

Questioning Optimization Strategies of High School English Reading Classroom based on Deep Learning

Zulin Liu¹, Xiying Fan^{2,*}

¹ No. 7 Middle School, Panzhihua, Sichuan, China

² College of Foreign Languages, Pan zhihua University, Panzhihua, Sichuan, China

* Corresponding author: Xiying Fan (Email: 1352144980@qq.com)

Abstract: With the development of the times, the requirements for education are constantly increasing, and deep learning is crucial for students' development and progress. This paper integrates the concept of deep learning into the classroom and explores optimization strategies for questioning in high school English reading classes. By exploring the current situation of questioning in high school English reading classrooms, it was found that there are shortcomings and deficiencies in teacher questioning and feedbacks. Based on the requirements of deep learning and core competencies for English learning, this paper reflects questioning in English reading classrooms. On this basis, strategies such as clarifying the purpose of questioning, respecting individual differences, increasing classroom participation, and encouraging and guiding students are proposed for high school English teachers in order to promote students' deep learning and better development.

Keywords: Deep Learning; High School English Reading Classroom; Questioning Optimization Strategies.

1. Introduction

The concept of deep learning has guiding significance for high school English reading classroom teaching. It is not only beneficial for cultivating students' good learning habits and thinking abilities, but also helps teachers clarify the direction of classroom design optimization. Teachers need to pay attention to the improvement and multidimensional development of students' reading abilities in English reading classroom teaching, and promote deep learning in the classroom. In high school English reading classroom teaching, through reasonable teaching design by teachers, students are encouraged to acquire new knowledge from reading texts, summarize and integrate information, establish correlations between information, and form knowledge integration and structure; Guide students to engage in communication activities such as explanation, analysis, and judgment around knowledge and information through questioning, promote students' language use, and achieve the essentialization and functionalization of knowledge; Teachers need to drive students to apply new knowledge structures in new contexts, comprehensively utilize language skills, develop diverse thinking, creatively solve problems in unfamiliar situations, express opinions, emotions, and attitudes with a rational attitude, establish correct values, and achieve knowledge transfer. In the process of achieving this goal, teacher questioning can play a crucial role. Asking questions is a medium for teachers to play a guiding role. Reasonable classroom questioning and question design can improve efficiency, complete teaching tasks, and help students cultivate learning habits. Deep learning-oriented teacher questioning is conducive to guiding students to actively engage in deep thinking, develop higher-order thinking abilities, cultivate core literacy, enhance students' core academic literacy and comprehensive qualities, and further develop their higher-order thinking abilities, simultaneously promoting teachers' teaching reflection and professional development.

2. Analysis of the Current Situation of Questioning in High School English Reading Classrooms

What is the scenario of asking questions in a real high school English reading classroom? The author found through classroom observations and interviews that the questioning situation is not ideal, mainly due to the following two aspects.

2.1. The Problems and Impacts of Teacher Questioning

2.1.1. Shallow Questioning

At present, in high school English reading teaching, teachers often arrange and design questions at low cognitive levels, which mainly include specific facts, symbolic meanings of words, recall expressions, and the choice of "yes" or "no". When answering such questions, students only need to browse through the reading text, retrieve information, and generally draw conclusions. The main purpose of teachers designing low cognitive level questions is to test students' understanding of the reading text. But using similar questions extensively can lead to shallow questioning. In actual high school English reading teaching, some teachers only focus on the learning and understanding of texts, neglecting practical application and transfer innovation, focusing only on literal understanding, neglecting textual reasoning and critical understanding; Focusing solely on language knowledge teaching and neglecting textual meaning and value discussions has led to a shallow questioning in reading teaching.

2.1.2. Unclear Direction of the Question

The unclear direction of the question is manifested in, firstly, using a complex sentence structure to ask questions, which includes many small questions; Secondly, the teacher raises multiple questions at once, but there is no connection between the questions; Thirdly, some teachers may ask a question and then use different scripts to ask again, which may confuse students. This situation will lead to two

consequences: firstly, the students' thinking of the initial problem will be directly interrupted; Secondly, students would be distracted from thinking about how the rephrased question differs from the original one. This kind of question with unclear direction not only lacks practical value, but may also distract students' focus and doubt their own understanding. The design of reading classroom related questions should have clear directionality. Teachers should clarify the intention of the question design based on the current cognitive level of students, determine appropriate thinking angles, response methods, and evaluation standards. If the question is too broad and does not match the students' existing knowledge and experience level, it cannot stimulate their enthusiasm for answering and participation in thinking. If students do not know how to think and answer, the question will lose its role and existence value.

