On Ecological Affordances of Learning Environment in Courses of English for Specific Purposes from Outcome-Based Education Perspective Taking Online Course Tourism English as an Example

Na Li¹

ABSTRACT

The learning environment plays an important role in the teaching of English for Specific Purposes, especially for the courses with the help of online courses. This paper explores the fundamental goal of establishing the learning environment for such courses, and proposes that the learning environment should match the theories of Ecological Affordances and Outcome-Based Education, based on the learners' learning needs. Abiding by these two theories, the paper puts forward the specific principles and implementing approaches in the practice of constructing the learning environment in online course of Tourism English, in order to enhance the learning effectiveness of the learners.

Keywords: Outcome-based education, Affordance, Learning environment, Tourism English, Online course.

1. INTRODUCTION

Currently, the rapid development of information technology and artificial intelligence has brought great changes to global higher education. ESP (English for special purposes) course is an important part of college English curriculum system in China. It plays an important role in promoting comprehensive English application abilities, humanistic literacy, and career development of Chinese college English students.

Nowadays, most colleges and universities in China offer ESP courses, involving a large number of students. The teaching of ESP courses strives to meet the needs of serving the society and students' growth, emphasizing the instrumental and humanistic nature of college English courses, and is actively carrying out teaching reform relying on online course construction.

Tourism English is a popular ESP course among students of Zhongshan College. This course aims to expand students' professional basic knowledge and practical English skills related to tourism. In the new era, teachers should continuously improve the design of online courses, optimize the affordances of learning environment, further promote students' learning outcomes, and enhance teaching effectiveness.

In response to the requirements of high-quality online course construction in China and the concept of online and offline blended teaching, how to design good online course teaching resources, create a better learning environment, and effectively promote the effectiveness of blended learning is a hot topic in Chinese ESP course teaching of college English.

This article takes tourism English as an example to explore the affordances of online course learning environment. On the basis of analyzing the nature of the course and students' needs, the OBE concept and supply theory should be followed to create a high-quality learning environment for students. Based on previous teaching practices, this article explores the objectives and design principles of creating an online learning environment for this course. Besides, this article discusses how to establish a reasonable and scientific learning module for the online course Tourism English, in

¹ University of Electronic Science and Technology of China, Zhongshan College, Zhongshan, Guangdong, China

order to improve the learning environment and effective affordance, and enhance students' learning effectiveness.

2. CURRICULUM OBJECTIVE AND ANALYSIS OF STUDENTS' NEEDS

As an ESP course, tourism English in Zhongshan College aims to expand students' professional basic knowledge and practical English skills. This course aims to cultivate students' comprehensive humanistic literacy international horizons, enhances their cross-cultural communication skills and critical thinking, and provides English comprehensive skills for the students in practical situations such as travelling, exhibitions, foreign receptions and foreign exchanges. It conducts situational practical training based on some topics related with tourism. The course adopts online and offline blended teaching and emphasizes "student-centered and outputoriented" model. It promotes the comprehensive application of project-based, task-based and cooperative learning modes, which fully promotes students' enthusiasm and autonomy in learning, and enhances students' comprehensive application capabilities in international tourism communication. It expands students' tourist knowledge and cross-cultural communication skills, and develops students' humanistic literacy to meet the needs of current social development and globalization.

The teaching team of tourism English had carried out course teaching for 5 semesters, and had made several surveys on students' needs. The team also produced several summaries on teaching reflections of these five semesters. The major needs of the students can be summed up as follows: 1) to learn tourism knowledge and content related to the theme of each unit, and expand their understanding of the tourism industry; 2) to master practical oral expressions of tourism English in the context of theme, and improve their practical communication skills of tourism English in each unit; 3) to enhance students' autonomous learning ability and sense of learning achievement by blended learning; 4) to improve students' academic literacy and skills in searching, reading, evaluating, analyzing, summarizing, and elaborating on literature materials by carrying out group project tasks; 5) to enhance critical thinking and crossimprove communication skills, cultural comprehensive humanistic literacy and future

employment skills by taking part in classroom discussions and completing group presentations.

3. OBE & AFFORDANCE THEORY

The concept of OBE (Outcome-Based Education) was put forward by Spady (1981 & 1994), which advocates the outcomes of students' learning, takes students' expected outcomes as the goals of the curriculum, and is applied in the whole course system construction process, so as to achieve the transformation from teachers' teaching to students' learning.

