

# *Research on ESP Teaching Reform by Internet Technology and Implementation Strategies in Higher Vocational Education*

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**Abstract**—To improve the teaching quality of ESP in higher vocational education, internet technology is adopted in the ESP teaching system. The research was carried out through investigation analysis, feedback and refinement from teaching practice. ESP teaching system can better develop and integrate Internet teaching resources to promote ESP teaching exchanges, cooperation and mutual learning. The teaching contents of professional terms, oral communication and practical writing translation are suitable for higher vocational students. The ESP teacher may carry out teaching not only in class but also before class and after class, which can create motive power and conditions for students' active learning. Caring for the needs of students can also stimulate their active learning. Teaching management in the classroom is important. It can improve teaching effect by evaluating students' achievement and their daily learning situation.

**Keywords**—ESP; teaching reform; internet era; implementation strategy; higher vocational colleges

## I. INTRODUCTION

There are more and more cooperations between China and foreign countries. And professional English is being paid more and more attention with the continuous development of reform and opening-up, especially the implementation of the "Belt and Road Initiative" policy. However, the existing professional English teaching can't meet the requirements of employers for foreign-related talents, and students' basic English knowledge in school is also difficult to adapt to the professional needs in the workplace. Therefore, some higher vocational colleges have offered ESP courses in order to meet the demands of local economy and industry development for applied talents, and to adapt to the needs of foreign-related compound talents in the development and change of the industry.

The investigation had been carried out many times in teaching classes, and the relevant research<sup>[1-4]</sup> had been analyzed to deeply understand the present situation so as to improve the pertinence and effectiveness of ESP teaching. Therefore, students' admission achievement, learning motivation and goal, self-learning before and after class, teaching hours in classroom, teaching contents, materials and methods, etc. are mainly investigated. The results show that students majoring in English are quite different from those in

other majors. It is helpful to learn knowledge by taking examinations for career development, which is the main purpose of the study. Students are less likely to carry out self-learning before and after class, mainly because they can reach fewer resources. Students are not satisfied with ESP audio-visual teaching method, and they are most willing to organize teaching interaction, including teacher-student interaction and student-student interaction. I hope to strengthen the accumulation of technical terms, and enhance requirements for oral expression.

Based on the above research and analysis results and the summary of teaching practice, the teaching content, means, links and process of ESP teaching should be reformed.

## II. ASPECTS OF ESP TEACHING REFORM IN HIGHER VOCATIONAL EDUCATION

### A. Reform of teaching contents

The teaching content mainly includes three aspects: professional terms, oral communication and practical translation. Professional terminology is the uniform industry term for certain things in a particular field, and is also a brief term for names in professional exchanges. For example, energy dissipation facilities in water conservancy projects are often referred to energy dissipator. Professional terminology is the basic element of ESP, and it is very important for professional exchange and practice in specialized field. Therefore, the principle of terminology management should be included in the teaching of ESP. Studies have shown that it is very beneficial to students' future careers and positions.

Oral communication is a normal requirement in the future career, which requires the employees to give a detailed explanation in the concrete scene. Therefore, in the daily teaching, the ESP situation, communication, and field will be changed into a reality, a communicative situation and a professional field, and so it is necessary for the employees to give a detailed explanation in the concrete scene. It should pay attention to cultivate students' ability to adapt to the professional working situation, and show the particularity of ESP from public English.

As more and more powerful Chinese enterprises go abroad, participate in international competition and contract

international projects, both the negotiation of the project, the bidding, the signing of contracts or the operation of projects involve the translation of a large number of Chinese and English materials. And the translation of English has played an important role in the technical exchange at home and abroad. Therefore, translation should be one of the main content modules in professional English teaching.

#### B. Reform of teaching means

It can promote inter-school cooperation by adopting Internet ESP teaching, in which schools can integrate and optimize resources, realize the exchange, build and share teaching resources together. Through the continuous exploration of teaching based on Internet, modern information technology can be applied to teaching, thus establishing a platform for communication and cooperation, promoting teaching and strengthening teaching results.

With the popularization of Internet, the full use of information technology can help teachers to renew their teaching ideas. Teachers will not only be traditional teachers, but also become organizers and mentors of learning. The application of micro-courses, MOOC, SPOC and other teaching methods in teaching can also promote teachers to explore new teaching methods, innovate mixed teaching methods and improve teaching efficiency.

