

A study of the necessity of Chinese-English bilingual medium teaching materials for international students in China

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Abstract: In the context of the implementation of the "Belt and Road" strategy, with the deepening of globalization, the educational cooperation between China and its member countries is increasing steadily, which has gradually formed an upsurge of cultural exchange that cannot be ignored. An increasing number of foreign students choose to study in China, and their demand for bilingual textbooks also grows accordingly. In order to gain a deeper understanding of the necessity of CLIL bilingual (Chinese-English) teaching materials for international students in China, a qualitative study is conducted by designing a comprehensive questionnaire. The research results show that bilingual professional textbooks can effectively meet the academic needs of international students in the dual language background of Chinese and English, make international students feel more confident in dealing with course materials and life problems, help them overcome the academic and psychological pressure brought by the language barrier, and enhance the understanding and respect of different cultures to promote cultural exchange and integration.

Keywords: CLIL textbooks, international students, the "Belt and Road"

1. Introduction

From the perspective of education, high-level opening up is an important means to gather the world's talents and resources, and participate in international competition. It is also an important driving force and the only way to build a strong country in education, science and technology and human resources [1]. Global bilingual teaching materials are a diversified and complex field. With the strengthening of globalization, bilingual education has become the educational policy of many countries and regions. With the rapid development of China's economy and the continuous improvement of its international status, more and more foreign students choose to come to China to study in the fields of Chinese language and culture, economic management, engineering and technology. At the same time, some emerging fields such as artificial intelligence and big data have also become popular choices for foreign students to study in China. However, for these international students, the language of textbooks they use has always been an important issue in the field of education.

1.1. Current situation of bilingual education for international students in China

1.1.1. Origin countries of international students in China

Education, with its deep roots in the genealogy of world civilizations, is an important cornerstone of dialogue among civilizations. With the promotion of the Belt and Road Initiative, educational exchanges between China and other member countries are also increasingly becoming an important cultural exchange program. ASEAN is an important node of the "Maritime Silk Road" in the 21st century, and with the construction of the "Belt and Road" Initiative, the cooperation between the two sides in the field of education has been deepening. Most ASEAN countries are third world countries, and Southeast Asian countries are different in geographical location, historical development, geographical environment, ethnic composition, economic development, religious belief, political model, and many other factors. At the same time, there is also a big gap in the development level and characteristics of higher education [2].

According to the Standard for the Quality of Higher Education for International Students in China (Trial), the undergraduate students who take foreign languages as the professional language of instruction should reach at least the level 4 of the Chinese language proficiency at the time of graduation [3]. Due to the different knowledge base of international students in China, the education level of colleges and universities in China is uneven. Many international students in China could not reach this condition at the time of graduation.

1.1.2. Bilingual textbooks demand of international students in China

With the implementation of the "Belt and Road" strategy, traditional textbooks can no longer meet the needs of Chinese students [4]. In China's higher education system, the means and elements of the education policy for Chinese overseas students are imbalanced, with some regions concentrating excessive resources, while others are relatively neglected or lacking corresponding support [5]. Therefore, it is of great significance to strengthen the educational management of Chinese international students. It is urgent to explore new international educational resources and improve the traditional education quality of international students in China. Some coastal areas in China with relatively developed economy are vigorously promoting bilingual education. In western China and some less developed areas, bilingual teaching has been carried out to some extent. And such schools are generally centered around famous universities. To better meet the foreign language teaching needs of international students, the development and use of bilingual teaching materials is a major initiative in China's education sector.

For international students, single-language textbooks may not be able to fully reflect the blend of diverse cultures, which limits their understanding and acceptance of Chinese culture. In the process of studying abroad, language barriers must be overcome in order to integrate into the new learning environment as soon as possible [6]. Due to the language barrier, students often feel lost and helpless when they try to integrate into the local society and participate in academic discussions. In such an environment, the feeling of loneliness will increase students' mental tension, thus reducing students' learning efficiency. Although most international students have some basic knowledge of a foreign language, language differences in different countries may still cause them to have difficulty in understanding foreign language textbooks, which can affect their studies, careers, and social functions. According to research findings, teachers are more creative and participative and can more effectively promote the cultivation of students' bilingual communication ability [7], and international students in China need such bilingual teaching environment to improve their various skills.

