Original Paper

Integrating Multimodal Theory in English Vocabulary Pedagogy:

Innovations and Insights in Junior High School Education

Luo Qian¹

¹ Institute of Public Foreign Languages, China West Normal University, China

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Abstract

Vocabulary, as an essential part in language, is the foundation of grammar, sentences and discourse. It also serve as a bridge for cross-cultural communication. Through vocabulary teaching, students are able to communicate and interact more effectively. The multimodal theory puts emphasize on dynamic language acquisition by employing multiple senses, such as visual, auditory and kinesthetic. Additionally, It attempts to enhance students' motivation and language abilities through medias like sounds, images and videos. For one thing, integrating multimodal theory into vocabulary teaching allows students to cultivate their critical thinking and deep learning. For another thing, it also aligns with the modernization needs and reinforces core competencies. The present paper applies multimodal theory into junior high school education and combines the APPLE teaching model to analyze practcal teaching cases, elucidating the specific ways and steps of multimodal theory.

Keywords

Multimodal theory, Junior high school, Language learning, Vocabulary teaching

1. Introduction

Vocabulary teaching is of paramount importance in junior high school English instruction. As Hamer states, "If the structure of a language is likened to its skeleton, then it is vocabulary that provides the vital organs and flesh."¹ This highlights that English vocabulary learning in junior high school is the core of fostering students' language ability and becomes a crucial factor in developing students' foundational skills. However, traditional vocabulary teaching methods exist a number of problems. Such as rote memorization, lack of contextual application, low memory efficiency, and have shortages of interactivity, practicality, and in-depth learning. At the same time, most teachers' instruction in vocabulary is limited to a singular teaching method of reading-memorizing-applying-testing. In order to optimize vocabulary learning efficacy and enhance knowledge retention, it is pivotal for teachers or

educators to explore multidimensional and valuable teaching approaches. According to Gardner's multiple intelligence theory, each person possesses various types of intelligence, such as linguistic, logical-mathematical and interpersonal intelligence. While this kind of distinction will apparently influence students' learning capabilities and daily life. Multimodal theory advocates that instruction should be carried out based on students' different intelligence and the way of meaning construction. It aims to meets students' needs and interest especially for visual, kinesthetic and auditory students.

This paper has a goal of exploring the applicability and effectiveness of multimodal teaching theory in English vocabulary instruction, solving current challenges in vocabulary instruction and linking theory with practice so as to achieve create a more realistic, interactive and informative learning atmosphere as well as enriching information input. What's more, with the wide utilization of educational technology, digital medias and online resources, combining multimodal theory with contemporary educational tools can not only considerably improve students' four basic language skills but also boosts their learning motivation, engagement and language levels. The "Junior High School English Curriculum Standards (2022 Edition)" (Ministry of Education, 2022, 20; hereinafter referred to as the "Standards") outlines the following level-one requirements for vocabulary knowledge:

A. Understand that words are composed of letters;

B. Use pictures and real objects to understand the meaning of vocabulary;

C. Say words and phrases based on visual or auditory cues, such as pictures, actions, animations, sounds, etc;

D. Learn vocabulary based on the sound, shape, and meaning of words, and appreciate the meaning expressed by vocabulary in context.²

It is evident that transforming abstract and demanding vocabulary knowledge into concrete, vivid, and lively forms to deepen understanding and cultivate a sense of language is essential. Converting text into videos, images, and audio can stimulate multiple senses in students and create a sound teaching atmosphere.

The innovation of this paper is mainly reflected in three aspects: First, practical innovation. This study combines the abstract concepts of multimodal theory with junior high school English vocabulary teaching cases, providing a referential teaching paradigm to enhance the quality and level of instruction. Second, structural innovation. Utilizing multimodal technology and guided by constructivism theory and systemic functional linguistics, this research delves into vocabulary understanding and memory, thus creating conditions for promoting classroom participation and diversified teaching. Third, content innovation. Based on the core ideas of the "Junior High School English Curriculum Standards (2022 Edition)" and using the People's Education Press Grade 9 junior high school English textbooks as a medium, this study formulates a logical and well-organized practical plan for junior high school English vocabulary instruction, aligning with the goals of core literacy development, new curriculum teaching requirements, and national educational objectives.

