International Journal of Educational Development
ISSN Print: 3104-4263
ISSN Online: 3104-4271
CD ISSN: 3104-428X
https://doi.org/10.63313/IJED.9091

Exploring the Application of the 5E Instructional Model in Senior High School English Reading Instruction

Chuanqiu Li
China West Normal University, Nanchong 637000, China

How to cite this paper: Li, C. (2026). Exploring the application of the 5E instructional model in senior high school English reading instruction. International Journal of Educational Development, 4(1), 46–53. ISSN Print: 3104-4263, ISSN Online: 3104-4271.
https://doi.org/10.63313/IJED.9091
Published: 2026-07-06

Copyright © 2026 by author(s) and Erytis Publishing Limited.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/
CC BY 4.0

Abstract

English reading instruction is one of the primary approaches to fostering students' core competencies in English. However, current reading instruction in senior high schools is often characterized by superficial and fragmented question design, as well as low levels of student engagement and participation. The 5E Instructional Model consists of five interconnected phases: Engagement, Exploration, Explanation, Elaboration, and Evaluation. Through the analysis of a representative teaching case, this study explores the practical application of the 5E Instructional Model in senior high school English reading instruction. The findings suggest that the model effectively enhances students' learning motivation, reading comprehension, and language application abilities, thereby facilitating the development of their core competencies in English.

Keywords

5E Instructional Model; Senior High School English Reading Instruction; Core Competencies

1. Introduction

The English Curriculum Standards for Senior High Schools (2017 Edition, 2020 Revision) explicitly state that the core competencies of the English subject comprise four interrelated dimensions: language ability, cultural awareness, thinking quality, and learning ability. Among various instructional components in senior high school English education, reading instruction plays the most prominent role in cultivating these competencies because of its unique educational functions and pedagogical value.

Through carefully designed questions and learning activities, teachers can guide students to identify linguistic and cultural phenomena, synthesize information, construct new concepts, infer logical relationships, critically evaluate different viewpoints, and express their ideas from multiple perspectives. Such instructional

practices contribute to the development of students' English thinking skills. In addition, reading instruction promotes meaningful interaction between teachers and students, enhances learners' language proficiency, broadens their horizons, cultivates aesthetic appreciation and cultural awareness, and encourages the pursuit of meaningful personal values. Therefore, reading texts serve as one of the primary vehicles for developing students' core competencies in English, while reading instruction represents a fundamental pathway for implementing competency-based English education (Li & Chen, 2019).

Despite these advantages, the Pre-reading–While-reading–Post-reading (PWP) model remains the dominant approach to English reading instruction in senior high schools. Although this model provides a clear instructional sequence and is relatively easy to implement, it has revealed several limitations in classroom practice. These include insufficient progression and coherence in activity design, overly superficial and fragmented questioning, and relatively low levels of student motivation and participation. Consequently, its effectiveness in promoting students' comprehensive language proficiency and higher-order thinking skills is often constrained (He & Lin, 2022).

Against this background, the present study adopts the 5E Instructional Model as the guiding framework for English reading instruction. As a student-centered instructional model, the 5E framework aims to increase learners' active participation, provide systematic scaffolding for overcoming reading difficulties, and facilitate the gradual development of students' core competencies in English.

2. The Necessity of Applying the 5E Instructional Model in Senior High School English Reading Instruction

English reading instruction constitutes an indispensable component of senior high school English education. To fulfill the requirements of the English Curriculum Standards for Senior High Schools (2017 Edition, 2020 Revision) (hereinafter referred to as the Curriculum Standards) and enhance the effectiveness of reading instruction, teachers need to move beyond the constraints of traditional teaching approaches and adopt instructional models that better respond to contemporary educational demands. In particular, traditional reading instruction has become increasingly inadequate in addressing the dual requirements of deep learning and authentic task-based learning. Consequently, identifying an instructional model that aligns with the principles advocated in the Curriculum Standards has become a key issue in senior high school English education.

Compared with traditional English teaching approaches commonly adopted in China, the 5E Instructional Model places students at the center of the learning process and emphasizes their active participation throughout classroom instruction. The model consists of five interconnected phases—Engagement, Exploration, Explanation, Elaboration, and Evaluation—whose initials form the acronym 5E (Zeng & Xue, 2024). Rather than treating learning as the passive acquisition of knowledge, the

model encourages students to construct understanding actively through inquiry and interaction.

