

Learning and Evaluation in English Language Teaching: A Deeper Learning Theory Perspective

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Abstract: This paper discusses English language teaching and evaluation from the perspective of deeper learning theory. Deeper learning is a learning style that pays attention to high-level thinking. It emphasizes that learners can understand the meaning of learning content independently and establish the connection between new and old knowledge to solve practical problems. The current situation of English language teaching and learning in senior high schools is introduced in detail and the existing problems are pointed out. On this basis, how and what students should learn English are depicted from the perspective of deeper learning theory. Pedagogical implications about how teachers should guide students to carry out deeper learning in the classroom and evaluate their learning are given.

1. Introduction

The latest *English Curriculum Standards* for Senior Middle School [1] has specified and refined the general requirements for the all-round development of students' morality, intelligence, physical fitness, beauty, labour and the relevant contents of socialist core values according to the laws of students' physical and mental growth and foreign language learning, as well as the basic requirements of society for talents and special requirements for foreign language ability, thus refining and developing the core quality system of the English discipline of high schools. It clarifies the degree requirements that students should reach after completing their English language learning in senior high school. On this basis, the structure of senior high school English curriculum has been optimized. The further connection between senior high school English education and the reform of the college entrance examination system is conducive to the unification of the three links of examination, teaching and evaluation [2].

Under the general background of the times, how teachers should teach in the classroom, how students should learn, how teachers should evaluate students' learning, and how the fundamental task of establishing morality and cultivating people proposed in the *English Curriculum Standards* can be realized are the tasks that should be paid attention to in this round of curriculum reform [3]. Teachers' teaching, students' learning and pedagogical evaluation should be guided by advanced concepts to realize the historical mission of cultivating and shaping people through English courses.

With the proposal of developing core literacy for Chinese students, deeper learning has attracted much attention. Deeper learning is based on life position and emphasizes subject thinking, promotes concept transformation and focuses on knowledge reconstruction, advocates participation and experience, pays attention to students' development, and moves from the surface formal transmission of symbols to the cultural endogenous creation of the integration of logical deduction of knowledge and value care [4]. Students' learning interest, confusion and significance are the premise, key and condition of deeper learning. Through activation and calling, deconstruction and refining, judgment and selection of knowledge, deeper learning realizes the presentation, representation and conception of the internal problem domain, forming the learning character of cultural practice, carrying out research- and innovation-based learning activities, and practicing quality-oriented learning evaluation.

2. Research on Deeper Learning

At the end of the 20th century, the science of learning began to develop. The academic community reached a consensus on some basic facts about "How people learn". There was a huge difference between learning for exams and learning for problem solving. Therefore, when today's educators talk about the pursuit of learning, they usually mean active and positive learning to promote problem solving and enhance creativity, that is, deeper learning.

At present, deeper learning research mainly involves two fields: learning science and computer and artificial intelligence. The former mainly uses the relevant achievements of learning science in learning and education to better promote human growth and development. The latter mainly establishes neural networks that simulate human brain, and urges the machine to form a deeper learning structure similar to human brain, so as to promote the formation of various expert systems [5]. This study mainly refers to the former. In this research, deeper learning is defined from the following four perspectives. First, learners in deep learning have the characteristics of initiative, enthusiasm, criticism and constructiveness. Second, deeper learning focuses on situation transfer, problem solving and innovation. Third, in the process of deeper learning, learners have good emotional experience. Fourth, deeper learning is a socialization process based on personality.

Based on the above understanding of deeper learning, the quality of deeper learning can be understood from three perspectives. From the perspective of individual learners, it is reflected in their academic achievements, cognitive structure and thinking methods. From the perspective of learner groups, it is reflected in their interaction, activity mode and interpersonal structure. From the perspective of deeper learning system, it is reflected in the operating mechanism and mode of learning activities, learning content and learning system, and in the state flow of individual interaction, conflict, adaptation and development in the group they constitute [6].

