

A Study on the Application of Multidimensional Interactive Teaching Model in Teaching English in Chinese Universities

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Abstract. The paper explains the basic concept of the multidimensional interactive teaching model, the 3 dimensions of the multidimensional interactive teaching model of English in colleges and universities, and discusses in detail the construction process of this teaching mode. In the multidimensional interactive teaching model of English in colleges and universities, the construction of a three-dimensional system, the integration of multidimensional interactive teaching elements, the construction of task-based teaching contents and the strengthening of the interaction between English learning and professional knowledge learning can meet the learning needs of students in learning English knowledge and improving their practical English application skills, as well as improve teaching efficiency, thus cultivating more outstanding talents.

1. Introduction

With the development of globalisation and the increasing frequency of international exchange and cooperation, all countries in the world are in urgent need of excellent foreign language talents with international vision, knowledge of international rules and proficiency in international business. However, traditional English teaching in universities is characterised by a lack of interactive communication, a focus on theoretical knowledge and a neglect of the cultivation of students' practical English skills, and a lack of interactive subjects, hollow interactive content, single interactive means and formalities. The construction of a multidimensional interactive English teaching model can break the shackles of the traditional teaching model, enhance the teaching effect and improve students' practical English skills.

2. The Basic Concept of the Multidimensional Interactive Teaching Model

The core of the multidimensional interactive teaching model is 'multidimensional', which refers to the multiple factors associated with teaching and learning. The core content of the multidimensional interactive teaching model includes the following four aspects.

The first is the establishment of a multidimensional interactive subject. In the multidimensional interactive teaching model, teachers and students are both providers and receivers of information, and they will constantly communicate and interact with each other throughout the

teaching process. The second is the integration of multidimensional interactive content. In the teaching of subjects, not only should more subject knowledge and skills be integrated, but also more emotional communication content should be infiltrated to promote a full understanding between teachers and students and to lay a good emotional foundation for the interaction in teaching. Thirdly, innovative multidimensional interactive means. In the multidimensional interactive mode, teachers can use modern education technology and multimedia platforms to carry out teaching and learning, change traditional teaching methods and ideas, lead the teaching content to be aural and visual three-dimensional, and help students to obtain more intuitive, more visual, more complete and systematic knowledge and skills[1]. The fourth is to expand multidimensional interactive teaching forms. In the process of teaching, teachers and students can use dialogue, questions, group activities, situational communication and other interactive modes to complete teaching activities and tasks together through communication, discussion, exchange and cooperation.

3. The Content of the Multidimensional Interactive Teaching Model of English in Higher Education

The multidimensional interactive teaching model is very different from the traditional teaching model in the teaching of English in higher education. The first dimension refers to the interaction between the various elements involved in teaching, including the human element, i.e. teachers and students, and the material

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element, i.e. teaching aids, teaching materials, teaching methods and the physical environment [2]. All these elements interact with each other. The second dimension refers to the interaction between classroom teaching and extra-curricular learning, which are connected as a whole through online and offline exercises and activities, which are an extension of classroom teaching and can serve to reinforce classroom learning [3]. The third dimension refers to the interaction between English language learning and professional knowledge. Teachers should strive to enhance the link between English learning and professional knowledge through the infiltration of relevant professional knowledge in the teaching process, so that students can deeply appreciate the practical value of English and increase their interest and willingness to learn English [4].

In teaching English in higher education, the three dimensions mentioned above are inextricably linked and interact with each other. The relationship between the three dimensions is a good one and helps students to acquire a wealth of knowledge, improve their skills, fulfil the objectives of teaching English in higher education and meet the country's needs for talent.

4.The Construction of the Multidimensional Interactive Teaching Model of English in Higher Education

In the multidimensional interactive teaching model of English in higher education, a variety of teaching factors are organised to promote the interaction of multidimensional factors in classroom teaching, the interaction of classroom teaching and extra-curricular activities, and the interaction of English learning and professional knowledge. The core purpose of this interactive model is to stimulate students' motivation and initiative in learning English, to improve their reading comprehension skills through regular English listening and speaking training, and ultimately to improve their overall English language skills. The following section analyses the structure of the multidimensional interactive teaching model.

