Effectiveness and Problems of Bilingual Education in Higher Education Institute– A Survey

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Abstract: A questionnaire-based survey was conducted to get the current status of bilingual teaching in higher education institute. Survey was carried out among three groups of students: students from engineering related departments (Group 1), students from science related departments (Group 2), and students from arts related departments (Group 3). Results showed some positive aspects of bilingual teaching, such as high enthusiasm from the students and high satisfaction rate to the course components. However, some problems related to bilingual teaching were also revealed such as poor English proficiency of the students themselves, lack of language environment and lack of good textbooks for bilingual education, etc. Recommendations were provided for references of bilingual education at university level in China.

Keywords: Bilingual education; teaching effectiveness; questionnaire

1. Introduction

Bilingual education refers to the use of a second or foreign language in school for the teaching of content subjects[1,2]. It aims to improve students’ learning and acquiring of the English language during the process of subject courses study, and make them competent for international communication in their academic field. It has been widely practiced worldwide since 1960 with highly development in Canada, USA, and Japan, etc[3].

As a new model of teaching method, bilingual teaching has becoming more and more popular nationwide in China and attracts lots of research attentions. An upsurge of bilingual education has been set off at varied levels of education from kindergartens to universities. The Chinese Ministry of Education has a high regard to bilingual education and asked the universities to adopt bilingual education to undergraduates and the courses of bilingual education should achieve 5-10% of the total courses taken[4,5].

Examination-oriented education had been dominated in China in the past, which had adverse impacts on teaching and learning results. It is also one of the major reasons for low quality of English teaching in China. Some students could easily pass the College English Test Band 4 (CET 4) and College English Test Band 6 (CET 6), but still feel very difficult for communication in English. With the globalization and the internationalization have become tendencies, quality-oriented education is getting more and more focus. It is specially urgent in the English related education in order to prepare our talents be more competitive in the world. Bilingual education has proven to be an effective way for both English learning and academic improvement.

Bilingual education in China is still under development and the relative theory and empirical studies are still insufficient. The effectiveness of bilingual education varied among institutes, geographical regions, and disciplines. Heilongjiang province is located at the northeast part of China, the English related education is not as developed as some inland provinces as Guangdong, Shanghai, etc. Taking the survey example from Northeast Forestry University, Harbin, Heilongjiang, this study aims to investigate the current status, effectiveness, and problems associated with bilingual education at university level.

2. Methods

A thorough literature review was conducted in order to identify the most important factors for bilingual teaching in higher education. Following the literature review, we developed survey
questionnaires. The surveys were pilot tested in a class of senior students, after which they were further modified.

In order to achieve the study objectives, multiple methodologies of interviews and frequent interaction with students in the bilingual education programs, as well as perspectives from prior published studies were utilized. The survey instrument developed in this study consists of three main sections. The first section is designed to get a general information of the students’ attitude towards bilingual education. This part of questionnaire consists of 9 survey items, which were extracted from the literature. Section 2 is intended to identify the factors affecting the effectiveness of bilingual education, in which 15 questions were listed. Section 3 is about the students’ perceptions on bilingual education. Open questions were given in this part so that the students could write down their suggestions and recommendations to bilingual education from their own perspective view.

Survey was carried out among the students of Northeast Forestry University, Harbin, Heilongjiang Province. Sample population was divided into three groups: students from engineering related departments (Group 1), students from science related departments (Group 2), and students from arts related departments (Group 3). From each group, 120 students were randomly selected for the survey. Survey was distributed among the senior students who had taken at least one bilingual course. Questionnaires were either directly deliver to the students or sent out by email. Totally, 360 questionnaires were sent out. The validity of the returned questionnaires was checked and invalid responses were removed from the study. The returned valid questionnaire was 112, 106, and 111 with valid response rate of 94%, 88%, and 93% for Group 1, Group 2, and Group 3, respectively.

3. Results

All questionnaires were checked for accuracy and completeness. Data were entered into Microsoft Access and the electronic database was checked for entry errors, by testing approximately 10% of the randomly selected paper questionnaires. All statistical analysis was conducted in SPSS v.15 (SPSS Inc., Chicago, IL).

3.1 Students’ English Proficiency

The general English level was surveyed for the respondents based on the passing rate for CET4 or CET6 (Figure 1). With the assumption that the score of the CET test is a good indicator of English proficiency, the students from Group 1 and Group 2 show similar level of English proficiency. The passing rate of CET6 was 30% for Group 3, which was 67% higher than that of Group 1 and Group 2. The students who have not passed CET4 averaged 33% for students in Group 1 and Group 2 while it sharply dropped to 10% for the students in Group 3. It indicates a general trend that the students from
arts departments have higher English proficiency and better command of English than students from engineering and science departments.

