

A Study on the Construction of a Deep Blended Learning Model for College English Driven by Students' Growth Needs

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Abstract: College English courses should promote whole-person development and cultivate students' ability to learn, think, practice and ponder. The study is based on the current English learning situation of students in application-oriented colleges and universities, following the law of cognitive development of college students. It takes the unit theme of college English courses as a clue, integrating the unit objectives and discourse content, etc.. It takes the concept of Deep Learning as the basis, and integrates Information Processing Theory and Spread Activation Model. English learning is oriented to students' output, and practices deep blended learning by relying on the platform of Mosoteach. The study innovates offline communication and interaction and provides online practice and guidance, to boost the integration of the first classroom and the second classroom. The study reflects the characteristics of ubiquitous learning, and promotes the deep learning of College English, achieving all-round human education function. In this way, the abilities cultivated by students in foreign language learning can be transferred to other disciplines and work life to meet the growth needs of students.

Keywords: College English; Deep Blended Learning Model; Students' Growth Needs

1. Introduction

1.1 Research review

The reform of foreign language teaching in colleges and universities has always been in full swing. The practice of curriculum ideology and politics in the year of 2014, the strategic idea of the "Highly Advanced, Innovative and Challenging" "Golden Course" in 2018, the general requirements of foreign language reform in higher education put forward by "New Mission, Great Vision, New Liberal Arts and Grand Foreign Language" in 2019, the promulgation of the "2020 Edition of the *Guide to Teaching English in Universities*", and the acceleration of the integration of information technology and foreign language teaching by the normalization of epidemic prevention and control, all of which have spurred the foreign language scholars and teachers to actively explore the construction of foreign language disciplines, truly achieving the goal of "all for the sake of the students, and for the sake of the students' everything."

Previous scholars have laid great emphasis on systematic research under a particular single perspective or theory, which mainly centers on: 1) the connotation and definition of each theory; 2) the related research status and problems; 3) the exploration of teaching mode.

However, foreign language teaching in colleges and universities is a systematic project, in which each theory is an indispensable part to make the whole. Previous research is insufficient as follows: 1) the degree of integration between theories is insufficient; 2) there is a lack of research on the English learning model targeted at the level of students in private colleges.

To sum up, foreign language teaching in private colleges lacks a set of systematic and operable implementation strategies to boost students' English learning. And, the overall depth and implementation needs to be strengthened. In particular, the cognitive development for leading learners has to be further explored.

1.2 Research Significance

Firstly, the research perspective is in line with the development concept of the country. Foreign

language teaching is widely learned, involving an abundance of topics. It is an important practice to cultivate students' comprehensive competences in colleges and universities, and it is also an crucial initiative to enhance China's comprehensive national power and international competitiveness.

What's more, the research is a positive response to the double-edged sword of mobile technologies. Students in 21st century is said to be the generation of "digital natives", who have more diversified channels to obtain information online randomly, but lacks investigation and speculation towards the fragmented knowledge. Hence, the research is conducive to improving the current situation of students with the lack of commitment to learning in private colleges, enhancing the effectiveness of learning.

Still, it aims to assist in developing student' stable internal motivation for learning, promoting whole-person development, and boosting students' ability to learn, think, practice and ponder. The competencies cultivated by students in foreign language learning can also be applied to other subjects, even to their future works and life.

2. Theoretical Basis

2.1 Deep Learning Concept

The concept of Deep Learning originates from the research of artificial intelligence. In the field of education, the concepts of Deep Learning and Surface Learning were first proposed and elaborated by American scholar Ference Marton in the 1970s in his article *On Qualitative Difference in Learning: Outcome and Process*. Overseas studies have shown that students who are capable of deep learning remember information for a longer period of time, have higher assessment scores and are more satisfied with the learning process [1].

In 2005, domestic scholars He Ling and Professor Lai Jiahou were the first to put forward the concept of deep learning in the magazine *Promoting Deep Learning in Students*. They believed that "deep learning is the one based on understanding, in which learners are able to critically learn new ideas and facts and integrate them into their original cognitive structure, make connections between their own ideas, and transfer their existing knowledge into new situations to make decisions and solve problems. [2]" This concept of is widely recognized.

