

Interpretation of the Implications and Exploration of the Strategies for the "Question Chain" in High School English Reading Instruction under the Background of Core Competencies

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Abstract: During the process of curriculum reform in the English discipline, there has been a progressive shift in emphasis from a focus on knowledge acquisition to a concern for human and student development, with a deeper inquiry into how to effectively construct the core competencies of the English subject. However, current English reading instruction still grapples with issues of fragmentation, superficiality, and oversimplification, where teachers tend to overlook the cultivation of students' critical thinking abilities and the inculcation of proper values. The design of the "question chain" within the framework of core competencies offers a promising solution to these challenges. This paper delves into the connotations and values of both disciplinary core competencies and the "question chain," and explores the implementation of the "question chain" in high school English reading instruction, aiming to cultivate the core competencies of the English discipline. By doing so, it endeavors to transform English teaching from superficial and disjointed practices to in-depth, interconnected approaches, thereby fulfilling the educational goals of the English discipline.

Keywords: Core Competencies, English Reading Instruction, Design of the "Question Chain".

1. Introduction

The reform of the English curriculum in the new century commenced with the compulsory education curriculum reform in 2001 and the high school curriculum reform in 2004. Currently, the curriculum reform has entered a deepening phase, characterized by three key trends. Firstly, there is a return to the essence of the discipline, emphasizing its educational value. The focus has shifted from the discipline's knowledge and its inherent laws to the cultivation of individuals—what kind of people to nurture and how to do so. Secondly, attention is directed towards students' cognitive development, exploring the relationship between language teaching and students' mental growth, and how to better integrate language knowledge instruction, language proficiency development, and the cultivation of students' thinking abilities. Thirdly, there is a focus on the core competencies of the discipline. China has now proposed a framework for the core competencies of Chinese students' development. In the process of curriculum reform, the emphasis has gradually shifted from knowledge to individuals and students' development. The concept of core competencies will replace the previous goal of comprehensive language application ability. The question that needs further exploration is how to integrate and elevate on the basis of the original comprehensive language application ability to construct the core competencies of the English discipline[1].

The core competencies of the English discipline encompass four dimensions: language ability, learning ability, cultural awareness, and thinking quality. Among these, language ability serves as the foundation, supporting the development of cultural awareness, thinking quality, and learning ability. Reading, as one of the five language abilities, plays a crucial role in English teaching. However, current English reading instruction still faces issues of fragmentation, superficiality,

and oversimplification, with teachers neglecting the cultivation of students' critical thinking and correct values[2]. The "question chain," as a teaching strategy, offers new insights into addressing the existing problems in English reading instruction and provides a fresh perspective on how to cultivate students' English core competencies through reading instruction.

In the context of cultivating English core competencies, this paper focuses on the innovative practice of high school English reading instruction paradigms. By constructing a "question chain"-driven instructional design framework, it deeply aligns with the collaborative development needs of the four core competency elements: language ability, cultural awareness, thinking quality, and learning ability. During the teaching implementation process, teachers use a stepped question chain as a cognitive scaffold to guide students in engaging in critical thinking activities during text deconstruction, facilitating a cognitive leap from surface-level information extraction to deep-level meaning construction through self-generated questioning. Meanwhile, relying on a group cooperative inquiry mechanism, it promotes students' cultivation of cross-cultural communication awareness and collaborative innovation capabilities through the collision of ideas. This teaching model aims to systematically enhance students' logical reasoning, critical evaluation, and innovative thinking abilities through the creative design of problem scenarios, assisting them in forming higher-order cognitive schemas and autonomous development capabilities based on disciplinary core competencies. It provides a practical pathway for cultivating English learners in the new era with Chinese sentiments and an international perspective.

2. Connotation and Value of Core Competencies

(1) Connotation of core competencies

Core competencies refer to the essential qualities and key abilities that contemporary students should possess to meet the needs of lifelong development and societal advancement. These competencies represent a comprehensive manifestation of requirements spanning students' knowledge, skills, emotional attitudes, and values, embodying the core objective of education in the new era to "cultivate well-rounded individuals" [1]. The development of core competencies is a continuous, lifelong process that can be taught and learned, rather than an abstract concept. In terms of content, it is divided into three dimensions: cultural foundation, autonomous development, and social participation. These dimensions are specifically manifested in six core competencies: humanistic accomplishment, scientific spirit, learning to learn, healthy living, responsibility and commitment, and practical innovation. These competencies are characterized by their scientific nature, contemporaneity, and national characteristics, playing a guiding role in curriculum reform and the transformation of educational models in the new era.

