

A Discussion on the Reform of English Teaching in Local Engineering-Focused University based on the Data of Graduates' Employment

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Abstract. With the goal of serving regional economy and social development, local universities have their own characteristics in many aspects, such as running orientation, targets of cultivating students, employment of graduates, conditions of running universities and etc. This paper takes a provincial key Engineering-focused university as an example to analyze the data of graduates' employment and requirements for English skill. The reasons for the students lacking adequate training in English for Special Purposes (ESP) and how to reform English teaching to satisfy the needs of students are discussed. A model to reform the current curriculum by integrating teachers' resources of public English teaching and specialized courses teaching to complete the ESP teaching in every stage of university English teaching is proposed.

Keywords: Reform of University English; Employment of Graduates; Local Universities; English for Special Purposes.

1. Introduction

College English is a foundational required course for most non-English major students during their undergraduate education, and it plays a significant role in promoting the development of knowledge, abilities, and comprehensive qualities of students. In China, students generally start learning English from their third grade in primary school, which means they have more than 10 years of English learning experience by the time they enter university. In the first two years of university, public English courses are still offered to further enhance students' listening, speaking, reading, and writing skills. The learning content and assessment criteria revolve around the pass rates for Band 4 and Band 6, which are large-scale standardized tests sponsored by the Ministry of Education of the People's Republic of China and administered by its National Education Examinations Authority. These two nationwide examinations aim to promote English teaching at Chinese universities while measuring students' English proficiency objectively and accurately., serving to improve the quality of college English courses in China.

However, in our many years of experiences of teaching in public English teaching, professional English teaching, bilingual teaching of professional courses, guiding bachelor and research on employment of graduates, we deeply impressed by the lack of cultivation of professional English abilities for the students, which are unable to meet the requirements of students for employment or further education.

Based on the employment flow data of a local university graduates, this article analyzes the actual needs of students and proposes reform strategies for college English teaching. Local universities are an integral part of China's higher education system with a focus on serving regional economic and social development by striving to cultivate high-quality talents locally. They have their own characteristics in many ways, such as educational positioning, talent training objectives, direction in

which graduates will go, as well as teacher resources. University H is a key multidisciplinary university constructed by Hebei Province focusing on engineering and including science, liberal arts, economics, business administration, laws, medicine, education, and art. It has 16 undergraduate colleges offering 79 undergraduate majors. The number of undergraduates graduating each year exceeds 4,500. This paper takes H University as a case study to analyze some common problems in college English teaching in local universities, and to explore feasible reform models, which has certain typicality and reference.

2. Problems and the Root of the Problem

According to the data of the flow of graduates in H University, only a very small number of graduates chose to study abroad [1]. The employers are mainly private and state-owned enterprises. Only a few of graduates entered the foreign-funded enterprises where a high level of public foreign language is required. Taking the statistics from 2017-2020 as an example ((Fig.1), only about 1% of graduates chose to study abroad. There were about 20-25% graduates were admitted to master's degree. More than 60% of students chose employment. The private enterprises provided the most job opportunities for those graduates, followed by the state-owned enterprise. Less than 3% of graduates entering foreign-funded enterprises. The proportion of graduates entering public institutions and government organs generally was very small.

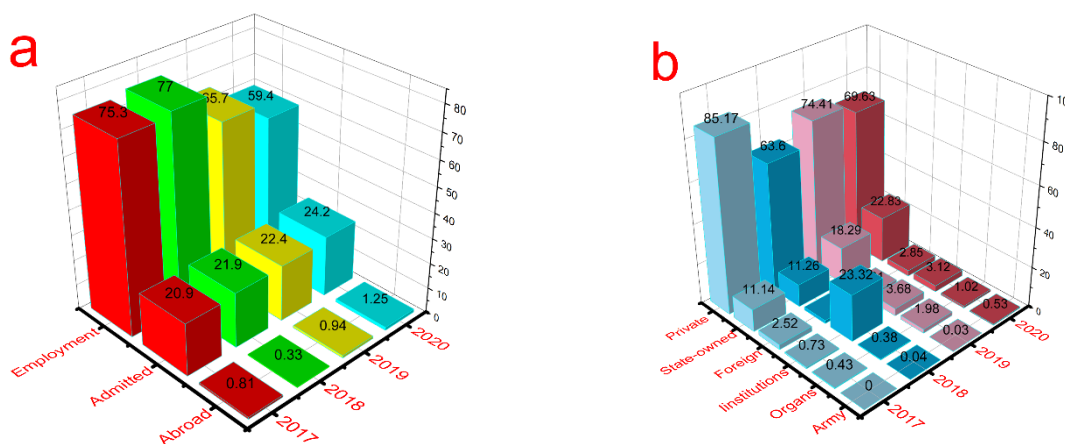


Fig 1. Statistics of flows of graduates of H University from 2017 to 2020 [1].a: employment and further study; b: employment unit.

