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A Blended Teaching Mode in ESP Classes under the Concept of Micro-learning

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Wenhui Hao wrote the manuscript, Yucheng Zhou is responsible for experimental design, Mei Song analyzed data,

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ABSTRACT

Micro learning exists in the new media ecosystem and is a new learning method. It is based on micro learning resources and micro media. Based on the concept of "micro learning", this paper explores a new type of blended teaching mode in ESP (English for Specific Purposes) classes. It combines the "online learning" and "offline learning" effectively by integrating three ways of learning together: online learning, classroom teaching and practical activities.

Keywords: ESP (English for Specific Purposes), micro learning, blended teaching mode, teaching design; information technology.

1. INTRODUCTION

Micro-learning is a new form of learning. It was first proposed by Austrian scholar Martin Lindner in 2004 and was defined as a new type of learning based on micro-content and micro-media coexisting in the new media ecosystem [1]. Many studies have been made since then. From 2005 to 2013, the University of Innsbruck in Austria has held seven international conferences on "micro learning", and the research and practice of "micro learning" have flourished. Many domestic scholars have also discussed the basic characteristics of "micro learning". For example, Zhu Yan [2] believes that "micro learning" is characterized with diversified teaching subjects, flexible learning time and space, simplification of learning content, mobility of learning terminals, etc; Chen Weiwei et al. [3] summarizes the characteristics of "micro-learning" as short time, fragmented content, personalized learning and diversified media. To sum it up, compared with the traditional classroom teaching, the learning content in micro learning can be short, fragmented, loosely connected, and dynamically reorganized. The learning time and place is flexible. Various forms of learning media, such as mobile phones, tablet computers, PDA, electronic dictionaries and other portable mobile terminals, as well as various software App

such as we-chat, Wei-bo, Rain-class are available for ESP learners. Students can use their spare time to study anytime and anywhere. Therefore, their personalized learning needs are easier to meet.

In the era of new media, both learning resources and learning support system tend to be miniaturized, and learning is characterized by rapidity and fragmentation. The concept of "micro-learning" combines scattered learning content with miniaturized media resources and mobile carriers [4]. The law of language learning also shows that it is difficult to improve the students' professional English skills and cultivate the professional English ability only by the traditional classroom teaching. Micro learning can provide strong support for scattered learning after class and greatly satisfy students' independent and personalized learning requirements. Based on this, this paper explores a new type of blended teaching mode in ESP (English for Specific Purposes) classes under the concept of micro learning.

2. CHARACTERISTICS OF TEACHING OBJECTS

ESP researchers generally agree that demand analysis should mainly include two aspects: the target demand and the learning demand (Hutchinson &Water 1987:59).

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Based on this, this paper analyzes learners' characteristics their expectations for ESP at first. The survey on learners' characteristics and expectations for ESP was conducted by a questionnaire.

The questionnaire includes: (1) learners' characteristics analysis such as learners' status and English learning difficulties (5 questions); (2) learners' expectations and demand for ESP teaching, such as English proficiency, professional knowledge, teaching methods, content of teaching materials (5 questions). This research selects 3 classes of the grade 2021 students as the survey objects. We issued 130 questionnaires, and 118 valid questionnaires were recycled. The results are as follows:

Table 1. Survey Results

	Α	В	С	D	E
1	58	20	24	14	2
2	11	45	53	8	1
3	14	28	62	12	2
4	6	17	60	32	3
5	23	39	33	8	15
6	8	108	0	2	0
7	6	92	8	10	2
8	77	3	29	9	0
9	76	102	84	70	0

According to the survey, over 80% of our students have not studied English for more than 2 years since they have been training and working in basic units after joining the army, they don't have enough time to study English. And 66.1% of them graduate from high school, 20.3% of the students graduate from junior colleges, and only 11.8% of the students were once admitted to university. The above data show that: first, most of our students have forgotten the basics of English and they are poor in English; Second, the big differences in educational level among students lead to big differences in their English level.

In view of the above situation, the teaching content design and class activity arrangement should embody the "micro" characteristics. By setting micro lectures, micro resources and micro activities, the comprehensive and difficult language practice activities can be divided into smaller and easier activities, which will improve the pertinence and effectiveness of language practice activities. In terms of teaching mode, online and offline teaching methods are combined in the ESP classes to help students solve the problem of personalized learning differences.

