

Research on Grammar Teaching in Senior High School Classes from the Perspective of Constructivism

-- A Case Study of Nanning No.15 Middle School

Yiting Yang

School of Foreign Languages, Nanning Normal University, Nanning 530100, China

Abstract: Grammar is an essential part of English teaching in senior high schools. Based on constructivist theory, the author observes eight English grammar classes which are selected from the high-quality classes competition of Nanning No.15 Middle School, aiming at answering the following questions through classroom observation: (1) What are the major models teachers use in English grammar teaching in senior high school? (2) What activities do teachers adopt in senior high school's English grammar teaching? After collecting and analyzing the data, it shows that teachers prefer to use the Guided-discovery Model and Meaningful Practice in grammar lessons.

Keywords: Constructivism, Grammar teaching, Teaching models and activities.

1. Introduction

1.1. Background of the Research

Grammar is not only the cornerstone of English language competence, but also an important ingredient of language competence. At the same time, grammar is a barricade to break through in language learning. Nowadays, it is highly contentious whether it is necessary to teach grammar and how to teach grammar in an effective way. For quite a long time, there has been a problem of low efficiency in grammar teaching in high school English teaching in China. Therefore, the selection of grammar teaching methods and activities plays a particularly significant role in improving the teaching effect. As a new cognitive theory introduced into China by the turn of this century, constructivism has been widely adopted by the educational circle. The theory holds that teaching should be student-centered and provide students with teaching situations in which they can interact and learn, thus helping them to construct new knowledge.

According to National English Curriculum Standards for Senior High Schools (2020), the specific goal of English courses in senior high schools is to cultivate and develop students' core literacies such as linguistic ability, cultural character, thinking quality and learning ability after receiving English education in senior high schools. As for the linguistic ability, it requires high school students to learn and master new grammar knowledge with the help of context so as to develop the awareness of English grammar. Grammatical knowledge is the unity of form, meaning and use, which is closely related to phonology, vocabulary, discourse and pragmatic knowledge. Therefore, it is of great significance to teach grammar.

1.2. Significance of the Research

As the present author mentioned above, grammar plays an essential role in English teaching, and it has always been a popular topic in academic research. If students master an adequate knowledge of grammar, they will be able to analyse difficult structures in texts and to communicate in an effective way. In this study, the present author will make a research on

the teaching models and activities adopted in senior high school's grammar classes based on the constructivist theory, which was founded by Jean Piaget, holding that interaction and communication with peers in grammar classes help students to learn grammar. Therefore, this study has theoretical and practical significance in English grammar teaching as follows.

Taking the perspective of theoretical value, this study aims to analyze the major grammar teaching models and activities teachers are more likely to use in classes after observing the classes and collecting some relevant information, which provides research basis for further study in English grammar teaching based on constructivist theory.

Taking the perspective of practical significance, the present author will conclude the scholars' researches and discuss grammar teaching models and activities based on constructivism. Constructivism which views knowledge acquisition as a dynamic process where learners are the doers rather than the recipients of knowledge, has been increasingly informed teaching practice (Mcgroarty, 1998; cited in Pengyue, 2015:2). Adopting the teaching models and activities from the view of constructivism, instead of just giving a lecture, teachers will serve as facilitators whose role is to help the students when it comes to their own understanding. Students are provided opportunities for interacting and communicating with peers, which helps them to acquire grammar knowledge effectively and to build confidence in learning English.

1.3. Layout of the Thesis

This study consists of the following five chapters.

To start with, Chapter One is the introduction of the research. In this chapter, the background and significance of the research are expounded.

In Chapter Two, the author makes a literature review on grammar teaching from the perspective of constructivism. The definition of grammar and grammar teaching, the models and activities of grammar teaching, the research about constructivism as well as related research at home and abroad are reviewed in this part.

Chapter Three is research design. In this chapter, the author

introduces the research questions, research subjects, research instrument, and research procedures.

In Chapter Four, the author analyzes the data which was collected during classroom observation. Then the present author further states major findings while conducting this study and pedagogical implications concluded from this study.