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2. Current Status of English Vocabulary Teaching in Junior High School

Indeed, the phenomenon of teaching vocabulary through traditional ways, which rely on direct instruction, simple indoctrination, and repetitive memorization, is still prevalent. However, this approach lacks a deep understanding of vocabulary meaning and context, overemphasizes textbook knowledge, and makes it difficult for students to use the language in communication and interaction. The monotonous evaluation methods and dull learning contents lead to a scarcity of cultivation in critical and creative thinking among students, gradually diminishing their learning motivation and interest. On the other hand, emerging teaching models are gradually coming to the fore, such as situational teaching, contextual teaching, and mind mapping. Among these, multimodal teaching methods have attracted significant attention. Xue (2016) explored the interaction between multimodal discourse analysis theory and multimodal discourse forms, as well as their integration with college vocabulary teaching, concluding that the efficient operation of multimodal teaching methods, learning approaches, and multimodal mutual assessment between teachers and students can enable undergraduates to meet the vocabulary standards set by the "College English Curriculum Teaching Requirements".³ Miao and Wang (2019), relying on surveys and tests, conducted an experimental study on ninth-grade students in a middle school in Liaoyuan City. They concluded that with the rapid development of information technology, multimodal teaching aligns with the trend of diversified communication. In addition, multimodal teaching can enhance students' language awareness from the phonological, pragmatic, and sociolinguistic aspects of vocabulary.⁴ Zhang (2019) applied empirical research methods to compare the vocabulary scores of experimental and control classes, concluding that driven by technological and societal development, the multimodal teaching model significantly differs from traditional English vocabulary teaching models. Multimodal teaching surpasses traditional methods in vocabulary instruction and students' vocabulary acquisition, enhancing students' vocabulary application skills, compensating for the deficiencies of traditional teaching, and enriching their information intake.⁵

The junior high school is an important stage for English learning and mastery, as well as a key period for the development of English knowledge and skills, such as listening, speaking, reading, writing abilities, and grammar and vocabulary mastery. Currently, junior high students are in adolescence and at a stage of cognitive development and progress. Their logical thinking, problem-solving abilities, and language comprehension capabilities are all in an ascending phase. The capacity to explore and seek knowledge externally is also gradually emerging. If teachers fail to use appropriate teaching methods, deeply cultivate teaching content, analyze student characteristics, and adequately prepare for classes, students will lack interest in learning and may even arise an aversion to English learning.

Professor Wen (2019) points out that foreign language educators must embrace the new era of linguistic intelligence technology development with open arms, adopt a positive and open mindset, quickly familiarize and master relevant technologies, and integrate classroom teaching with online courses, paper materials with online resources, and teacher evaluations with machine automated assessments.

This kind of integration will allow language intelligence technology to assist in foreign language education, enabling teachers to devote more time and energy to creative work.⁶ Therefore, to create a conducive learning atmosphere and enhance student engagement, it is vital to construct meaning potentials by using non-linguistic symbolic modes such as images, videos, and recordings. While current junior high school English vocabulary teaching is attempting advanced teaching methods and concepts to reform and innovate vocabulary instruction, issues such as outdated teaching methods, insufficient teacher skills, and lack of student initiative and enthusiasm still exist, which undoubtedly affecting students' vocabulary application abilities and language skills.

3. Junior High School English Vocabulary Teaching from the Perspective of Multimodal Theory

3.1 Multimodal Teaching Theory

Modality is a kind of resource that mainly used for communication and meaning construction, which embraces language, music, images, gestures, body language and so on. The meaning of modality relies on different social and cultural backgrounds. Multimodal teaching is famous for its application of various sensory experiences and expression ways to strengthen language acquisition. The New London Group primarily discussed "multimodal teaching" in "A Pedagogy of Multiliteracies" and expressed their opinions on this method. They hold the view that traditional characters and language teaching are not able to meet current education needs. In order to promote education quality and prioritize teaching pathways, it is necessary to increase diverse communication and expression ways like videos, audios, and images. They focused on using emerging and meaningful teaching technologies to activate the classroom atmosphere. Their theory actually provided evidences for multimodal teaching, and helped educational practice become more inclusive and multidimensional.