(2) Connotation and Value of English Core Competencies

The English core competencies encompass four key elements: language ability, cultural awareness, thinking quality, and learning ability[3]. Language ability refers to the capacity to understand and express meaning, intentions, and emotional attitudes through listening, speaking, reading, viewing, and writing within specific social contexts. The development of language ability cannot be divorced from concrete contexts; it must occur within social situations. Therefore, isolated learning of vocabulary or grammar knowledge, detached from social contexts, does not foster students' language ability. Instead, learning vocabulary and grammar serves as a means to develop language ability, rather than being the ultimate goal of its development. Cultural awareness extends beyond mere perception and understanding of Chinese and foreign cultures; it encompasses broader and deeper content. Cultural awareness primarily refers to the appreciation of excellent Chinese and foreign cultures, including both humanistic and scientific knowledge. It represents students' understanding of Chinese and foreign cultures within the context of globalization, as well as their recognition of excellent cultures. Cultural awareness also pertains to students' intercultural cognition, attitudes, and behavioral orientations in a globalized world, emphasizing the cultivation of individuals capable of intercultural understanding and communication. Thinking quality focuses on nurturing students' logical, critical, and innovative thinking, enabling them to express meaning and intentions with sound reasoning. It cultivates students' ability to identify problems, raise questions, and substantiate their viewpoints through evidence collection, rather than blindly following others. Learning ability refers to students' awareness and capacity to actively apply and adapt English learning strategies during the learning process, broaden their channels for English learning, and enhance the efficiency of their English learning.

The four aspects of English core competencies are interconnected and mutually influential. Firstly, English language ability serves as the foundation for these core competencies, supporting the development of cultural

awareness, thinking quality, and learning ability. Improved English language ability can better assist students in broadening their cultural horizons and enriching their ways of thinking. The value of cultural awareness reflects the value orientation of English core competencies[1]. The formation of cultural awareness helps cultivate students into individuals with a global perspective, possessing intercultural knowledge and communication skills. It also fosters students' social responsibility and patriotism, enabling them to learn how to shoulder social responsibilities, conduct themselves properly, and become culturally refined and socially responsible individuals. Thinking quality embodies students' cognitive development characteristics and levels, and its development enhances their ability to analyze and solve problems. Learning ability is a prerequisite for the development of English core competencies. Forming good self-management habits in learning is crucial for students' lifelong development, as well as for their ability to broaden learning channels and improve learning efficiency. English core competencies are teachable and learnable. Teachers can guide students to develop these competencies through subject content and learning activities in their teaching practices.

3. Interpretation of the Implications of the "Question Chain" in High School English Reading Instruction under the Context of Core Competencies

(1) Connotation of the "Question Chain"

The "question chain" refers to a sequence of interconnected questions. It is a teaching strategy derived from classroom instruction and represents a novel approach to designing questions for classroom activities[4]. Effective classroom questioning can fully mobilize students' enthusiasm, guide them to focus their attention, actively participate in classroom activities, and engage wholeheartedly in learning.

A question chain comprises a series of related sub-questions that are interconnected around a specific theme and core question, following a certain logical order. The questions involved in a question chain are not scattered, isolated, or inefficient; rather, they are interrelated, structured, and hierarchical, revolving around a particular theme. By solving each sub-question within the chain, the ultimate goal of addressing the core question is achieved. This approach allows for a more comprehensive resolution of problems by considering all aspects involved in a holistic and systematic manner. The questions in a question chain can be categorized into two types. The first type includes questions aimed at confirming facts, assessing comprehension, or verifying information. These questions typically have a lower cognitive level and can be further divided into recall questions, display questions, or classroom management questions. The second type of questions primarily aims to encourage student communication and enhance their critical thinking skills. High-level questions are also referred to as referential questions or creative questions that do not have a single correct answer.

(2) Characteristics of the "Question Chain"

The question chain plays a crucial role in English reading instruction under the context of core competencies. One of the methods to improve students' English reading ability is through questioning. By posing effective questions, students can gain a deep understanding and internalization of the text

through the processes of contemplating questions, attempting to answer them, and engaging in internalized communication. Moreover, they can transcend the text and apply the internalized linguistic and cultural knowledge to real-world contexts to solve authentic problems, centered around specific themes. In English reading instruction, the question chain typically refers to a series of contextual, structured, and hierarchical question scaffolds proposed by teachers based on in-depth text analysis and thorough assessment of students' learning conditions. These scaffolds are designed around the thematic significance of the text to help students perceive and understand the content and structure of the text, construct structured knowledge; guide them to analyze and evaluate the deeper meanings of the text, internalize structured knowledge; and encourage them to correctly grasp the text's values, apply structured knowledge, and achieve transfer and innovation.