Furthermore, the 5E Instructional Model is highly consistent with the requirements of the Curriculum Standards. It presents a progressive and inquiry-based learning process that corresponds closely with the principles of the English Learning Activity Approach and students' cognitive development (Shi, 2024). Throughout the instructional process, the model emphasizes independent thinking, collaborative inquiry, and active knowledge construction. Such instructional practices contribute to the development of multiple dimensions of students' thinking quality and learning ability, enabling them to acquire knowledge proactively instead of merely receiving it passively. Consequently, the model effectively promotes students' autonomous learning, problem-solving abilities, and innovative thinking.

3. The 5E Instructional Model

The 5E Instructional Model was developed by the Biological Sciences Curriculum Study (BSCS) team in the late 1980s. Rooted in the theory of constructivism, the model views knowledge not as something transmitted directly from teachers to learners but as a system of meaning actively constructed by learners within specific contexts. The five instructional phases are both independent and interconnected, forming a cyclical learning cycle that facilitates continuous conceptual development (Bybee et al., 2006). The model consists of the following five phases: Engagement, Exploration, Explanation, Elaboration, and Evaluation.

The first phase, Engagement, serves as the starting point of the instructional process. Its primary purpose is not only to introduce the learning content but also to stimulate students' curiosity and learning motivation. At this stage, teachers may employ a variety of instructional strategies to activate learners' prior knowledge and arouse their interest in new concepts (Shi, 2024). For example, vivid stories, authentic real-life cases, thought-provoking questions, meaningful situational contexts, multimedia resources, and brainstorming activities can all be used to capture students' attention. By connecting learners' existing knowledge with new learning content, teachers establish cognitive links that naturally lead students toward the central concepts and themes of the lesson.

The second phase, Exploration, represents the core stage of the instructional process. During this phase, students actively discover and construct new knowledge through inquiry and practical exploration under the guidance of the teacher. To facilitate this process, teachers should provide sufficient learning resources and appropriate scaffolding, enabling students to identify problems, formulate hypotheses, and explore underlying patterns through firsthand experience. Based on the contexts or themes introduced during the Engagement phase, teachers carefully design inquiry tasks that encourage students to think critically and investigate independently. Students may solve problems individually or collaboratively in groups, while

teachers provide timely guidance and formative feedback to support learners throughout the inquiry process. Such instructional practices help strengthen students' awareness of autonomous inquiry and lay a solid foundation for subsequent learning (Wang, 2016).

The third phase, Explanation, focuses on helping students interpret and articulate the knowledge they have constructed during the Exploration phase. Learners are encouraged to explain their understanding, exchange ideas with peers, question alternative viewpoints, and engage in meaningful discussion, thereby deepening their conceptual understanding and refining their problem-solving strategies. At the same time, teachers provide additional explanations, clarify key concepts, and address misconceptions through various instructional approaches. Beyond facilitating conceptual understanding, this phase also aims to enhance students' oral communication skills, summarization abilities, and critical thinking through explanation, discussion, and teacher guidance (Cheng, 2020).

The fourth phase, Elaboration, extends students' learning by encouraging them to apply newly acquired knowledge and skills to authentic situations. After developing an initial understanding of new concepts during the Exploration and Explanation phases, students are expected to transfer what they have learned to solve practical problems in new contexts. Teachers may organize collaborative learning activities or group discussions to help students summarize key concepts, deepen their understanding, and apply newly acquired knowledge flexibly in situations similar to those encountered in real life. The ultimate objective of this phase is to promote the transfer and internalization of knowledge while fostering students' teamwork, problem-solving abilities, and creative thinking (Zhao, 2020).

The final phase, Evaluation, is integrated throughout the entire instructional process rather than being confined to the end of a lesson. It involves systematic assessment of both the learning process and learning outcomes. Teachers are encouraged to adopt multiple forms of assessment, including self-assessment, peer assessment, and teacher assessment, in order to obtain comprehensive feedback on students' learning. Such evaluation enables learners to recognize both their progress and areas for improvement, thereby developing a clearer understanding of their own learning process. More importantly, continuous evaluation facilitates reflective teaching and learning, ultimately contributing to the creation of more effective and high-quality English classrooms (Wang, 2016).

4. Application of the 5E Instructional Model in Senior High School English Reading Instruction

To illustrate the practical application of the 5E Instructional Model in senior high school English reading instruction, this study takes Unit 1, My First Day at Senior High School from the compulsory textbook published by Foreign Language Teaching and Research Press (FLTRP) as an example. The unit belongs to the thematic context

of “Self and Society” and presents a diary describing the first day of senior high school experienced by the protagonist, Meng Hao. Since the story closely mirrors students’ own transition into senior high school, it effectively activates their prior experiences and emotional resonance, encouraging them to face new challenges with confidence and optimism.