4.1.Cross Interaction of Multidimensional Elements in Course Teaching

In the traditional English teaching model, teachers usually explain the vocabulary and phrases first, then translate the text word by word and sentence by sentence, and finally deal with the exercises after the lesson [5]. The teacher spends a lot of time and effort on explaining and analysing words and phrases, and students have little opportunity to participate in the classroom interaction. This type of classroom does not stimulate students' initiative and motivation to learn English.

The multidimensional interactive teaching model can change this vicious circle. The process is as follows: firstly, the teacher introduces the topic by showing the spoken language, then the key words and phrases are explained and practised at the same time, afterwards the

key grammar of the text is explained and analysed, the students discuss and study in groups on the basis of their understanding, and finally the class is extended by extra work. In the multidimensional interactive teaching model, the use of modern educational technology and multimedia teaching facilities is very important. Teachers should not only be proficient in using Power Point and Keynote to explain the teaching content, but should also be able to deploy rich audio and video teaching materials in Power Point and Keynote, and build three-dimensional teaching displays to guide students to interact with each other visually and aurally. This includes interaction between teachers and students, interaction between students and human-computer interaction. The teacher is the organiser, guide and evaluator of these activities. All activities are designed to motivate students and to enhance their English listening and communication skills through active participation and repeated training, and ultimately to improve their ability to use English in practice.

4.2.Building A Cycle of Interaction between Course Teaching and Extra-curricular Learning

The interaction between classroom teaching and learning outside the classroom is the second dimension of the multidimensional interactive teaching model. Before the lesson, teachers can set small tasks for students to discuss the content or topics to be learnt in small groups, and then send one student from each group to report on the content and questions raised in class. In the classroom, the teacher's explanations are combined with the students' practice, so that the students can digest and absorb the knowledge presented. After class, teachers can assign extended exercises, such as drawing mind maps, recording small interactive videos in English, dubbing film clips, role-playing and other extra-curricular activities, to extend the teaching content into the classroom, which not only consolidates what has been learnt, but also develops good learning methods among students [5].

4.3.Building A Positive Interaction between English Language Learning and Professional Knowledge

Many Asian university students are not interested in learning English, mainly because they do not think it is relevant to their professional studies or that it will be of no use in their future work [6]. For this reason, teachers can integrate knowledge related to students' specialisms into English teaching, such as English vocabulary and English expressions corresponding to professional terms, or design realistic and typical workplace communication situations to build a bridge between English learning and career development, or even guide students to use English to analyse and solve practical problems in the workplace. The interaction between English learning and professional knowledge in the teaching of English in higher education reinforces the professional knowledge of students and enhances their motivation to learn; On

the other hand, it also brings the students closer to the English classroom and effectively improves the efficiency of English classroom teaching [7].

5. Analysis of the Multidimensional Interactive Teaching Cases in Teaching English in Chinese Universities

5.1. Integrating the Multidimensional Interactive Teaching Elements

The author adopts a multidimensional interactive teaching model in the English language classroom, establishing a system of learning tasks before, during and after class to encourage students to participate actively in classroom activities. For example, during the teaching of the chapter 'Albert Einstein and Science', the author, as the organiser and designer of the activities, designed a number of communicative tasks based on the theme of the textbook: firstly, students were asked to learn about the cultural background of Albert Einstein in advance and to discuss and reflect on it in small groups. Secondly, the author of this article introduces in class the ten most famous scientists in the world who are on a par with Albert Einstein and their achievements; Thirdly, how to cite relevant content in the article to prove that "Albert Einstein is not a Space Alien"; Fourthly, students were encouraged to choose five statements from the article that they thought were good and to give reasons and interpretations; Fifthly, the author showed students films about aliens, such as "Signs" and "The Day The Earth Stood Still", and asked them to write their impressions in English. By setting up rich and diversified teaching activities, mobilising various teaching elements for interaction and encouraging students to communicate in English, although it adds challenges to the author's teaching work, it is conducive to developing students' communicative use of English, satisfying their learning needs and communicative demands, and greatly enhancing the teaching effectiveness [8].

5.2. Constructing Task-based Teaching Content

In the second dimension, the author constructs a task-based teaching content system in 4 steps. (1) Designing the teaching tasks, optimising the teaching objectives by combining different design units and topics, and then designing the content of the tasks to suit the students' needs. Here we take the theme of "Thanksgiving" as an example, and first design the objectives to include key vocabulary and sentences from the Thanksgiving text. (2) Briefly explain the historical origins of Thanksgiving and discuss with students the customs and traditional foods involved in Thanksgiving so that they can understand the meaning of Thanksgiving and the different ways in which it is celebrated in different Western countries. (3) Students will learn about or study English articles, music, poems and films related to

Thanksgiving and learn to sing a Thanksgiving song. (4) Students will write a short essay comparing and contrasting the differences between Thanksgiving Day in the West and Chinese New Year.

