

A Preliminary Study on Bilingual Teaching of "Flight Principles" Course for Flight Trainees

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Abstract: Through the realistic requirements of pilots' English listening and speaking ability, the importance of bilingual teaching is discussed. The forms and methods of bilingual teaching in flight technology courses are analyzed. Several problems that should be grasped in bilingual teaching are pointed out.

1. Introduction

The aviation industry is a key development area during the “13th Five-Year Plan” period. The civil aviation industry will become the largest market in the world aviation industry in the future, and a large number of excellent flying talents are urgently needed. In the process of training flight personnel, how to improve the English listening and speaking ability of flight students and meet the basic requirements of ICAO for the English ability of pilots is an urgent problem to be solved in training institutions. This paper mainly discusses the issue of improving the English level of flight students through bilingual teaching.

2. The Concept of Bilingual Teaching

The so-called bilingual teaching means that the second language or foreign language is used in schools to teach various subjects [1]. The bilingual teaching we are talking about here refers to a system of teaching in both Chinese and English. The basic requirement of bilingual education is to use the two languages as a teaching medium in a systematic and systematic manner in the teaching process, so that students can learn and grow in the overall knowledge, the two language abilities and the culture represented by the two languages. Both can achieve smooth and natural development.

3. The Importance of Bilingual Education

The development of the world economy and the globalization of information dissemination have made the society more and more demanding for the foreign language level of professionals. The competition of the country is ultimately the competition of talents. Therefore, bilingual education in colleges and universities is an important way to improve the English level of professional talents. It is a major trend in the development of education and teaching, and it is also necessary to cultivate high-quality talents suitable for economic globalization.

English is defined by the International Civil Aviation Organization (ICAO) as the language for civil aviation radio, land and air calls. At the core of the ICAO English standard is that when English-speaking flight and air traffic controllers speak in English on radio frequencies, in addition to being proficient in ICAO standard terminology, they must be proficient in English to express normal and abnormal situations [2]. The situation, intentions and wishes, requests and regulatory methods, and respond quickly to the above situation. This requires the flight crew to have good English skills, especially a solid oral (including listening and speaking) basis. In recent years, with

the increasing number of international flights, due to the lack of proficiency in English for pilots, there are communication barriers between pilots and air traffic controllers, and there have been many flight accidents, route conflicts and dangerous proximity due to errors in English radio callers. And other issues. In order to improve the communication capabilities between pilots and air traffic controllers, ICAO mandated that as of March 5, 2008, captains and co-pilots, flight pilots on internationally operating aircraft and helicopters Must meet the ICAO English radio communication ability level 4 or above. Raising the requirements for the English language proficiency of flight personnel is a formal resolution adopted by the ICAO Council and is a requirement for flight safety.

"Bilingual" is a form of teaching. The purpose of bilingual teaching is to learn professional knowledge and improve students' second language ability. In the teaching of flight technology courses, the bilingual teaching of "Chinese + English" is of great significance for improving the English listening and speaking ability of flight students in China, and is an important way to improve the level of English listening and speaking.

4. The Form and Method of Bilingual Education

4.1 Forms of Bilingual Teaching

From the perspective of bilingual teaching development, there are mainly three forms of immersive bilingual teaching, maintenance bilingual teaching and transitional bilingual teaching [3].

From the current situation of language environment and language ability in China, the transitional type is a more realistic bilingual teaching mode, and the maintenance type is still difficult to fully realize at the present stage in China. It can be used as the main mode of bilingual education development in the middle stage, which is also bilingual. Teaching the target model that we will strive to achieve in the future.

4.2 Ways to Carry out Bilingual Teaching

Bilingual teaching courses. The courses in flight technology are divided into professional basic courses and professional courses. However, due to its strong applicability and complex theoretical calculations, professional courses are beneficial to the development of bilingual teaching from both the teacher's teaching and the students' learning. The bilingual teaching of professional courses enables students to further acquire English in the process of mastering professional knowledge, and to subtly improve the students' ability to use English comprehensively. For example, bilingual teaching in the professional course "Jeppesen Aeronautical Chart and Navigation Database" has great practical significance. Jeppesen aeronautical chart is a general navigation map for air navigation in the world civil aviation field. Because Jeppesen aeronautical chart mainly uses English to mark and explain the information of the map, it contains a large number of abbreviations and unique symbols, which make it from non-English speaking countries. Aviation personnel have some difficulties in interpreting and applying Jeppesen charts. The new teaching mode of bilingual teaching directly enhances the practical application ability of flight students to Jeppesen aeronautical charts in the future [4].

