three aspects.

Keywords: Informationization; Senior high school English vocabulary; Teaching

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1. Introduction

In the current era of rapid development, knowledge is evolving at an astonishing pace. As a global lingua franca, English has become increasingly important^[1]. However, mastering English is no easy feat. For senior high school students, a solid vocabulary foundation is crucial. Nevertheless, many senior high school students show little enthusiasm for dull vocabulary learning and lack the initiative to explore. The advent of information technology can effectively address these issues, enabling students to shift from passive to active learning and transforming their lack of interest into enthusiasm. Thus, teachers must actively explore the role and application methods of information technology in vocabulary teaching to build efficient classrooms.

2. Significance of information technology in senior high school English vocabulary teaching

2.1. Enriching classroom content

The integration of information technology and senior high school English classrooms can effectively enrich teaching content and methods, and improve students' English learning environment and atmosphere^[2]. In traditional English classes, it is difficult for teachers to complete teaching tasks efficiently with just their voices and chalk. Inevitably, there will be an imbalance in teaching content, such as overemphasizing grammar while neglecting vocabulary^[3], which affects students' vocabulary learning outcomes. With the integration of information technology, on one hand, it can break the monotony of teaching forms and stimulate students' learning enthusiasm. On the other hand, most teaching content can be condensed into short videos, allowing students to reinforce their memory of new knowledge through previewing and reviewing, and consolidating the learning effect of the class. Meanwhile, teachers can devote more time to guiding students, teaching them effective vocabulary-memorization methods and training their English skills.

2.2. Strengthening communicative competence

The application of information technology enables students to be exposed to more authentic communication environments while learning English grammar and vocabulary. This helps them continuously practice their English application skills and deepen their understanding and memory of English vocabulary^[4]. It also prompts teachers to change their teaching concepts from rigid teaching to flexible application of textbooks. This allows students to acquire novel and interesting English knowledge in different communication scenarios while learning new content. For example, when teaching the vocabulary in "Unit 6 At one with nature," teachers can use information technology to create an agricultural dialogue scene with words like "soil," "crop," "agriculture," "beauty," "sunflower," etc. Students can then use the learned vocabulary to create dialogue content, such as "A: Good soil helps grow crops. B: Right. We learned that in agriculture class." In this way, when memorizing English vocabulary, students can maintain a more positive attitude, imitate teachers to connect the classroom with real life, timely consolidate what they have learned, actively seek English vocabulary in daily life, and gradually expand their English vocabulary.

2.3. Boosting learning confidence

With the help of certain information tools, teachers can promptly understand students' learning situations and states, and develop more targeted guidance plans^[5]. During the senior high school stage, there are significant individual differences in students' development in various aspects. Using a single and unified teaching method is insufficient to meet the English learning needs of all students. Through information technology, teachers can quickly implement stratified and phased teaching, helping most students regain confidence in English learning, changing their traditional perception of English courses, and thus falling in love with the English subject.

3. Existing problems in senior high school English vocabulary teaching

3.1. Predominance of mechanical memorization

In senior high school English teaching, the "teacher-lectures-and-students-listen" model is widely adopted. In this model, students' learning behaviors are passive and "forced", resulting in a lack of enthusiasm in vocabulary memorization and grammar application, and unsatisfactory learning outcomes. Currently, senior high school

students' English vocabulary accumulation mainly relies on textbooks, and they lack the initiative to explore other vocabulary learning and accumulation methods^[6]. Over time, students' performance in English vocabulary classes becomes mechanical and superficial, making it difficult to achieve the expected teaching and learning effects. Moreover, some students simply spell and pronounce English letters when learning and memorizing vocabulary, severing the connection between vocabulary, pronunciation, and usage, which further increases the dullness of vocabulary learning.

3.2. Lack of depth and breadth

English vocabulary, as a fundamental element of the English language, can form sentences through interconnections and enrich learners' vocabulary reserves^[7]. However, in actual vocabulary teaching, teachers often overlook the connections between words. They usually teach vocabulary unit-by-unit, separating words of the same category. This "rote-learning-based" vocabulary teaching method seemingly reduces students' academic burden, but in fact, it has the opposite effect. It not only fails to lighten the burden but also increases the difficulty of memorization. In short, there is a lack of depth and breadth in vocabulary teaching. The so-called breadth of vocabulary teaching refers to making horizontal associations and expansions when learning a certain word to increase students' vocabulary reserves. The depth of vocabulary teaching means going beyond the literal meaning of a word and endowing it with more meanings and usages in different contexts. This lack makes students feel that they have mastered the learned vocabulary in class, but in fact, they only achieve short-term memory^[8].