To promote the growth needs of learners, teachers should assist students to better accumulate knowledge and facilitate the internalization and transfer of knowledge, which in turn requires the newly-learned information should conform to learners' memory patterns. However, the focus of memory is primarily on retrieval rather than storage. The key to retrieval lies in the organization i.e. the regularity and orderliness of information storage, which can effectively boost the efficiency of memory only if it is stored in a way that is most conducive to retrieval. This is just like the library collection, which is as vast as a sea of books, but as long as they are labeled and stored in different categories, they can be found quickly by using an online search system.

Deep learning precisely stresses that learners, on the basis of comprehension, critically draw on new knowledge and new ideas. They integrate original knowledge and experience based on schematic frameworks, transferring and digesting information to cultivate learners' higher-order thinking ability. Deep Learning Concept has five basic characteristics, that is, focusing on the cultivation of critical thinking skills, highlighting the association and integration of information, enhancing knowledge construction and reflection, emphasizing the transfer and application of knowledge and ability, and oriented to the cultivation of problem solving [3]. This is in line with the realization of learners' growth needs.

2.2 The Information Processing System

Psycholinguistics believes the process of cognition involves the one of information processing. A large amount of information is activated by the stimulation of sensory stores which take in the variety of colors, tones, tastes and smells people experience each day and retain them in a raw, unanalyzed form for a roughly a second. When the incoming information is not attended to, it instantly disappears. Conversely, information quickly enters the short-term memory, which can store 7 ± 2 units of information in a relatively short period of time. Thereafter, if the information undergoes a set of control processes such as rehearsal, fine processing plans, strategies, etc, it can be stored successfully in the permanent memory [4]. Otherwise, it is only short-lived.

The theory inspires that teachers should guide students to absorb knowledge, that is to say, to strengthen the traces of memory on the basis of understanding, to effectively consolidate basic knowledge, to smoothly store information from short-term memory to long-term memory, and to effectively extract it on suitable occasions, so as to solve the problem of learners stagnating at the level of previous memory and forgetting what they have learnt before.

2.3 Spread Activation Model

Spread Activation Model is a network model of semantic representation proposed by Collins and Loftus (1975). It is a network of nodes connected to each other according to semantic links or semantic similarities. The concepts of a vocabulary are represented by nodes. The typicality of the concepts, the degree of association between related concepts, structural features (e.g., taxonomic relations) and other factors determine the distance between the nodes. The length of the distance is positively correlated with how closely the concepts are linked. The shorter the distance is, the closer the connections are, which means that the concepts are also more solid in the network, and the greater the chance that the related concepts will be activated and extracted [4].

This model reveals that teachers could regard each student as the node in the network. Whether it is an online or offline activity, when a few students participate in the class, only a few nodes are activated at that time, and the vast majority of nodes are not processed. Due to the limited number of nodes activated, the power to spread in parallel is relatively weak, their overall accessibility in the network is greatly impaired, and it is easier for students to remain a silent and passive state in English learning. On the contrary, when the majority of students actively express their ideas, and positively devote their energy to learning, the number of nodes increases significantly, the so does activation power, and more nodes will be activated and connected to each other. At this time, students are subconsciously influenced by this positive learning atmosphere and appear to be more active, which turns out they have the strong drive to participate in English. Therefore, teachers should design activities that can stimulate students' motivation, such as English recitation or brainstorming activities in Mosoteach regularly to effectively stimulate students' intrinsic motivation.

3. Research Content

Based on the relevant research results of many precious scholars, this paper takes students' growth needs as the own duty, integrates the concept of curriculum ideology and politics. It starts from the connotations of Deep Learning, gains insight into its psychological mechanisms, follows the law of cognitive development of college students. The study takes the current situation of students' English language level in application-oriented colleges and universities as the starting point. On the basis of integrating the Information Processing Theory and the Activation Model, it takes the undergraduates in Xi'an Peihua Universities as the research subjects. It is oriented towards students' output ability, practices deep blended learning, innovates the interaction in the face-to-face classroom, and lets students practice online and provide guidance, to achieve the superior integration of learners' growth between the first and second classrooms and construct meaningful knowledge system, so as to increase the input of learning behaviors, promote the in-depth learning of foreign language, and achieve the full range of parenting function.