2.1.3. Fragmentation of Questioning

In addition, most English teachers still tend to constantly ask a lot of questions in today's reading teaching. Teachers ask random questions and students provide simple answers - let's call it "fragmented questioning". Most high school English teachers place more emphasis on reading text knowledge points, structure, and content when designing questions, relying too much on reading text to explain language knowledge points, and there is no logical connection between the questions. If the logical main line of the discourse cannot be highlighted in classroom questioning, and the questions that guide the teaching core are relatively scarce, so students will be unable to systematically and deeply understand the writing logic and context of the reading discourse. When designing classroom questions, teachers should pay attention to the connections between various questions, whether they are logical, hierarchical or not. Overly fragmented questions are not only unfavorable for teachers to carry out teaching activities and achieve teaching objectives, but also cannot promote students' thinking quality and high-level thinking to achieve deep development.

2.1.4. Lack of Hierarchy in Questioning

The problem with classroom questioning is the lack of hierarchy and systematicity, without emphasizing the order of questioning, and the designed questions are only based on the surface information of the text, without going from shallow to deep and gradually progressing. Questions with a sense of hierarchy can better guide students' learning and thinking, and promote the development of deep learning. In addition, the proportion of display, reference, and evaluation questions in classroom design is not appropriate, and the developmental patterns of high school students' thinking are not taken into account. In high school English reading classes, many English teachers raise mostly display based questions, only focusing on guiding students to grasp the shallow information of the reading text, which leads to insufficient exploration of students' cognitive abilities and thinking training. For reference based and evaluation based problems, students need to have a high level of participation in thinking activities, which can exercise their thinking abilities. Therefore, if the number of such problems is too small and teachers lack guidance, it will lead to students not being able to deeply explore and analyze the content, deep connotations, and writing structure of the text, nor can they exercise their reasoning and thinking abilities in this process. In such a questioning mode where the proportion of multi-level questions is imbalanced, it is also difficult to achieve the improvement of students' higher-order thinking quality, and

deep learning cannot be achieved.

2.2. The Problems with Teachers' Feedback

2.2.1. Improper Feedback Method

Teachers' feedback must pay attention to methods and methods. Firstly, feedback is timely. Some teachers do not provide timely feedback or even provide any comments after students answer questions, and directly proceed to the next stage of teaching tasks. Secondly, teachers' feedback should be positive. Positive feedback can increase students' learning confidence and stimulate their enthusiasm for learning. Conversely, negative feedback can undermine students' confidence, hinder the construction of a good relationship between teachers and students, and in severe cases, even lead to students' shadow or learning aversion.

2.2.2. Monotonous Feedback and Evaluation language

Some teachers provide feedback after students answer, but their comments lack diversity. Teachers tend to repeat feedback and use the same evaluation language for different problems and students, but excessive repetition can easily cause auditory fatigue in students, which is also a waste of time behavior. However, having too few evaluation comments is not conducive to cultivating students' enthusiasm for answering questions.

3. Reflection on English Classroom Based on Deep Learning and Core Quality

Deep learning is compared with shallow learning. Shallow learning refers to the mechanical and passive acceptance of knowledge, simply acquiring and memorizing knowledge, which is not related to existing knowledge, and does not involve deep understanding and processing. [1] Deep learning refers to active and critical learning and reflection of knowledge. In the process of deep processing of knowledge information, one grasps its inherent meaning, pays attention to actively constructing a personal knowledge system, and transfers and applies existing knowledge in real situations to solve complex problems, achieve comprehensive learning goals, and develop higher-order thinking abilities. [2] The essence of deep learning points to a deep understanding based on higher-order thinking abilities, integrating methods of connection, transfer, monitoring, and criticism into the entire learning process. Deep learning has stricter and more systematic requirements for learners, but it is also the key to cultivating high-quality talents.

Promoting deep learning and cultivating core competencies complement each other. In today's transitional period of educational development, the concept of core quality teaching is highly respected, and educators also tend to cultivate students' core literacy and comprehensive qualities in all aspects. In the English subject, core literacy includes four dimensions: language ability, thinking quality, cultural awareness, and learning ability, and deep learning is an important way to cultivate core literacy. Therefore, English educators need to make promoting students' deep learning one of the classroom teaching objectives. And deep learning in the classroom aims to integrate teachers, students, and knowledge as a complete system, with teachers as the lead, students as the main body, and knowledge as the medium, truly combining the three to achieve the best teaching effect. In the classroom, under the guidance of teachers, students can complete the learning and understanding of knowledge, build

their own knowledge system, develop correct learning and thinking habits, accumulate experience, and achieve mutual transformation with knowledge. When learning new knowledge, by recalling and associating existing experience, and putting it into application, the two-way promotion of experience and knowledge can be achieved.

4. Optimization Strategies for Questioning in High School English Reading Classrooms Based on Deep Learning

In response to the problems in high school English reading classroom questioning, combined with reflection on the English classroom based on deep learning and core competencies, the author proposes the following optimization strategies for high school English reading classroom questioning.