In the existing body of literature, the content of deeper learning is divided into four parts [7]. First, subject knowledge is the core and basic content of learning, mainly including declarative knowledge and procedural knowledge, which is the basic requirement for mastering the core academic content in deeper learning. Second, strategic knowledge is an effective application method and "additive" of subject knowledge, which can significantly improve learners' critical thinking and problem-solving ability. Third, good social skills are the lubricant to ensure the implementation of the above learning activities and form a situation of effective communication and collaborative work. Fourthly, the construction of benign cognitive structure is the representation of the formation of learners' high-level thinking and the embodiment of the formation of deeper learning thinking [8]. On the one hand, learners can draw inferences from other cases, transfer flexibly, and solve real situation problems; on the other hand, they can gradually generate excellent metacognitive quality by integrating the above contents, learn to learn, and can timely supervise,

regulate, reflect and improve their learning ability.

3. English Language Teaching under the Framework of Deeper Learning Theory

Under the framework of deeper learning theory, English language teaching contents can be described as follows (see Table 1):

Table 1: English Language Teaching Contents from the Perspective of Deeper Learning Theory

Elements	Explanation	Example	Teaching methods
Subject knowledge (SK)	The representation of subject knowledge points	Single word, e.g., fruit, furniture,	Lecturing method
Knowledge strategy (KS)	Learning strategies corresponding to subject knowledge	Strategies for learning words	Discussion method
Social skills (SS)	Act of interacting with others	Behaviors of interacting with others, such as accepting authority, conversation skills, cooperative behavior; Self-related behaviors, such as emotional expression, moral behavior, and positive attitude towards self; Task related behaviors: participation behavior, task completion, following guidance, etc.	Discussion method Game method Scenario performance brainstorming
Cognitive Structure (CS)	The learner's knowledge structure, as well as all the conceptual content and organization displayed	Merge concept schema Graphic conceptual schema	Discussion method Graphic method

The concept of deeper learning is based on learners' understanding of learning knowledge, thinking critically, and integrating new knowledge into the existing cognitive structure for internalization [9]. High school English teachers can help students to deeply tap the connotation of the text, deeply grasp the context between knowledge concepts, make students' cognitive structure change in depth and breadth, and further improve students' ability to apply, analyze and evaluate English knowledge.

Taking English vocabulary teaching in senior high school as an example, deeper learning requires students to apply their knowledge to problem practice, and constantly deepen their learning and understanding of English words through active thinking and exploration. Under the concept of deeper learning, students, on the basis of deeper memory and understanding of knowledge content, combine existing knowledge with newly acquired knowledge. Through deeper processing and internalization, students can learn new ideas and new knowledge as a whole, and can flexibly use the integrated knowledge to solve problems. Teachers create problem situations to stimulate students' interest in learning English knowledge, change students' learning intentions, enable students to actively participate in learning, and actively analyze, evaluate and apply new knowledge. Teachers should create a good learning environment for students, establish an equal relationship with students, and use reasonable question guidance to stimulate students' internal learning motivation. Equally importantly, teachers emphasize the value and inspiration of the content when

designing questions, and use questions to trigger students' deeper thinking, so that students can analyze and explore from multiple angles and aspects. Teachers should also give students enough space to learn, encourage them to question questions in class, to combine their existing knowledge and experience with new knowledge, and achieve a deeper understanding of the meaning of English words.

For example, in the process of teaching "Fruits", the teacher introduces the types of fruits to the students with the topic of fruits, and asks them to make a deep analysis of the vocabulary they need to learn. By asking questions such as "How many kinds of fruits do you know?" "What is the origin of the fruits?", the teacher guides students to connect knowledge with real life, say something based on their own experience, conduct in-depth analysis and exploration of fruit topics from multiple angles and aspects in the process of thinking about problems, and let students make connections with "fruit" culture, customs, origin, types, etc. Teachers should let students start from the existing experience and knowledge, carry out active learning with the desire to explore, associate the newly acquired knowledge with the existing knowledge, increase students' vocabulary through "brainstorming", change students' behaviour in specific scenes, and then carry out the second experience activity. Such two experience activities can improve the cognitive level of students in their own perception, reflect on learning strategies, and achieve the effect of generation.