The above data shows that the vast majority of graduates are engaged in major-related work. The graduates entering enterprises need to use English to consult or translate technical literature, write product description or technical introduction, and communicate technical information with foreigners in their work. But most graduates reported back that they were not up to those tasks quickly. Even the graduates who went on to pursue a master's degree found it is difficult for them to read English professional literature or to write English academic papers, although most of them had passed the CET-6. Meanwhile, the graduates who chose employment gave feedback that the complicated grammar knowledge, uncommonly used vocabulary, listening and speaking training focusing on daily communication, which they mastered in order to cope with course exams and CET-4 and CET-6, had little use in their practical work [2].

The reason why English teaching in local universities cannot meet the needs of graduates must be that special-purpose English teaching has been seriously weakened in the English teaching. The purpose of English for Specific Purposes (ESP) learning is to enable learners who speak English as a second or foreign language to acquire the skills to use the language in a specific field [3-5]. Because the college English teaching are mostly oriented towards passing the national College English tests (CET-4 and CET-6), coupled with the shortage of teachers of ESP and the lack of incentive mechanism, ESP teaching has become the weakest link in college English teaching for a long time.

Taking H University as an example, the total undergraduate teaching hour are about 2,400 class hours, of which the total teaching hours for required courses of college English are 192 hours, running for 4 semesters. For non-English majors, college English takes up the most credit hours. The optional courses involve 3 parts: language skills, language and culture, language application. For the engineering students, some optional courses, such as General Academic English, Scientific English, Engineering English, are conducive to the cultivation of professional English ability. However, due to the background and academic research field of the English teachers are mainly English-related, and the number of teachers in the School of Foreign Languages is limited, only a few students succeed in choosing those courses.

Compared with public English teaching, the teaching hours of ESP are very limited. Take H University as an example again, the professional English course is offered in the fifth semester, with only 32 teaching hours. The courses are taught by the professional teachers and teaching material selected by the professional teachers. Because the students are lack of basic training in ESP and limited teaching hours of ESP, only some professional literature with low degree of difficulty, both linguistically and professionally, are studied in the class. Although the language difficulty of the literature does not exceed CET-4, most students found it difficult to learn it well, because professional literature are very different from public English in many ways, such as vocabulary, grammatical structure, context, etc. For the Engineering teachers and teaching administrators, the professional English course is a “minor course”, not taken seriously by them. In addition, since the content and assessment of the professional English are determined by the teachers of different majors, it is difficult to conduct a unified assessment of the teaching effects, which also leads to the lack of supervision of professional English teaching.

3. Discussions

In view of the serious disconnect between college English teaching and talent training needed in local Engineering-focused universities, college English teaching should be reformed in many aspects, such as course location, teaching objectives, teaching requirements and teacher allocation. The cultivation of professional English ability should be paid particular attention to meet the requirements of training professional talents.

3.1. Curriculum Reform

It is suggested that the contents of ESP-related should be added and teaching hours should be increased while the contents and teaching hours of public English teaching are reduced. For example, intercultural communication courses focusing on humanistic education can be appropriately reduced, because students have many channels to understand the cultural differences between Chinese and foreign countries in the days of information and network. In addition, in view of the popularity of online dictionaries, the requirements for vocabulary in public English should be reduced, so that students can set aside their learning ability to master the professional vocabulary which is not involved in online dictionaries but has high word frequency in professional literature. ESP teaching should strengthen the ability of writing and translating related to the student's major.

The curriculum reform may be started from the optional courses, and followed by the adjustment of some required courses. In the overall framework of curriculum setting, language background in listening, speaking, reading and writing may be changed from daily life to professional scene. The topics of reading and writing may be converted into professional topics. Plenty of professional vocabulary words may be integrated into the reading and writing classes so as to both train reading ability and improve ESP ability.

