An Exploration of ESP Blended Teaching Model Based on Ke Tang Pai

Taking the teaching practice of "English listening and speaking of marine engineering" as an example

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Abstract—This paper analyzed the current teaching situation of English listening and speaking of marine engineering. Nowadays, marine English conversation competence for most students is at an average or even lower level, and they can't communicate with simple marine English vocabulary. In order to improve students' marine English conversation competence, as well as enhance students' learning enthusiasm and better cultivate their learning interests. ESP mixed teaching mode based on Ke Tang Pai was proposed. This model is composed of pre-class, during-class and after-class parts. Software SPSS is used to compare and analyze students' scores under the ESP model and the traditional model. The teaching practice showed that the mode gives full play to the advantages of online and offline teaching, improves the enthusiasm and activity of students, and improves the quality of course teaching.

Keywords: Ke Tang Pai; ESP

1 INTRODUCTION

With the continuous development of the global shipping industry, the demand for seafarers in the international market will continue to increase, and the requirements for seafarers' quality will also increase. The export of seafarers' labor services is not only conducive to easing domestic employment pressure, but also conducive to promoting the development and growth of China's shipping talent team. According to the 2019 Report on the Development of Chinese Seafarers, by the end of 2019, China had 784355 registered seamen, including 575823 registered seamen on international voyages. In 2019, only 155449 crew members were dispatched abroad [1].

Compared with seafarers from other third world countries, our crew members have strong professional ability, can bear hardships and stand hard work. But an indisputable fact is that our crew members have poor english listening and speaking ability, especially not good at communication. Fan et al.^[2] carried a survey on Chinese and foreign crew members in 2017, 57.14% of the surveyed foreign crew members believed that they encountered many difficulties in communicating with Chinese crew members, and the English communication level of the new generation of Chinese crew members showed a downward trend. This restricts the ability of Chinese seafarers to play their own advantages and participate in international competition.

Marine engineering English listening and speaking is a kind of English for Specific Purposes (ESP). The focus is on the work related to marine engineers, focusing on improving their language listening and speaking abilities. Marine engineering English listening and speaking, as a compulsory course for marine engineering majors in maritime universities, covers all aspects related to the life and work of seafarers, such as public language, daily business of engine room, communication with the bridge, emergency language, external business communication, Port State Control (PSC) and International Safety Management (ISM) inspection. It is very important to cultivate the English communication ability of marine engineering students.

As shown in Table 1, the maritime english assessment includes two parts: listening and speaking, both of which are conducted on the computer and randomly generated by the computer. The assessment content is based on the competency assessment outline of the applied level. Listening and assessment are considered to have passed the assessment only when both parts are above 60 points. The types of listening assessment questions are all objective single choice questions. After students finishes answering the questions, the test results will appear on the computer screen immediately. The content of the oral examination will be recorded, and the Maritime Bureau Examination Center will organize qualified evaluators to the designated place to grade the recorded content. Maritime English assessment is conducted in June and December of each year before the written examination of the certificate. Applicants have five make-up examinations for each part within three years, but examinees who fail the assessment cannot participate in maritime English written test. Language ability has become one of the important vocational skills, which is as important as professional knowledge and operation ability. If student is skilled in marine engineering expertise, while English ability is insufficient, he would also be considered unqualified.

At present, the teaching of marine engineering English listening and speaking mainly has the following current situations. Firstly, the teaching schedule is unreasonable. At present, the textbook marine engineering English listening and speaking, which used by marine engineering students, is organized and compiled by the China Maritime Safety Administration, contains 48 texts. However, less class hours is a common phenomenon in maritime colleges. At the same time, marine engineering English listening and speaking is usually arranged for the first semester of junior year. But the main professional courses such as main engine and auxiliary engine have not been completed, resulting in the lack of relevant knowledge of marine engineering among students. Secondly, the teaching mode is fixed and the form is single. Influenced by the less class hours, most navigation teachers still teach Marine engineering English listening and speaking in traditional cramming method, which is teacher centered, boring, and students' classroom participation is low. Thirdly, the assessment mode is unreasonable. In some maritime colleges, the Marine engineering English listening and speaking teaching is still based on the passing rate of the certificate assessment exam for

seafarers, which is deviated from the actual goal of English ability training, resulting in the negative washback effect of the certificate assessment exam on teaching [3,4].