1.1.3. Current situation of bilingual (Chinese-English) professional textbooks in China

As an effective means of language teaching, bilingual textbooks play an important role in the teaching of international students in China. However, with the deepening of teaching reform and the increase of international communication, many problems have arisen in the use of bilingual textbooks. First, the content of bilingual textbooks needs to be improved. Because the international students come from different countries, their language habits and language differences often appear some differences in cultural connotation, or unnatural cohesion. For example, the same point may be difficult for students to understand due to the differences between Chinese and Western cultures and contexts when narrating. In addition, there is a problem of unbalanced teaching resources in bilingual textbooks at present. Due to the differences in economy and culture among different regions, there are also great differences in educational resources. In some places with better economies, schools get better educational resources, while in remote or backward places, they get less funding. As a result, the teaching effectiveness of bilingual textbooks varies greatly in different regions. Bilingual textbooks are updated slowly. With the progress of society and the update of knowledge, the content of textbooks should keep pace with the times. However, the update speed of some bilingual textbooks is relatively slow, which cannot timely reflect the latest knowledge in science, technology, culture and other aspects. This will make the students cannot learn new knowledge and new technology in a short period of time, which will affect their future development [7].

2. Research Design

2.1. Research objectives

From the perspective of international students in China, this study aims to explore the necessity and effectiveness of CLIL bilingual textbooks for international students in China, actively promote the development of China's higher education textbooks, and strive to explore the adaptability of CLIL bilingual textbooks for international students in China. It will provide suggestions for improving the

teaching quality of professional courses or applied technology courses for international students in China, and effectively meet the necessary trend of the China's education internationalization development.

2.2. Research Subjects

The subjects of this study are all international students. A total of 302 questionnaires (122 female students and 180 male students) are collected in this paper, and the participants are from different countries (as shown in Figure 1). It shows that the respondents of international students mainly from Asian countries. The participants were mainly between the ages of 18 and 24, and their education level was currently at the undergraduate level.



Figure 1: Distribution of origin countries of international students' respondents in China.

2.3. Research Methods

An online questionnaire survey was used to evaluate the necessity and effectiveness of bilingual textbooks (both Chinese and English) for international students in China. The questionnaire is divided into two parts: basic information and main information. The basic information is to understand the basis of the participants, and the main information is analyzed mainly around four dimensions: (1) Language ability; (2) The current use of textbooks; (3) Challenges faced; (4) The effectiveness of bilingual teaching materials.

3. Results and discussion

The main reasons affecting the development of the education of international students in China are as follows: the knowledge base of international students in China is weak, the level of scientific research is poor, and the language barrier leads to the inability to carry out effective communication [8]. In view of this phenomenon, to clearly show the correlation results of the open questionnaire, the whole paper focuses on the discussion and analysis from five dimensions.

3.1. The bilingual ability of international students in China varies greatly

After the Ministry of Education of China issued the "Belt and Road" Education Initiative in 2016, the number of foreign students coming to China has been risen.

According to the data in table 1, 60.27% of the international students in China rated their English proficiency as good or above, while only 22.51% of them rated their Chinese proficiency as good or above, 32.78% of them rated their English proficiency as normal, and 41.06% of them rated their Chinese proficiency as normal. And 36.43% of them had poor or relatively poor self-assessment of their Chinese proficiency. According to the questionnaire data, most of the poor self-assessment Chinese proficiency comes from Asia, the third world countries, which is the largest source of students in China. The

education level of the third world countries is generally not high, and most of the international students come from the middle level educational institutions. The Chinese proficiency of the foreign students is not high on the whole, although the Chinese proficiency of the foreign students is not directly related to their professional ability. However, their Chinese language ability is closely related to their learning process and results, which is consistent ^[9] with previous study.

Table 1: Self-assessment of Chinese speaking level of foreign students in China

Evaluation	Very Good	better	Normal	Poor	Very poor
English proficiency	28.15%	32.12%	32.78%	6.29%	0.66%
Chinese language proficiency	3.97%	18.54%	41.06%	14.9%	21.53%

3.2. Bilingual (Chinese-English) textbooks are not widely used in China

According to the data in Figure 2, we can see the progress China has made in implementing bilingual education in Chinese and English for international students. Specifically, the proportion of students who have bilingual textbooks in Chinese and English is not high, only 38.41%, while the proportion of English textbooks is 34.11%, while the proportion of Chinese textbooks is slightly lower, but also reached 27.48%. The research shows that a certain proportion of international students in China still use a single language textbook, which may reflect that the diversity and adaptability of bilingual textbooks have not been fully promoted. Nevertheless, there are signs that some Chinese institutions of higher learning are gradually adopting bilingual textbooks to enrich their teaching content and improve students' cross-cultural communication skills ^[10]. However, from the perspective of China's higher education as a whole, bilingual textbooks are still relatively low in the Chinese higher education system and have not become a mainstream teaching model.