3.3. Monotonous teaching forms

In the era of information-based teaching, teachers should actively and fully utilize information-based devices in teaching. However, due to the rapid update of information-based teaching equipment and the average information technology literacy of most teachers, the application of information technology in actual teaching is not ideal. Some senior high school English teachers still rely on word-spelling and dictation to check students' learning during vocabulary teaching^[9]. Meanwhile, teachers assume that vocabulary memorization is easy and students can handle it on their own, so they focus more on grammar and tense teaching. However, they overlook the fact that most students lack autonomy and self-control, resulting in students being well-behaved in class but neglecting their studies after class, ultimately affecting the overall English teaching level.

4. Effective strategies for senior high school English vocabulary teaching in the background of informationization

4.1. Utilizing short videos to enhance the vitality of vocabulary teaching

The rapid development of information technology has significantly promoted the development of education in China. With the popularity of various short-video platforms, some content creators have ventured into the "Video + English vocabulary teaching" field^[10]. Therefore, teachers can draw inspiration from the characteristics of such videos and create teaching short videos centered around senior high school English vocabulary. However, in practical applications, teachers should select appropriate video content and forms according to the English vocabulary foundation and abilities of their students to achieve twice the result with half the effort.

For example, when teaching the words in "Unit 1 A New Start" of the Foreign Language Teaching and Research Press' Compulsory Course 1, such as "badminton," "drama," "band," "debate," "gym," "piano," "stage," "photography," "science," teachers can prepare lessons in advance and start creating the following video

content: In the video, sunlight shines through the window into the living room. Tom is reading a newspaper when he suddenly sees a badminton bouncing around the room. Tom grins mischievously, picks up a badminton racket, and hits the badminton on the ground. Bang! Jerry, wearing a ballet skirt made of feathers, starts dancing unsteadily. At this point, a label pops up: Badminton.

In the next scene, Tom and his friends are using pots, pans, and ladles as musical instruments. The pot serves as a drum, and the ladle as a drumstick, creating rhythms. Jerry is tossed into various shapes on the bed by the “music”. Then a label appears: Drama. In the third scene, Tom is sitting gracefully in front of a piano, playing a simple melody. Jerry quietly climbs onto the piano and runs around on the keys, producing chaotic notes. Tom panics and tries to adjust the tune according to Jerry’s movements. A label then shows: Piano. By using the popular approach of short-video-plus-vocabulary-teaching, on one hand, it can enliven the dull learning atmosphere for senior high school students and increase their interest in English vocabulary learning. On the other hand, the stimulation of videos and sounds can deepen students’ memory of vocabulary in their brains, improving their vocabulary-memorization efficiency and durability, and thus laying a solid foundation for English vocabulary learning^[11].

4.2. Leveraging informationization for building a complete vocabulary system

During the senior high school stage, students need to learn and use a large number of English words. However, simply memorizing or learning new words in class is not enough^[12]. This approach can only increase students’ vocabulary reserves but cannot help them build a comprehensive vocabulary system, often leading to the situation of “regretting the lack of words when needed”. Therefore, teachers can adopt the method of “associative memorization + informationization” to help students improve their vocabulary systems and effectively expand their English vocabulary^[13]. For example, when teaching “nation” and “observe” in “Unit 3 Family Matters” of the Foreign Language Teaching and Research Press’ Compulsory Course 1, teachers can use information technology to create dynamic mind maps. For “nation,” the associated words can be “China,” “Japan,” “Britain,” “America,” “Chile,” “Peru”; for “observe,” the associated festivals can be “Chinese New Year,” “New Year’s Eve,” “the Lantern Festival,” “the Dragon-head-raising Festival,” “Qingming Festival,” “the Dragon Boat Festival.” Through this vocabulary-teaching method of “associative memorization + informationization,” students can experience the benefits of “reviewing old knowledge to gain new insights,” develop good self-review habits, and truly expand their vocabulary.