Composition Listening Oral Computer terminal, the computer Computer terminal, the computer Form composes the test paper randomly composes the test paper randomly Part I Reading aloud 20% (one Part I Understanding sentences 20% passage of less than 200 words) Part II Understanding short dialogues Examination Part II Topic presentation 30% Structure (one profession related topic) Part III Understanding long Part III Question answering 50% dialogues and passages 50% (ten profession-relate questions) Examination content Based on the exam syllabus. Based on the exam syllabus Computer grades the test paper Qualified evaluator grades the test Assessments automatically, with a full score of paper, with a full score of 100 and 100 and a passing score of 60. a passing score of 60. Examination time Each person's examination time is within 60 minutes

Table 1 Basic Information of Maritime English Assessment

How to change this unfavorable situation and improve Chinese seafarers English listening and speaking ability has become a major issue in shipping colleges. Nowadays, a large number of teaching reforms continue to emerge. Weng [5] takes quantitative and qualitative research methods, such as interview, questionnaire, pre-test, post-test to study students' marine English conversation competence and journal writing.

Blended Learning is a teaching mode that complements the advantages of traditional teaching (Face-to-Face) and E-Learning. It is an important research direction of teaching reform in colleges and universities ^[6].

Chen ^[7] present an online strategy that facilitated the transition from traditional face-to-face learning to full online instruction. This is a five-component blended learning strategy referred to as Discover, Learn, Practice, Collaborate and Assess (DLPCA). The result showed that blended teaching approach based on MOOC and Rain Classroom could enhance the deep integration of IT and classroom teaching.

Based on the Ke Tang Pai platform, this paper constructs the ESP blended teaching mode, hoping to promote the training of high-quality seafarer who are proficient in marine engineering English.

2 DESIGN OF ESP BLENDED TEACHING MODE

2.1 ESP blended teaching platform

Ke Tang Pai is a new teaching platform jointly launched by domestic first-line tutors and Peking University alumni to provide interaction between teachers and students. With high efficiency, it combines WeChat, webpage and flat design to reflect the light application mode [8].

It can provide teachers with convenient and fast courseware interaction, homework correction, data upload, online testing, score management and other functions. Furthermore, it can be operated through personal computer or mobile WeChat APP to record all students' normal performance and final examination result. So as to form a complete set of electronic documents of teaching activities, let "Internet +" enter the classroom, realize the classroom ecology of teacher-student interaction, student-student interaction and human-computer interaction, which create a more democratic, equal and humanized ESP hybrid teaching mode [9,10].

2.2 ESP blended teaching activity design

The ESP blended teaching mode is shown in Figure 1. The activities of the ESP blended teaching mode mainly include before class, during class and after class.

Before class, the teacher, as the "coordinator of ESP blended teaching", determines the teaching objectives according to the syllabus. Videos, topics and other materials related to the course about the crew's work and life uploads through Ke Tang Pai, and preview tasks should be pushed. Students understand the learning tasks through independent learning, discuss with other members of the group, and communicate with teachers through private letters if there are problems. This process is helpful for teachers to understand the self-study situation and professional basis of each student before class.

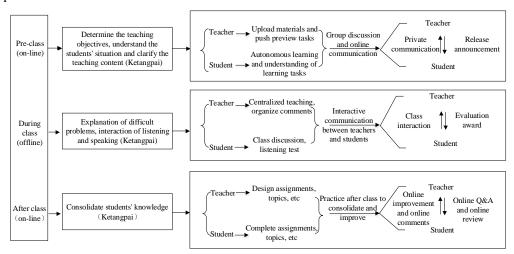


Figure 1 Design of ESP Blended Teaching Mode Based on Ke Tang Pai

During the class, according to the students' professional foundation before the class, the teaching content should be set in a targeted way, centralized teaching should be carried out, and comments should be organized. In the part of explanation, students' enthusiasm will be aroused and corresponding rewards will be given by using the methods of quick answers, random questions or roll call questions in the classroom. For the listening test, use the interactive answering function of the Ke Tang Pai to enter the test questions and audio into the class school in advance. In the class, the options of the test questions will be disarranged, and the questions will be answered in a limited time. After students have submitted the answers, Ke Tang Pai can automatically grade the students, so that the students can see the score of each question at a

glance. Teachers can use the analysis function of Ke Tang Pai to repeat the audio, and explain the test questions of low scoring rate. The key and difficult points of the course could be explained thoroughly, so as to make the teaching process targeted and improve the classroom effect.

In the oral part, teacher can set relevant topics in advance, which can be some videos or audio of the actual operation of ship and play in the classroom. Randomly select several groups of students to play the role through the Ke Tang Pai, and practice speaking on the topic. In the evaluation process, the way of student-student mutual evaluation and teacher comment can be used comprehensively to grade their oral practice. Classroom evaluation can be released at the end of each offline class, which is helpful for teachers to understand students' other demands for the face-to-face course timely.

