

Feasibility Study on the Application of Interactive Teaching Model in TESOL under the Background of Universal Grammar and L2 Acquisition Model

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Abstract. The interactive teaching model is a new teaching methodology that is quite different from the traditional teaching model based on teacher's lectures and rote learning. It plays an important role in teaching English to non-native speakers of English, and more and more Teaching English to Speakers of Other Languages (TESOL) practitioners are trying to adopt this model in their teaching. This paper will analyse the specific role played by the interactive teaching mode in TESOL from a linguistic point of view, and study the feasibility of the application of this mode in English teaching under the framework of Chomsky's Universal Grammar and Krashen's theory of second language acquisition. The teaching model will be analysed through the research methodology of literature study within the theoretical framework of universal grammar, input hypothesis, affective filter hypothesis and monitoring model. Through the study, this paper concludes that the interactive teaching model is in line with linguistic findings such as Universal Grammar and L2 Acquisition Theory, and its application in TESOL is highly feasible.

Keywords: Interactive teaching model; TESOL; Universal Grammar; L2 acquisition model.

1. Introduction

The interactive teaching method was first proposed by American educational psychologists Brown and Palincsar in 1989. It aims to cultivate students' ability to think independently, communicate and cooperate, and thus enhance learning. It focuses on "communication and interaction" in teaching and learning, advocates the concept of "student-centered" teaching, and emphasizes the effectiveness of teacher-student, student-student and student-based communication and interaction.

In China, although the interactive teaching mode has become popular, most schools still use the traditional "grammar-translation method", in which the teacher is the centre of the teaching process. Meanwhile, due to the lack of relevant theoretical support, even though some teachers are willing to try to adopt the interactive teaching mode, this mode has not become mainstream. Teaching English to Speakers of Other Languages (TESOL), as a practical application of second language acquisition and applied linguistics, can demonstrate its feasibility from a linguistic point of view and help promote this scientific teaching method. Both Universal Grammar Theory and L2 Acquisition Theory are important parts of this theoretical framework. At the same time, much of the content of both echoes the core theory of the interactive teaching model. Therefore, this paper will conduct a feasibility study from the perspectives of Universal Grammar and L2 Acquisition Theory respectively to demonstrate the advantages of the Interactive Teaching Model applied in TESOL.

2. Literature Review

2.1. Universal Grammar (UG)

Hannah Valenzuela in *Linguistics for TESOL-Theory and Practice* describes Universal Grammar as a commonality of language shared by humans as proposed by Noam Chomsky. Language is both a system and a human instinct; there is a shared language acquisition mechanism among humans [1].



Wei Yanlong in *Analysing Chomsky's Universal Grammar from the Perspective of Second Language Acquisition* summarizes Cook's viewpoint and proposes that Universal Grammar can objectively explain various problems that appear in classroom language teaching. There is no need to allow language learners to interact or to encourage them to develop their own language learning methods in the classroom because their grammatical systems will automatically match the principles of the UG theory [2].

Luo Haiyan's *A Study on the Correlation between Universal Grammar Accessibility and Pilot's Years of English Learning* suggests that Chomsky believed that human monolingualism and bilingualism are acquired in two ways altogether. While monolingualism is a natural acquisition process, bilingualism is an unnatural acquisition process in which the learner receives bilingual input. In the process, gradually generates a universal acceptance of bilingual input that applies to the bilingual language which ultimately constitutes an understanding of bilingual grammar [3].

2.2. L2 Acquisition Theory

Wang Ban in *A Study of the Influence of Input Hypothesis and Output Hypothesis on Children's L2 Acquisition in EFL Countries* summarises Krashen's input hypothesis-centred language monitoring model, which was inspired by Chomsky's theory of the mechanism of language acquisition, and makes a positive evaluation and suggestions for the application of the input hypothesis in Chinese children's L2 acquisition [4].

Zhang Jianjun in *A Study on the Application of Second Language Acquisition Theory in College English Teaching* introduces Krashen's theoretical system of second language acquisition, and its implications for English teaching practice are drawn. On the other hand, it also compares some of the differences between Chomsky and Krashen at the theoretical level, and argues the possibility of the application of second language acquisition theory in English teaching from several angles [5].

Lv Jiaorong in *Exploring the Integrated English Teaching Mode Based on Superstar Learning Channel Platform under Krashen's Bilingual Acquisition Theory*, puts forward an integrated English teaching strategy based on Superstar Learning Channel Platform under the framework of Krashen's Bilingual Acquisition Theory, which makes use of the information technology platform to improve the effect of English teaching effectively [6].