There are some features of multimodal teaching. First of all, it enhances sensory experiences by integrating multiple expressions and emphasizes positive participation and interaction. It also advocates student-centered theory and personalized development as well as optimizing students' learning paths. Besides, multimodal teaching encourages students to discover their innovative spirit and subjective initiative, fostering critical thinking and creative capabilities. Besides, students' teamwork and interpersonal skills will be accordingly enhanced through means like group discussions and project cooperation. Furthermore, multimodal teaching attracts student attention by presenting various medias, sparking their ideas and providing different learning experience. Lastly, it advocates teaching students on the basis of their abilities and upgrades teaching methods and principles based on students' various learning style.

In summary, applying multimodal teaching to junior high school English vocabulary instruction can not only reinforce students' vocabulary acquisition but also deepen their memory and understanding towards English words, laying a strong basis for future English learning. Thus, students have the chances to develop their language abilities, learning capacity, cultural awareness, and thinking quality.

3.2 Effectiveness of Multimodal Vocabulary Teaching

According to Halliday's systemic functional linguistics, language has significant functionality. As shown in Figure 1, in vocabulary teaching, teachers need to impart the meanings of words and integrate context into their instruction. Thus, students are able to choose appropriate vocabulary according to language' social function and purpose. Systemic functional linguistics also believes that vocabulary memorization should connect with grammatical structures and text characteristics. In this way, students have access to understand and use vocabulary in a more comprehensive and more clear way. The fact that encouraging students to think how vocabulary is used to convey different attitudes, ideas, and meanings can get a close combination of knowledge and values.

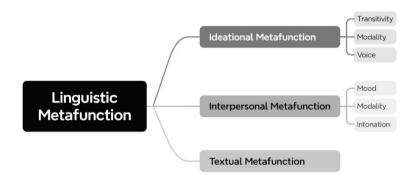


Figure 1. Linguistic Multi-functions

In the process of multimodal teaching, teachers are expected to demonstrate the three major functions of language through multimedia resources. For examples, they can use visual materials to explain the internal meaning of vocabulary, and adopting short videos or films to show the usage of vocabulary within specific contexts. Furthermore, comparing the collocations and usages of the same vocabulary in different contexts enables students to comprehend how the meaning of vocabulary influences the communication and reception of information.

3.2.1 Visual Aids in Memory: The Charm of Images

Research demonstrates that visual factors like images, videos, and charts can convert abstract words into vivid visual images, namely providing tangible lexical connections. This method benefits learners both intuitively experiencing the strength of words and motivating their learning interest. For instance, observing a photo or video about grapes while learning the word "grape" enables learners to swiftly understand the word and its usage.

As a crucial part of multimodal learning, visual elements help students with different learning styles enhance vocabulary memorization through various sensory experiences. We need notice that visual factors are more attractive than text alone. Designing elaborate flashcards, colorful charts and interesting videos are able to promote student participation and interaction. On the other hand, visual elements are also beneficial for reviewing and consolidating text content. According to the dual coding theory, when information is presented in both text and image forms, vocabulary memorization will be more effective. Employing images, videos, and interactive applications into immediate feedback not only provides appropriate contexts and atmosphere for vocabulary learning but also keeps student motivation.

In traditional teaching methods, the usage of images is very limited and exists only as static illustrations in textbooks. Images are often viewed merely as teaching aids, with teachers focusing on simple explanations of illustrations or overlooking them entirely. However, multimodal teaching advocates for the integration of images with text, sound, and other resources. In this approach, images are not just aids but mediums for conveying information and text. Dynamic images and interactive graphics are used to enrich teaching methods.

3.2.2 Auditory Understanding Enhancement: The Power of Sound

For auditory learners, using audio and video materials in vocabulary teaching undoubtedly improves learning efficiency and proactivity. As a matter of fact, listening practice helps students not only understand the pronunciation of words and sentences but, more importantly, combining listening skills with reading, writing, and speaking can comprehensively enhance language proficiency. First of all, through audio dialogues, students can immerse themselves in the culture of other nations, fostering respect and understanding for multiculturalism. Second, teachers are expected to engage students in vocabulary-related games or activities by playing audio and video materials or conduct vocabulary tests through audio, thus improving students' listening comprehension abilities.

Listening practice plays a crucial role in vocabulary learning, especially in terms of phonetics and intonation. Compared to reading words alone, auditory memorization of words is often more effective, particularly under emotionally charged and contextual conditions. Regular auditory practice can also develop a sense of language, enhance memory, and foster linguistic intuition. Teachers can play English news (such as China Daily, BBC, VOA) to increase students' vocabulary, familiarize them with English pronunciation, and deepen their understanding of vocabulary distinctions.