After class, teachers can use the function of assigning homework in Ke Tang Pai to design homework and topics, and publish them online to help students further consolidate relevant knowledge. For the assignments and topics completed by students, set up an evaluation mechanism to test the learning effect of students. At the same time, through the private message function, students can consult related difficult problems, and teachers can give help timely. Relevant divergent topics can also be released to exercise students' thinking and expand their knowledge.

3 ANALYSIS OF PRACTICE EFFECT

In this study, four classes of a university in the second semester of 2021-2022 were selected to analyze the effect of ESP blended teaching practice. There were 56 students in class 9 and class A, who chose the ESP blended teaching mode. While 61 students in class 7 and class 8 adopted the regular Face-to-Face teaching mode. The scores were composed of the normal oral scores and the final listening test scores in May 2022, accounting for 50% respectively. SPSS software was selected to conduct independent samples T test on the scores of four classes, the results was shown in Table 2.

It can be seen from Table 2 that F value in the independent sample test was 3.779, Sig. value was 0.054, indicating that the assumed variance was equal. The T-test value of the mean value equation was 3.990, Sig. value was 0.000, the original hypothesis was rejected, showed that there is significant difference in the scores of the four classes before and after the implementation of the ESP blended teaching model.

It can be seen from Table 3 that the average score of class 9 and class A implementing the ESP blended teaching mode is 76.491, while the average score of class 7 and class 8 implementing the conventional teaching mode is 70.246. The results shows that the practical effect of the ESP blended teaching mode is obviously better than that of the conventional teaching mode.

Table 2 Independent sample test of the scores of classes 7, 8 and 9, A

Levene test of variance equation		T-test for equality of means					95% confidence interval of difference	
F	Sig.	t	df	Sig.	Mean difference	Standard error difference	Lower	Upper

Final exam Equal variances assumed exam Equal variances not assumed	variances	3.779	0.054	3.990	0.115	0.000	6.245	1.565	3.145	9.345
	variances	3.779		3.956	106.505	0.000	6.245	1.578	3.116	9.374

Table 3 Statistics of scores of 7, 8, 9 and A

	Class	Number	Mean	Standard deviation	Standard error of mean
Final exam	Classes 7 and 8	61	70.246	7.606	0.974
	Classes 9 and A	56	76.491	9.296	1.242

4 CONCLUSION

Marine engineering English listening and speaking focus on training students' ability to apply professional English. The ESP blended teaching mode based on the Ke Tang Pai expands the traditional listening and conversation courses in time and space, emphasizes process management, and reconstructs the traditional classroom teaching. Through the course practice, it is proved that it is conducive to improving the enthusiasm and activity of learning, also to improving the ability of students to use professional English comprehensively.

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REFERENCES

- [1] Li Xiaowei. A study on fuzzy comprehensive evaluation of washback effects of seafarers' English examination for certificates of competence [D]. Dalian: Dalian marine university, 2019.
- [2] FAN, L.FEI, J.SHRIEVER, etc. The communicative competence of Chinese seafarers and their employability in the international maritime labour market [J]. Marine Policy, 2017 (83): 137-145.
- [3] BROWN, J. The washback effects of language tests. University of Hawaii Working Papers in ESL, 1997, 16(1):27-45.
- [4] BAILEY, K.M. Working for washback: A review of the washback concept in language testing. Language Testing, 1995, 13(3):257-279.
- [5] Weng Jiejing. A Study on Improving Students' Speaking Competence in Marine Oral English Teaching of Navigational College from the Angle of Discourse Analysis [D]. Zhejiang, Zhejiang Normal University, 2012.
- [6] Guo, S. Design and Practice of Blended Learning Mode Based on Flipped Classroom: Taking Japanese Conversation Course as an Example. 2021. Hangzhou, China: Institute of Electrical and Electronics Engineers Inc.

- [7] Chen Xirong. An Exploration of Blended Teaching Model Based on CBI-Taking the Teaching Practice of Business English as an Example [J].Instruction and Teacher Professional Development. 2019(12):129-134.
- [8] Kurucova Z, Medová J, Tirpakova A. The effect of different online education modes on the English language learning of media studies students [J]. Cogent Education, 2018(1):1-13.
- [9] Zhu, Y. Research on the Blended Teaching Practice Based on the Ketangpai Network Teaching Cloud Platform. 2020. Beijing, China: IOP Publishing Ltd.
- [10] XU Jianying, ZHANG Xuehong, HU Jixiang. Teaching cooperation of college English teachers & specialized teachers for ESP transformation: a case of Journalistic English[J]. Foreign language learning theory and practice. 2017(1):67-72.