4.1. Engagement: Stimulating Learning Interest

During the Engagement phase, the teacher first asks students to close their eyes for 30 seconds and recall the most memorable moment from their own first day at senior high school. Students are then invited to write one English keyword describing that experience—such as lost, sweaty, or excited—on sticky notes and place them on the blackboard.

Next, the teacher presents three pictures depicting a quiet campus, a notice board, and the back view of an elderly man with white hair. These visual stimuli are designed to arouse students’ curiosity and emotional engagement. The teacher subsequently poses two guiding questions: Who is the white-haired man?What might happen next?

Once students’ curiosity has been stimulated, the teacher plays the audio recording of the first two paragraphs of the text, allowing students to verify or revise their initial predictions while listening. This introductory activity creates an engaging classroom atmosphere by connecting the lesson with students’ own experiences and naturally guiding them toward the reading topic.

4.2. Exploration: Constructing New Understanding

During the Exploration phase, the teacher primarily assumes the role of facilitator and guide. Students receive four text fragments that have been cut apart and are required to reconstruct the original passage collaboratively in groups.

To encourage close reading, students are not allowed to read the complete text directly. Instead, they must determine the correct sequence by examining clues such as the connections between opening and closing sentences, demonstrative pronouns, and changes in verb tense. This task encourages students to “learn by doing” while repeatedly scanning contextual clues such as quiet campus, turning around, and stepped into the classroom. In addition to strengthening students’ skimming and scanning skills, the activity enables them to experience the narrative progression more deeply.

Meanwhile, the teacher circulates around the classroom and poses a series of guiding questions, including: What made the narrator surprised? How did his feelings change?

Students are then asked to highlight emotional expressions in different colors, laying the foundation for the subsequent Explanation phase.

4.3. Explanation: Developing Conceptual Understanding

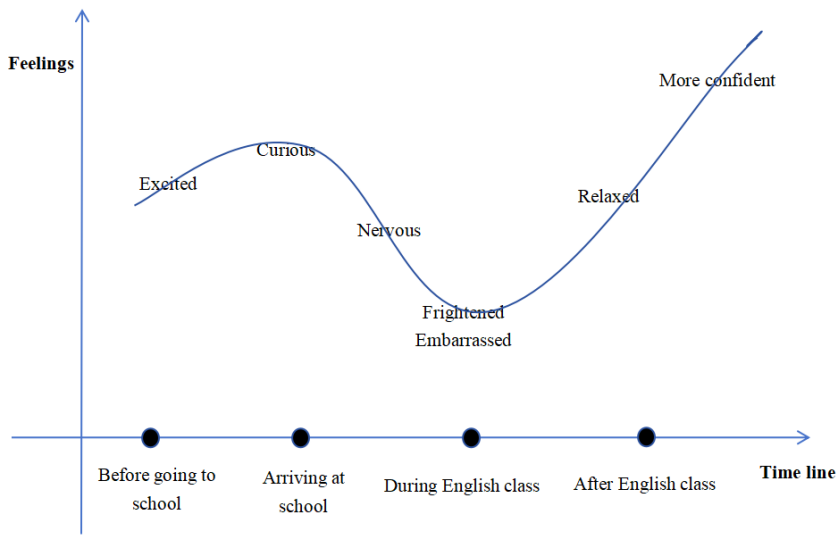
During the Explanation phase, the teacher projects a two-dimensional coordinate graph (see Figure 2) in which the horizontal axis represents the chronological development of the story and the vertical axis indicates the intensity of the narrator's emotions.

Based on the evidence collected during the Exploration phase, students work together to plot an emotional trajectory and explain the reasons underlying each emotional change in English. At the same time, the teacher guides students to focus on two important language features.

The first concerns the metaphorical meaning of the idiomatic expression "with butterflies in my stomach." The second examines the coordinated imperative structure in "Keep calm and be prepared," highlighting how the conjunction and creates a rhetorical progression from parallelism to emphasis.

Through the jointly constructed visual representation and teacher-guided discussion, students not only understand the literal meanings of these language forms but also gain deeper insight into the underlying linguistic and rhetorical principles.

Figure 1. Two-dimensional Coordinate Graph Used in the Explanation Phase.



4.4. Elaboration: Applying and Extending Learning

During the Elaboration phase, the teacher transfers the reading context to a new situation closely related to students' own school life by introducing the upcoming school sports meeting.

Working in groups, students are required to write a short narrative of approximately 100 words entitled "First Day at the Sports Meet." Their writing should include four essential elements: environmental description, an unexpected event, emotional development, and an inspiring concluding sentence.

