

The Blended Teaching and Learning Online and Offline From the Perspective of Independence and Interaction Taking English Teaching as an Example

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ABSTRACT

This paper studies the origin, development, characteristics, forms, application ways and influence of blended English teaching and learning online and offline from the perspective of independence and interaction. Online education such as MOOC and SPOC enable learners to accept classical and up-to-date English learning materials from famous universities home and abroad and to arrange independent learning at their own pace. Offline education of the blended teaching and learning helps promote the deep understanding and overall application of English knowledge through face-to-face or other means of communication and interaction between teachers and students or among students themselves. An integrated approach of combining induction and deduction and drawing upon materials form the basis of the present study with a view to bring out the implications of the blended English teaching and learning: playing the functions of realizing the roles of learners as main participants and teachers as instructors; promoting learners' development of autonomous learning and social ability; cultivating learners' global vision and comprehensive English ability and creating a sustainable and balanced educational ecology.

Keywords: the blended English teaching and learning, online and offline education, independence, interaction

I. INTRODUCTION

The blended teaching and learning is a systematic mixture of face-to-face offline style and E-learning style.[1] Different scholars have the various definitions to the blended teaching and learning. Collis and Moonen held that the blended teaching and learning combines the traditional face-to-face style with online teaching and learning, that is, teachers make lectures not only in classrooms but also online, so the online teaching and learning is the expansion of the process that occurs in the classrooms. Li Kedong argued that the blended teaching and learning is the integration not only of two learning styles that developed from different theories. In addition, the blended learning requires the teachers to play the assistant roles and students to play the leading roles. The blended learning refers to the combination of study that takes place in the classrooms and online occasion with the support of the different multimedia. The famous Chinese scholar He Kekang explained the blended teaching and learning as follows: the blended teaching and learning will give a full play to the advantages of both traditional learning and E-learning. In the blended learning, teachers

instruct, inspire and monitor the students' learning process, as a result, students would be more active, enterprising and creative to carry out their own study. Under the support of information technology, the combination of the traditional and online learning sources would make the blended teaching and learning achieve the greatest learning efficiency. The reason why is that it can satisfy the learners' personalized need for autonomous learning.[2]

II. ONLINE EDUCATION

The online education originated from the middle 19 century Britain and developed rapidly in 1970s with the great progress of information technology, the design and development of courses and the support service of study. Nowadays, the online education, with the assistance of mobile phone, computer and Internet, has been gradually and widely accepted by increasing teachers and students. Online education integrates various sorts of modern education ideologies whose common characteristic is that the students should be the main focus during the educational process. Therefore, online education should be preplanned whether in selection and presentation of teaching materials or in

the management and support of students. Besides, online education has a high requirement for students' autonomous and independent quality. In other words, students should have a strong sense of responsibility and self-control to their own study, especially in setting up learning goals, methods and evaluation ways.

The pioneer of online education is professor Wedemeyer who put forward the theories of autonomy and independence in 1971. He also illustrated the features of independent learning as follows: firstly, students and teachers are separated to fulfill learning tasks or teaching duty in different communicative ways; secondly, the teaching process is carried out with the help of communicative media; thirdly, according to students' own learning pace, they can start their learning in their most convenient places or stop their learning anytime, most of all, students should be responsible for their own education.

According to professor Wedemeyer's opinion, the study is accomplished by students' acquiring, internalizing and evaluating knowledge. Because of the limit of class size, the course schedule and the class hours in the traditional teaching and learning model, there is a gap of English learning effect among different students. The students who learn slowly and fail to catch the teaching contents tend to behave negatively in English class, worst of all, they finally skip English classes. Likewise, the students who learn quickly would not get inspiration of learning English because the teaching content seems easy for them and lack of challenge, consequently, they lose the aspiration to explore knowledge in English class.

However, the online English course possibly accommodate almost every students' unique learning pace. In the online education process, the students who learn slowly could rewind or pause videos repeatedly until they grasp minute and difficult knowledge points and catch up the schedule of English course, whereas, the students who learn quickly could choose more challenging learning material or finish larger amount of exercises to improve their English ability.

In fact, not everybody can achieve the independent learning with perfection because independent learning advocates the learners' self-instruction and self-management. In order to achieve idealistic goal, students should always keep the learning interest and driving force, keep up with the course pace and have a comprehensive assessment. In the support of intelligent calculation and big data, the personalized education could be achieved in some degree, which is regarded as the main stream of education in the future.

When it comes to the main forms of independent learning, MOOC and SPOC is the most recognized by public. MOOC means massive open online course, which is an Internet learning platform founded by

American prime universities in 2012. MOOC offers free-charge courses, which arouses world awareness in education domain. with the development of three course supporter enterprises Coursera, Udacity, edX, MOOC is available for more and more teachers and students. The courses in MOOC are usually designed and developed by the teams that are led by the professors from famous universities in the world. The professors are so professional in their research field that the courses are of wide popularity. What's more, as times goes by, the courses in MOOC get modified over and over again to ensure its excellent quality. The listing order of lessons in MOOC is from easy to difficult. Besides, MOOC is suitable for learners to attain knowledge in about ten-minute period, which takes a consideration to meet learners' need for fragmented learning.