According to their pedagogical functions, question chains in English reading classrooms include introductory question chains, exploratory question chains, progressive question chains, summative question chains, and transfer question chains[5]. The questions within a question chain pertain to the reading text itself, covering aspects such as the text's theme, genre, structure, details, inferences, values, author's attitude, and background knowledge. They also involve students' existing knowledge, cognitive levels, emotional attitudes, as well as the knowledge and skills they have yet to master. Like a chain, the question chain links students' learning levels, the relevant content of the reading text, teaching objectives, and learning objectives. Each question is interconnected and closely linked, leading from one to another and delving deeper layer by layer. Each sub-question serves as a catalyst for students' cognitive development. Through the organic connection of questions, the question chain teaching approach effectively overcomes the shortcomings of rigid classroom instructional segments, fragmented and superficial questioning, and randomness in English reading instruction. It not only efficiently drives the instructional process but also guides students to progressively understand the content and structure of the text, construct and internalize structured knowledge, express themselves creatively, and enhance their abilities to identify, analyze, and solve problems, achieving deep learning at a high-level cognitive tier. This, in turn, cultivates students' essential qualities and key abilities in the English discipline. In summary, the question chain in English reading instruction is an effective reading strategy that helps students better understand the content, structure, and meaning of the text, fostering the development of their core competencies in the English discipline[6].

4. Strategies for the "Question Chain" in High School English Reading Instruction under the Context of Core Competencies

(1) Precisely anchoring teaching objectives and core problem frameworks based on learning situation diagnosis and in-depth text analysis

A precise understanding of students' cognitive schemata serves as the logical starting point for designing the question chain. Teachers need to systematically diagnose students' language decoding abilities, stages of critical thinking development, and interdisciplinary knowledge reserves through multi-dimensional learning situation analysis, thereby constructing a dynamic portrait of learners. Building

on this foundation, the "Zone of Proximal Development" theory should be employed to establish tiered scaffolding and design problem scenarios that align with students' cognitive gradients. This approach activates relevant nodes within students' existing schematic networks, facilitating meaningful connections between old and new knowledge.

Text analysis should adhere to the principle of "three-dimensional parsing": Firstly, the macroscopic thematic significance and microscopic topical threads of the text should be extracted through thematic contextual analysis, clarifying the hierarchical relationships among content elements. Secondly, stylistic theories should be utilized to dissect the text's structural and linguistic style characteristics. Finally, critical discourse analysis should be employed to gain insights into the author's value positions, emotional attitudes, and implicit ideologies, revealing the text's profound educational values.

Based on the dual foundations of learning situation analysis and text deconstruction, teachers should follow the "backward design" concept to determine the lesson's teaching objectives centered around the exploration of thematic significance. Specifically, it is necessary to organically integrate language ability objectives, thinking quality objectives, cultural awareness objectives, and learning ability objectives to form observable and evaluable expected learning outcomes. In accordance with teaching objectives and the text's difficulty coefficient, overarching core questions should be refined, and a hierarchical structure of "main questions-sub-questions" should be constructed. This clarifies the teaching priorities and difficulties, providing targeted foundations for the subsequent dynamic generation of the question chain.

(2) Designing the question chain and initiating inquiry based on learning situation analysis and text analysis

Based on learning situation analysis and text study, teachers design questions that provide students with thinking space, avoiding oversimplified "yes-or-no" questions. They emphasize activities and experiences, integrating the developmental process of students' thinking to design a question chain that revolves around the core competencies of the English discipline, aligns with teaching objectives, and progresses logically and hierarchically.

Foundational question chain centered on language ability

Language ability serves as the foundation of the core competencies in the English discipline. Therefore, in the design of the question chain for reading instruction, teachers can start from aspects such as vocabulary, grammar, and sentence structures based on the text content, asking students about the meanings and structures of specific vocabulary and syntax in the text. These questions not only help students consolidate their linguistic knowledge but also enhance their language proficiency.

Expansive question chain centered on cultural awareness

Cultural background is a crucial factor in understanding texts. Hence, teachers can design questions related to the text's background knowledge to guide students in delving deeper into the cultural connotations behind the text. For example, teachers can ask students about the origins and significance of certain cultural customs or have them compare differences between cultures. These questions can broaden students' cultural horizons, foster an awareness of cross-cultural communication, and improve their cultural literacy.

Critical question chain centered on thinking quality

Critical thinking is an indispensable component of reading

instruction. By designing critical questions, teachers guide students in conducting in-depth analysis and evaluation of the text. For instance, teachers can ask students to analyze whether the arguments and evidence in the text are reasonable or have them evaluate the author's writing techniques and style. These questions help students develop critical thinking skills and improve their abilities to analyze and solve problems.