The concept of OBE is a reverse teaching design. In teaching process, teachers aim at the outcomes of learning that the students can achieve and carry out their relative teaching designs. The whole teaching process is student-centered and focuses on the output of learning outcomes. This concept emphasizes student-centered and outcomeoriented, and advocates the reverse design of teaching process which aims at students' expected learning outcomes. OBE is also regarded as the correct direction of pursuing excellent education and an educational concept worth learning. The philosophy of OBE teaching is also called outcomeoriented education, which emphasizes expected learning outcomes the students' have achieved in the learning process and puts emphasis on students' autonomous learning and self-realization. OBE focuses on students' learning outcomes, advocates a student-centered approach in the teaching process, emphasizes reverse design in teaching plan, and realizes the transformation from "focusing on content" to "focusing on output". Teachers should be clear about the students' learning objectives and think about what the students can achieve after their learning, and then design teaching contents and learning activities accordingly.

The theory of ecological affordances originates from educational ecology. Educational ecology focuses on relationship and mechanism between education and its ecological environment by applying ecological principles such as ecosystem and ecological balance. The core of educational ecology is about how to promote the balance of educational ecosystem and maximize the benefits of education.

The concept of "ecological affordances" was first put forward by Gibson (1977), and then he made continuous research and proposed relevant principles. Gibson (1979) gave his description of affordances, that is, "the affordance of the

environment are what it offers the animal, what it provides or furnishes, either for good or ill". (1988) introduced the concept Norman "ecological affordance" into the information technology research, paying attention to the function design of human-computer interaction, and believed that only the contents that urge users to take practical actions in the information technology environment can be transformed into affordance. Qin Lili & Dai Weidong (2015: 228) put forward that affordance means that language learners can transform the resources and interactive opportunities of learning environment they can obtain into the meaningful positive or negative contents of language learning through interpretation and subsequent action. On the macro level, the generation of affordances is the product of the interaction of language users, environment and language (Qin Lili, He Yanhua & Ouyang Xibei; 2020: 92). On a macroscopic level, affordance is a circulation created by the continuous interaction among perception, interpretation and action (van Lier, 2004: 92).

Affordance is regarded as the natural correlation and dynamic adaptation between learners and learning environment. Only when online course design matches students' learning needs and learning efficiency, and can be perceived and interpreted by the students who later can take relevant actions, can the course design be transformed into positive affordances.

4. OBJECTIVES, PRINCIPLES AND REALIZATION PATHS OF CREATING EFFECTIVE AFFORDANCES FOR ONLINE COURSE LEARNING ENVIRONMENT

The theory of ecological affordances is of great significance for online and offline blended teaching, online course learning environment and other research fields. When the students study online courses, they need to perceive the learning resources and interactive learning opportunities of the online course learning environment, know their functions, and take corresponding actions to make transforming affordances happen. Affordances also emerge from some specific activities created by online courses. Teachers can create the learning environment of online courses with learning resources, interactive learning opportunities and actions which include students' participation in the course learning process, so as to transform it into

effective affordances and promote the effectiveness of online course learning.

It is very significant and valuable to apply OBE to the online and offline blended teaching and online courses widely carried out in Chinese colleges and universities. OBE is based on outcome-oriented and ability-oriented education, which has been widely applied in college English teaching in China. OBE emphasizes students' outcomes, which is the starting point of task-driven teaching, and has also been included in the teaching objectives of many courses.

Applying OBE in the whole process of online course construction of Tourism English is of great significance: 1) OBE is a guidance in designing modules of online course Tourism English, which can effectively enhance the quality of online and offline blended teaching, promote the proper teaching content, teaching activities and task design of each module, and effectively improve students' learning enthusiasm and autonomous learning abilities; 2) OBE will help students achieve their learning objectives and competences for this course, and effectively help them learn two main parts of this course, namely, the main knowledge related with some interesting tourist topics and the practical tourist English skills in some important situations; 3) It will effectively improve the quality of online courses, improve the teaching design of unit modules, promote the realization of effective affordances, and provide effective support and guidance for making this course be a better online course.

4.1 Objectives & Principles

The ideal learning environment created by online courses can provide students with effective learning opportunities. Everything in the language world that students can use and actively participate in is affordances. Only by perceiving and interpreting these learning opportunities, and then taking actions, can students turn them into positive affordances.

Students are learners and users of language. In the process of online course learning, students can play an active role in language learning activities and improve their learning efficiency by paying attention to their own needs, understanding the teaching objectives and orientations of the course, and focusing on their own learning progress and expectations for acquisition and using of language and practical skills. Teachers should create an effective learning environment for students through the curriculum platform, and promote the occurrence of effective affordances in order to accomplish the teaching goals.

Taking online course Tourism English as an example, the objectives of creating an effective learning environment can be summarized as follows: to be based on the course orientations and students' learning needs, to design reasonable, comprehensive and attractive course unit modules referring to the main teaching modules of this course, to create rich and appropriate teaching resources, to achieve effective affordances and promote the generation of students' learning outcomes.

