



A Study on Senior High School English Reading Instruction Guided by Multimodal Discourse Analysis

Yuting Wang

Hangzhou Normal University, Zhejiang, 311121, China

1779956731@qq.com

Abstract. Multimodal discourse analysis offers a framework to address limitations in traditional English reading instruction. This study develops a hierarchical teaching model for senior high school by integrating theory with practical reflection. The model demonstrates value in enhancing comprehension and competencies, while also identifying implementation challenges in the Chinese context and suggesting targeted improvements.

Keywords: Senior High School English; Reading Instruction; Multimodal Discourse Analysis

1 Introduction

The Compulsory Education English Curriculum Standards (2022 Edition) clearly advocate for the deep integration of information technology with English teaching. This provides clear guidance for the reform of English reading instruction in senior high school. As a key part for cultivating students' core competencies, English reading serves not only as a primary means of acquiring language knowledge, but also as a crucial way for developing intercultural communication skills. However, current English reading instruction in senior high school remains constrained by traditional unimodal approaches. Teaching predominantly focused on textual explanation tends to overlook the central position of students, resulting in insufficient classroom engagement. With the widespread adoption of multimedia and internet technologies, current senior high school students are accustomed to acquiring information through multimodal resources such as images and videos. Grounded in systemic functional linguistics, multimodal discourse analysis emphasizes the synergistic role of linguistic and non-linguistic signs, which offers theoretical support for addressing the challenges of traditional teaching methods^[1].

From a theoretical perspective, this study integrates multimodal discourse analysis with English reading instruction in senior high school, focusing on the textual characteristics of materials and the cognitive patterns of students. It also proposes a theoretical model to enrich the research on the theoretical framework of multimodal teaching. From a practical perspective, the multimodal reading teaching model constructed in this study will provide senior high school English teachers with an operable instructional

framework. It aims to address issues such as weak transmission of cultural context and low student engagement. Therefore, it would offer practical reference for the implementation of multimodal teaching in senior high school English reading.

2 Literature Review

2.1 Related Studies Abroad

Research on multimodal teaching abroad started early, establishing a relatively mature theoretical and practical foundation. The visual grammar theory developed by Kress and Van Leeuwen provided an analytical tool for applying modes such as images and videos in reading instruction, confirming that visual modes can effectively complement textual meaning^[2]. In an empirical study involving 40 French undergraduate students, Guichon and McLoman found that listening texts presented in multimodal forms significantly enhanced the comprehension of second language learners, and proposed course design principles for computer-assisted multimodal instruction^[3]. In a multimodal project-based empirical study, Li observed that multimodal tasks deepened teacher candidates' understanding of instructional content while improving their professional ability to utilize multimodal resources, offering practical insights for teacher training in multimodal pedagogy^[4]. Based on the systemic functional multimodal discourse analysis framework, Lim found that the coordination of teachers' deictic gestures, rhythmic gestures, and discourse content could strengthen meaning transmission^[5]. Hardison and Pennington focused on the role of visual modes in second language learning, and through empirical studies on facial expressions, lip movements, and accompanying gestures, confirmed that visual modes promote discourse decoding, particularly enhancing learners' perceptual accuracy and depth of comprehension in complex contexts^[6]. In a study on the multimodal expression of parallel comparison structures, Ferré discovered that the coordination of emblematic gestures and linguistic repetition can effectively reinforce semantic gradients, providing theoretical support for conveying semantic emphasis in multimodal discourse and enriching the analytical dimensions of multimodal pedagogy^[7].

2.2 Related Studies at Home

Although research on multimodal teaching in China started relatively late, it has developed rapidly, with a focus on theoretical application and empirical validation. Yang and Du, exploring meaning construction in multimodal foreign language learning from a cognitive perspective, proposed that instructional design should avoid cognitive overload, providing cognitive theoretical support for mode selection in multimodal reading instruction^[8]. Research by Lyu et al. demonstrated that multimodal teaching could enhance the reading comprehension and memory retention of university students, and its logic for mode selection offers valuable insights for teaching complex texts in senior high schools^[9]. Based on systemic functional linguistics, Liu and Wang proposed three key indicators for the effectiveness of multimodal classroom discourse, confirming through case analysis that the coordination of language-related gestures and teacher-

student interaction can improve teaching outcomes^[10]. In response to the current state of English teaching in secondary school, Yang put forward five design principles for multimodal courseware, including coordination, reinforcement, and simplification, demonstrating that the organic integration of text, images, and audio can construct thematic meaning, thereby offering concrete references for developing multimodal resources in senior high school reading instruction^[11]. Fang and Liu, integrating the General Senior High School English Curriculum Standards, focused on the skill of viewing in senior high school English and proposed multimodal discourse teaching strategies, which effectively enhance students' text interpretation abilities^[12]. Hu and Liu explored virtual reality multimodal learning activities, confirming that multisensory participation can deepen practical application and situational awareness in reading, providing a new pathway for technology-enhanced English reading instruction in senior high schools^[13].