3.2.3 Interaction for Enhanced Application: The Effect of Practice

To increase teaching diversity and learning interest, multimodal teaching advocates interactive and experiential teaching. Constructivist theory contends that knowledge is constructed through personal experiences and understanding of the whole world. In vocabulary teaching, students learn vocabulary through interaction, discussion, exploration, and practice. When students connect newly acquired vocabulary with personal experiences and interests, their understanding and remembering abilities on vocabulary will get constant increase. As we all know, interactive learning includes peer assessment, group discussions, and reflective learning. By learning and supporting each other and sharing learning resources, students are able to adjust their learning strategies according to their merits and drawbacks. Role-play and program-based learning are particularly useful in interactive activities. Through role-play, students are supposed to enhance their interest and motivation in vocabulary retention while

experiencing and enjoying different roles. Moreover, learners can not only improve their interpersonal skills but also fluently employ new vocabulary when students communicate and cooperate with others. Program-based learning encourages students to actively ask questions and analyze solutions. This kind of proactivity undoubtedly aids students to do fine processing of vocabulary, fostering a close integration of knowledge and values. In summary, project-based learning increases the interest and challenge of learning by providing simulated or real social situations for interaction.

3.3 Potential Issues and Suggestions for Multimodal Teaching

Multimodal teaching, which enriches learning experiences through multiple senses and strengthens vocabulary memorization, has significant scientific and practical values in the field of education. However, there are some shortcomings in its application.

3.3.1 Unequal Resource Distribution: Addressing Development Needs

Multimodal teaching requires schools to have comprehensive teaching facilities and abundant teaching resources. At the same time, teachers need extensive teaching experience and solid professional knowledge. This presents significant challenges for many schools and some teachers, especially in economically underdeveloped areas where educational resources are often unevenly distributed. First, the use of computers, multimedia equipment, and touch pens may be available in economically developed areas, whereas poorer regions might rely on traditional teaching tools. Second, the technical equipment required for multimodal teaching not only needs initial investment but also requires substantial funds for maintenance and updates, which can be burdensome for financially limited schools. Lastly, there is a disparity in teachers' professional capabilities; multimodal teaching requires teachers to have subject knowledge, technological application skills, and innovative teaching methods.

To address this situation, government and relevant educational institutions should provide sufficient financial assistance to ensure equal access to multimodal teaching resources for all students. Schools should also find ways to reduce costs, relieve the burden of teaching materials and content, develop sustainable technical plans for the maintenance and upkeep of teaching equipment, and help teachers improve through remote seminars, online training courses, and experience exchange meetings.

3.3.2 Student Adaptation Differences: Focusing on Individual Characteristics

Multimodal teaching, as an emerging pedagogical approach, emphasizes the employment of varied teaching methodologies and tools. This approach can be challenging for students who are accustomed to traditional teaching methods. According to the VARK model, learners can be categorized into visual, kinesthetic, auditory, and reading/writing learners, as illustrated in Figure2. Consequently, students with different learning styles have various ways of processing information; some are good at dealing with visual information, while others intend to learn through doing. Beyond the distinction in learning styles, students' personality traits also influence the implementation of multimodal teaching. More specifically, introverted students may prefer to work independently, but outgoing students intends to proceed group collaboration and interaction. Since each student has diverse experiences and background knowledge, they naturally have diversified reaction to multimodal teaching.

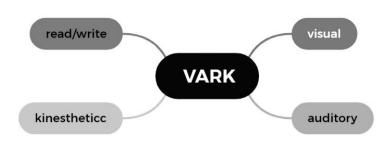


Figure 2. VARK Model

To help students with different learning styles, teachers are expected to adopt differentiated teaching methods. In other words, teachers can present vivid images and videos for visual learners, playing lectures and audios for auditory learners, and designing offline activities for kinesthetic learners. For reading or writing learners, they are supposed to analyzing text information. It is necessary for educators to help learners develop personalized study plans, because these plans can foster students' self recognition and improve adaptability. Teachers should also take measures to adjust their teaching plan based on students' learning situation.