2.3. Introductory Teaching Model

Liang Min designed questionnaires, experimental studies and interviews in *The Application of Interactive Teaching Method in Senior High School Reading Teaching*. Through analysis, it is found that interactive teaching methods can effectively improve students' reading ability and reading interest in high school English reading teaching under the background of new curriculum standards [7].

Wen Wen proposed in the *Application of Interactive Reading Mode in Junior High School English Reading Teaching* that interactive education is essentially a new form of education based on constructivism, which overcomes the traditional teaching method to a certain extent, and emphasizes the "subject" and "knowledge". Teachers can introduce discourse teaching in various ways, rationally use mind mapping, and carry out three-dimensional reading and discourse development activities [8].

Xu Yongfen proposed in *Exploring the Application of Interactive Reading in Senior High School English Teaching* that interactive reading mode is a new and effective teaching method for senior high school English teaching, which guides students to naturally transition to learning related to the topic of the article and ensures that students have a certain degree of systematic cognition of the background of the article. At the same time, teachers should pay attention to the teaching of reading learning skills in the course of teaching, and guide students to gain knowledge expansion and ability improvement in reading learning [9].

3. The Application of Universal Grammar in Interactive Model

As an important theory in the field of second language acquisition, Universal Grammar also has very profound practical significance for teaching English to non-native English speakers. The theory of Universal Grammar helps educators to try to analyse and find solutions to some of the problems that arise in the process of teaching and learning, to predict and evaluate the effectiveness of teaching and learning, and to better design teaching methods.

The interactive teaching model is a more specific teaching methodology that is applied in some English teaching scenarios. This unique teaching model, which emphasises interaction, can be further analysed within the theoretical framework of Universal Grammar to help us explore the feasibility of this model in TESOL.

3.1. The Application of Universal Grammar in TESOL

According to the theory of universal grammar, every human being has an inherent and common system of language production [1]. The process of children's speech acquisition is the transformation of universal grammar into individual grammars, which is realised with the help of the Language Acquisition Device (LAD). Every human being has an innate knowledge of grammar, which consists of a set of uniform basic grammars called principles and subtle differences in natural languages called parameters, which is the theory of principles and parameters. In acquiring different languages, students are actually setting different parameters. If this theory is applied to TESOL, then the parameters here are specific to the English language. Taking Chinese EFL students as an example, most Chinese native speakers do not have a natural notion of "word pattern variation", because the pattern of words in modern Chinese grammar is completely reflected by the order of words and the addition of dummy words, and the words themselves do not usually undergo morphological changes. On the other hand, in English, just personal pronouns have different word forms corresponding to subject case, object case, adjective case, noun case, etc. But it doesn't mean that Chinese students don't have the knowledge of word form. However, this does not mean that Chinese students do not have the ability to understand and use these English-specific morphological changes. Their "principles" are still present in the acquisition of English, but what is needed is to reset the "parameters" of English. This gives teachers ideas for content and methodological choices in teaching. In terms of content, this can be done through targeted training, i.e. a lot of input on a particular 'parameter', so that students can gradually adapt the principle to that parameter. In this example, the teacher can use a corpus containing specific word pattern variations to enable students to try to understand and acquire the use of word pattern variations on their own. In terms of methodology, the interactive teaching model is an appropriate choice.

3.2. Universal Grammar and Interactive Teaching Model

Universal grammar argues that the acquired environment is also very important for language acquisition. Language acquisition is the use of existing knowledge of Universal Grammar and the setting of parameters through the stimulation of the acquired environment [2]. In the interactive mode of teaching, the teacher acts more as a "facilitator" than as a mere exporter of knowledge. Students use "interaction" as an important means of acquiring competence. Teachers can design interactive methods according to the teaching content to create a learning environment for students. Let's take the example of Chinese students learning English word formation. The teacher prepares enough sentences with complete SVO structures for the students, in which the subject and object are personal pronouns to be learnt, and guides the students to summarise the patterns of morphological changes of the words in these sentences. After that, the students are allowed to make sentences based on their summarised patterns and give feedback to the teacher, who becomes the object of interaction with the students in this part of the process and corrects the students' mistakes. This process is actually the process of rearranging the parameters. In SVO structure sentences, the subject and object are the sender and receiver of the action respectively. In Chinese, as long as the sender is in front of the receiver, it can be in line with the Chinese expression, and there is no need to distinguish the

morphology of the words. In English, on the other hand, personal pronouns have different word forms for both subject and object. However, none of such differences go beyond the general principles of human language, i.e., universal grammar. Students will eventually arrive at their own correct results due to the constraints of universal grammar. The use of multimedia devices in the interactive mode of teaching and learning can help teachers design interactive questions for students, such as guiding students to make predictions and choices by linking and matching, and helping students to summarise their experiences. The interaction with the teacher, the process of trial and error, and the process of summarising on their own, provide students with a fuller stimulus and experience, which is closer to the process of "acquiring" a language than the rote memorisation of grammatical rules.

