Fluency First Guided Cultivation of Academic Communication Competence for Chinese Graduates Based on EAP

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Abstract—English for Academic Purposes (EAP), which is a branch of English for specific purposes (ESP), focuses instruction on skills required to perform in an English-speaking academic context across core subject areas. For Chinese graduates whose mother tongue is not English, EAP teaching consists of four parts, which are academic listening, academic reading, academic listening and academic writing. This paper takes EAP teaching for computer major graduates with professional master degree as an example to introduce our creative teaching methods such as games, memory competition, debates and international conference simulating, with purpose of cultivating graduates' academic communication competence, broadening their academic fields and improving their job competitiveness. Key of these teaching methods is students centered and situation-based teaching, focusing on students' competence of free expression in oral or written English. Our teaching design concentrates on encouraging graduates interests in EAP learning, which is guided by fluency first principle. This teaching reform is also one exploration for IT international talents cultivation for computer major graduates with professional master degree.

Index Terms-EAP, ESP, fluency first, computer major graduates, academic communication competence

I. INTRODUCTION

Traditional English teaching for graduates revolves around common English teaching such as grammar rules, translation or reading comprehension. In other words, traditional English teaching is only suitable for some entrance exams, not for communication, not to mention academic communication. Moreover, most teachers who teach English for graduates are teachers majoring in English. They can hardly lead graduates to other academic fields such as computer science or other engineering science (Zhang, 2011).

For graduates with professional master degree, the accelerated program is designed to develop professional engineering or other fields leaders in every profession (Jin, 2013). The graduates needs not only competence of cross-cultural communication, but also grasp of international competitive experiences to become talents. If teaching program for graduates with professional is only concerned with traditional English teaching content, there is no point in improving or promoting their learning progress.

To solve this problem, EAP courses become more and more popular (Cai, 2012a; Cai, 2012b; Wang, 2013). On successful completion of one EAP course in computer science, students should be able to grasp of basic paradigm of academic communication in the academic cultural context such as Computer Science and show competence in presenting concepts and ideas in spoken form for one academic topic clearly and establishing working relationships with their lecturers and other students. They should have capacity to take control of their own researching and summarizing by using appropriate learning strategies. They should also have confidence and ability to think critically and to analyze an argument and ability to write an academic report or short papers.

To keep up with the teaching developing situation, our university set up EAP course for graduates of computer technology field. As one subversive reform for public English teaching (Cai, 2014), EAP puts more emphasis on application capability of academic reading, academic listening, academic speaking and writing in one academic fields (Gillett, 2015). Through learning process, they will need to develop the ability to think logically and independently (Su, 2014), to be reflective and critical, to analyze, to synthesize and to be creative. Our EAP teaching content consists of three parts, which are oral communication part, written communication part and speaking and listening part. Here, we adopt fluency first as our guiding principle to cultivate graduates' academic communication competence, which are discussed in detail in the following sections.

II. SURVEY OF CURRENT ENGLISH TEACHING FOR GRADUATES WITH PROFESSIONAL MASTER DEGREE

Figures and Tables

Our university was approved to enroll graduates with professional master degree in 2011. From 2012, we began to enroll new postgraduates. Now our students who are pursuing master degree are 78. In September of 2015, enrollment scale expands to 67, in other words, 67 new postgraduates will begin to study in our university. To grasp English learning proficiency of all 172 students enrolling from 2012 to 2015 in our university, one table is designed to get some statistical data, which is shown in TableI.

From Table I, we know that nearly 70% students have passed CET4. So they have the capability of basic English listening, reading, speaking and writing. But no more than 30% students have passed CET6. In English learning process, most students have difficulty in oral English and academic writing. And over 70% postgraduates are not satisfied with their English proficiency. So nearly 70% students take it for granted that EAP teaching will helps to improve their English proficiency, especially for job employment and further education such as PhD study.

CAL TABLE FOR ENGLISH LEARNING	J PROFICIEN	CY OF NEW I	OSIGRADU	ATES IN RECENT FOU
Enrollment Year	2012	2013	2014	2015
total no.	27	53	25	67
no. of passing CET4	20	42	19	46
percentage of passing CET4	74%	79%	76%	69%
no. of passing CET6	8	12	7	12
percentage of passing CET6	30%	23%	28%	18%
difficulty in English listening	75%	81%	77%	83%
difficulty in oral English	86%	89%	90%	91%
difficulty in academic writing	91%	93%	90%	92%
difficulty in academic reading	87%	85%	83%	85%
satisfactory for English learning	30%	26%	31%	35%
necessity of learning EAP	67%	75%	78%	82%

STATISTICAL TABLE FOR ENGLISH LEARNING PROFICIENCY OF NEW POSTGRADUATES IN RECENT FOUR YEARS

Graduates of grade 2012 are our first enrollment students. EAP teaching is not set for them. Most students have difficulty in flexible application of academic English. One student attended an English interview of one international software company. There is a certain gap for his oral English and requirement of the company. He had difficulty in expressing his ideas in professional field and finally he failed to pass the English interview. Only one excellent girl continued her further PhD study and most of graduates entered domestic software companies to work.