3.3.3 The Evaluation System: Need Reform and Innovation

The teaching evaluation system plays a vital role in fostering students' core competencies. It aids students in experiencing progress and success in English learning, allows for a comprehensive understanding of self. Teachers are able to get real-time teaching feedback, and it is beneficial to improve their teaching skills and enhance professional development. Besides, the teaching evaluation system also assists schools and administrative departments in enhancing classroom implementation and the quality of education (Ministry of Education, 2022, p. 53). However, traditional evaluation system, which primarily focus on homework and exams, emphasizes summative evaluation and neglect formative assessment, failing to fully reflect the outcomes of multimodal teaching.

Therefore, to promote the teaching evaluation system, get timely teaching feedback, and improve teaching strategies, the creation of a diversified evaluation system is indispensable. This should include evaluations of student academic performance, teacher professional growth, and innovation in teaching methods, examining classroom engagement, student learning outcomes, and teacher professional development. The evaluation system is expected to be multifaceted, multipurpose, and multileveled, considering students' individual differences and implementing differentiated evaluation standards to ensure fairness and transparency in the evaluation process and outcomes. Students' learning situations should be viewed from perspectives of progress and development.

4. Case Analysis of Multimodal Theory in Junior High School English Vocabulary Teaching

To demonstrate the scientific and effective application of multimodal theory in junior high school English vocabulary teaching, this paper presents a case study based on the People's Education Press Junior High English Ninth Grade, Unit 13 "We're Trying to Save the Earth." Utilizing the APPLE teaching steps and multimodal teaching methods, the teaching process is exhibited as follows:

A. Classroom Introduction (Activation)

To stimulate students' interest in environmental issues and provoke discussion, this section employs an audio-visual introduction method. A video on Japan's nuclear wastewater discharge into the sea and PowerPoint slides showcasing environmental pollution (as shown in Figure 3) are used to spark curiosity. Students are encouraged to attempt describing the environmental issues depicted in the images using their existing vocabulary.



Figure 3. The Pictures about Environmental Pollution(source: Baidu pictures)

This section employs a combination of video and images to stimulate student thinking, attract their attention, and encourage them to build upon their existing knowledge to construct meaning. It aids in broadening their perspectives and enriches the diversity of their learning experiences.

B. Presentation of Course Content

Teachers display images of environmental pollution encountered in daily life and their English definitions on PowerPoint. They instruct students in word pronunciation and practice, followed by guiding them through definitions, images, and example sentences to understand and categorize the vocabulary. For instance, words like cars, ships, loud music, mobile phones fall under noise pollution, while smoking and factories are categorized as air pollution. During this process, 2-3 students are invited to classify words on stage, and those excelling are rewarded.

While explaining vocabulary, teachers are supposed to aid students in developing a robust environmental conservation ethos, advocating for a love of nature, environmental protection, and collective responsibility.

C. Peer Learning

Peer learning seeks to enhance vocabulary understanding through group collaboration. In this stage, students are supposed to engage in role-play exercises, incorporating the vocabulary related to environmental pollution in part 1a within a dialogue framework presented in 1c. The teacher should minimize interruptions to sustain high student engagement and enthusiasm. After 4-5 groups have finished their performances, the teacher offers feedback and suggestion, emphasizing teamwork, effective application of vocabulary and improvisational skills.

In this section, teachers are expected to present the cultural background, etymology, and various contexts of vocabulary so as to help students better understand and memorize them. The focus is on

providing opportunities for meaningful expression and mutual learning among students, which promotes a sense of responsibility and pride while also enhance their confidence and communication.

D. Learning Reinforcement

Students familiarize themselves with the pronunciations of key vocabulary by listening to audio recordings of parts 2a and 2b. After primary practice, the audio is replayed for shadowing exercises, with a focus on correcting words that are misheard or overlooked. Post-listening activities include a "Speak and Guess" game, which is used to enhance oral expression, strengthen vocabulary retention, stimulate associative thinking and boost learning participation.

This section gradually guides students from simple listening exercises to realistic practice, enhancing their observational and communicative skills while stimulating the sense of language. During the game phase, teachers can participate optionally but should prioritize student-centered activities to create a more relaxed learning atmosphere which aligns student feedback.

E. Learning Evaluation

Evaluations provide valuable feedback on student merits and disadvantages, and teachers have the chance to observe their development while adjusting their teaching strategies. Regular assessments also enhance teaching quality and efficiency, assuring smooth teaching activities.