4. Research Design

4.1 Adherence to teachers' conviction and sense of nurturing, reconstructing teaching objectives.

Foreign language teaching is a highly cognitive behaviour. Foreign language teachers in colleges and universities must set up a firm conviction in teaching and a sense of educating people, implement national education and teaching policies, and promote classroom teaching reform. Foreign language teaching has shifted from simply transmitting language knowledge to highlighting students' practical ability, innovative spirit and comprehensive literacy, so as to reserve foreign language talents who can enhance the national language ability and international competitiveness, and to realise the growth needs of students. The fundamental task of cultivating virtues and morality should be immersed in English teaching subconsciously, sort out the ideological and political elements of each unit's theme, to enhance the student' sense of identification with the Chinese culture, cultivate patriotism and guide them to cultivate positive values. Meanwhile, the integration of information technology and foreign language

teaching should be accelerated, leading to the linkage effect of online and offline foreign language teaching, forming a situation of complementary advantages, and realising in-depth learning that can cultivate students' critical thinking ability.

Thus, teachers should firstly formulate diversified teaching objectives, integrating national policy objectives, human development objectives, language knowledge and skills, and comprehensive literacy, reflecting the requirements of talent cultivation objectives on the structure of university English courses. Foreign language teaching should focus on learners' practical ability, innovative spirit and comprehensive literacy, cultivate their sense of nationalism and possess great vision.

4.2 In-depth exploration of teaching content, promoting offline interaction in the classroom and consolidating students' foundation.

Due to the limitations of their ability and level, undergraduates often understand the passage text by word-by-word translation, without comprehending it as a whole. Teachers need to macroscopically design more detailed and in-depth teaching content and activities to help students build a structured system.

Under the framework of curriculum ideology and politics, the teachers, guided by the output-oriented approach, should firstly throw out valuable topics which activate learners' internal drive to learn, perceive usefulness and enhance the willingness to continue learning. The discourse learning of the unit provides students with superior input that leads to ideas, structures and language. Based on students' cognitive structure and relying on Information Processing Theory and the Spread Activation Model, English learning focuses on the logic and systematicity of information, emphasizes learner' recoding and rearranging of knowledge, and gradually realizes the gradual advancement of knowledge from attention and memory to understanding, analysis and innovation, so as to satisfy the English language needs of students with different levels of proficiency. The class discussion is problem-oriented, helping students to sort out the main lines of the text, reflecting classroom interactivity, and exploring the plotting and layout of the discourse. The teacher will analyze writing techniques, linguistic features and logical connections between paragraphs. The learning should activate students' internal schema, focus on the integration of new and old knowledge, and integrate the concept of deep learning throughout.

4.3 In-depth practice of English activities, achieving the transfer and innovation of knowledge in the second classroom.

The output part strengthens students' understanding towards the unit theme, students positively exploit the interesting and meaningful topics prevalent in the society, and complete group activities in a diversified way such as questionnaires, sitcoms, street interviews, mind maps with personalized design, etc. In addition to enhancing their comprehensive language skills, students' language expression and integration skills, critical thinking skills, coordination and interaction skills, and creative skills are also developed their creativity in the process.

When teaching the unit *Managing Personal Finances*, students filmed the drama *Campus Loan* to help their peers deeply understand the root causes and hazards of campus loans, to correct their minds and eliminate campus comparison between students, guiding them to arm their minds with knowledge, enriching their inner world, and forming a healthy outlook on consumption and values. In the unit *The Love of Reading*, students introduced the library on campus, that is, Weizhi Library, covering its historical development, and the collection of books. Their video focused on the introduction of school history hall, borrowing area and study area, and randomly interviewed students studying in the library, with questions that included general evaluation of the library environment, whether they love reading and the reasons for it, the frequency of their daily trips to the library, and their preferences for books. By focusing on the daily campus life of their peers in a sideways manner, learners were stealthily stimulated to desire knowledge and called for the habit of lifelong learning.

4.4 In-depth design of activities in Mosoteach and fulfillment of online drills and guidance, promoting students' knowledge acquisition and self-learning skills.

