# The correspondence between constructivism teaching theory and English teaching reform

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Abstract: With the continuous development of economy, education has also made unprecedented achievements. Today, with the rapid development of socialist education and culture, more and more new teaching methods and ideas have been applied to curriculum teaching. In the traditional English teaching(ET), students' English ability is gradually out of touch with the practical needs of society. In daily teaching, new theories are needed to guide and change the traditional teaching mode. In other words, the traditional teaching model has not met the requirements of the new curriculum reform. The goal of teaching design based on constructivism is to stimulate and cultivate the students' ability to learn independently and do well, and cultivate their ability to collect information, deal with information and solve problems. On this basis, the problems and disadvantages in college ET in Gansu Normal University for Nationalities are investigated and analyzed by questionnaire and interview. Based on the above research results, the author believes that this research has certain enlightenment significance to senior high school ET design, and the research results are helpful to attract senior high school teachers to adopt constructivism-based teaching design, so as to improve ET level and cultivate students' lifelong learning ability.

## 1. Introduction

Since the reform and opening up, the domestic economy has developed rapidly, and with the acceleration of globalization, China's economic and political position in the world has been continuously strengthened, with the increase of foreign-funded enterprises and Sino-foreign cooperation projects, and the increasingly frequent exchanges at home and abroad. As an international language, English plays an increasingly prominent social role [1]. At present, there are not many excellent English textbooks that can reflect the characteristics of higher vocational education, and their pertinence is not strong, so it is difficult for teachers to choose suitable textbooks [2]. Fourth, students' interest in learning is not high. The students of higher vocational colleges are special, including graduates from technical secondary schools, technical schools, vocational high schools and general high schools. Especially in higher vocational schools, although they undertake the task of training higher vocational talents, the teaching form of English still follows the book-based education in high school, which can't improve students' comprehensive practical ability [3]. The level of social and economic development determines the size of education, which is the consensus of people. At the same time, with the development of economy, the society's demand for education will gradually increase, and the demand for high-level and multi-category applied senior talents will also be strengthened. In the rapid development of knowledge economy, the dual requirements of quantity and quality not only show the need for more scientific and cultural talents, but also the need for these talents to apply what they have learned to economic development [4].

The core of comprehensively improving the quality of higher education is to vigorously improve the level of talent training. The fundamental task of higher education is to cultivate talents [5]. As an indispensable part of higher education, college English education and teaching must also conform to the requirements of the times, clarify the training objectives, reform the training methods and teaching models, and cultivate qualified English talents for the society. These students generally have poor English foundation and are not interested in English learning [6]. Students are not interested in English learning and have no good textbooks, so teachers' enthusiasm for teaching will naturally be affected. Therefore, at present, many teachers basically adopt traditional and fixed teaching methods, which is difficult to stimulate students' interest [7]. Means and tools used in educational scientific research; The purpose of using educational scientific research methods is to "explore the relationship between various elements of education and other things, as well as the changes and laws between the quality and quantity of education". There are various research methods in education science. The methods used in this paper are mainly survey, literature and experiment [8].

## 2. A Survey of Constructionism Theory

## 2.1. The Development of Constructionism and Its Basic Views

Constructionism translates structuralism, which is a branch of cognitive psychology and a further development from behaviorism to cognitivism. That is, the process in which the individual's cognitive structure changes due to external stimulation [9]. Education must be based on experience. Education is the growth and transformation of experience. It is a development process in, due to and for experience. Students have problems from experience, and problems can stimulate them to explore knowledge and generate new ideas. Therefore, it emphasizes the enthusiasm, constructiveness, situational, social and task-based learning, cooperative learning, etc. [10]. Through the interaction between new information and the existing concepts in students' cognitive structure, learners can not only master the solutions to specific problems beyond their development ability at their original level, but also modify old knowledge and gain new meaning. So that students can explore and practice the learning content in a specific environment, and evaluate the students' performance, spending bright spots and shortcomings.

Constructionism, as an important philosophy of cognition and learning, better illustrates the process of human learning and its cognitive laws, that is, it provides theoretical support and philosophical basis in terms of how learning occurs, how meaning is constructed, how concepts are formed, and what major factors should be included in the learning environment. It strengthens the leading position of educational psychology in the field of education and teaching. Therefore, the use of constructivism can better explain the human learning process and cognitive laws.