For graduates of grade 2013, traditional English teaching was set for them in the first semester, which is taught by English teachers. In the second semester, EAP teaching is set for them, which is taught by supervisor or professional teachers with overseas learning experiences. Focus of EAP teaching is to train capability of oral academic communication and academic writing communication for graduates. From April of 2014, executive officer Mohamed EI-Refai of IBM provides 9 internship positions for our graduates. All working language or environment is English. By training of EAP teaching, these 9 students adapted themselves to the new working environment quickly and showed their excellent competence in the work.

III. INTRODUCTION OF EAP TEACHING FOR GRADUATES WITH PROFESSIONAL MASTER DEGREE

A. Requirments of EAP Teaching for Graduates with Professional Master Degree

With development of integration of world economy, more and more IT talents are required in IT industry. Take Dalian as an example, talents requirements increase year by year from 2009 to 2015. But few candidates are highly qualified for international IT talents. So university teaching and reform should adapt to talents requirements of IT industry. In China, there are over tens of millions of IT talents in software industry. Among them, at least 10% should have a good command of English. But in fact, only 1% of these talents are good at English expression in oral or written. For IT industry, listening and oral English are the basic requirements. In addition, technology communication is the most important part. By traditional English teaching, only some of candidates are qualified for the former requirements. It is almost impossible for them to be qualified for the latter requirements. For practitioners of IT industry, they should also have capability of fast search for key information in large amounts of English technology documents. Finally, they should learn to write formal project reports and instruction manual.

In order to adapt to IT talents requirements of IT industry, it is necessary to set EAP teaching for graduates. By academic training, students will learn to express themselves correctly in certain academic field. In this paper, computer science is chosen as our academic field.

B. Oral Communication Teaching Design of EAP Teaching

Enrollment quality of our university is not so good. Their English proficiency is ordinary, not to mention academic communication. From application point of view, teaching idea of vocabulary guidance and fluency first is adopted. Vocabulary building is the basis of international communication. So training of academic listening, academic reading, academic writing and academic speaking consists of large amount of professional vocabulary. Based on elicitation teaching method and games introduction, more and more professional vocabulary is introduced to students and strengthened in the latter application. Key point of oral communication teaching design is taking fluency first as the

most important principle, with purpose of training capability of expressing ideas in English. Simple sentence is enough to express a point, so complex structures or sentences are not encouraged in our teaching.

Teaching process is as follows. Each lesson begins with a vocabulary memorization competition or a guessing word game. For vocabulary memorization competition, each student can write one to five words he or she has memorized from words list on the wall. The group with the largest number of correct words for all students belonging to this group wins. Because all students are interested in playing games and they want to win, they will put all their efforts in memorizing these words. By this way, passion for learning professional English vocabulary will be aroused and good teaching effects will be obtained. For guessing word game, different groups of new vocabulary will be sent to different group of students to learn. Then one delegate of each group tries to explain the meaning of words belonging to his or her group. If other students guess the correct word for the English explanation, then this group will get 1 point. The group who guess the word will get 1 point too. Purpose of this process is to train English oral expression for one professional word with simple sentences.

Second step for oral communication teaching is debate. Here, free debate is adopted, which will be around two teams consisting of four students. Topics of free debate is concerned with development of computer science or new technology such as cloud computing. Students will have enough time to prepare materials for their supporting point. A debater in pros speaks first then a debater in cons speaks. Two teams take turns, until the time is up. During the debate, debaters cannot read the information that is prepared before. But they can show the summary of any newspaper or book. By this debate preparation and statement process, students will learn to catch key points of English expression for academic oral communication.

After two or three classes of preparation, formal academic oral communication teaching begins. The teaching will revolve around specifications, presentation, discussion and other factors, which is shown in Fig.1.

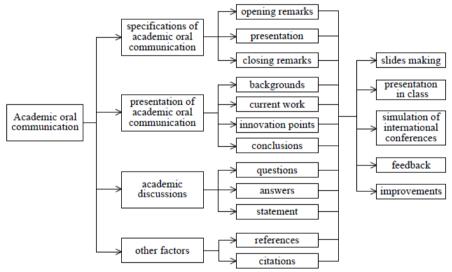


Figure 1. Teaching design of academic oral communication.

