Research on the Blended Teaching & Learning Construction of ESP Courses Based on OBE Model: A Case Study of the IT English Course

Xiaoxuan Yang

School of Foreign Languages

Dalian Neusoft University of Information

Dalian, China

Abstract—Blended teaching & learning combines traditional face-to-face learning methods with technology-based eLearning methods. Based on the Outcome Based Education (OBE) model, the paper proposes the blended teaching & learning reform of English for Specific Purposes (ESP) courses. Taking the course of *IT English* as the case, the paper constructs the course resources and designs the teaching & learning process, aiming to satisfy the requirements of blended teaching & learning and improve learning effect of students. For each unit, a complete study guide is provided for students, which clearly specifies the teaching & learning arrangement before, during and after each class. Accordingly, students can effectively use the course resources (including courseware, micro courses, reading exercises, extended learning materials, etc.) to reasonably organize learning activities and achieve better learning effects. The paper hopes to shed light on further studies on blended teaching & learning construction of ESP courses.

Keywords—blended teaching & learning, ESP, OBE, IT English

I. INTRODUCTION

Following the English for General Purposes (EGP) courses set for freshmen and sophomores majoring in English, ESP courses promote English teaching & learning onto the application level in various fields and industries. As EGP courses aims to lay a solid foundation in language knowledge and skills, ESP courses are more focused on the actual use of English in practical work and life. Therefore, for ESP courses, students' learning effect can be more directly and clearly reflected through their outcomes (such as oral presentation, listening comprehension, report writing, technical document reading and translation, etc. in certain industry or field). Blended teaching & learning is an approach combining online educational materials and opportunities for instruction online with traditional place-based classroom methods. Face-to-face classroom practices are combined with computer-mediated activities regarding content and delivery [1]. In blended teaching & learning mode, teachers are responsible to guide, support, monitor and control the teaching & learning process while students make full use of the resources and environment created by teachers to autonomously study [2].

OBE is a classical educational theory, proposed by Spady William in the year of 1994. The theory bases each part of an educational system around goals or outcomes. By the end of any educational experience, each learner should have achieved the goal. There is no single specified style of teaching or assessment in the OBE theory; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes [3]. Under the guidance of OBE theory, the paper designs and implements the blended teaching & learning construction of the *IT English* course, offering some reference for future studies on blended teaching & learning construction of ESP courses.

II. BLENDED TEACHING & LEARNING CONSTRUCTION OF IT ENGLISH

As a typical ESP course, *IT English* is set for junior students majoring in English and business English. The course aims to improve students' English language skills and professional knowledge in the field of IT and software development. The course content is mainly focused on the 6 phases in Software Development Life Cycle (SDLC), including Feasibility Study, Requirements Analysis, Design, Implementation, Testing and Operation & Maintenance. All the course resources should be concentrated on the students with the aim of achieving good learning outcome and effect. Therefore, the paper conducts the blended teaching & learning construction of IT English from the following 3 aspects of course resources construction, teaching & learning implementation, and the platform construction.

A. Course Resources Construction

To better satisfy the requirements of blended teaching & learning, sufficient resources in various forms should be constructed and provided to students at different stages of learning.

1) Study Guide

In the first place, a clear study guide for each unit should be provided with specific tasks, activities, arrangements and questions, as well as assignments and deliverables at certain stage. For each individual class, all the items are well

organized and arranged before, during and after the face-to-face classroom teaching.

2) Micro Courses

Six micro courses are made, concentrating on the six phases of SDLC individually. In each micro course video, the core professional knowledge of each phase (course unit) is interpreted within fifteen minutes. Several questions (both open-end and closed-end questions) are set according to the main content of the micro course, aiding students to check how much they have understood. Before each unit, students can be arranged to watch the corresponding micro course video, master all the professional vocabulary and expressions, and understand all the professional knowledge. The content of each micro course video is required to be interesting and challenging enough, so as to arouse students' passion and initiative of learning.

Fig. 1. Six micro courses

3) Courseware

Each course unit is composed of four modules, including business conversation, technical conversation, technical reading and technical writing. Except for the application in class, the courseware can also be shared with students after each class, facilitating students to review the knowledge and complete assignments.

4) Assignments

After-class assignments (dictation, oral practice, translation, email writing, etc.) should be specified and shared with students on the platform, which is convenient for students to check the specific requirements and standards anytime and anywhere after class.

5) Extended Learning Materials

For the students who have the desire and the capacity to further their study on the topic of the unit, some extended learning materials are shared with students on the platform.