Before writing, students revisit the original text to identify a transferable narrative framework consisting of the following stages: setting hook, dialogue trigger, embarrassment , mentor's words, takeaway. The teacher also encourages students to incorporate rhetorical devices introduced in the reading text, such as coordinated imperative sentences and metaphorical expressions.

After completing their writing, students participate in a gallery walk, displaying their work on the classroom walls and using stickers to vote for the most impressive concluding sentence produced by other groups. Through this activity, students further integrate language knowledge, emotional understanding, and higher-order thinking.

4.5. Evaluation: Providing Continuous Feedback

Evaluation is embedded throughout the instructional process rather than being confined to the final stage of the lesson. It incorporates both teacher assessment and student assessment to provide continuous feedback on learning.

During the Engagement phase, the keywords written on students' sticky notes serve as an "emotional thermometer," allowing teachers to compare students' initial and final emotional responses.

In the Exploration phase, students' performance in reconstructing the text and explaining the emotional trajectory constitutes formative assessment.

During the Elaboration phase, students' narrative writing and peer voting function as summative assessment. Finally, the teacher distributes a short reflective questionnaire asking students to respond to the following question: What challenge at senior high school might still give you "butterflies," and what is your plan for dealing with it?

Students submit their responses before leaving the classroom. The teacher then analyzes this feedback to refine the instructional design of subsequent units, thereby forming a continuous cycle of teaching reflection and improvement.

5. Conclusion

The 5E Instructional Model not only promotes the comprehensive development of students' core competencies but also provides an effective pedagogical approach for implementing the English Learning Activity Approach advocated in the English Curriculum Standards for Senior High Schools (Wu, 2025). By shifting the focus of English reading instruction from the transmission of linguistic knowledge to the cultivation of students' competencies, the model contributes to the development of more meaningful and learner-centered classrooms.

Furthermore, the five interconnected phases of the model form a progressive instructional cycle that aligns with students' cognitive development and effectively stimulates their interest in learning. Compared with traditional approaches to English reading instruction, the 5E Instructional Model places greater emphasis on

student-centered inquiry and active knowledge construction. Through continuous exploration, explanation, application, and reflection, students are encouraged to develop critical thinking, creativity, and autonomous learning abilities.

Therefore, English teachers should develop a thorough understanding of the theoretical principles underlying the 5E Instructional Model and apply it flexibly according to different reading texts, instructional objectives, and learners' proficiency levels. Through thoughtful instructional design and effective classroom implementation, teachers can better facilitate the development of students' core competencies in English.

References

[1] Bybee, R. W., Taylor, J. A., Gardner, A., Van Scotter, P., Powell, J. C., Westbrook, A., & Landes, N. (2006). The BSCS 5E Instructional Model: Origins, Effectiveness, and Applications. Biological Sciences Curriculum Study. Retrieved August 17, 2024, from http://sisltportfolio.missouri.edu/ssg392/bscs5eexecsummary.pdf

[2] Ministry of Education of the People's Republic of China. (2020). English Curriculum Standards for Senior High Schools (2017 Edition, 2020 Revision). Beijing: People's Education Press.

[3] Li, M., & Chen, M. (2019). A practical study of the 5E instructional model in English reading from the perspective of core competencies. Basic Foreign Language Education, 21(5), 62-67, 108.

[4] He, A., & Lin, M. (2022). Problem-oriented 5E reading instruction. Foreign Language Teaching in Schools (Secondary Edition), 45(5), 60-65.

[5] Zeng, Z., & Xue, H. (2024). English 5E reading instruction driven by question chains. Foreign Language Teaching in Schools (Secondary Edition), 47(10), 31-35.

[6] Shi, Y. (2024). Integrated reading-to-writing instruction under the 5E instructional model. Foreign Language Teaching in Schools (Secondary Edition), 47(4), 49-54.

[7] Wang, Y. (2016). A Study on the Application of the 5E Inquiry Learning Model in Higher Vocational English Reading Instruction (Master's thesis). Shandong Normal University.

[8] Cheng, Z. (2020). A Study on the Effectiveness of the 5E Instructional Model in Junior Secondary English Reading Instruction (Master's thesis). Yangzhou University.

[9] Zhao, X. (2020). A Study on the Application of the 5E Inquiry Learning Model in Senior High School English Reading Instruction (Master's thesis). Yan'an University.

[10] Wu, H. (2025). The practice of the 5E reading instructional model in junior secondary English classrooms. Liaoning Education, (9), 44-47.