As for the last part of this study, Chapter Five includes summary and limitations of the present research. And the author puts forward the corresponding suggestions for further researches.

2. Literature Review

Since the end of the twentieth century, constructivism theory has been gradually introduced into China by several educational scholars. It has been applied into English teaching in middle schools and universities, especially in the teaching process of listening, speaking and reading rather than in grammar teaching. However, the National English Curriculum Standards for Senior High Schools (2020) proposes that a series of learning activities should be designed so as to enable students to enhance their language learning competence based on the knowledge structure they have already built. Therefore, the application of constructivism in English grammar teaching is particularly essential. In this chapter, the author provides an overview of constructivism-based grammar teaching models and activities, the definition of constructivism as well as the related researches at home and abroad.

2.1. Grammar and Grammar Teaching

The understanding of definition of grammar is necessary in grammar teaching. Grammar is one of the three elements of language, namely, pronunciation, vocabulary and grammar. Linguists have proposed various definition of grammar. In Oxford Advanced Learner's English-Chinese Dictionary (Hornby,2018), grammar is explained as both "the rules in a language for changing the form of words and joining them into sentences" and "a person's knowledge and use of a language". To some extent, it can also be interpreted that grammar is composed of syntax and morphology (Zou Siheng, 2020:3). Chomsky (1965) holds that grammar is a system of rules that determine the formation, meaning and application of sentences.

Besides the definition of grammar mentioned above, scholars also make explanations on grammar from various perspectives. Historically speaking, grammar can be divided into prescriptive grammar and descriptive grammar. Prescriptive grammar, namely traditional grammar, refers to the grammar that aims to tell people what they should say and what they should not say. Yet what enjoys priority in modern linguistics is descriptive grammar. It aims to describe and analyze the language that people use in daily life (Dai Weidong & He Zhaoxiong,2018:3). From the perspective of descriptive purpose, grammar can also be categorized into pedagogical grammar, reference grammar, and linguistic grammar. Grammar which is written for the purpose of teaching is so-called teaching grammar; reference grammar provides reference standards for language teachers or learners. Grammar formed according to linguists' understanding of grammatical concepts is linguistic grammar (Wang Pan,2021). English teachers' interpretation on grammar exerts a significant influence in grammar teaching.

According to the latest researches on grammar teaching at home and abroad, it is evident that grammar teaching

nowadays puts more emphasis on student-centered teaching belief, showing that the study of grammar teaching should be based on constructivist theory.

2.2. Grammar Teaching Models

There are multiple teaching models in English grammar classes. Among them, three models are most frequently adopted and studied, which are inductive model, deductive model and guided discovery model (Wang Qiang, 2006). Here, the present author gives a detailed account of these three models and analyzes their connections with constructivist theory.

2.2.1. Inductive Model

In inductive model, the teacher presents learners with authentic language situations and induces them to understand grammar rules without explaining any of these rules in an explicit way. It is generally considered that the rules will become obvious if the students are given enough appropriate examples. For example, in order to induce students to realize the distinctions between 'other' and 'the other', the teacher will hold two apples first, saying 'Some students may like red apples and other students may like green apples'. Then the teachers will hold two pens, saying 'I have two pens. One is red. The other is black.' After similar examples presented by the teacher, it is believed that students will be able to understand that "the other" is often used between two objects. Then students will be asked to apply the newly grammar structure to produce their own sentences. This time what teachers should do is only to provide feedback to students to help them build their confidence. Lastly, the teacher can explain the grammar rule to the student (Wang Qiang,2006).

2.2.2. Deductive Model

The deductive model depends on reasoning, analyzing and comparing. First, the teacher gives students an authentic example. Then the teacher explains the underlying rules regarding the forms of certain structural words. Sometimes, comparisons are made between the newly presented knowledge structure and the previously learned knowledge structures. Finally, the students practise applying the grammar rules to produce sentences with given prompts.

2.2.3. Guided Discovery Model

The guided discovery model has something to do with the inductive model in that the students are induced to find out the rules by themselves but differs in the process of the discovery. In the guided discovery model, students are cautiously guided by the teacher and the rules are elicited and taught explicitly. Ellis (2002) proposes two senses of awareness in second language acquisition. First, learners can be made to consciously "notice" the properties of language; second, learners can be aware of the sense of forming some kind of explicit knowledge as well as implicit knowledge.