When assigning pre-class work in groups, the author will set up different cooperative groups according to students' learning needs, adjust the content of the tasks according to the actual teaching situation, give brief explanations of the knowledge points when necessary, assign the teaching objectives and tasks to students in different groups, ask them to preview the text, collect information or carry out group practical activities before class, and guide them to help each other to complete the cooperative tasks. Classroom presentations can be varied and can take the form of dialogues, poetry recitations, PPT presentations, film reviews, debates, dramas, etc., involving group members as much as possible.

In addition, the Micro-Course Online Video format can be used to combine multimedia teaching with live teaching, to encourage students to participate actively, and to guide them to combine learning with life practice, listening, reading and practising. Here is an example of a 45-minute theme lesson on "Friendship", which is shown in Table 1.

Table 1. Theme Lesson "Friendship" Teaching Steps

Step	Teaching Task	Duration (Minute)
1	Students watch Micro Course Online Video	10
2	The teacher analyze and explain vocabulary in this text of English textbook	10
3	Students listen to standard reading audio of this text of English textbook	5
4	Students start shadow-reading	5
5	The teacher explains important grammar that appears in the text	10
6	Students complete exercise questions	5

Before the lesson, the teacher creates a Micro-Course Online Video, which lasts about 10 minutes. The text is introduced by the proverb 'Without confidence there is no friendship' and students are guided through the Micro-Course Online Video. The Micro-Course Online Video is a lively way to motivate and interest students in learning. The teacher uses the students' enthusiasm to explain the key words and phrases in the lesson and emphasises their understanding and usage. Next, play the standard audio reading of the text and ask students to listen carefully and then follow along, paying particular attention to the pronunciation of the words and phrases. As they read along, students can further understand and appreciate the ideas and feelings expressed in the text. Then, the teacher explains the key grammar points in the text to help students read and understand it better. Finally, students are given 5 minutes to complete the synchronised exercises to reinforce what they have learnt. This is a flipped classroom that combines Micro-Course Online Video, knowledge-based lectures, listening and reading, grammar explanations, and reinforcement exercises to link the classroom and the classroom, and to

construct a task-based teaching model that improves the effectiveness of teaching [9].

5.3. Enhancing the Interaction between English Language Learning and Professional Knowledge Learning

Unlike other subjects, learning English requires a great deal of time and effort in listening, speaking, reading and writing, i.e. a great deal of practice in order to learn to apply knowledge and improve communication skills. In multidimensional interactive English teaching, teachers not only care about students' English knowledge and skills, but also take into account the link between English learning and professional knowledge, giving full play to the instrumental and humanistic role of English as a language, encouraging students to use English as a language tool to understand the history and culture of English-speaking countries, to broaden their horizons, to read foreign literature related to their professional field of study, and to improve their intercultural communication skills so as to better facilitate their professional learning and development.

6. Pedagogical Implication

The multidimensional Interactive Teaching Model can break through the traditional teaching model and build a relatively open and flexible learning platform for students. It can mobilize the enthusiasm of various factors in teaching, promote students' professional learning, conform to students' learning laws, comply with educational and teaching laws, meet students' learning needs, and improve their comprehensive English proficiency. But in the multimedia interactive teaching model, teachers need to pay attention to three issues. Firstly, teachers should update their educational philosophy, dare to break traditional teaching methods, dare to give up their dominant position in traditional teaching methods, fully mobilize students' learning initiative and enthusiasm, and carry out various teaching activities with students as the center. Secondly, teachers should be good at utilizing modern educational technology and multimedia new media platforms to provide diverse and three-dimensional teaching materials for learning, set up rich and colorful extracurricular extension activities, and fully stimulate students' interest in learning. Thirdly, teachers should have a basic understanding of subjects beyond English. We should seize the characteristics of English learning tools and humanities, combine students' English learning with professional learning, strive to set up real and typical workplace communication scenarios for students, build a bridge between English learning and career development, and guide students to analyze and solve practical problems in work in English.

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