3. A DESIGN OF MICRO-LEARNING TEACHING SYSTEM IN ESP CLASSES

3.1.Micro Lecture

Micro lecture means being "micro" from the perspective of curriculum system framework and teaching content arrangement. Many of our students have forgotten the basics of English. They are poor in English. It is even more difficult for them to study ESP. Therefore, in ESP

classes, we plan to redesign the arrangement and organization of the teaching units, ensuring that there are clear goals to achieve by refining and dividing the knowledge points into smaller tasks suitable for scattered learning. In particular, we'll cut the teaching content into small pieces and rearrange them in different short or scattered parts according to the students' needs and English levels.

The basic idea is to reorganize teaching units according to professional topics, and each unit is organized around a certain topic. Under this topic, different subtopics are divided. Exercises and practical activities will be designed according to each part's specific teaching target. Then, it will be easier and more convenient for students to learn in a very short time period. In addition, through the training of basic language knowledge and skills such as listening, speaking, reading and writing, students' professional language application ability under this topic will also be improved.

3.2.Micro Resources

Micro resources are the basis of micro-learning. With the development of new technology and new media, both the traditional teaching ways and learning habits have been changed. Books are no longer the only learning resources. There are more and more digital media learning resources. As mobile carriers become smaller, learning resources continue to be miniaturized. Therefore, in the new media environment, "micro" learning resources become more and more popular with the youngster.

Micro-resources can be presented in the form of text, audio or video. The value of micro-resource content can be multi-dimensional, such as words and expressions, grammar, background information, etc. In 2012, the Open University of China officially launched the five-minute course website. Its resources usually center on a single theme, or a core knowledge points, and the content is usually short, fragmented, but practical. Thus when building micro-resources, designers should follow the following principles: (1) fragmented but systematic. (2) short but practical.

3.3.Micro Activity

Language practice plays a key role in strengthening and improving students' language ability. In the process of ESP teaching, comprehensive and difficult practice activities can be divided into many "micro" teaching practical activities.

3.3.1. *Mini-talk*

Students are chosen to make a mini-talk randomly. Teachers can use 2-3 minutes to ask students to make a mini-talk with topics suitable for their English level or ability. The topic content should be limited to the relevant teaching units. Students can summarize the teaching



content of the last class, and can also introduce the new knowledge or start new topics in the next unit.

3.3.2.Content-based Speech.

Students can collect and summarize relevant information on a specific topic, and present their views and thoughts in the form of speech. Teacher can examine their proficiency in professional knowledge as well as basic English skills, which can not only improve students' ability of summarizing, inducing and reasoning, but also improve their ability of practical application of English.

3.3.3. Task-oriented Presentation

Task-oriented presentation. Students are divided into groups of 3 (not more than 4), with one student as the leader. According to the teaching content and teaching objectives, the teacher assigns different research tasks to each group and makes clear the specific implementation time of task report. The group leader led the group members to consult relevant information, discuss with each other, establish the theme of task report, make PPT presentation, and jointly complete the task report.

These practical activities can not only effectively implement these teaching activities, but also make full use of the students' leisure and fragmented time and improve the efficiency of classroom teaching at the same time. These short-term and small-task teaching and practice activities are easy for students to complete, which greatly promotes the maintenance of active and active learning.

4. A BLENDED TEACHING MODE UN-DER THE CONCEPT OF MICRO-LEARN-ING IN ESP CLASSES

With the development of the research and practice of blended teaching, the concept of blended teaching has gradually changed from the learning mode of "face-toface teaching + online learning", to a richer connotation. Goodyear [5] emphasizes that blended teaching is not only a combination of face-to-face teaching and online learning, but also a combination of teaching and tutoring in a "student-centered" learning environment. Blended teaching can also be regarded as "teaching practice based on mobile communication devices, online learning environment and classroom discussion" [6]. Feng Xiaoying et al. [7] summarized the conceptual evolution of blended teaching into three stages: technology application stage, technology integration stage and "Internet +" stage. The blended teaching in the "Internet +" stage pays more attention to learning experience from the perspective of students. Blended teaching under the condition of new media pays more attention to students' learning experience and learning participation. Many scholars believe that blended teaching gives full play to the advantages of traditional classroom teaching and network learning. It not only gives full play to the leading role of teachers in guiding, inspiring and monitoring the teaching process, but also fully reflects the initiative, enthusiasm and creativity of students as learning subjects [8].