In order to accomplish these objectives, this paper puts forward the principles of establishing effective affordances for online course learning environment of Tourism English. These specific principles are as follows: 1) To be guided by the concept of OBE and the theory of ecological affordances, develop student-centered teaching, and to focus on students' outcomes, and adopt reverse design of teaching; 2) To implement online and offline blended teaching and carry out the complete design of pre-class, in-class and after-class teaching to design various modules of each unit; 3) To ensure module setting of each unit, and teaching resources and interactive activities provided in each module, which should be based on students' learning needs and course orientations, and provide necessary, reasonable, rich and effective teaching designs.

4.2 Realization Paths

Tourism English is an ESP course, which belongs to academic English series of college English. At the beginning of its establishment, this course aims to meet the needs of students for learning specialized English and serve their professional study. The teaching design of this course aims to expand students' basic knowledge of tourism, broaden their core vocabularies related to tourism, enhance their practical tourism English expression and skills, improve their comprehensive English application ability based on tourist contexts, develop their cross-cultural communication ability, critical thinking, international perspective and humanistic literacy, and strengthen their practical application abilities in tourism situations in order to meet the needs of social development and future employment.

Based on the above course requirements and orientations, the course has been promoting the teaching concept of OBE, implementing an reform of online and offline blended teaching, focusing on formative evaluation and course process assessment, relying on online course designing, creating high-quality teaching resources and modules, guiding students to actively engage in autonomous studying, group cooperative learning, and project-based learning, in order to promote students' outcomes and the formation of high-level thinking skills and learning abilities, and fully enhance students' learning efficiency and sense of achievement.

Creating high-quality online course resources and effectively providing effective affordances of learning environment for the course platform are key to achieving these teaching objectives. This paper proposes some effective realization paths for creating effective affordances of learning environment for this online course platform.

First, it is necessary to make a learning environment into a dynamic, comprehensive, and adaptive ecosystem with unified modules and abundant resources. In online course, each unit offers seven modules: Lead-in Activities, Comprehension of Text A/B, Further Study, Stories about China's Tourism, Situational Dialogue Training, and Practical Project Training. These seven modules involve three stages: theme learning of each unit, key content learning and expansion, and students' learning outcomes. The teaching process follows the whole teaching process of preclass, in-class and after-class sections. Based on teaching practice and students' feedback of several semesters, the teaching group continuously adjusts and improves the learning resources of each module, and dynamically adjust the learning environment in a timely manner according to the actual transformation of affordances, so as to form a course platform of self-harmonic and complete ecological affordances.

Second, in order to ensure the formation of students' positive affordances and the output of high-quality learning outcomes, and to enhance the effectiveness of online and offline blended learning, the interactive activities designed for each module of the course platform should provide necessary supports to help students achieve the learning effects of each module smoothly and achieve positive affordances of the learning environment. For example, in the module of Lead-in Activities, the written statements and questions are provided for students to learn and understand audio-visual

materials smoothly. In the module of Stories about China's Tourism, the designers specifically annotate difficult vocabularies with Chinese versions to help students learn, understand, and master English vocabularies of these Chinese unique expressions. In the module of Situational Dialogue Training, the platform provides dialogue task lists, useful English expressions and audios and videos of relevant situational dialogues, as well as samples of dialogue videos made by previous students for the present and future students who are about to learn this course. The module of Practical Project Training also provides project task lists, guidance of project implementation, and excellent projects achieved by previous students for the present students.

Third, there is a must to improve the implementation process of blended learning based on the concept of OBE by promoting students' learning outcomes and effectively providing resources, integrating classroom teaching with online course teaching resources, and emphasizing the implementation and feedback of previous blended learning. Teachers should guide students to apply what they have learned in the practical situations created by the teachers, achieve constructing their own theme contents and language knowledge of each unit, and promote the formation of high-level thinking skills such as analysis, synthesis, evaluation and innovation. Teachers should fully stimulate students' learning enthusiasm by providing rich multi-modal learning resources of each unit and encouraging students to perceive relevant learning resources and interactive opportunities, interpret them, and take learning actions under the drive of task lists, thus promoting positive affordances of the course platform.

Before class, the teachers distributes pre-class task lists to guide students to watch the lead-in videos, discuss important issues related with specific theme of each unit, preview key vocabularies and main contents of Text A/B, and watch the teacher's lecture videos of two texts, in order to further understand the texts. Teachers guide students to successfully complete autonomous study with theme discussions of each unit set by the teacher before the class, and learn supplementary contents, key tourism professional terminologies and vocabularies of each unit.

In class, the teachers mainly tests the effectiveness of students' autonomous learning and online learning before the class, asks students many questions about key vocabularies and difficult

terms of each unit, and conducts teacher-student discussions to share students' understanding of key contents and learning experiences of each unit. Based on these teaching activities, the teachers summarize the key contents of each unit, and provide some appropriate learning extensions for students.