Specifications of academic oral communication need to follow some routines provided by examples. Students will learn how to do opening remarks, presentation and closing remarks from examples. Presentation is the most difficult part for this teaching. Based on research backgrounds and related works, students will learn to introduce his or her current work with adoption of research methods and experimental results and give conclusions. In simulation of international conferences, each student is one author of one paper and each student should give a presentation before all audiences in class, which he or she learns how to make slides and give formal oral presentation. In discussion practice, each student learns to answer questions and argue with other researchers. According to academic routines, students learn to cite or reference other works. Based on these teaching activities, students are instrested in the learning process and practice their academic oral expression automatically.

C. Written Communication Teaching Design of EAP Teaching

Written communication is very important for students in their future education or jobs. So this training is necessary in our teaching. The introduction of written practice is a letter. It is very easy for students to introduce his or her study life to a friend. They will learn to write some sentences with correct grammar and spelling. Then teachers give some abstracts to students to read after class. There are some common rules in writing an abstract. For example, passive sentences are usually used and backgroud-purpose-your work-conclusion routine is usually used. Based on main body of one paper, students learn to catch key points of the paper and write an abstract for the paper. It is a little difficult for them to complete this work because most of these students have difficulty in writing acadmic papers even in Chinese. But with help of supervisors, students will learn a lot from this training process. Here, fluency is also the guidance principle. Simple sentences are enough for the abstract. The whole teaching design is shown in Fig.2.

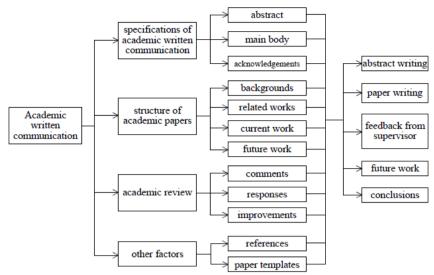


Figure 2. Teaching design of academic written communication.

As shown in Fig.2, specifications of academic written communication include abstract writing, main body of a paper and acknowledgements expression. Then structure of a formal academic paper will be introduced to students. One author should introduce research backgrounds, related works and give his own work and then the future work. After submission to one journal or conferences, the author will receive the review result. For comments of experts, one author needs to learn how to give right response to each comment and revise the paper. Based on the training, students will learn to write an abstract. Some good students learn to conclude their current work and write a formal academic paper. In the whole teaching process, both the EAP teacher and the supervisor of one student are the guiders for the student.

D. Speaking and Listening Teaching of EAP Teaching

Academic speaking and listening are included in each class. Singing English songs and some popular games are introduced as a best manner in the teaching process. For example, game of running man is very popular in China. So this game is adopted and changed in the class based on our requirements. How to express clearly and get understood are very important in the game. Different groups have different secret sentence as their code. Each group tries to guess a story to get the final conclusion. Each student enjoys the game very much, which revolves learning and practicing English process. Our students like to sing popular English songs such as "take me home, country roads" and "my heart will go on". Singing each sentence is also a kind of speaking and listening practice.

In general, teaching methods such as games, competitions, role play, debate, songs, simulation in various forms are adopted in our EAP teaching process for graduates of computer technology field. Different teaching methods and different teaching content are tried in two years of teaching. Each student enjoyes the teaching process and learns a lot from the class from feedback of students.

IV. IT TALENTS CULTIVATION BASED ON EAP TEACHING

A. Reasons for IT Talents Cultivation Based on EAP Teaching

In recents years, EAP teaching is very popular for graduates in all majors. But for students whose major is computer science, it is especially important for the following reasons. First, all up-to-date information or technology for computer science is English. And development of computer science comes from USA and Europe countries. So as a practioner in IT industry, each graduate should learn to know something he or she needed from large amounts of English documents. Second, all programming languages are English. Most of our graduates will do jobs related to software or project management. So professional vocabulary building and much pratice in EAP teaching are very important for their future work. Third, the most competitive software companies are international companies, which will adopt English as their working language. If our graduates want to enter these companies, language is the first stepping stone for their positions. By these reasons, EAP teaching is clearly in order in graduate teaching schedule especially for students with computer science as their major.