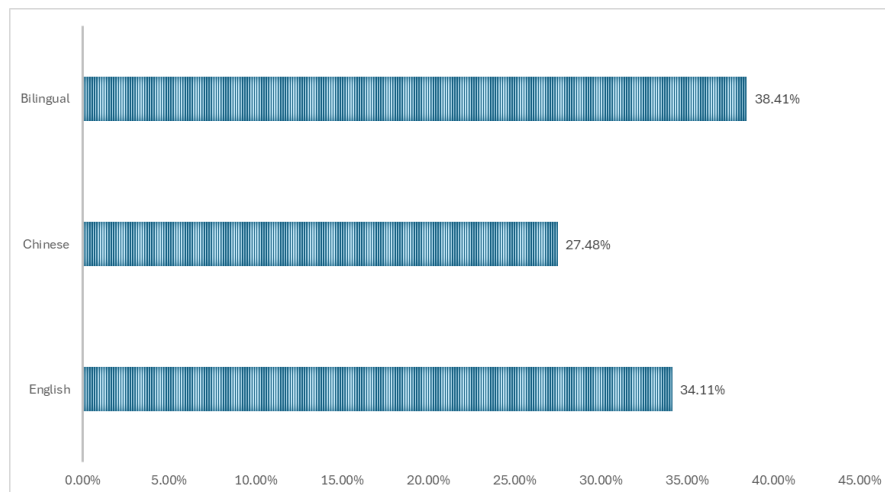


Figure 2: Language used in textbooks for international students' current professional courses in China

3.3. Challenges in all aspects affect the whole study career of international students in China

According to the relevant research data in Figure 3 below, international students in a foreign country and unfamiliar language environment often feel an invisible pressure and challenge. These students find themselves trapped in a brand-new world surrounded by cultures and languages they are not familiar with, which undoubtedly has a great negative impact on their psychological state. Feelings of difficulty, sadness, disgust and fear proliferate, and what is even more disturbing is that these negative feelings are not just fleeting feelings, but accumulate and deepen gradually, when these international students begin to realize that their communication with others, their academic progress and the social relationships they build are significantly affected by the language problem. They may feel as if they are stuck in an inescapable situation. This feeling is not only frustrating but also has a long-term negative impact on their mental health. Outlets to vent or divert emotions are necessary for international students in China.

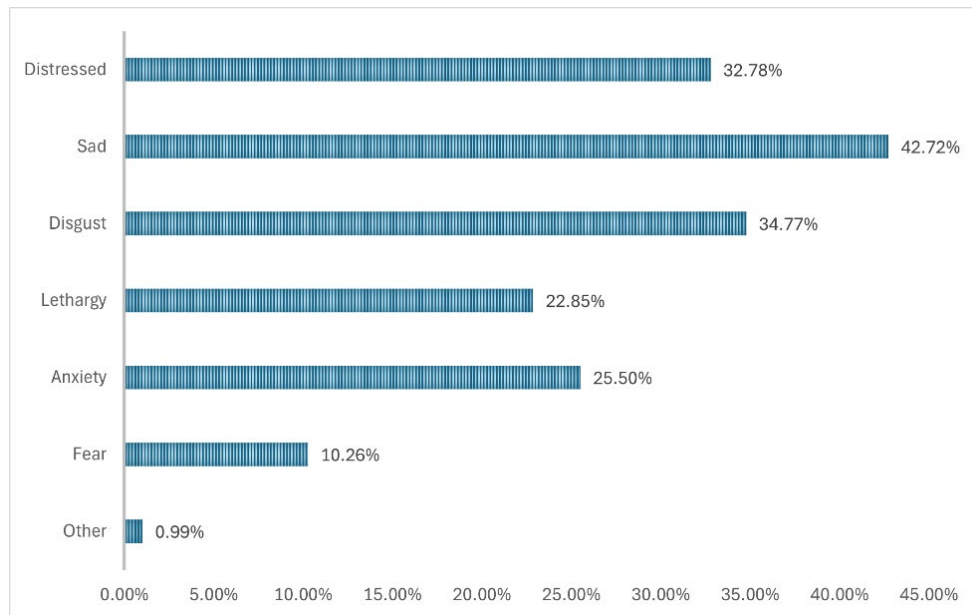


Figure 3: Negative psychology when taking professional courses in a language students are not good at