## 2.2. Common Constructionism Teaching Mode

It emphasizes that meaning does not exist independently of us, knowledge is constructed by individuals, and the understanding of things depends on the things themselves and the original knowledge and experience background of individuals. Because real understanding can only be constructed by individual learners based on their own rich and unique experience background, which depends on the process of learning activities in specific situations. In a word, although constructivism has different tendencies, they all question the objectivity, reliability and certainty of knowledge in different ways to some extent. Although some knowledge views are inevitably too radical, they still pose a great challenge to the traditional teaching theory and curriculum theory, which deserves our deep thought. If students want to become active constructors of meaning, they need to: (1) Try to explore and discover the meaning of knowledge; (2) In the process of constructing meaning, actively collect and analyze relevant information and materials, put forward assumptions and verify the learned problems. Constructionism has made a new explanation of knowledge, learning and teaching, which is the comprehensive inheritance and development of teaching and learning theories based on Dewey's, Vygotsky's, Piaget's and Bruner's thoughts. The constructiveness of knowledge explained by constructivism has beneficially revealed the initiative of cognition, as well as the understanding and analysis of learning-related concepts, all of which provide an adaptive theoretical basis for the teaching design of practical teaching and experimental courses in universities.

High level thinking is the core cognitive activity in the learning process. The problem is uncertain, complex and contextualized, and the solution and rating methods of the problem are diversified. Learners should constantly think, process and transform all kinds of information and

ideas, synthesize and summarize based on new and old knowledge, explain relevant phenomena, form new assumptions and inferences, and reflect on and test their own ideas. As the owner of learning activities, learners need to actively and independently manage and adjust learning activities. Members of the same body often communicate and exchange in the learning process, share various learning resources, and jointly complete certain learning tasks, so as to form a mutual influence and mutual promotion interpersonal relationship between each other, and form a certain standard and culture. The negotiation, interaction and cooperation of the learning community are of great significance for knowledge construction. This kind of collaborative learning is not simply learning together by several people, but based on a collaborative learning framework background. Its key elements include: clear and specific student learning objectives; Group members' recognition of goals; Clear and complete task completion guidance and instructions; Diversification of members in the group; The chances of success are fair and reasonable; Reasonable time arrangement; A positive attitude of mutual assistance; Face to face communication; Personal reliability; Publicly recognize and reward the academic achievements of the group; Summary after the activity, etc. The cooperation emphasized by constructivism is an effective learning measure in terms of improving learning ability, interpersonal communication ability and personality self-esteem.

## 3. Strategies of english teaching design from the perspective of constructivism

## 3.1. Influenced by traditional ideas, English learning lacks practice context

The goal of contemporary ET is to cultivate talents with strong comprehensive application ability of English, so that they can communicate effectively in English in their future study, life, work and social interaction. At the same time, college ET requires strengthening students' autonomous learning ability, thereby improving their comprehensive cultural literacy of English language, so as to meet the needs of China's social development and international integration. Constructionism holds that learning is not just a process of transferring knowledge from teachers to students, but a process of students constructing their own knowledge; Students are not passive receivers of information, but active constructors of information meaning. This construction cannot be replaced by others. This requires repositioning the relationship between teachers and students in the teaching process, completely changing the one-man show, cramming and cramming style, adopting the traditional teaching concept of passive transmission as the main and active construction as the auxiliary, and advocating the constructivist teaching concept of student centered and student centered. It is of great significance to innovate ET mode. In order to achieve the perfect fit between them, higher vocational colleges must take measures to change the existing teaching mode, reform some unsuitable places and improve the fit. In ET, teachers can't always maintain the traditional unilateral knowledge imparting mode. According to the survey, all the teachers who take on the task of college ET do not have doctoral degrees, and 50% of them have not obtained master's degree certificates, and some of them have bachelor's degree. Generally speaking, the titles of the teachers who take on the task of college ET are low, most of them are lecturers and teaching assistants, and most of them are young teachers. The number of scientific research projects or academic works is small and the grade is not high. Due to the shortage of teachers, college English teachers have an average teaching hour per week, and some teachers have three different levels of college ET tasks: A, B and C. As shown in Figure 1.

To sum up, from the previous interviews with front-line teachers of experimental courses in universities, we fully understand the problems in experimental courses now, and we find that these problems have also appeared in experimental courses in other universities, that is, they are universal to some extent. However, the emergence of this problem can't be analyzed and studied only by the "one-sided words" of the experimental teachers. Apart from sorting out and analyzing the relevant literature, we should also stand in the perspective of students to get a deeper understanding.

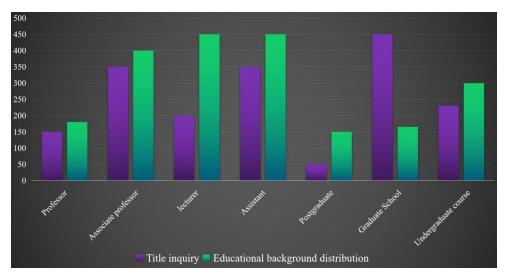


Figure 1 English teachers' situation

In order not to damage and affect the original structure and internal relations of the experimental course learning team, and to obtain more complete experimental results, we adopted the method of participatory research. As a member of the research team, I entered the class of the research sample at the beginning of the semester, and learned the experimental course together with the two groups of experimental objects. At the same time, the experimental teachers in experimental groups A and B are not the same. However, after analysis, the two experimental teachers in the two experimental groups are both experienced and outstanding teachers who "shoulder to shoulder" in the experimental and theoretical courses. They may have some differences in teaching ideas, but through the analysis of teaching achievements and experience in previous years, we believe that the differences have little impact on the research and can almost be ignored. The specific teaching arrangement is shown in Table 1.