B. Teaching & Learning Implementation

Based on the OBE educational theory, the aim of blended teaching & learning construction of *IT English* is to achieve better study outcome and effect. Except for the sufficient course resources in various forms, scientific and reasonable teaching & learning design and implementation is quite critical and indispensible.

1) Teaching & Learning Strategy

As the soul of blended teaching & learning design, teaching objectives, difficulties and focuses lead all the teaching & learning activities and tasks. Teachers should let students exactly know the teaching objectives, difficulties and focuses at the very beginning [4]. After students complete course projects, assignments and tasks, except for grading, teachers should offer comment and feedback in time for students to make improvement and modification.

2) Blended Teaching & Learning Activities

Before Class: In the new English teaching mode, the pre-class learning stage contains the two aspects of watching video and previewing [5]. After watching the micro course video of certain unit, students are required to master all the professional vocabulary and expressions, as well as to understand all the professional knowledge, laying solid foundation for classroom teaching & learning. Several open-ended and closed-ended questions are also offered to students to think over.

In Class: Centered on the difficulties and focuses of the unit, the teacher carefully arranges teaching contents and activities. Different from the lecturing and explaining methods adopted in traditional teaching & learning, discussion, debate, practice and other interactive teaching methods are more frequently used, which effectively promote students' understanding of the professional knowledge and improve students' practical use of IT professional English.

After Class: Relative courseware, practice and assignments are shared on the platform for students to review the knowledge and check the requirements of tasks. If some students have both the desire and the competence to learn more about extra knowledge about the unit topic, they can download and access the extended learning materials prepared by the teacher. Therefore, all the students, whatever their learning capabilities or knowledge reserves are, can achieve decent learning effect.

Process Monitoring: The teacher can monitor and evaluate students' learning process through the data acquired from the platform (visit times, online learning duration, etc.), questionnaires, interview, etc. The teacher can offer accurate and prompt feedback on their learning performance and results to students, which can help improve teaching & learning effect constantly.

C. Blended Teaching & Learning Resources Platform

An intranet platform dedicated for blended teaching & learning has been constructed and put in use in Dalian Neusoft University of Information. After the teacher creates the course teaching calendar on the platform, the knowledge structure of the course is automatically generated. In accordance with the specification of the unit study guide, the teacher uploads all the

teaching & learning materials of different types onto the platform. Students download the course and unit study guide first so as to understand the proper learning process, like what should be learned or completed before, during and after each class, and get to know how and when to use different types of the teaching & learning resources of the course. Various file types of learning resources are supported on the blended teaching & learning resources platform, including different types of text, image, video, audio, webpage and compressed files. Teachers can choose to upload, quote and link to certain files or network address while students can choose to download or check online certain files. The data of students' online learning can be recorded and reported to the teacher, including students' learning items, online learning duration, visit times, etc., all of which can be applied by the teacher to monitor and control students' learning process. Additionally, teachers will be prompted with information of the students who seldom get involved in learning activities recently, making it possible for teachers to remind or warn the students. Some follow-up objective questions, like multiple choice and True or False questions, can be set in advance based on the micro course video. Through those questions, students can check how much they have understood and mastered after watching the video and before coming into the classroom.

III. CONCLUSION

For the purpose of improving students' ESP course learning effect and outcome, sufficient learning resources and specific learning guide should be provided to students before, during and after teaching & learning process, which can be achieved through blended teaching & learning reform of the course. The comprehensive and clear study guide is indispensible for students to understand the complete learning process and methods. Whatever the file types are, all the resources should be interesting and challenging, so as to arouse students' learning passion and desire. Based on the educational theory of OBE, blended teaching & learning is to provide sufficient learning resources for students to conduct autonomous learning. However, in all cases, it is quite critical for teachers to monitor, control and evaluate students' learning process and offer feedback and warning in time, for students to constantly improve learning effect of ESP courses.

REFERENCES

[1] Strauss, Valerie. Three Fears about Blended Learning. The Washington Post. 2012.5

[2] Lin Xueyan. Design and Implementation of Blended Teaching and Learning Mode Based on Flipped Classroom. China Vocational and Technical Education. 2016.2

[3] Spady, William. Outcome-Based Education: Critical Issues and Answers. American Association of School Administrators. 1994.10

[4] Li Fengqing. The Theoretical Basis and Instructional Design of Blended Teaching. Modern Educational Technology. 2016.9

[5] Li Huiju. Research on the Reform of College English Teaching Mode Based on the Combination of OBE Concept and Flipped Classroom. Journal of Changchun Institute of Technology (Social Sciences Edition). 2016.12