4. L2 Acquisition Theory in Interactive Teaching Model

L2 Acquisition Theory is Krashen's series of theories on second language acquisition. In the early 1980s, inspired by Chomsky's theory of language acquisition mechanisms, Krashen proposed five major hypotheses for the language monitoring model: the learning-by-acquisition hypothesis, the natural sequence hypothesis, the monitoring hypothesis, the affective filtering hypothesis, and the input hypothesis [4]. The interactive teaching model has an important research value within the theoretical framework of the input hypothesis, the monitoring hypothesis, and the affective filtering hypothesis.

4.1. The Application of L2 Acquisition Theory in TESOL

According to Krashen, "comprehensible input directly affects the effect of the input hypothesis, and learners can only acquire language if they receive a large amount of comprehensible input". Comprehensible input requires language learners to receive input that is one level ("i + 1") above their current level of English ("i" level). Regarding the selection of input content, first of all, the input material must be comprehensible. Krashen states, "In order to move a language learner from one stage to another higher stage, the language input provided must contain the linguistic structure of the next stage [4]." Secondly, the input needs to be interesting and relevant. Only topic materials that are interesting and relevant to the learners' life situations can fully stimulate their internal motivation to learn and keep their interest and desire to learn. Finally, the input materials should be in accordance with the natural acquisition characteristics and be in sufficient quantity. After a large number of repeated learning inputs, learners will continue to consolidate their "i+1" language knowledge and promote language acquisition. At the same time, in terms of the natural order hypothesis, Krashen believes in structural and intrinsic linguistic competence, and therefore informal, subconscious learning classrooms can help students to truly acquire the innate language-processing skills shared by all human beings.

In TESOL, EFL students are going through the process of second language acquisition of English. All of these theories can be applied to teaching practice. According to the Input Hypothesis, teachers should provide comprehensible input to students, and the material chosen should be based on the current level of English proficiency of the students, with a slight increase in the level of difficulty, so that the students can consolidate what they already know while attempting to comprehend the new content on their own. At the same time, it is necessary to ensure that students receive a large amount of sufficient input and that the material is interesting and life-like.

4.2. The Function of L2 Acquisition in the Interactive Teaching Model

The interactive teaching model is a very successful application of second language acquisition theories in TESOL. This paper will analyse the role played by the interactive teaching model in TESOL from the perspectives of the Input Hypothesis, the Monitoring Hypothesis and the Affective Filter Hypothesis, and explain how these theories are reflected in this model [6].

In the aspect of input hypothesis, first of all, comprehensible input requires teachers to have a proper grasp of the selection of materials, which requires teachers to have an in-depth understanding of

students' learning progress and English level. The most important feature of the interactive teaching mode is the interaction between teachers and students and between students and students. In such interaction, the teacher as a receiver can fully understand the students' English level. Secondly, in the traditional teaching method, teachers often just unilaterally pass the knowledge to students as it is, and require students to learn by rote, no matter whether they have really mastered the language rules or not. In this way, students may have wrong perceptions of some linguistic phenomena, such as considering some Chinese and English words as synonymous substitutions that are exactly equivalent to each other and ignoring the role of context. This translation-grammar-centered teaching method will undoubtedly also enhance the negative transfer of the mother tongue. Moreover, due to the lack of application, language rules memorised in this way tend to be more easily forgotten. In contrast, the interactive teaching model encourages students to act as outputs as well, so that they can fully perceive the occasions of language application during their own language output, and their interactions with the teacher and other students at the same level are essentially a form of comprehensible input. Finally, the interactive teaching mode emphasises the use of multimedia and information technology. In order to acquire a language, it is not enough to rely only on the corpus input in the classroom. Teachers can make use of the rich content of multimedia to impart language input to students, and they can also use various campus apps to provide students with sufficient comprehensible input outside the classroom.