4.1. To Clarify the Purpose of Questioning and Prepare Well Before Class

Clarifying the purpose of English reading classroom questioning is an important part of pre class preparation. Teachers should fully realize that the purpose of questioning is not limited to testing students' mastery of reading texts or cultivating their reading skills. In the process of questioning, they should also pay attention to cultivating their thinking ability, promoting deep learning, and integrating deep learning into classroom teaching and questioning. Therefore, in pre class preparation, teachers need to set questions based on the purpose of questioning and predict the achievable results, rather than randomly asking questions about certain parts of the reading in teaching. Therefore, in preparation, teachers are constantly adjusting and weighing various influencing factors to develop the best plan. This also requires teachers to constantly learn and reflect, accumulate experience in order to achieve maximum teaching efficiency and student benefits, and in this process, effectively avoid the problems that exist in the teacher's questioning.

4.2. To Respect Individual Differences and Enrich Questioning Types

When teachers ask questions, they should make it clear that students are the main body of the classroom, so they should pay attention to individual differences between students, respect differences, and solve problems caused by differences. Students in the same class inevitably have vastly different learning abilities. But everyone is one of the main subjects in the classroom, so we cannot view students from a performance-based perspective, but towards different students and all students. Enriching the types of questions during design is also one of the effective strategies to promote students' reading and deep learning abilities. The commonly used types of classroom questioning are mainly display questions and reference questions. The misconception of most teachers lies in placing too much emphasis on display questions designed based on text content, while neglecting the role of reference questions outside of the textbook. So teachers should be good at combining two different types of problems together, and arrange them reasonably in the teaching process according to their different functions and roles. When designing teaching, it is necessary to design questions with different levels of difficulty based on the key and difficult points as well as the characteristics of students,

in order to fully stimulate students' interest in learning and enthusiasm for answering. In addition, it is necessary to cultivate one's own patience. This type of problem requires students to divergent their thinking, so students should be given a certain amount of thinking time. When necessary, teachers should guide students patiently. This can also solve the problem of shallow and lack of hierarchy in teacher questioning.

4.3. To Increase Classroom Participation and Diversify Questioning Methods

The constructivist learning theory and situational cognition theory in cognitive learning theory advocate that teachers should attach importance to the social context, interactive practice, and authentic communication of language learning, and create a real or near real English learning and usage environment for students. [3] It also reflects the importance of increasing the participation of college students in the classroom. In order to save classroom time and complete teaching tasks, teachers will adopt a collective questioning approach, facing a wide range of questioning objects, but teachers cannot understand the individual learning situation of students through this method. Therefore, teachers should use individual questioning methods according to the situation, which can help teachers understand the learning situation of individual students and remind students to pay attention to listening. When asking questions, it is also important to pay attention to using encouraging words in order to maximize the motivation of students.

4.4. To Encourage and Guide Students and Focus on Effective Feedback

Teachers' feedback not only responds to students' answers, but also emphasizes the effectiveness of feedback. Firstly, teachers should establish a sense of feedback and develop the habit of providing timely feedback to students. Secondly, they should pay attention to the ways and methods of feedback. After students answer, they should determine which parts of the answer are worth praising or need to be supplemented, so that students have a certain understanding of their learning achievements. In addition, when praising, it is necessary to use diverse language, not just a single "OK" or "Good", but a rich evaluation language. One method is to repeat a part of a student's answer, which is both an affirmation of the student and a way to maintain their enthusiasm. When students' answers require improvement or supplementation, positive emotional feedback is used to guide them to come up with correct or more comprehensive answers.

5. Conclusion

The cultivation of core competencies is an important direction of English education reform and an important task of English reading classroom teaching. The teaching concept of deep learning should also be integrated into reading teaching, and classroom questioning is one of the strategies to achieve students' deep learning. There are still many shortcomings in the current high school English reading classroom questioning. Teachers should consider how to effectively improve reading questioning strategies based on the teaching philosophy of deep learning and the actual situation of students at different levels. Utilizing these strategies to promote students' deep learning not only promotes the growth of teachers' professional abilities, but

also helps students achieve comprehensive growth and development. Thousands of educators stand on the three foot podium, nurturing three thousand peaches and plums, and making contributions to the future of the country and nation.

References

- [1] Linfeng Li, Research on Teaching Design for Deep Learning of High School English Reading [D] Chongqing: Southwest University, 2020.
- [2] Xiujuan Wu, Hao Zhang Experimental Research on Deep Learning Based on Reflection [J] Journal of Distance Education, 2015 (4): 67-74.
- [3] Yonghua Luo The Connotation and Construction of Deep Learning High School English Classroom [J] Curriculum, Textbooks, Teaching Methods, 2021, 41 (6): 96-102.
- [4] Hanting You Exploration of Reading Teaching Strategies in High School English Classroom from the Perspective of Deep Learning [J] Teacher, 2022 (15): 48-50.