The use of the Internet can help students achieve self-determination, individuation and active learning<sup>[5,6]</sup>. By assigning tasks to students through the Internet in which students need to cooperate with each other in teaching, they can arrange learning time and place on their own will, which can save educational resources and be suitable for students with special circumstances or special requirements at the same time. The use of the Internet can also make it possible for students to learn individually. According to their own language learning conditions, students can choose the content and difficulty that they need to learn, so that they can understand or master the corresponding contents very well. At the same time, different students can also choose different difficulty and favorite materials, and even focus on different special exercises, all of which can contribute to personalized learning. Personalized learning is the basis of active learning. When students can control their own learning rhythm, their learning frustration and anxiety will be reduced accordingly, and their learning efficiency will thereby be improved.

#### C. Reform of teaching link

ESP is a typical interdisciplinary which is the intersection of English course and professional courses, and is also the intersection of basic course and specialized courses. The pre-class preparation is an important link that can't be ignored. Effective pre-class preparation is helpful to cultivate students to form a good habit of preparation, to make students know the teaching contents in advance and to understand the key and difficult points of classroom teaching, so as to be more targeted and efficient when studying in class.

In classroom teaching, interaction is an important means to stimulate college students' enthusiasm and interest in learning. Besides teacher-student interaction, it also includes student-student interaction, which is more effective and easy to realize

in teaching practice. Grouping can promote the interaction between students and mobilize more students' enthusiasm for learning. Because the foundation of higher vocational students is relatively weak, the biggest problem in ESP teaching is to fear to face up to difficulties. Most of the students can't participate effectively in the teaching process. In this case, group teaching can enable students to rely on the strength of the team, enhance confidence in participation and learning, and form a state of effective learning.

The contemporary college students are influenced by the external information and advanced ideas, and the requirements for the diversity and modernity of classroom teaching are constantly increasing. The teaching resources on the Internet used in ESP teaching, such as micro-courses, MOOC, SPOC, and intelligent vocational education and other teaching resources platform, can meet the psychological needs of college students. Teachers can better construct ESP teaching situation, promote oral communication, and improve the quality and efficiency of practical teaching.

The after-class review can consolidate and extend the classroom teaching contents. And it is an important way to improve learning effect. In ESP teaching, the application of information technology in after-class review has changed the monotonous way of review in the past, so that students can think better and expand the content of knowledge and construct a more perfect knowledge system.

#### D. Reform of the teaching process

The whole teaching process consists of three modules: interaction, evaluation, reflection and improvement. Through the interaction between teachers and students, the basis of teaching evaluation is formed, based on which the assessment index system and its empowerment are gradually improved. Through the application of evaluation system, reflection on teaching content, teaching progress, teaching organization and other links can promote the improvement of teaching effect. The whole teaching process is shown in the figure.

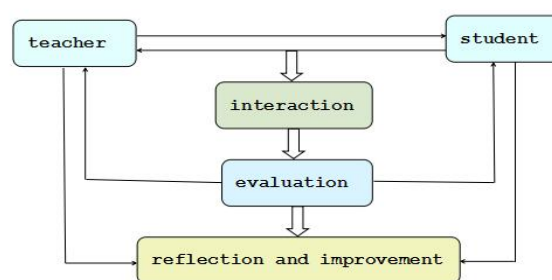


Fig. 1. Diagram of ESP instructional design

### III. STRATEGIES FOR ESP TEACHING REFORM

#### A. Establishing ESP curriculum standard by conducting industry enterprise research

In addition to the further strengthening of the English basic education, the higher vocational English education should emphasize the division of the profession and the professional classification, strengthen students' practical ability in English, and prepare for the students to step into the workplace.

Through the continuous research of the industry enterprises, the ESP curriculum standard is established and the teaching and positioning and the teaching objectives are defined. The learning order and learning degree are regulated. Teaching resources are effectively integrated. In addition, the open teaching mode is promoted through the construction of the curriculum resources network sharing and exchange platform. It should make clear the qualitative and quantitative index of the course teaching evaluation in order to help teachers to better grasp the teaching contents and the class hours, and enable students to have the foundation of the diversified communication and communication of the water conservancy professional through the study of the course.

#### *B. Developing ESP teaching materials suitable for higher Vocational Colleges*

Teaching material plays a guiding role in the teaching process. It is based on the service industry, mainly practical and suitable for the orientation of higher vocational colleges. The contents of teaching materials should be combined with social needs, professional needs and students' own abilities and qualities, and at the same time can reflect the characteristics of majors. It especially needs to pay attention to the teaching practice, promote the proportion of the practice link, and highlight the practice teaching and the actual operation.