3.2. Design of the Reform Mode of English Teaching for Specific Purposes

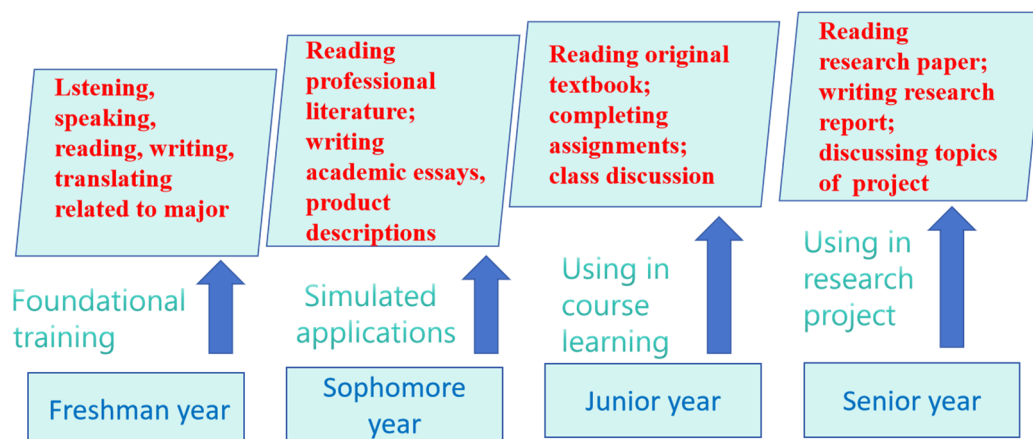


Fig 2. The design of reform mode of ESP teaching.

ESP teaching should be carried out step by step throughout the whole university stage, so that students' professional English ability can be systematically cultivated. Drawing on the experience of Japan and South Korea in college English reform [6,7], we propose the following specific implementation measures (Fig. 2) : In the first year of university, particular emphasis is placed on the major-related content in the courses of listening, speaking, reading, writing and translation, to give students the basic training of ESP, so that they can master some professional vocabulary(for example, professional popular science articles are selected as teaching materials). In the second grade, students can be trained in the simulated application of ESP, such as writing academic essays, project introductions, product descriptions, as well as reading some original professional articles that match their acceptance level, etc. In listening and speaking courses, case discussions on professional issues might be performed simulated. On the basis of completing the basic training, some professional courses may select original English textbooks for teaching. In these course, students are required to complete assignments, conduct class discussions and write course papers in English. In grade four, students are trained to complete literature review, write short research reports, and discuss topics in English. It is believed that after four years of progressive and systematic training, students can acquire solid professional English skills.

3.3. Reform about Teachers and Teaching Materials

Although many English educators have long been aware of the disconnect between college English teaching and the actual needs of students, and have persistently called for the transfer of college English teaching from focusing on basic English to emphasis on special-purpose English teaching [6,8], few local universities have really implemented the reform. In addition to the orientation of CET-4 and CET-6 to college English teaching, one important reason is that the implementation of the reform is faced with a series of operational difficulties, among which the lack of teachers of specialized English courses is the first. At present, most college English courses in local universities are taught by the teachers of School of Foreign Languages, and the teachers' educational background is English related majors, so it is some difficult for them to undertake ESP teaching that requires a certain amount of professional knowledge. On the other hand, usually, their academic researches have little overlap with the professional knowledge of non-English majors, so they lack the interest to learn knowledge related ESP, especially considering there are so many majors in a universities. As a result, the problem of teachers of ESP has become the bottleneck of reform [9].

At present, the quick and effective measure is to integrate the teacher resources of public English and specialized courses, forming a "teaching unit" with relatively fixed personnel around the corresponding major Nowadays, most of the young teachers of specialized courses have a doctor's degree and many of them have overseas experience, so they are fully capable of completing some ESP teaching. Although they may lack in phonetics, grammar fundamentals, etc., they can fully make

up for it through collaborative teaching with public English teachers. It is recommended to select original English academic literature with different language difficulty and professional background for different learning stages. Professional teachers have advantages in selecting professional English teaching materials because they are familiar with their majors. Such a countermeasure is not a foolproof solution, but it is a feasible one that can be put into practice as soon as possible.

4. Conclusion

Based on the employment flow data of a local university graduates, it is found that college English teaching in local universities generally lack the cultivation of professional English abilities for students. At present, college English teaching in local universities is generally out of line with the needs of talent training, so it is urgent to reform the current college English curriculum and strengthen the cultivation of professional ability. The reasons for the students lacking adequate training in English for Special Purposes and how to reform English teaching to satisfy the needs of students are discussed. A model to reform the current curriculum by integrating teachers' resources of public English teaching and specialized courses teaching to complete the ESP teaching in every stage of university English teaching is proposed.

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