Table 1	Teaching	Schedule
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	Contents of teachers' activities	Student activity content
Group A	Sort out and improve the contents	Teaching preview and
	of teaching design	preparation of preview report
Group B Organize and review the syllabus		Nothing

Group A teachers organize and improve the teaching design before this round of experimental teaching, and prepare for the experimental teaching, including: (1) Analyzing the students, knowing their existing knowledge and skills reserves and the knowledge and skills that students are eager to learn through this experiment; (2) Analyze the experimental content, and fully summarize and analyze the difficulties and key points of this experimental course. Before class, the teachers in group B make use of the original experience, take the outline of experimental course and the basic requirements of experimental course teaching as the guide, and prepare for experimental course teaching. Group B students are consistent with the original teaching arrangement at this stage, and do not do preparatory activities.

## 3.2. Adopt diversified hierarchical evaluation methods

Constructionism teaching mode requires students to achieve the purpose of meaning construction through cooperative and cooperative learning. Collaborative learning: group negotiation and discussion. The purpose of collaborative learning is to enable students to use external resources in the process of exploration and learning to construct the meaning of the knowledge they have learned. At the beginning of collaborative learning, teachers should formulate the form of student group discussion (such as several people in a group) and goals (understanding and answers to the questions discussed) from a practical perspective. All discussion activities are closely related to the objectives of the activity. The final students have achieved a more comprehensive and correct

understanding and solution of the problems discussed on the basis of extensive thinking and benefit collection, which not only improves the efficiency and ability of student student interaction, but also promotes the initiative of teacher-student interaction. Cooperative learning can not only cultivate students' team consciousness and spirit to a certain extent, but also promote the cultivation and development of students' innovative spirit. However, the situation is always concrete and everchanging, and the learning of abstract concepts and rules can't flexibly apply to the changes of specific situations. Therefore, it is often difficult for students to flexibly use the knowledge acquired in school to solve real problems in the real world, and it is difficult to effectively participate in social practice activities. Situational teaching is to guide students' independent inquiry learning by using cases or situations as carriers, so as to improve students' ability to analyze and solve practical problems. Teachers can make use of colorful multimedia to show students the knowledge to be learned and relevant information, with illustrations and pictures, so that students can have a more intuitive understanding of the knowledge to be learned, mobilize students' senses and vision, speed up the understanding of what they have learned, realize the leap from static learning to dynamic learning with traditional teaching aids, reduce students' learning fatigue, stimulate students' interest in learning, and thus improve learning efficiency.

In this model, students and teachers are equal, and students and teachers have the same right to speak, and can express their own views, emphasizing to stimulate students' subjective exploration ability and expression ability. In foreign language teaching, we should pay attention to the cultivation of students' initiative and enthusiasm. First of all, we should encourage students to ask questions independently, reduce the proportion of teachers' lectures as much as possible, allow students to have more in-depth discussions, and encourage students to actively ask questions they want. Is the key to promote this educational model. In the new period, it is necessary to strengthen publicity, so that relevant departments can accurately understand the method, so that they can change the traditional teaching ideas and methods, promote the popularization of the method in the new period, so that students and teachers can feel the benefits of the curriculum. For ET, each student has its own development potential, but the fields of performance are different, and even the same student has different development and performance in different fields, which requires that the evaluation content should take into account not only students' academic achievements, but also other aspects, such as students' knowledge mastery ability, practical ability, cooperation ability and innovation ability. Hierarchical teaching is the specific implementation of teaching students in accordance with their aptitude. When evaluating individual learners, we should also carry out according to their actual level, performance ability and development potential.

## 4. Conclusions

Constructionism, as an important theoretical basis, has been applied in the research of instructional design in recent years. As an integral part of the teaching design, the teaching of experimental courses emphasizes that students need to cooperate with the experimental environment, other students and teachers, so constructivism is more appropriate as the theoretical basis of experimental course teaching design. We should actively use mature constructivist teaching methods in English classes; When adopting a diversified and hierarchical evaluation method for ET, we should pay attention to the diversity of evaluation forms, the diversity of evaluation contents and the artistry of evaluation methods. According to the specific situation of students, we should make corresponding changes. In the specific teaching practice, we should teach students in accordance with their aptitude, flexibly use constructivist teaching methods, conform to the requirements of the times, clarify the goal of talent training, reform the training methods and teaching modes, and cultivate qualified English compound talents for the society. To sum up, in this paper, the author makes a comprehensive analysis of the constructivism teaching theory, and makes a holistic analysis of the relevant contents of ET reform, hoping to give you some inspiration, and hope that you can give feedback to some of your ideas after reading this article, so as to promote its all-round development.

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