After class, students engage in online learning expansion and practical training of each unit and watch the module of Further Study and teaching videos on Stories about China's Tourism, so as to deepen their understanding of the main contents of each unit, and also enhance their understanding of Chinese tourism situation, culture and economy. What is expected for this stage is to deepen their understanding of China's tourism resources and enhance national pride and enthusiasm for China's tourism resources. After finishing the fundamental study of each unit, students continue to learn relevant examples of situational dialogues, conduct practical training in groups, and record situational dialogue videos. Based on learning achievements of previous students' projects and project tasks of each unit, teachers guide students to search and read project materials, summarize the key information, complete the group project report of each unit, make files of PPT and complete the video recording of the project report.

Fourth, guided by the output of students' learning outcomes, the teachers aim to build online courses which are rich in positive affordances, establish a teacher-student community in which teachers play the leading role and students are the main participators of the study, stimulate students' learning potentials, improve teaching effectiveness, and enhance students' sense of achievement. The teachers should deeply integrate information technology with foreign language education, implement blended learning models such as flipped classroom and PBL teaching, promote the output of students' learning outcomes, and achieve dynamic teaching management and course assessment. Teachers should carefully design classroom activities based on students' output, take students as the center of teaching procedure, implement taskbased, project-based and collaborative learning, use students' learning outcomes as the main basis for process assessment, and carry out a whole-process and diversified formative evaluation. constructing online courses and implementing blended learning, the teachers aim to enhance the quality and level of students' learning outcomes. When students study online by the online course, teachers should apply the concept of OBE and the theory of positive affordances to provide timely supports and assistance for students to help them complete group learning outcomes and improve the quality of their output, guide students to fully experience learning by doing and doing by learning, and enhance their sense of achievement.

5. CONCLUSION

This paper is guided by the concept of OBE and the theory of ecological affordances, takes online course Tourism English as an example and explores the creation of effective affordances for the learning environment of the course platform. It proposes the objectives and principles for creating effective affordances for the learning environment of this online course, and clarifies the implementation paths based on previous teaching practices.

Creating high-level curriculum platform and promoting effective affordances of learning environment depend on teachers' understanding and practice of advanced educational concepts, and teachers' focusing on students' needs curriculum orientations. The concept of OBE and the theorty of ecological affordances are integrated with the current online and offline blended teaching implemented in China, which can improve the construction of teachers' online course learning environment and ultimately promote the output of excellent learning outcomes. construction of online course learning is dynamic and should be improved based on feedback from teachers and students. Building a teacher-student community and increasing teacher-student interaction can also promote the formation of positive affordances for learning platforms.

ACKNOWLEDGMENTS

This research is supported by projects named Research on the Application of OBE-Oriented Model in Open Online Tourism English Course (2022ZXKC544); Understanding by Design: Combining Moral and Technical Education in Tourism English Course — An Ideological and Teaching Exploration (SJY202305); Research on the Teaching Practice Effectiveness of Ideological and Political Education in ESP Courses from the Perspective of KWL Model (SJY202202); Influencing Factors of Mobile Learning for Foreign Language Learners from the Perspective of UTAUT-SOR Model: A Case study of the Guangdong-Hong Kong-Macao Greater Bay

Area Curriculum Alliance Platform (2023GXJK541).

REFERENCES

- [1] Gibson, J. J. The theory of affordances. In Shaw R & Bransford J (eds.). Perceiving, Acting, and Knowing: Toward an Ecological Psychology. Hillsdale, N J:Lawrence Erlbaum, 1977. 67-82.
- [2] Gibson, J. J. 1979. The Ecological Approach to Visual Perception. Boston: Houghton Mifflin.
- [3] Norman, D. A. The Psychology of Everyday Things. New York: Basic Books, 1988.
- [4] Qin, Lili. & Weidong Dai. 2015. Internalization Mechanism of English Knowledge from the Perspective of Ecological Affordances—Through Class Presentation Activities. Modern Foreign Languages (2): 227-237.
- [5] Qin, Lili, Yanhua He & Xibei Ouyang. 2020. Internalization Mechanism of English Knowledge from the Perspective of Ecological Affordances—Through Class Presentation Activities. Journal of Beijing International Studies University (4):92-106. DOI: 10.12002/j.bisu.295.
- [6] Spady, William G. 1981. Outcome-based Instructional Management: A Sociological Perspective. Washington DC: National Institute of Education.
- [7] Spady, William G. 1994. Outcome-based Education: Critical Issue and Answers. Arlington: American Association of school Administrators.
- [8] Van Lier, L. 2004. The Ecology and Semiotics of Language Learning: A Sociocultural Perspective. Boston:Kluwer Academic.