

Original Paper

Integrating Multimodal Theory in English Vocabulary Pedagogy: Innovations and Insights in Junior High School Education

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Abstract

As the basic building block of language, vocabulary plays an essential role in language learning. It forms the foundation of grammar, sentences and discourse, and it is also the bridge for cross-cultural communication. Through vocabulary teaching, students can achieve effective communication and interaction. Multimodal theory emphasizes the dynamic learning of language, which involves using various senses such as visual, auditory, and kinesthetic senses, attempting to stimulate students' enthusiasm and language proficiency through media like sound, images, and videos. Applying multimodal theory in junior high school English vocabulary teaching can not only develop students' critical thinking and promote deep learning, but also meet modern needs and enhance core competencies. The author applies multimodal theory into junior high school English vocabulary teaching and employs the APPLE teaching model to analyze teaching case, illustrating the specific operational steps and methods of this 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. (Hamer, 1990) 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. It is imperative to explore multidimensional and holistic teaching models to enhance long-term knowledge retention and optimize vocabulary learning efficiency, leading to the emergence of multimodal teaching theory. According to Gardner's Theory of Multiple Intelligence, individuals possess different types of intelligence, such as linguistic, logical-mathematical, and interpersonal intelligence, which obviously affect their learning capabilities and daily life. Multimodal teaching theory tailors instruction to the intelligence and meaning construction processes of different learners, aiming to meet the needs of diverse learners, especially for visual, auditory, and kinesthetic learners.

This paper aims to explore the effectiveness and availability of multimodal theory in junior high school English vocabulary teaching. It addresses existing issues in vocabulary teaching and applies the theory to case studies, connecting theory with practice to achieve a more life-like, realistic, and practical teaching approach, enriching the methods and means of information input. Furthermore, with the advancement of educational technology, digital media and internet resources are being fully utilized. Integrating multimodal theory with modern educational methods not only significantly enhances students' listening, speaking, reading, writing, and viewing skills but also further strengthens their enthusiasm, effectiveness, and initiative in learning. 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. (Ministry of Education of the People's Republic of China, 2020)

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.

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”. 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. 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. (Zhang, 2019)

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. (Wen, 2019) 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 refers to the resources that humans use for communication and meaning construction, including language, music, images, gestures, body language, etc. The significance of these modalities varies from different cultural and social backgrounds. Multimodal teaching is an educational method that integrates various sensory experiences and expression methods to enhance learning efficiency. The New London Group first proposed "multimodal teaching" in "A Pedagogy of Multiliteracies", and they detailed their views on this approach. They believed that traditional text and language teaching are insufficient in the age of globalization. To improve the quality and effectiveness of education, the promotion of diverse communication and expression methods, such as video, audio, and images, is advocated. They emphasized using emerging technologies as teaching tools to enhance the classroom experience. Their theory laid the foundation for multimodal teaching, promoting more diverse and inclusive developments in educational practice.

As for the characteristics of multimodal teaching, to begin with, it skillfully integrates various expression methods to enhance sensory experiences, emphasizing active student participation and interaction. It focuses on student-centered learning, promoting students' individualized development and optimizing learning paths. Secondly, multimodal teaching encourages students to exercise their initiative and creativity, fostering critical thinking and creative abilities. Furthermore, multimodal teaching enhances teamwork skills through means like group discussions and project collaboration. Thirdly, multimodal teaching attracts student interest by presenting various media, stimulating their thoughts and providing diverse learning experiences to meet students' needs. Finally, it advocates teaching students according to their aptitudes, updating teaching methods and principles based on students' different learning styles and types.

In a word, applying multimodal teaching to junior high school English vocabulary instruction can not only improve students' vocabulary learning outcomes but also deepen their memory and understanding

of words, laying a solid foundation for future English learning. This approach enhances their language abilities, learning capacity, cultural awareness, and thinking quality.