2.3. Grammar Teaching Activities

The three grammar teaching models introduced above underlie the idea that new grammar items presentation should consider the instructional variables and should be student-centered. However, it is believed that grammatical capability cannot be obtained only by learning its rules explicitly. Extra practice is needed to enhance learners' understandings. Next, the author will discuss about three types of activities used the most in grammar lesson, that is, mechanical practice, meaningful practice and using prompts for practice.

2.3.1. Mechanical Practice

Mechanical practice involves activities that are aimed at form accuracy. By doing so, the students are asked to do repeated practice to a key element in a structure. Substitution and transformation drills are most frequently used in mechanical practice. However, It is not conducive to the effective use of constructivism theory in grammar teaching to inspire students to acquire knowledge.

2.3.2. Meaningful Practice

Meaningful practice serves as upgraded edition of mechanical practice in grammar teaching. The teaching activities based on meaningful practice have no absolutely wrong or right answers. The students need to engage in such activities and try to get a deeper understanding of the grammatical rules.

2.3.3. Using Prompts for Practice

Using prompts in grammar practice is actually introduced in the two grammar teaching models the author has mentioned above, that is, inductive model and deductive model. In these two models, after presenting an example or creating language scenario for students, the teacher will usually ask students to do related practice by providing them some prompts. The prompts used in class can be key words, charts, pictures, etc. By giving prompts to students, teachers will encourage them a lot psychologically.

2.4. Constructivism

The constructivist theory was first put forward by Piaget. He argues from the perspective of cognitive theory that the development of cognition is a process of continuous construction. Piaget (1972) maintains that cognitive structure adapts to changes of the environment through "assimilation" and "adaptation". Assimilation is to enrich and strengthen the structural system of the subject by incorporating environmental factors into the existing schema. At the same time, there are some changes in the structure of the subject when assimilating. Adaptation refers to the process in which organisms adapt to specific environmental stimulation by adjusting their internal structure, including reflection and integration to achieve the construction.

2.5. Related Researches at Home and Abroad

English grammar teaching has been a hot topic in current academic and educational circles. With new teaching models which are based on constructivist theory introduced into China at the end of last century, English grammar teaching in senior high school has undergone qualitative changes. Numerous scholars abroad and at home have conducted extensive researches in English grammar teaching from multiple perspectives. It is essential to refer to the prior studies, since they provide solid theoretical basis to this study.

2.5.1. Related Researches Abroad

The idea of Constructivism was first put forward by the Swiss philosopher and psychologist J. Piaget. The School he founded, known as the Piaget School or the Geneva School, is the most influential School in the field of cognitive development. Piaget (1972) argues that cognition is an active construction based on the existing knowledge and experience of the subject. People produce knowledge and form meaning based upon their experiences. Apart from learning theories, Piaget's constructivist theory addresses how learning actually occurs, not focusing on what influences learning.

Referring to other researches abroad, the author found that

several scholars has claimed their views on this topic on the basis of Piaget's theory. Many experts and scholars carried out further studies of constructivism from various perspectives. Vygotsky (1978), the pioneer of Social Constructivism, emphasizes the role of learners' social, cultural and historical backgrounds and proposes the important concept of "the zone of proximal development". Based on this theory, he further puts forward a teaching model which is called scaffolding. Scaffolding instruction supports the construction (the introduction of new material) and is taken away after completion (or when the lesson is understood). Brown (1980) argues from the perspective of classroom activities that cooperative learning is the core of class activities. In most cases, there is very little need for explanations of grammar by the teachers since interaction and communication with peers is believed to help students to learn grammar.

Blyth (2011) has concluded pedagogical implications of grammar teaching in light of constructivism. He maintains that learning is not the result of development, but is development. Disequilibrium facilitates learning. Reflective abstraction is the driving force of learning. Dialogue within a community engenders further learning. Learning proceeds towards the development of central organizing principles. Additionally, he points out that teachers must gain a thorough understanding of the relationship between 'aspect' and cognition by self-consciously experiencing the process of narration.