2.3 Summary of Previous Studies

Collectively, existing research on multimodal discourse analysis in language education has yielded several robust findings. Studies conducted abroad have consistently confirmed that well-designed multimodal instruction can enhance learners' text decoding, comprehension depth, and discourse decoding accuracy. Visual modes such as images, gestures, and video clips, when appropriately coordinated with verbal input, facilitate meaning construction and reduce cognitive barriers. Domestic studies further validate these benefits in the Chinese educational context, demonstrating that multimodal teaching improves reading engagement, memory retention, and the ability to interpret complex texts. However, several important gaps remain. First, empirical and model-building studies are disproportionately concentrated at junior high and university levels, with senior high school English reading instruction receiving comparatively limited attention. Second, while technology integration (e.g., virtual reality, multimedia courseware) is acknowledged, concrete, classroom-ready models that systematically address the cognitive characteristics and text complexity typical of senior high school are scarce. Third, most studies highlight the risk of cognitive overload when modes are selected arbitrarily, yet few provide explicit guidance on how to achieve text-modality coordination in daily lesson planning. In addition, practical challenges such as teachers' multimodal competency, resource constraints, and assessment frameworks remain under-explored. To address these gaps, the present study develops a hierarchical multimodal reading teaching model specifically tailored to senior high school. The model is grounded in established multimodal discourse theory and SLA principles, while incorporating insights from personal teaching practice to ensure feasibility and pedagogical coherence.

3 Reflections on Personal Language Teaching Experiences

During the internship, the author experimented with multimodal teaching for the text *From Problems to Solutions*. In practice, comparative diagrams were used to visually illustrate the restoration effects of the Aswan Dam, while short videos demonstrated

the operational process of digital scanning technology. This approach notably heightened students’ enthusiasm for discussing cultural heritage preservation techniques. However, it was also observed that some students became overly focused on the technical demonstrations in the videos, neglecting the textual content and its logic. This highlighted that multimodal resources must serve the text’s core arguments, informing the design principle of text-modality coordination in the subsequent model design.

4 The Hierarchical Multimodal Reading Teaching Model

Based on the multimodal discourse analysis, key insights from existing empirical research, and reflections from personal teaching practice in senior high school English reading instruction, the author designed the following hierarchical multimodal English reading teaching model for senior high school (Figure 1).

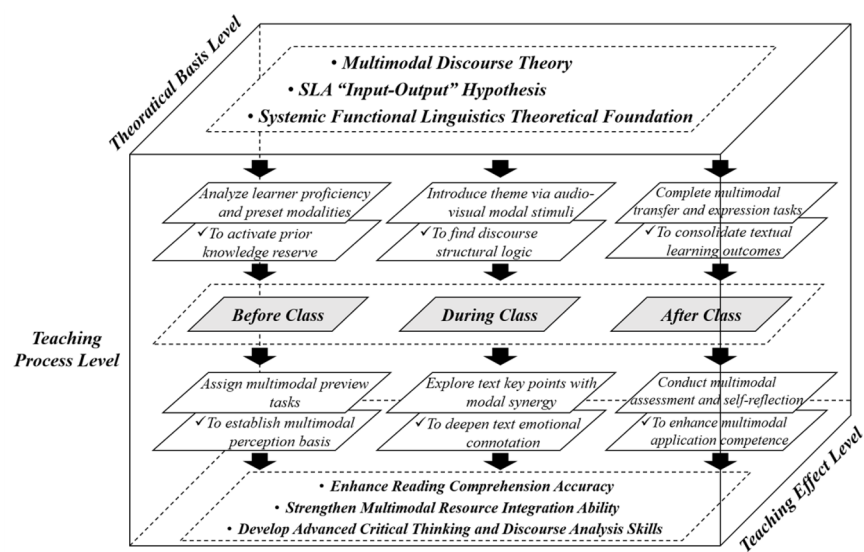


Fig. 1. The Hierarchical Multimodal Reading Teaching Model for Senior High School

The three-layer model provides a comprehensive framework for multimodal teaching and learning in language education.

The top layer shows the theoretical basis level. This layer integrates three foundational theories. Multimodal Discourse Theory emphasizes how different semiotic modes (e.g., image, sound, text) work together to construct meaning. The SLA “Input-Output” Hypothesis highlights the necessity of both comprehensible input and meaningful output for language acquisition. Systemic Functional Linguistics (SFL) supplies a systematic lens for analyzing how linguistic and multimodal choices realize ideational, interpersonal, and textual meanings. Together, these theories guide modality selection, instructional sequencing, and the design of multimodal tasks.