3.2 Effectiveness of Multimodal Vocabulary Teaching Applications

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. Hence, students can choose appropriate vocabulary based on the social function and purpose of the language. Systemic functional linguistics also advocates that vocabulary memorization should interact with grammatical structures and discourse features, enabling students to understand and use vocabulary more comprehensively and clearly. The fact that encouraging students to consider how vocabulary expresses different attitudes, ideas, and meanings can achieve a close integration of knowledge and values.

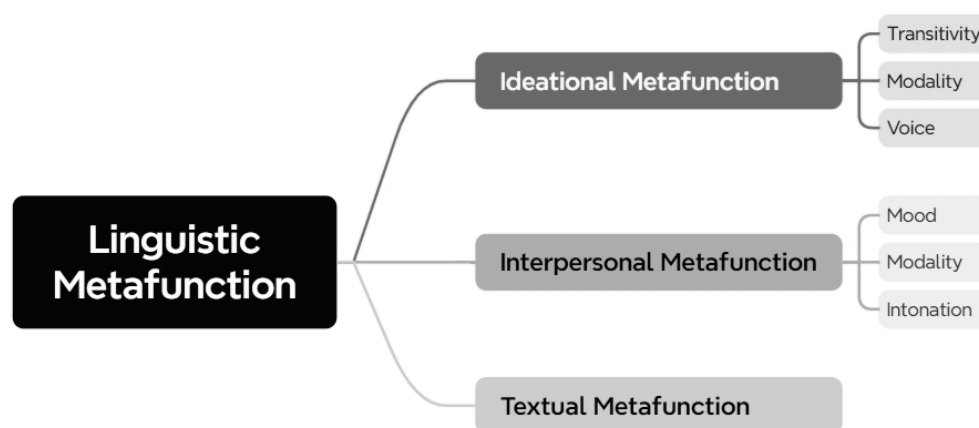


Figure 1. Linguistic Multifunctionality

In multimodal teaching, teachers can use multimedia resources to demonstrate the three major functions of language, such as using visual materials to explain the connotations of vocabulary, and employing short videos or film resources to demonstrate the usage of vocabulary in specific contexts. In addition, by comparing the collocations and usages of the same vocabulary in different media, students can understand how the meaning of vocabulary affects the transmission and reception of information.

3.2.1 Visual Aids in Memory: The Charm of Images

Research indicates that visual elements like images, videos, and charts can connect abstract words with concrete visual imagery, providing tangible lexical associations. This method benefits learners by intuitively experiencing the power of words and enhancing their interest in learning. For example,

viewing a photo or video about grapes while learning the word “grape” allows learners to understand the word and its usage more quickly.

As a crucial component of multimodal learning, the use of visual elements helps learners with different learning styles to increase vocabulary memorization efficiency through various sensory experiences. Notably, visual elements are more attractive than text alone. Well-designed flashcards, vivid charts, and engaging videos are able to enhance student participation and experience. Moreover, the use of visual elements also aids in the review and consolidation of learning content. According to the dual coding theory, when information is presented in both text and image formats, vocabulary memorization is more effective. Using images, videos, and interactive applications for real-time feedback not only provides appropriate contexts and atmospheres for vocabulary learning but also strengthens 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 posits that knowledge is constructed based on personal experiences and understanding of the world. In vocabulary teaching, students actively learn vocabulary through interaction, discussion, exploration, and practice. When learners connect newly learned

vocabulary with personal experiences and interests, their ability to understand and remember vocabulary will be continuously strengthened. Interactive learning includes peer teaching, group discussions, and reflective learning. By learning and supporting each other among peers, sharing learning resources, and developing learning strategies, students can consolidate their knowledge of vocabulary.

Role-playing and project-based learning are particularly effective in interactive activities. Through role-playing, students enhance their interest and motivation in vocabulary memorization while experiencing and enjoying different roles. Moreover, learners improve their interpersonal skills and naturally use new vocabulary through communication and collaboration with others. Project-based learning encourages students to actively pose, analyze, and solve problems. 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 Figure 2. Consequently, students with different learning styles process information differently; some excel with visual information, while others thrive through hands-on experience. Beyond learning style variations, students' personality traits also influence the implementation of multimodal teaching. For instance, introverted students may prefer to work independently, while extroverted students often enjoy group collaboration and interaction. The diverse experiences and background knowledge each student brings further contribute to the varying degrees of adaptation to multimodal teaching.