After motivating students' auditory, kinesthetic, and visual senses in vocabulary perception, teachers conduct vocabulary tests on Rain Classroom, praising exemplary students and encouraging those needing improvement. Homework is assigned on Rain Classroom. Before class ends, students self-assess their performance (as shown in figure 4), summarizing learned knowledge and encouraging self-reflection to enhance self-awareness and critical thinking, thereby facilitating personal growth.

The things I did		Evaluation			
I played an active role in this class	Ę	5	4	3	2
	1				
I expressed myself in English very well	Ę	5	4	3	2
	1				
I followed my teacher well and took som		5	4	3	2
necessary notes	1				
I worked together with my partners very	Ę	5	4	3	2
well.	1				
I made some progress in this class	Ę	5	4	3	2
	1				
TOTAL SCORES					
20-25: Excellent;					
15-19: Very good					
10-14: Good					

Figure 4. Self-assessment

5. Conclusion

Junior high school English course embodies both humanistic and instrumental values. Mastering a

language fundamentally requires ample vocabulary, which is essential for analyzing grammar, understanding texts, and engaging in linguistic communication. It is also crucial for improving writing, speaking, and listening skills. Implementing multimodal teaching in English vocabulary instruction holds profound theoretical and practical significance.

Firstly, multimodal teaching method, which including the use of visuals, videos, and audios, meets students with a variety of learning styles, promoting better understanding and vocabulary retention. Moreover, integrating multimedia into lessons certainly captures student interest and makes complex concepts become more accessible. Secondly, it allows students to learn in some vivid and concrete scenarios, moving beyond rote memorization to more special and meaningful experiences, thereby enhancing their communicative skills and vocabulary acquisition. Thirdly, unlike traditional methods, students actively participate in group discussions and cooperation activities, which help develop practical skills and cultivate creativity, optimizing both effectiveness and availability of teaching. Self assessment enables students to get a clear comprehension of their own abilities so that they are more easy to establish learning objectives and create detailed study plans. Lastly, the advancements in science and information technology seamlessly aligns with contemporary educational philosophies, making them highly match with the principles multimodal teaching.

In conclusion, this paper examines the necessity and feasibility of implementing multimodal teaching in junior high school English vocabulary instruction, exploring potential challenges and solutions. It provides deep analysis of the teaching model and concludes with a case study that employs the APPLE teaching model. However, limitations in teaching practice, strategies, and a lack of comprehensive research methods have been noticed, which will be addressed in future studies.

Bibliography

- Gao, Y., & Chen, X. (2020). Analysis of Junior High School English Vocabulary Teaching Based on Multimodal Discourse Analysis Theory. *Journal of Changchun College of Education*, 36(05), 63-68.
- Hamer, J. (1990). The Practice of English Language Teaching (p. 158). London: Longman.
- Miao, N., & Wang, H. (2019). Construction and Effectiveness Study of English Vocabulary Teaching Framework Based on Multimodal Theory. *Journal of Changchun Normal University*, 38(04), 160-165.
- Ministry of Education of the People's Republic of China. (2022). Compulsory Education English Curriculum Standards. Beijing: Beijing Normal University Press.
- Wen, Q. F. (2019). 70 Years of Foreign Language Education in New China: Achievements and Challenges. Foreign Language Teaching and Research, 51(5), 735-745, 801.
- Xue, S. M. (2016). College English Vocabulary Teaching from the Perspective of Multimodal Theory. *Overseas English*, (19), 92-93.
- Yang, J. (2017). Application of Multimodal Discourse Analysis Theory in Junior High School English

Published by SCHOLINK INC.

Vocabulary Teaching. Journal of Jiamusi Vocational College, (03), 383.

- Yue, L. L. (2021). Exploration of the Application of Multimodal Discourse Theory in Junior High School English Vocabulary Teaching. *Overseas English*, (18), 223-224.
- Zhang, J. Y. (2020). Application Research of Multimodal Theory in Junior High School English Vocabulary Teaching. *Modern Communication*, (15), 194-195.
- Zhang, X. Y. (2019). An Empirical Study on the Effect of Multimodal Teaching on College English Vocabulary Acquisition. *Overseas English*, (05), 62-63.