The research above shows that the constructivism plays a significant role in English grammar teaching. Furthermore, it helps English teachers to shift their attitude towards grammar teaching. Teachers who break away from traditional, teacher-centered approach to explicit grammar instruction, are now opting for "Comprehension-Based Pedagogy" where students come to know the grammar through exposure to comprehensible input. This is often described as shifting the pedagogical focus from FORM to MEANING.

2.5.2. Related Researches at Home

A large and growing body of literature at home has investigated on the issues about the importance to employ these models into grammar teaching and what teaching models teachers should adopt in their class.

Wang Qiang (2006) claims that the understanding of how to teach grammar is as disputed as the value of grammar in language learning. Wang introduces three approaches of teaching grammar: the deductive method, the inductive method, and the guided discovery method. She believes that all the three methods have advantages and shortcomings respectively. Therefore, in the process of teaching, it is vital for teachers to vary these methods in different circumstances.

In contrast to Wang Qiang, Wu Xiaoyan (2006) asserts that in teaching process, the dual motivation of the student and the teacher should be given equal importance in terms of "bilateral activities" between the teacher and the student, and of "bilateral activities" or "multilateral activities" between the students. Teachers should take a high level view and integrate theory with the process of teaching. Similarly, Huang Yumei (2021) also points out that teachers need to create ideal learning situations for students, stimulate their analytical and thinking competence, and enhance their ability to construct knowledge and solve problems.

In conclusion, all these researches at home and abroad have emphasized the importance of constructivism in English grammar teaching, which provide adequate theoretical and practical basis for the following study carried out by the

present author.

3. Research Design

Based on the constructivism theory, this study intends to make an in-depth understanding of the current situation of English grammar teaching in senior high schools through classroom observation, and to explore the way to apply the English teaching models and activities from the perspective of constructivism to the English grammar classes in senior high schools, and to study the influence of such grammar teaching models and activities on senior high school students' English grammar learning.

3.1. Research Questions

The study is devoted to grammar teaching based on constructivism. This thesis tries to explore the following two questions:

- (1) What are the major models teachers use in English grammar teaching in senior high schools ?
- (2) What activities do teachers usually adopt in senior high school's English grammar teaching ?

3.2. Research Subjects

In this study, the author observed eight grammar classes which were selected from the high-quality classes competition of Nanning No.15 Middle School, with each presenting different grammar points. The author had obtained permission from the English teachers who had the eight grammar classes in terms of recording the classes. Permission to conduct this research was granted by Nanning No.15 Middle School. During the observation, the author recorded the grammar teaching models and teaching activities adopted by teachers in each grammar class.

3.3. Research Instruments

Classroom observation is the principal research method in this study. Through classroom observation, the teaching models and activities teachers adopt in English grammar lesson can be observed. Moreover, the problems existing in the process of teaching can also be found out. The author has observed eight exemplary grammar lessons from Nanning No.15 Middle School. The research tables are presented in the following chapter.

3.4. Research Procedures

In order to make a research on the teaching models and activities teachers tend to use in grammar teaching in senior high schools, this study had undergone the following three phases.

At first, the present author consulted the literature about constructivism and English grammar teaching in senior high school, to refer to the current situation of these fields as well as the related theoretical basis.

In the second stage, the author began to conduct classroom observation method. The author selected 8 exemplary grammar lessons recorded in Nanning No.15 Middle School for in-depth research.

In the third stage, the author sorted out the data collected in the grammar classes and analyzed them respectively. And then concluded the findings and pedagogical implications of this study.

4. Data Analysis

In this chapter, the author will describe and analyze the data from the perspective of constructivism which has been collected through classroom observation. Then the present author will further summarize the major findings and proposes the pedagogical implications.

With the purpose of exploring the teaching models and activities used in English grammar classes in senior high schools as well as putting forward some pedagogical implications based on constructivism theory, the author has observed 8 grammar lessons. The grammar points taught in these lessons are shown in Table 1.