B. Key Points of IT Talents Cultivation Based on EAP Teaching

Based on experiences of two years EAP teaching, there are some key points we need to emplasize. IT talents cultivation especially IT international talents cultivation based on EAP teaching is feasible. Certaily, EAP teaching is only the basis for academic introduction, not the crucial factor. Students will learn something important for their future research work. With academic training of listening, speaking, reading and writing, most students will learn to begin their research by reading English academic documents. Fluency is the primary element for English expression whether

in oral or in written. Simple sentence is enough for most cases. And clear expression and statement are the key points in a lot of best English papers in science or other top journals. So fluency is our teaching guiding priciple. Complex sentences or complicated expressions are not encouraged. Hardware and software for dummies are not bad, but are our goals. So our graduates, IT practitioners should learn to express clearly and fluently with simple senteces.

V. QUESTIONS WORTHY OF CONSIDERATION FOR EAP TEACHING

EAP teaching tries to set a bridge between college English and professional English. So teaching content, teaching design, teaching method of EAP should be different from traditional English teaching. There are some questions needed to be considered in EAP teaching process.

(1) how to adopt flexible and enjoyable teaching methods in EAP teaching

From primary school to high school to university, our students have too many English classes. The emphases of these English classes are entrance grades or passing the exam. Few of them have a lot fun in the learning process. So in graduate education, students will be reluctant to learn English. How to attract students attention and interests plays a very important role in EAP teaching. Teaching purpose of EAP is to train students how to apply English in academic communication. So how to adopt flexible and enjoyable teaching methods in EAP teaching is very important for teachers. If popular TV games such as "Running man" or "reality show" are introduced in EAP teaching, students will be full of enthusiasm and try their best to fulfill each task arranged in the game because they want be the winner. They will enjoy the studying process and learn something important for academic communication. Whether a student has good or bad command of English expression, he or she will find it easy to participate in the teaching and learning process. All classes are students-centered. What a teacher should do is to make a careful plan for each minute of the lessons. Certainly, game is only one form of teaching methods. Other methods such as competition, interaction, guessing words, team work, debate and discussions can also be adopted. By these activities, students will learn to build self confidence in oral or written English expression and try to pursue and further the practice of a higher development goals.

(2) how to make full use of all kinds of online or offline IT technical means for EAP teaching

With limited class hours, it is very hard for EAP teaching to meet requirements of all students. Regardless of many teaching contents a teacher has designed, students will find it hard to complete an academic task such as paper writing. So how to solve this problem is very difficult. With development of IT industry, App of mobile phones, Wechat, QQ discussion group, electronic book, online learning system, multimedia platform have been very popular in the university. Moreover, working emphasis of guidance committee for national engineering graduate education is to construct online courses. So EAP teaching resources should be covered in mobile App, Wechat, QQ, online systems and so on. Only by deployment of teaching resources on all kinds of new platforms, EAP teaching will be changed from traditional teaching to open teaching. With integration teaching resources in audio, video, animation, image, text forms, students will find it easy to access any resource he or she want to search to learn. So teaching places or teaching activities have been expanded from classrooms to everywhere.

(3) how to train highly qualified and well trained EAP teacher teams

Teaching teams are the last, but not the least factor for EAP teaching. Academic background of EAP teacher is very different from tradition English teaching. Many people from USA or Europe find it easy to be an English teacher in China because English is the only determining factor. But for academic English teaching, not only English but also major is very important. A teacher of EAP teaching needs to design simulation of international conferences, discussion for one academic topic, academic debate for some academic idea. If he or she knows nothing about the academic field, it is impossible for him or her to complete the teaching design. The teacher of EAP teaching must lead students to complete PPT presentation for their work, papers searching, papers review, papers writing and template using. So major of EAP teachers should be some academic field. One feasible way for EAP teacher teams is to choose professional teachers with some academic background and with some overseas study or teaching experiences. To be prepared for the requirement of EAP teachers, a university should be prepared to train some EAP teacher teams in every academic field. Overseas training and teaching practice in EAP teaching are both important. By this way, EAP teachers not only have a good command of English, but also have advantage of academic views.

VI. CONCLUSIONS

For graduates with professional master degree, especially for computer science major, EAP teaching is very important for their academic communication and their future job or further education. In order to cultivate students with competence of cross-cultural communication and international competitive experiences, EAP teaching began from two years ago in our university. With statistical data collected from nearly 100 graduates of our university, EAP teaching program plays a very important role in their future education or jobs. They have learned to do their research seraching and summarization and to think critically and to analyze an argument. The ability to express himself or herself is the most important. So fluency first is our guiding principle to cultivate graduates' academic communication competence, which is in accordance with trend of development of computer science. In our future EAP reform, new teaching

methods will be tried and flexible teaching schedule will be designed. And EAP teacher teams, introduce of new IT technology and flexible teaching practice will be also tried.

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