Student’s self-evaluation for the English skills of listening, speaking, reading and writing shows the similar trend as the CET passing rate. The students from arts department are more optimistic towards English learning and more than 70% of the students think their English skill is good or excellent (Table 1).

### 3.2 Students’ satisfaction towards course components of bilingual education

A multiple-choice-question was formulated for major ways of English learning. Responses show similar trend for all three groups with average condition showed in Figure 2. More than 50% of the students indicate that reading books, newspapers, and academic materials written in English (53%) as well as watching English movies (54%) are the major ways of English learning. About 35% of the students study English by listening to English programs or songs. As to the major obstacles of learning during bilingual education, poor listening comprehension in English is the bottleneck for the students in engineering and science departments while unsuited textbook is the most concerns related to bilingual education of the students majored in arts.

![Figure 2 Major ways of English learning for all students](image)

Survey on the students’ satisfaction towards course components of bilingual education shows that more than 90% of the students involved in bilingual education are satisfied with all three course components of instructor, textbook and knowledge convey (Figure 3). The highest satisfaction is for course instructor, which is 94%, 96%, and 95% for Group 1, Group 2, and Group 3, respectively. The
lowest satisfaction is associated with textbook. Results indicated that most of the course instructors for bilingual education are competent, while the appropriate textbook still needs more attention. The English book in its original version may not fit the situation and course objectives in China, and the textbook in Chinese does not satisfy the purpose of bilingual education.

3.3 Students’ perception towards bilingual education

Students’ perception towards effectiveness of bilingual education varied among three groups and between two categories of English proficiency and academic knowledge (Table 2). The general trend is that bilingual education provides more help both for English proficiency and academic knowledge to the students in engineering and science related departments while less help is reported to the students in arts department. Generally speaking, an improved students’ competence in English could be seen by all students involved.

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Figure 4 Problems associated with bilingual education.

Short of language environment for bilingual education and low English proficiency of the students are the major problems associated with bilingual education (Figure 4). The issues are more seeable for the students in science departments (Group 2) with 60% and 49%, respectively. Twenty-four percent of the responses in science departments indicate that teacher’s English proficiency is also a concern of the effectiveness of bilingual education. However, the situation is much better for the other two groups, with 3% responses for the students in engineering departments (Group 1) and 12% responses for the students
in arts departments (Group 3) showing concern to teacher’s English proficiency.

4. Conclusions and Discussion

Bilingual education is highly welcomed by the students. Results showed some positive aspects of bilingual teaching, such as high enthusiasm from the students and high satisfaction rate to the teachers. Generally, the students from arts department have better command of English than the students from engineering and science departments. This is probably because the students in arts department are exceptionally talented at language learning. However, the effectiveness of bilingual education is relatively low in the arts related departments compared to that of engineering and science departments. This could possibly explained by the differences in course contents. There is more narrative contents in the arts related courses, which require the course instructor not only have solid academic background but also have strong verbal skill to express their ideas clearly and attractively in English. Some problems related to bilingual teaching were also revealed. Among them lack of environment for language practicing and lack of good textbooks are the major external issue while an internal issue of the student themselves was also highlighted, that is less English proficiency of the students, which to some extent hinders the improvement of bilingual education.

To further improve the effectiveness of bilingual education in higher education institute, measures should be taken from both teaching side and learning side. For the teaching side, course instructor, textbook and teaching methods are the major components. Training for trainer program should be widely practiced to help the teacher in both English proficiency and academic development. Additionally, appropriate textbook is also a key issue deserved more attention along the teaching and learning chain. Further more, more efforts should be put on teaching methods of bilingual education so that the bilingual education is in line with international practices and tailored to Chinese students. On the other hand, to the students, a correct attitude toward bilingual education should be formed to have more subjective initiative during the study and be more active in the class. In addition to the above two aspects, government and universities should provide more supports and give priority to bilingual education. Corresponding policies for motivation of the implementation of bilingual education is seen as a crucial component of bilingual education in China. For example, the Chinese Ministry of Education initiated the Demonstration Project for Bilingual Education Course Development at university level in 2006 and 100 bilingual courses were selected nationwide, which greatly motivated the adaptation and implementation of bilingual education at universities.

References


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