Table 1. Grammar Points Taught in the Observed Classes

Lessons	Grammar Points to be Taught
Lesson 1	Verb-ed form
Lesson 2	Nouns used as verbs
Lesson 3	Past perfect tense
Lesson 4	Restrictive attributive clause
Lesson 5	Passive voice
Lesson 6	Present perfect tense
Lesson 7	The usage of the infinite
Lesson 8	Adverbs and adverbial phrases

4.1. Teaching Models Used in Grammar Classes

In this part, the author will describe and analyze the data which have been collected from 8 grammar lessons and shown in Table 2 from the perspective of constructivist theory.

As Table 2 shows above, within the 8 grammar lessons that different grammar points are taught, there are 4 lessons (50%) using the guided discovery model, which ranks the first among the three models. And there are 2 lessons (25%) using the inductive model and deductive model respectively.

The data presented in Table 2 indicate that teachers prefer guided discovery model. Although this model is similar to inductive model in that the teacher will emphasize more on inducing students to explore the rules, it differs in that the former involves teacher's explanation of the grammar rules to students. Based on the constructivist theory, in the grammar class using this model, the teacher, the intermediater of teaching process, guides students to discover grammar rules by setting contextualised scenarios. In this way, the teachers not only impart grammar knowledge to students, but also improve students' language competence and learning competence. Therefore, the teachers should try to guide students to find out the rules by themselves and improve their learning ability.

4.2. Teaching Activities Adopted in Grammar Classes

In this part, the author will describe and analyze the data which have been collected from 8 grammar lessons and shown in Table 3 from the perspective of constructivist theory.

Table 3 shows that within the 8 grammar lessons that different grammar points are taught, meaningful practice is used for 10 times (47.6%), which ranks the first among the three activities. Mechanical practice is used for 7 times (33.3%) and prompts for practice is used for 4 times (19.1%).

The data in Table 4-3 imply that, first and foremost, meaningful practice is used in 10 grammar lessons while prompts for practice are just used in 4 lessons. Based on the

constructivist theory, meaningful practice focuses on the construction of existing and new knowledge structure. Each activity is dynamic and directly related to students' existing knowledge which helps students to learn the grammar points. However, since the practice based on prompts has been considered as effective practice, the teachers should try to adopt some prompts such pictures, key words, mimes, etc to design the classroom activities; secondly, it can be found that in the meaningful practice, blank-filling drills based on the given text are frequently provided. Therefore, teachers should design various types of drills in order to arouse students' interest and help students understand the rules in an effective way by repeated exercise.

4.3. Major Findings and Pedagogical Implications

From the data analysis of classroom observation presented in Chapter Four, the author has concluded three findings and the corresponding pedagogical implications as follows:

(1) The change of teaching philosophy. Nowadays, the teaching models used by English teachers are different from the previous direct method. In the teaching process, more and more attention is paid to inspiring students' independent thinking and exploring ability. Grammar class is usually designed as student-centered, and teachers serve as facilitators. Students use the knowledge they have learned in the previous classes to build a brand-new knowledge framework, which is exactly the embodiment of constructivism in teaching.

(2) Preference to the guided discovery model. By guiding students to discover the underlying rules of the grammar structure, teachers will help students to expose under the context directly. Hence, the teachers are supposed to try to guide students to find out the rules by themselves and improve their learning ability.

(3) Preference to the meaningful practice. Meaningful practice is related to constructivism. Through learning the grammatical knowledge, student's knowledge structure is built little by little. Meaningful practice is conducive for students to build elements in sequence.

5. Conclusion

Based on the previous chapters, the author will make a conclusion about this research and the limitations of this study as well as suggestions for further studies are listed.

5.1. Summary of the Present Research

The purpose of this thesis is to study the application of constructivism in the grammar teaching. Based on constructivist theory, the author has figured out the answers of the questions this thesis tries to explore through literature research and classroom observation method, and comes to the findings that the guided-discovery model enjoys popularity in grammar teaching and meaningful practice is favorable by the teachers.

5.2. Limitations of the Present Research

Although in this study, the author has analyzed the research and data from multiple perspective, this study still has some limitations.