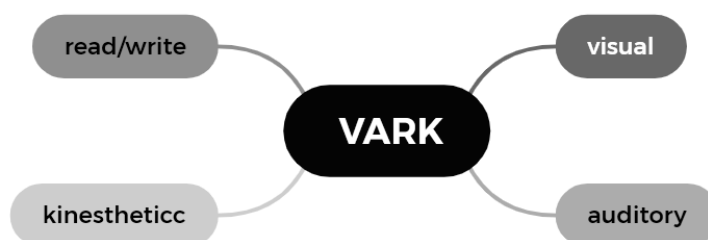


Figure 2. VARK Model

To assist students with different learning styles, teachers should adopt differentiated teaching methods: using images and videos for visual learners, lectures and audio for auditory learners, offline activities for kinesthetic learners, and textual content for reading/writing learners. It is crucial for educators to help learners develop personalized study plans, as these plans can foster self-awareness and enhance adaptability. Teachers should also gather feedback through surveys or interviews and adjust their teaching strategies based on students' learning outcomes.

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 aims to deepen vocabulary comprehension through group collaboration. In this phase, students engage in role-play, using the environmental pollution vocabulary presented in part 1a within a dialogue framework as outlined in 1c. The teacher is expected to minimally interrupt to maintain high student engagement and enthusiasm. After 4-5 groups have performed, the teacher provides feedback and suggestions, focusing on team collaboration, vocabulary application, and improvisational skills.

In this section, teachers may introduce the cultural background, etymology, and usage scenarios of words, in order to aid students in more effective understanding and memorization. Emphasis is placed on providing opportunities for self-expression and mutual learning among students, fostering a sense of responsibility and honor, while building confidence and encouraging self-expression.

D. Learning Reinforcement

Students familiarize themselves with key vocabulary pronunciations through audio playback of parts 2a and 2b. After practice, the audio is replayed for shadow training, with a focus on correcting misheard or missed words. Post-listening activities include a “Speak and Guess” game to enhance oral expression, reinforce vocabulary memorization, stimulate associations, and boost learning enthusiasm.

This segment gradually guides students from basic audio input to kinesthetic practice, enhancing observational and communicative skills and stimulating English thought processes. In the game phase, teachers may selectively participate but must prioritize student-led activities, maintaining a relaxed learning atmosphere with student feedback.

E. Learning Evaluation

Evaluations provide comprehensive feedback on student progress and comprehension, aiding in their development while informing future teaching plans and methods. Regular assessments also enhance teaching quality and efficacy, ensuring 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	5	4	3	2
	1			
I expressed myself in English very well	5	4	3	2
	1			
I followed my teacher well and took some necessary notes	5	4	3	2
	1			
I worked together with my partners very well.	5	4	3	2
	1			
I made some progress in this class	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, through visuals, videos, and audio, caters to diverse learning styles, aiding effective understanding and memorization. Moreover, multimedia use undeniably sparks student interest, transforming complex concepts into more tangible, vivid, and simplified forms. Secondly, it enables students to learn in vivid, concrete scenarios, moving away from rote memorization to more engaging and enriching experiences, thereby enhancing communicative and vocabulary application skills. Thirdly, compared to traditional methods, students actively engage in group discussions and collaborative activities, fostering practical skills and innovative spirit, optimizing teaching effectiveness and efficiency. Self-evaluation also assists students in accurate self-perception, establishing clear learning objectives and detailed plans. Lastly, the evolution of science and information technology aligns seamlessly with modern educational philosophies, resonating with the era in multimodal teaching.

In summary, this paper analyzes the necessity and availability of multimodal teaching in junior high school English vocabulary, exploring potential issues and solutions. It thoroughly dissects this teaching model, concluding with a case study using the APPLE teaching model. However, limitations in teaching practice and strategies, along with a lack of comprehensive research methods, will be addressed in future studies.

References

- 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). In *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 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.