4.2.1 The Time for Bilingual Teaching

At present, flight students generally adopt the "2.5+1.5" group training mode. The opening hours of each professional course should be just right. It is necessary to consider the curriculum learning requirements stipulated in the talent training program, and also take into account the gradual progress of the students' knowledge learning. Take the Air Traffic Management course as an example. It is best not to open an air traffic management course in the first semester. Freshmen have a small vocabulary and do not have a basic course or a professional course. English can't reach the level of full bilingual education. If bilingual teaching is implemented at this time, it will be difficult and the teaching effect will be poor. Therefore, considering the English level of the students, it is best to open in the fourth or fifth semester. At this time, the students have learned a certain

foundation for the study of air traffic management through professional basic courses or professional courses, and it is easy to understand the content with strong professionalism. Moreover, the students learned that the future work is closely related to the air traffic control department and enhanced the enthusiasm for learning air traffic management. In addition, senior students study in professional English, the English level has been improved to a certain extent, and it is easier to accept bilingual teaching.

4.2.2 The Model Adopted for Bilingual Teaching

Different professional courses have different degrees of dependence on English, so the form of teaching should be different. For example, as an interactive language, the bilingual teaching of land and air conversation courses can choose the immersion teaching mode, while the aircraft system, flight principle, and Jeppesen chart are suitable for transitional bilingual teaching mode. At the same time of selecting the appropriate teaching mode, the teaching process can also take corresponding teaching activities. For example, according to the different English levels of students, different teaching levels are determined; specific syllabus and teaching methods are formulated, and the professional teachers are based on the nature of bilingual teaching. And the students' English proficiency, formulate a practical, detailed and specific syllabus, teaching calendar, teaching standards; actively use multimedia, network and other teaching facilities, multi-faceted to stimulate students' senses, stimulate students' interest, so that they can be faster and better Master professional knowledge; create an English learning environment, broaden the way students learn English, and enable students to continuously improve their English skills in the school environment [5].

5. Several Issues should be Grasped in the Bilingual Teaching

5.1 Teacher Team Building

Teachers are the key to determining the success or failure of bilingual teaching. Bilingual teachers need to have a complete knowledge system, the teaching ideas that keep pace with the times, keep up with the cutting-edge knowledge of the times, and have a comprehensive ability structure, such as information acquisition ability and language application ability, teaching monitoring capabilities and the ability to use teaching methods. At present, the bottleneck restricting the development of bilingual teaching is the teacher. Solid and profound professional knowledge and in-depth oral English expression skills are two conditions for teachers who are bilingual tasks. The two cannot be biased. Otherwise, it is difficult to be qualified for professional courses. For the ordinary local colleges and universities of teaching type, there is a problem that the introduction of overseas students is difficult. Young talents with high English proficiency should be encouraged to serve bilingual education. At the same time, schools must create conditions to provide training and exchange opportunities for teachers who serve this task, and train qualified bilingual teachers.

5.2 Screening of Original Textbooks

In addition to understanding the cutting-edge dynamics and novel knowledge of the development of professional fields, the original English textbooks can introduce advanced Western educational concepts. An excellent English original textbook is the basis for the successful implementation of bilingual teaching. It should have several characteristics: the textbook is on the overall structure of the arrangement, focusing on cultivating students' way of thinking about knowledge; the content of the textbook covers the basic knowledge principle. At the same time, it is closely related to students' life and study, and equipped with life examples; the textbooks are well illustrated, the language is vivid, the practical knowledge is rich and close to the engineering practice, which has a good guiding effect on cultivating students' practical ability and creativity; the teaching materials are equipped with a certain amount of three-dimensional Teaching resources. For courses that do not have a high degree of English original textbooks, you can take the first self-editing bilingual teaching lectures, continue to enrich the content, gradually improve the level of editing, and then form a high-level teaching materials.

5.3 Teaching Schedule

The use of bilingual teaching is bound to slow down the teaching progress, and after the bilingual teaching, the planning time of these professional courses has not increased. In fact, many courses are taught in Chinese, teachers and students have already felt the difficulty of these courses and the lack of class time. Bilingual teaching requires a large amount of professional English in the classroom, and teachers often tend to lag behind the students' listening comprehension. The method of adding blackboard board books is used to make up for it. The board books have to be very careful. Some key and difficult problems, teachers need to repeat explanations, etc. These will inevitably affect the progress of the lectures, but the teaching plan must be completed. There is a difficult contradiction between limited class time and slow progress. Under this circumstance, teachers should make scientific choices for teaching content. For non-key content that students can fully self-study, students can be properly arranged for self-study.

6. Conclusion

English is the legal language prescribed by ICAO. With the acceleration of the opening up of civil aviation in China, the use of English calls for flight flights is an inevitable trend. Improving the English ability of pilots is an urgent requirement of airlines. For civil aviation flight students, bilingual teaching of professional courses has high social value and practical value. For bilingual teaching of flight students, the training institutions should pay sufficient attention to vigorously promote the construction and reform of bilingual teaching, meet the requirements of the development of civil aviation for the English level of flight personnel, and provide more and better civil aviation flight professionals for the society. To better explain the spirit of air service to the country.

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