Autonomous question chain centered on learning ability

Learning ability is an important sustainable development capability within the core competencies. In reading instruction, teachers can design autonomous questions to guide students in independent learning and inquiry. For example, teachers can have students design a set of reading comprehension questions, explain their design rationale and answers, and analyze the structure and content of the article. This helps cultivate students' habits and abilities for autonomous learning.

In the process of designing the question chain, teachers should adhere to the principles of goal-orientation, hierarchy, and logic. Firstly, the design of the question chain should closely revolve around teaching objectives, avoiding the proposition of ineffective questions and ensuring that the questions proposed contribute to the achievement of teaching objectives. Secondly, the question chain should possess hierarchy, progressing from simple to complex, from basic to advanced, gradually guiding students in deep thinking. Lastly, the question chain should exhibit logic, meaning that each question within the chain possesses a certain logical coherence, guiding students to think and explore according to a logical sequence. On this basis, teachers, centered around the thematic context of the reading text and with the question chain as the main thread, guide students to actively participate in the classroom, think critically about questions, and express their viewpoints enthusiastically, jointly exploring the thematic significance with both teachers and students.

(3) Evaluating activities, revisiting the question chain, and reflecting on question validity based on classroom effectiveness

Teaching evaluation and reflection are vital components of high school English reading instruction, and diligent reflection is an important quality for teachers' professional development. Therefore, after class, teachers should rely on the classroom effectiveness of the reading lesson and students' classroom performance, analyzing classroom activities through student self-assessment and peer evaluation, combined with teachers' classroom observations and evaluations, to assess whether the design and implementation of the question chain have achieved the pre-set effects. Teachers should reflect on whether the question chain design effectively helps students deeply understand the text, guides them in multi-angle deep thinking, inspires them to creatively solve authentic problems, and achieves deep learning. They should analyze whether there are questions at the same cognitive level within the question chain, whether there are an excessive number of low-level thinking activities, and whether the focus is on training high-level thinking activities. Based on the analysis and evaluation of classroom performance and the implementation of the question chain, teachers should identify the issues and make improvements, providing references for later teaching.

5. Conclusion

In the realm of core competencies, the design of the question chain emerges as an innovative strategy for the English discipline to attain its educational objectives. It presents a novel pedagogical and learning paradigm that tackles the long-standing challenges in high school English reading instruction, such as the disproportionate emphasis on linguistic knowledge over thinking skills, the inclination towards superficial learning instead of deep cognitive engagement, and the prevalence of fragmented, superficial, and rigid teaching methodologies. To effectively harness the potential of the question chain, teachers must possess a profound understanding of the core competencies in the English discipline, discern the intricate relationships among their constituent elements, and elucidate the essence and significance of question chain design within the context of English reading instruction. Through meticulous text analysis, pinpointing core questions, and prioritizing higher-order thinking, teachers should craft question chains that are contextually relevant, hierarchically structured, and logically coherent, thereby aligning seamlessly with the teaching objectives.

These question chains should serve as catalysts for students to actively engage in thinking, exploration, and collaborative dialogue, all centered around the thematic essence of the text. As a result, students can cultivate their linguistic proficiency, cultural sensibility, critical thinking faculties, and learning agility by actively participating in and immersing themselves in enriching and meaningful learning endeavors. Moreover, it is imperative for teachers to engage in continuous teaching reflection and evaluation, ceaselessly exploring new avenues and making iterative improvements to optimize the effectiveness of the question chain design and its implementation in the classroom.

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References

- [1] Mei, Deming & Wang, Qiang (Editors-in-Chief). What to Reform? How to Teach? How to Assess? (Analysis of the New English Curriculum Standards for High Schools). Foreign Language Teaching and Research Press, January 2018.
- [2] Wang, Qiang, Sun, Weiwei, Cai, Mingke & Wang, Jing. "An Integrated Unit Teaching Design for High School English Aimed at Deep Learning." *Frontiers in Foreign Language Education Research*, Issue 1, 2021.
- [3] Ministry of Education. English Curriculum Standards for Ordinary High Schools (2017 Edition). People's Education Press, 2018.
- [4] Lu, Fangqing. "Research on the Design of Question Chains in Primary School English Text Teaching." *Teaching and Management*, Issue 5, 2022.
- [5] Liu, Honggang & Gao, Lixiang. "Question Chains in High School English Classroom Teaching: Connotation and Design." *English Teaching & Research Notes*, Issue 1, 2023.
- [6] Geng, Lina. "Linking Learning Tasks with a 'Chain' of Questions: An Exploration of English Teaching Practices under the Concept of Deep Learning." *Basic Education Curriculum*, Issue 18, 2023.