The teacher should attach great importance to the role of Mosoteach, the platform where students experience delicate processing in the mind, ensuring learners are actively involved in English learning and highlighting students' learning participation and experience. Before learning a new unit, students are required to learn the relevant teaching materials from Mosoteach and ponder on a series of relevant

questions by themselves, which will later be discussed in the classroom by the manner of grabbing answer, raising hands and selecting randomly by the teacher in the platform. Students should also complete the questionnaires and quiz related to chapter content, finish brainstorming on the thematic reflection, and even upload their assignments. The teacher would give the concrete feedback and guidance after the class either online or in the classroom. Through this series of activities, problems such as the limited in-time hours, low participation of students, few application on newly learned language points are solved to a large extent, which stimulates learners' initiative.

In view of the relatively weak English foundation of the private college students, the teaching activities are set up to gradually transit from the easy degree to difficult one, so that more than 80 percent of the class can get marks if they complete them conscientiously, which could first overcome students' fear of learning English. Students are driven to finish the above tasks by the few peers who have already completed the task and got the relevant scores, forming a friendly learning atmosphere and actively participating more. In terms of the brainstorming part, from the initial topic related to the theme, to the deep reflection on certain topics, students are required to apply the new words learnt, key sentence patterns or/and grammar (at least seven ones) appearing in the text to writing, effectively avoiding phenomena such as Internet plagiarism, and guiding students to think critically on the basis of understanding the content.

4.5 Scientific implementation of teaching assessment, inspiring students to think in depth.

It is true that some private college students are less driven to learn by themselves, thus clear disciplines could guarantee the effective learning. The teacher should exploit the advantages of combining summative assessment and process evaluation to impact students' learning attitudes, methods, behaviours and effects in a timely manner and to guide them to think in depth. The teacher and students should reach a consensus in advance on following aspects: class attendance, the implementation of taking leave system, the state of students (playing smartphones, chatting or sleeping) in class, the timely submission of brainstorming and other activities in Mosoteach.

The group activity adopts a combination of student-student evaluation and teacher-student evaluation, and the group leader awards points fairly according to group members' contribution degree, and announces the results in the group. At the same time, based on the quality of the class presentation, the teacher's score for the work is counted into the platform, which is included in each student's total score, and timely comments are given in the classroom to provide suggestions. When it needs students to express their perspectives on Mosoteach, after a couple of times, few students just send number 0,1, and other irrelevant symbols. The teacher just sets 0 grade, students would get relevant scores considering the quality of their upload opinion. The same is true for brainstorming part, at first, there were always certain students directly picking up online information to obtain empirical value. Corresponding to this dilemma, they have to use the words, phrases and grammar from newly learned unit. For students with superior content and few mistakes, they would obtain extra empirical value. Still, the teacher would collect the typical mistakes committed by students and share mistakes in the class to instruct students the correct usage. The teacher would also provide individual guidance on the each mistake committed by every student, who would have at least one chance to interact face-to-face and in depth with the teacher in the leisure time, helping them consolidate knowledge. Students writing with plagiarism from internet and classmates or talking irrelevant information would be deducted the given scores from the platform, warned for the first time. If the similar behavior is discovered again, an empirical value of 10 will be taken away as a punishment. In the midterm, students are tested on vocabulary, 20 of which are from the first four units and the other 10 words are just from the whole book, which could meet the requirements of students at different levels. Because if they long for high grades, they have to memorize more on the basis of the units learned. In order to help students pass CET-4, the oral test at the end of the semester is set to memorize a total of five excellent examples on composition part. At the beginning, most students found this task extremely tough difficult and are reluctant to engage in, but with the encouragement of the teacher, there are always few active students with good foundation to follow this activity, which promptly form a radiation effect under the influence of Spread Activation Model. More students would be influenced and they are activated to imitate each other, which turns out to be almost students could memorize four to five essays eventually. Not only do scores constrain their behaviors in the process, but also gives them a sense of achievement in English learning, letting themselves trust a truth as long as they exert themselves, they could make it.

5. Summary

Driven by students' growth needs, the deep blended learning model for college English aims to boost learners' higher-level thinking ability. It highlights elaborate processing of the mind to absorb information, beneficial to the construction of knowledge structure. It increases learners' behavioral commitment to learning and promotes their cognition, assisting them in forming lifelong learning habit.

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