3.4. The effectiveness of bilingual (Chinese-English) professional textbooks for international students in China

Table 2: Textbooks for professional courses (textbooks for which you are not currently bilingual, textbooks for bilingual professional courses (in English and Chinese) are helpful to your study

Evaluation	Couldn't agree more	agree	Neutral	Disagree	Strongly disagree
Monolingual textbook	4.97%	20.2%	26.49%	40.07%	8.28%
Dual language textbooks	10.26%	34.77%	25.83%	19.21%	9.93%

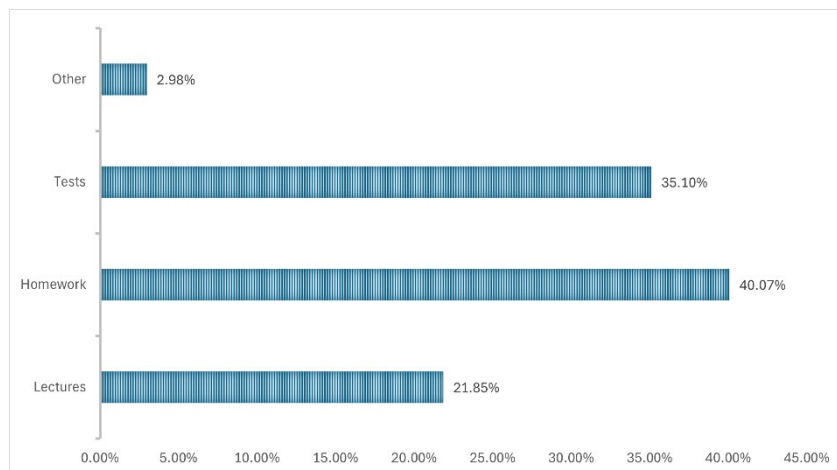


Figure 4: Situations in which bilingual (English and Chinese) textbooks are most useful for you

According to the statistics in Table 2 and Figure 4, currently, the use of single-language textbooks is helpful to international students in China, 24.99% of them agree with the use of bilingual textbooks, 45.03% of them use bilingual textbooks, 26.49% of them have neutral opinions (using single-language textbooks), and 25.83% of them use bilingual textbooks. Those who disagreed or strongly disagreed that single-language textbooks were helpful accounted for 48.35%, and those who held bilingual textbooks accounted for 28.51%. The analysis of the study reveals that for those international students who choose to use bilingual textbooks, they generally believe that this practice has a significant positive impact on understanding lectures, completing assignments and coping with exams in class. The findings further

support the effectiveness of bilingual textbooks in improving language ability and academic performance.

4. Conclusions

Based on the effectiveness and necessity research of CLIL Chinese-English bilingual medium textbooks for international students, this paper collected respondents from international students in China through an online survey. Based on the questionnaire data, four dimensions are discussed: (1) Language ability; (2) The current use of textbooks; (3) Challenges faced; (4) The effectiveness of bilingual teaching materials. The motivation of learning bilingual textbooks summarizes that it is a necessary trend for international students to use bilingual (Chinese and English) professional textbooks, and China is gradually improving the level of higher education. The results show that bilingual (Chinese-English) medium professional textbooks exist and had been used by a part of higher education organizations. When reading monolingual textbooks or conducting research, students often feel frustrated and helpless because they cannot fully grasp the taught content and knowledge related to study. However, by using bilingual medium textbook, they can learn the knowledge itself more effectively, thus developing their enthusiasm and confidence in academic research, which is also necessary because it can free them from academic anxiety and frustration caused by insufficient language understanding, and more importantly, this way of learning effectively promotes students to have a deeper understanding of different cultures, better appreciate the charm of multiculturalism, and at the same time show a higher degree of respect and tolerance in cross-cultural communication.

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