4.3. Employing the situational teaching method to improve vocabulary application ability

The situational teaching method is a virtual teaching application scenario created with the help of information technology and physical tools^[14]. Through this method, abstract and rigid English vocabulary can become more vivid and flexible, thereby improving students’ vocabulary-memorization efficiency and strengthening their English vocabulary application ability^[15]. For example, when teaching the words in “Unit 4 Friends Forever”, teachers can ask students to preview the vocabulary. Then, with the help of multimedia devices, play the song “Auld lang syne” and ask students to find the English words that appear in this course from the lyrics. If there are none, students should form a sentence using the words in this section to evaluate the song. In this way, it can not only narrow the gap between students and the English subject but also cultivate students’ aesthetic qualities, realizing the linkage between English and music, and achieving the goal of interdisciplinary teaching. However, when some students are unable to complete the “sentence-making” task, teachers can provide appropriate reminders and assistance to build their confidence in memorizing and applying English vocabulary and further

improve the overall English vocabulary learning level of students.

5. Conclusion

In conclusion, for senior high school students, mastering more English vocabulary is of great help for their future studies and careers. To enable students to progress steadily in English learning, teachers must view information-based teaching objectively and rationally, deeply analyze its value, fully recognize the huge potential it can unleash in classroom teaching, and integrate it into daily teaching to help students make great progress in English learning.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Wang Y, Gao Y, 2023, Reflections and Explorations on Information-Based Teaching of Senior High School English under the New Curriculum Reform. *English Journal for Middle School Students*, 2023(12): 95–96.
- [2] He J, 2023, Discussion on the Promoting Role of Information-Based Teaching in Senior High School English Teaching. *Interactive Software*, 2023(7): 5436–5437.
- [3] Zhang Y, Wen W, 2024, Exploration on the Application of Multimedia Information Technology in Senior High School English Teaching. *Microcomputer*, 2024(10): 241–243.
- [4] Chen Q, 2024, Research on the Application Strategies of Modern Information Technology in High School English Vocabulary Teaching. *Teacher*, 2024(26): 39–41.
- [5] Wang S, 2024, Exploration of Senior High School English Teaching Models from the Perspective of Informationization. *Reading, Writing and Arithmetic*, 2024(4): 146–148.
- [6] Wang C, 2022, Using Information Technology Teaching Methods to Assist High School English Vocabulary Teaching. *New Education*, 2022(10): 24–26.
- [7] Sun H, 2021, Strategies for Vocabulary Teaching in High School English under the Background of Informatization. *Language and Mathematics Foreign Language Learning (First Half of High School Edition)*, 2021(10): 78–79.
- [8] Zhang Y, 2023, Research on the Deep Integration of Information Technology and High School English Vocabulary Teaching. *Parents*, 2023(4): 136–138.
- [9] Zhao Y, 2023, The Influence of Cognitive Load and Vocabulary Presentation Modes in Multimedia Teaching on College Students' English Vocabulary Memory. *Journal of Chifeng University (Philosophy and Social Science in Chinese)*, 2023(3): 55–59.
- [10] Wen W, 2023, Research on the Application of Information-Based Means in Vocational College English Vocabulary Teaching. *Meimei*, 2023(10): 0247–0249.
- [11] Li Y, 2023, Investigation and Research on the Presentation Modes of English Vocabulary in Senior High School English Vocabulary Teaching, thesis, Huaibei Normal University.
- [12] Yang H, 2023, Analysis of the Application of Information Technology in Secondary Vocational School English Vocabulary Teaching. *China New Telecommunications*, 25(18): 221–223.
- [13] Wang X, 2023, Optimizing Junior High School English Vocabulary Teaching with the Help of Seewo Interactive

Whiteboard. Today, 2023(17): 0163–0164.

- [14] Shen X, Fang Y, 2024, Practical Research on Information-Based Teaching of Middle School English Based on the TPACK Framework. Anhui Educational Research, 2024(20): 101–104.
- [15] Liu J, 2023, Cultivating Senior High School Students' English Disciplinary Accomplishments through English Classic Reading. English Journal for Middle School Students, 2023(40): 29–30.

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