To begin with, there are too many uncertainties under the severe condition of Covid-19 pandemic. It is also the circumstantial factors that propelled this study to change the

research methods from observing the offline classes to observing and analyzing the grammar classes downloaded online.

What is more, the research samples in this study are in a small scale. Therefore, the present research is not adequate and comprehensive to expound the grammar teaching situation in senior high schools.

5.3. Suggestions for Further Researches

To some extent, this study houses some theoretical and practical significance, but it still has its limitations which are mentioned above. Therefore, further researches will be conducted by adopting more methods to study the grammar teaching in senior high schools.

References

- [1] Blyth, C. A Constructivist Approach to Grammar: Teaching Teachers to Teach Aspect [J]. *Modern Language Journal*. 2011, 81(1):50-66.
- [2] Chomsky, N. *Aspects of the Theory of Syntax* [M]. Cambridge: MIT Press, 1965.
- [3] Ellis, R. The place of grammar instruction in the second/foreign language curriculum. In E. Hinkel & S. Fotos (Eds.), *New perspectives on grammar teaching in second language classrooms* (p. 17-34)[J]. Mahwah, NJ: Lawrence Erlbaum Associates, 2002.
- [4] Piaget, J. *The Principles of Genetic Epistemology* [M]. London: Routledge & Kegan Paul Ltd, 1972.
- [5] Terrell T.D, Brown H.D. *Principles of language learning and teaching*[J]. *Language*, 1980, 57(3):781.
- [6] Vygotsky, L.S. *Mind in Society*[M]. Cambridge: Harvard University Press, 1978.
- [7] Dai Weidong, He Zhaoxiong. *A New Concise Course in Linguistics for Students of English*. 2nd Edition [M]. Shanghai Foreign Language Education Press, 2018.
- [8] Hornby. *Advanced Learner's English-Chinese Dictionary - the Ninth Edition* [M]. The Commercial Press, 2018.
- [9] Huang Chenhui. *An Empirical Study on Constructivism-based English Grammar Teaching in Senior High Schools: A Case Study of Attributive Clause Teaching* [D]. Fujian Normal University, 2019.
- [10] Huang Yumei. *Application of constructivism in English Grammar teaching in Senior high schools* [J]. *English Teachers*, 2021, (17):136-138+156.
- [11] Ke Yaman. *On the teaching model of high school English grammar* [J]. *English on Campus*, 2018, (16):129.
- [12] Peng Yue. *Research on the Strategies of Senior English Grammar Teaching Based on Constructivism* [D]. Xinyang Normal University, 2015.
- [13] WANG Qiang. *A Course in English Language Teaching (Second Edition)* [M]. Beijing: Higher Education Press, 2006.
- [14] Wang Pan. *The Current Situation of Grammar Research in China and its Implications for English Grammar Teaching in Middle Schools* [J]. *English Teachers*, 2021(22):146-148.]
- [15] Wei Jianpei, Mei Yingchun. *Piaget and Constructivism* [J]. *Journal of Jining University*, 2009, 104-107.
- [16] Wu Xiaoyan. *On the Enlightenment of Constructivism to English Teaching* [J]. *Foreign Language and Their Teaching*, 2006, (02):33-35.
- [17] Yang Bingxian. *A Survey of English Grammar Teaching in Senior Middle School Based on the English Key*

- Competencies: A Case Study of Nanning Foreign Language School[D]. Nanning Normal University, 2021.
- [18] Zhao Mingli. An Empirical Study of English Grammar Teaching Based on Constructivism in Senior High Schools [D]. Liaoning Normal University, 2010.
- [19] Zhao Mengjie. On the Establishment of Effective English Grammar Classroom in High School: A Case Study of Subjunctive Moods [J]. Emotion Reader, 2020, (02):56.
- [20] Ministry of Education of the People's Republic of China. English Curriculum Standard of Full-time Compulsory Education for Senior High Schools (2017 edition, 2020 revision) [M]. Beijing: People's Education Press, 2020.
- [21] Zou Siheng. An Action Research on Communicative Approach to English Grammar Teaching in Junior Middle School [D]. Yanbian University, 2020.