The middle layer shows the teaching process level. The teaching process is organized into three stages: before, during, and after class, each with specific pedagogical actions and purposes. Before the class, teachers assign multimodal preview tasks (e.g., watching a video clip, exploring an infographic). The goal is to establish a multimodal perception basis by activating learners' prior knowledge reserves. This stage enhances reading comprehension accuracy, strengthens multimodal resource integration ability, and develops advanced critical thinking and discourse analysis skills. During the class, the instruction focuses on exploring text key points through modal synergy (e.g., combining verbal explanation with visual cues, gestures, or sound effects). This synergy deepens students' understanding of the text's emotional connotation and structural logic. Themes are introduced via audio-visual modal stimuli to help learners find discourse structural logic. Multimodal transfer and expression tasks (e.g., recreating a scene using different modes) consolidate textual learning outcomes. After the class, learners engage in multimodal assessment and self-reflection, such as creating a short multimodal project or evaluating their own use of modes. This process enhances multimodal application competence, ensuring that skills are transferred to new contexts. The bottom layer shows the instructional outcomes. The ultimate outcomes target three core competencies: enhanced reading comprehension accuracy (ability to interpret multimodal texts precisely), strengthened multimodal resource integration ability (skill in combining diverse semiotic resources), and developed advanced critical thinking and discourse analysis skills (capacity to evaluate, synthesize, and critique complex multimodal discourse).

Altogether, the model moves from theory to process to outcome, ensuring a systematic and empirically grounded approach to multimodal pedagogy.

5 Conclusion

In conclusion, this study demonstrates that multimodal discourse analysis offers a theoretically robust and pedagogically viable lens for reforming senior high school English reading instruction. By integrating Multimodal Discourse Theory, the SLA Input-Output Hypothesis, and Systemic Functional Linguistics, the proposed three-layer hierarchical model addresses key limitations of traditional unimodal teaching methods—namely, insufficient student engagement, weak transmission of cultural context, and neglect of non-linguistic semiotic resources. The model's top theoretical foundation guides modality selection, its middle instructional process operationalizes reading teaching through pre-class, during-class, and post-class stages, and its bottom layer targets measurable competencies such as reading accuracy, multimodal integration, and critical thinking.

Reflections from personal teaching practice further confirm that carefully orchestrated modal synergy (e.g., combining videos, diagrams, and verbal explanations) can significantly boost student motivation and discourse comprehension, while poorly integrated resources risk distracting learners from core textual logic—underscoring the principle of text-modality coordination embedded in the model. Despite the progress of multimodal reading teaching in the Chinese context, several practical challenges

persist. These include insufficient allocation of multimodal resources, uneven teacher competency in designing and evaluating multimodal tasks, and a lack of standardized assessment systems that capture multimodal literacy. Future research should focus on developing teacher training programs, constructing lesson plan repositories tailored to senior high school English curricula, and designing valid evaluation rubrics for multimodal reading outcomes. Only by addressing these challenges can the full potential of multimodal discourse analysis be realized in routine classroom practice, ultimately fostering students' core competencies in an increasingly multimedia-driven world.

References

1. X. Cheng: English Instructional Design Based on Discourse Analysis. *Foreign Language Teaching in Schools (Secondary)* **43**(10), 1–8 (2020)
2. Kress, G. R., & Van Leeuwen, T.: *Multimodal discourse: The modes and media of contemporary communication*. Arnold, London (2001) <https://doi.org/10.2307/1512155>
3. Guichon, N., & McLornan, S.: The effects of multimodality on L2 learners: Implications for CALL resource design. *System* **36**(1), 85–93 (2008) <https://doi.org/10.1016/j.system.2007.11.005>
4. M. Li: Multimodal pedagogy in TESOL teacher education: Students' perspectives. *System* **94**, 102337 (2020) <https://doi.org/10.1016/j.system.2020.102337>
5. Lim, F. V.: Investigating intersemiosis: A systemic functional multimodal discourse analysis of the relationship between language and gesture in classroom discourse. *Visual Communication* **20**(1), 34–58 (2021) <https://doi.org/10.1177/1470357218820695>
6. Hardison, D. M., & Pennington, M. C.: Multimodal second-language communication: Research findings and pedagogical implications. *RELC Journal* **52**(1), 62–76 (2021) <https://doi.org/10.1177/0033688220966635>
7. Ferré, G.: Multimodal analysis of conjoined comparatives. *Cognitive Linguistics* **36**(4), 593–631 (2025) <https://doi.org/10.1515/cog-2024-0057>
8. J. Yang, P. Du: A Cognitive Study on Meaning Construction in Multimodal Foreign Language Learning. *Journal of the Chinese Society of Education (S1)*, 51–52 (2012)
9. M. Lyu, W. Mou: Research on the Impact of Multimodal Teaching Model on College Students' English Reading Ability. *China Educational Technology* (12), 129–132 (2014)
10. G. Liu, H. Wang: A Study on the Effect of Multimodal Discourse in English Classroom. *Journal of the Chinese Society of Education (S1)*, 188–190 (2018)
11. Y. Yang: Research on Design Principles and Application Strategies of Multimodal Courseware in Middle School English Classes. *Foreign Language Teaching in Schools (Secondary)* **42**(03), 28–32 (2019)
12. H. Fang, Y. Liu: Teaching Strategies for Senior High School English Viewing Based on Multimodal Discourse. *Foreign Language Teaching in Schools (Secondary)* **42**(07), 20–25 (2019)
13. H. Hu, G. Liu: Toward Multimodality: The Value Orientation of Virtual Reality Learning Activities. *Basic Education* **21**(01), 96–105 (2024)

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