According to the affective filter hypothesis, the brain is like an affective filter (affective filter), the brain automatically relaxes the shielding for positive emotional language input, and enhances the shielding for uninteresting negative emotions, which reduces the effectiveness of language learning [10]. The first effective factor affecting language acquisition is motivation. Whether or not a student has a clear purpose for learning has a direct impact on the learning effect. If the purpose is clear, then the motivation will be high and the progress will be fast; on the contrary, the result will be very little. The second is personality. Learners who are confident, outgoing, happy to be in unfamiliar learning environments, and feel good about themselves make faster progress in learning; the third is the emotional state, which mainly refers to anxiety and relaxation. Those who are more anxious have higher emotional barriers and get less input; conversely, they tend to get more input. Through the interactive teaching model, it is possible to first develop a personalised learning plan for students and help them find their learning goals. The "i+1" input model also helps students gain motivation as they progress. In the selection of input content, the interactive teaching method requires teachers to grasp hot topics, fully mobilise the classroom atmosphere and students' emotions, and cultivate students' interest in learning, which also reduces the brain's emotional filter. Secondly, the interactive teaching mode requires full classroom interaction, which helps to cultivate students' cheerful character, build up their self-confidence and make faster progress. Finally, the interactive teaching model allows teachers to have a more detailed understanding of students' emotional state, so that they can use psychological methods to reduce students' anxiety, thus lowering the emotional barrier.

"Monitoring" means noticing, paying attention to, and correcting the form of the language. According to Krashen, "acquisition" enables a person to acquire real linguistic competence, and L2 learners produce linguistic output through "acquired" knowledge, while "learning" plays a limited role, mainly to Learning" plays a limited role, mainly in allowing people to consciously judge and adjust their own language forms, and to pay attention to whether their language is correct or not [10]. This process of judgement, attention and adjustment is the process of monitoring. In the interactive teaching mode, the process of student interaction is actually a trial-and-error process, in which the monitoring mode begins to play a role in helping students express themselves correctly. Teachers can also observe students' self-monitoring in the process of interacting with them, so as to avoid over-monitoring or under-monitoring by some students, which may affect their language expression.

5. Conclusion

By analysing the interactive teaching model in TESOL within the context of universal grammar and L2 acquisition theory, the advantages of this model are clearly presented. The interactive mode of teaching can effectively provide EFL students with the stimuli needed to satisfy the universal grammar, and the input of the parameters can be designed in a targeted manner. In addition, the process of interaction in teaching can be seen as a process of comprehensible input. It helps the teacher to understand the current level of the students and to adapt the "i+1" part of the content to the students' learning pace. At the same time, the light-hearted atmosphere of the interactive mode of teaching can effectively reduce students' affective filters and make second language acquisition more efficient. Further, this model also allows the monitoring model to work more scientifically.

Overall, the feasibility of the interactive teaching model for application in TESOL is very strong and in line with the existing findings of Universal Grammar and L2 acquisition theory.

The research methodology of this paper is mainly based on theoretical analyses of literature studies and lacks direct experimental results, thus there are some limitations.

References

- [1] Hannah Valenzuela, *Linguistics for TESOL-Theory and Practice*, Springer International Publishing_Palgrave Macmillan, 2020, 2-8.
- [2] We Yanlong, *Analysing Chomsky's Universal Grammar from the Perspective of Second Language Acquisition*, *Xibuxuekan*, 2022, (01),116-120.
- [3] Luo Haiyan, *A Study on the Correlation between Universal Grammar Accessibility and Pilot's Years of English Learning*. *Overseas English*, 2021(21):122-124.
- [4] Wang Ban, *A Study of the Influence of Input Hypothesis and Output Hypothesis on Children's L2 Acquisition in EFL Countries*, *Overseas English*, 2021(21):122-124.
- [5] Zhang Jianjun, *A Study on the Application of Second Language Acquisition Theory in College English Teaching*, 2022, (19):117-119.
- [6] Lv Jiaorong, *Exploring the Integrated English Teaching Mode Based on Superstar Learning Channel Platform under Krashen's Bilingual Acquisition Theory*, *English Square*, 2022(23):76-80.
- [7] Liang Min, *The Application of Interactive Teaching Method in Senior High School Reading Teaching*, Hunan Normal University. 2023.
- [8] Wen Wen, *The Application of Interactive Reading Mode in Junior High School English Reading Teaching*, *Xueyuanjiaoyu*, 2023(08):24-26.
- [9] Xu Yongfen, *Exploring the Application of interactive Reading in Senior High School English Teaching*, *Campus English*, 2023(03),136-138.
- [10] Bruce loves travelling, <https://www.zhihu.com/question/27269636/answer/836340381>, 2020-05-24