Deep processing of knowledge is the core of deeper learning [10]. Taking vocabulary teaching as an example, the traditional classroom mostly focuses on this part of the content in teachers' lectures and students' recitations, but lacks the process of learners' real deep understanding, meaning construction, transfer and assimilation in the classroom. However, in the deeper learning English classroom, the stage of acquiring new knowledge only emphasizes the acquisition of new knowledge, and learners have a certain understanding of new knowledge in the stage of knowledge awareness and activation of previous knowledge. The focus of this stage is to provide individuals with personalized resources, carry out personalized learning, and focus on learning the deviation in basic knowledge.

4. Evaluation of English Language Learning under the Framework of Deeper Learning Theory

How do teachers evaluate whether students have achieved deeper learning? First, it can be evaluated from the perspective of trend, the transformation from simple to complex, from concrete to abstract; Second, it can be evaluated from the perspective of quantity accumulation. The former structure level to the multiple structure level is the quantitative change process of learners' response level. Third, it can be evaluated from the perspective of qualitative change. From the multiple structure level to the relevance structure level is the qualitative change process of learners' response level. Several levels reflect the development process of learners from quantitative change to qualitative change, and the pursuit of deep understanding and high-level thinking, which is the development process of deeper learning.

Under the concept of deeper learning in senior high school English language teaching, teachers should run evaluation through the whole learning process, and let students deeply analyze the logical connection of English words through scientific and reasonable evaluation and inspiration. Teachers should make full use of the evaluation function to enable students to think logically, form objective theoretical arguments, and enable students to use new knowledge to solve relevant problems. Teachers should also pay attention to the development of students' thinking, regulate students' learning process through the evaluation function, and improve and adjust the teaching process according to the actual situation. In the classroom, teachers should pay attention to the thinking process that students experience, timely evaluate students' learning and information

processing effects, consciously guide students to extract valuable information from English words, let students form new questions on the basis of understanding English lexical knowledge, and deepen their understanding of the essence of English lexis through further thinking and analysis. In teaching, teachers should constantly promote the development of students' thinking to a higher level, encourage students to communicate and cooperate with each other, and put forward different views and methods on problems. Students constantly improve and innovate their presentation methods in group cooperation to further promote deeper learning.

For example, in the process of teaching "Fruits", teachers can organize students to discuss "Fruits" in groups, so that students can understand the relevant knowledge of fruits in communication and discussion. During the inspection, teachers encourage students to speak actively, inspire students to remember vocabulary effectively through reasonable inspiration, guidance and evaluation, and understand the basic knowledge about fruits. Teachers set discussion topics for students, "How many kinds of fruits do you know? Can you classify the fruits into different categories?", making students think deeply about the problem from multiple perspectives, such as category, price and consumption index. In the process of deeper learning, teachers should encourage students to express their interests and hobbies, let students talk more about topics they are familiar with, and encourage them to express their views with logical understanding and objective arguments. Teachers should make students dare to challenge and speak in the in-depth participation of thinking activities through scientific evaluation, so as to achieve the teaching purpose of improving and innovating their ability.

The concept of deeper English learning in senior high schools requires teachers to attach importance to the cultivation of students' thinking quality, guide and inspire students to grasp the essence of problems in their thinking and analysis, enable students to establish a close relationship between the original knowledge and new knowledge, internalize knowledge, and realize the transfer and application of knowledge.

5. Conclusion

To promote the formation of deeper learning quality is to promote the development of learners' core literacy. The main purpose of the implementation of deeper learning is to cultivate the core quality of learners and implement the task of cultivating morality and talents in the latest *English Curriculum Standards*. Based on the above discussion, the subsequent measurement and evaluation of English language teaching under the theoretical framework of deeper learning can also start from the perspectives of learning achievements, learning strategies, cognitive structure, learners' physiological indicators, learners' interdependence, home school relationship, teacher-student relationship, etc., through thinking visualization diagnosis, academic performance comparison, eye movement and ERP/EEG observation, questionnaires and interviews to see whether learners' deeper learning occurs.

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