#### *C. Reserving and train ESP teachers*

The teacher is the leader of the teaching behavior who plays a direct role in the teaching effect of the curriculum and the learning effect of the students. In order to solve the problems existing in the teaching of the ESP course, we must have a professional ESP teacher team. At present, it is very necessary to reserve and train ESP teachers. We must consider the problems about how to make teachers match the posts, change their ideas, actively improve their own ability, and establish a perfect training system.

In the training, it should pay attention to guide ESP teachers to master the basic laws of the formation of education thought, grasp the basic elements of the formation of classroom teaching education thought, and form their own ESP education thought. To avoid a lot of useless efforts, they should not only pay attention to the result of the formation of the educational thought, but also pay attention to the educational thought itself. The ESP teachers should not only focus on the result of the formation of the educational thought. As far as the formation of educational thought is concerned, it is necessary to take professional identity as the basis, teaching self-confidence as the motive force and teaching self-consciousness as the method. By grasping these points and carrying out them in practice, teachers' educational thoughts can be achieved naturally<sup>[7]</sup>.

Due to the nature of the ESP curriculum, teachers are encouraged to create distinctive classes. The creation of such classes is a systematic project, which needs to be integrated and merged in many aspects according to the correlation between teachers' individuality and the factors of characteristic classes. When teachers' individuality can be fully released and brought into play in classes, distinctive classes can thus have a solid foundation for future generation; When teachers'

personality element becomes the starting point or the principle requirement of the various elements of the characteristic curriculum, then such classes are the products of teachers' personality element to a certain extent<sup>[8]</sup>.

#### *D. Motivating students' active learning*

Students are the core participants of "effective learning". ESP instructional design should focus on students' learning and growth, and teachers should guide students to actively participate in and explore actively<sup>[9]</sup>. Educational neuroscience reveals that it is through social interaction that people can learn knowledge. Therefore, we should ensure a high degree of sociality, pay attention to individual differences of students, and enable more students to obtain a sense of self-affirmation in the course of learning. At the same time, teachers should pay more attention to meaningful feedback to support learning, and help students to develop ability in interdisciplinary learning.

In the present teaching process, students in higher vocational colleges generally do not have a good foundation of English, which leads to a psychological state of fear of difficulties. So they can't actively participate in the activities of teaching. In this case, it is necessary to promote emotional communication and communication between teachers and students and among students through a variety of communication methods so as to stimulate students' enthusiasm for learning. In addition, teachers need to help students with more language information by showing them a lot of language information, guiding them to use metacognitive tools to search, absorb, and organize information and to clarify steps and methods for solving language material problems, helping students to exercise and improving their ability to use language.

In addition, more attention should be paid to students' classroom management. On the one hand, students in higher vocational colleges are relatively lazy, which requires teachers to urge them to study harder; on the other hand, the proper management of teachers can help the whole class to form a good discipline and learning atmosphere, and help students to conduct ESP learning. The teacher's classroom management is the external driving force for students' learning. Through the routine execution and feedback, teacher's classroom management is internalized into the students' conscious behavior, forming the consciousness and initiative of the students' ESP learning. It is helpful to mobilize more students to participate in ESP study by integrate students' daily discipline and learning status into the whole evaluation system. It is important to pay attention to the fact that students will hook up the ESP to the English Rank Test, hoping ESP course to help them. But the students' basic English proficiency are seriously differentiated, which is thereby necessary to have clear scoring standard and methods as well as strict enforcement in daily teaching.

#### *E. Reforming the method for evaluating students' ESP achievement*

First, it should establish a quantitative assessment index system including attendance rate, pre-class study, classroom enthusiasm, homework and team cooperation, and clarify the empowerment of indicators at all levels and the way of scoring;

Second, it should reform the assessment mechanism, changing the form of only one final examination for each issue into the one of process examination, and arranging a simulation training once a month to take the average scores of several monthly examinations as the regular scores and include them into the final results. Third, it should change the examination form and improve the ways of examination such as face-to-face questions and answers and other oral tests. For example, we should divide students into groups, set up specific scenes conduct questions-answers interaction between teachers and students and examine students' self-use of English communication rather than a test paper in the past in testing students' listening level.

#### IV. CONCLUSION

ESP teaching reform is a vital channel to improve the teaching effect in higher vocational colleges. The combination of online and offline by internet technology makes learning break the time and regional limitations and create more learning opportunities out of classroom, which can stimulate students' learning motivation and enthusiasm. In the "internet" environment, teachers not only impart knowledge, but also organize and guide learning. Students are the key participants in the success of the reform. Self-learning and interest in ESP will affect their learning results. The reform of ESP teaching can improve the initiative and enthusiasm of students to participate in the study on their own.

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