In ESP teaching, we establish a blended learning environment under the concept of micro-learning, which consists of three different ways of learning: online learning +classroom teaching + practical activities. It combines the "online learning" and "offline learning" effectively and integrates language knowledge learning and professional skills training. It maximizes the advantages and teaching effects of blended teaching. In this new blended teaching mode, the three different ways, online learning +classroom teaching + practical activities are integrated in three aspects:

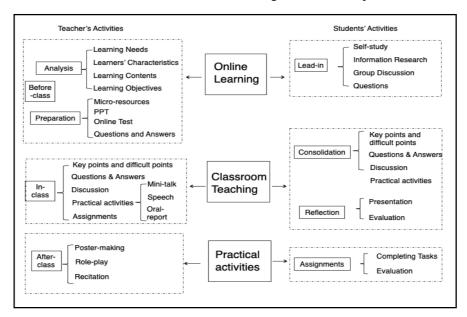


Figure 1 A Blended Teaching Mode



4.1.Integration of Classroom Teaching and Online Learning

Classroom teaching is the major part of ESP teaching. It is also a key place for students to exercise and improve their practical language professional ability through different activities. Therefore, the basic knowledge of the unit, such as new words and expressions, grammar, and professional background information can be made into micro-classes or online courses. Students are required to learn them online before class, while in classroom, it centers on practical activities.

4.2.Integration of Classroom Teaching and Flipped Classroom

Flipped classroom reverses the traditional teaching concept and process, emphasizing "transferring knowledge outside classroom, and internalizing knowledge outside classroom" [9]. In ESP teaching, the combination of partially flipped classroom teaching and fully flipped classroom teaching can be adopted according to the teaching content. As for the unfamiliar professional knowledge, for example, new words and expressions, grammar, and professional background information can be arranged on online learning. The unfamiliar professional knowledge can be arranged in classroom teaching. This is partly flipped classroom teaching. As for the familiar professional knowledge, Students can be required to divide the content of the text into groups and complete the entire study of text, while the classroom teaching focuses on the practical language professional ability training. Partially flipped or fully flipped classroom mode integrates classroom teaching and flipped classrooms, meets the needs of students at different levels, maximizes the active role of students, and promotes students' conscious, active, and autonomous learning behavior.

4.3.Integration of Teacher-led Teaching and Student-centered Learning

The deep integration of "teacher-led teaching and student-centered" learning is the core of the entire blended teaching. Related research also shows that under the traditional classroom teaching mode, the average value of students' autonomous learning behavior is only 2.639, while the average value of students' autonomous learning in blended teaching based on flipped classroom teaching is 3.991 [10]. It can be seen that blended teaching emphasizes the multiple interactions between teachers and students and between students, and its teaching effect is directly reflected in the students' ability to cooperate and communicate. Based on this, in the blende teaching mode for ESP classes, especially in the design and implementation of teaching activities, it should mainly focus on student-centered teaching activities with the goal to improve their practical application ability.

Give full play to the integration of teacher-led teaching and student-led learning, so that students have more time in the classroom to participate in classroom activities and improve their language skills.

5. CONCLUSION

The micro-lecture, micro-resource, and micro-activity teaching system emphasizes the "micro" design English teaching. In this new teaching system, not only the teaching content, resource construction and activity design are more specific, short, purposeful and targeted, the course organization, resource types and forms of activities are also more flexible, diverse, and more convenient. The micro-lecture, micro-resource, and micro-activity teaching system is more suitable for scattered learning in the new media era. The blended teaching mode of "classroom teaching + online learning + practical activities" integrates "online" and "offline" learning, and integrates language knowledge learning and internalization, language skills training and improvement effectively. It embodies the learning philosophy of "student-centered". Therefore, this blende teaching mode under the microlecture, micro-resource, and micro-activity teaching system reforms the traditional single classroom teaching in an all-round and in-depth manner, creating a new practice for blended teaching in ESP classes.

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