There are several features in MOOC as follows: the diversified learning tools; easily-accessible courses; a wide range of learners; the autonomous participation. MOOC integrates different kinds of social network tools and digital sources to form course materials. What's more, the most convenient aspect of MOOC is that learners can get access to the courses designed by famous universities home and abroad without the limit of time and space under the support of Internet. As a consequence, the number of learners also exceeds substantially that of traditional courses. Besides, learners have choices to decide what courses they want to attend at their own desire. Because of MOOC's massive, open and online characteristics, students need to possess the great potential to implement the autonomous and independent learning. Teachers could choose suitable videos to support their online teaching in order to inspire students' English learning enthusiasm and interest. In fact, not every university has the ability or fund to construct or maintain a MOOC, and there is no need to do so indeed. It is wise for universities to take advantage of existing excellent MOOC courses to expose students in the real and selected English context and circumstance. The proper use of MOOC would possibly transcend the challenge and enhance educational effect.

SPOC refers to small private online course, which was put forward and founded by professor Armando Fox of MOOC lab director of University of California, Berkely in 2013. [3] The number range of SPOC learners is from dozens to hundreds, which is smaller than that of MOOC. Distinguishing from MOOC's open feature, SPOC is private, which means only the learners who are qualified to meet the standard of courses would be permitted to take the courses. SPOC combines the offline and online teaching and learning models to carry out the flipped classroom teaching and learning, especially making a full use of online materials such as MOOC videos or other online evaluation function. The typical procedure of SPOC is as follows. According to teaching plan, teachers assign

the online learning materials such as watching videos or presentation in a regular time to students as the homework, organize online discussion and integrate online and offline reference materials for students to read by themselves. Students should finish watching videos, homework and discussion in the set time according to learning schedule. After the online study, teachers should answer students' questions that are related to online learning to find out whether students grasp the language points or not and deal with the problems that appear in study or homework by discussing with students in the classroom. Teachers could adjust the teaching plan, learning schedule and evaluation system according to students' academic performance and learning need.

Different from MOOC which makes teachers serve the learners from all over the world and become widely recognized in the education domain, SPOC enables teachers to keep available in real campus and small online classroom. In SPOC, teachers are the organizer of course sources so they don't necessarily prepare the lecture content and play the role as the lecturers every class, but need to integrate various kinds of online and offline materials. During the classes, teachers are the instructors and promoters, they organize students to discuss in groups and provide personalized instruction anytime to help students overcome difficulty in learning process. SPOC makes innovation in the education model and inspires enthusiasm and vitality of teaching and learning. In some sense, SPOC inherits, develops and specifies MOOC, realizing private and small-sized education through combining online and offline education.[4]

SPOC takes advantage of MOOC technique to liberate teachers from repeated activities. Teachers could spare time and energy from introducing and explaining prepared knowledge and skill to activities of higher value such as discussion, teamwork, face-to-face communication, interaction and so on. Spoc utilizes MOOC's advantage and makes up for the shortcoming of traditional education to some extent. Besides, SPOC creates a learning atmosphere of interaction, diversified information and harmony without limit of time and space by combining traditional paper sources and Internet sources in the flipped classroom.

In recent years, AI technology raises increasing public awareness because it could be applied into the process of designing teaching and learning materials. The inference of intention in AI technology could be used to explore every user's real need, as a result, find users' internal need more comprehensively and deeply and then help Internet platform offer corresponding personalized service about learning content, method, sources and tools according to every user's internal requirement. The catcher of knowledge in AI technology could grasp language points of different

types in the article, recommend related learning sources, broaden learning range and strengthen the educational effect to achieve the goal of offering more efficient learning service and support. The augmented reality in AI technology could create concrete teaching and learning circumstance to specify abstract knowledge and explain language more vividly, which arousing students' learning interest and helping learners understand complicated and abstract knowledge concept. The virtual reality in AI technology could provide the service for users to experience multi-dimensional interaction through hardware, software and terminal, which creates an unprecedented immersive teaching and learning atmosphere.

III. THE BLENDED ONLINE AND OFFLINE EDUCATION

The scholar Holmberg believed that online teaching and learning should involve a kind of "instructive teaching consultation". The online education should pay attention to students' autonomous learning, but it never means students have to study the learning material package alone and without any help. This "instructive teaching consultation" involves two types, one is simulating consultation, another is real consultation. The simulating consultation occurs between students and pre-designed learning material package. Students' learnings have something to do with the learning material package, and there is a transmission of knowledge and idea between students and learning material package. On the contrary, the real consultation refers to the interpersonal relationship between students and teachers or among students themselves. Holmberg also held the opinions that the good emotional relationship arouses learners' interest and inspire enthusiasm. According to the scholar Keegan's viewpoint, the primary principle in designing learning material is to add contents about interpersonal relationship. In addition, the various intercommunication tools are indispensable in the teaching process. The scholar Daniel deemed that the intercommunication is very important, and the main function of intercommunication is socialization and feedback. But the proportion between independent learning and intercommunication should be proper in order to reach a balance. The professor Wedemeyer considered that smooth communication is significant because the interaction distance about understanding and feeling exists both in online and offline education which would cause the communication barrier and emotional distance between teachers and students.

Although nowadays the modern society was influenced a lot by Internet, do the online education could completely replace the offline education? The answer is probably no. It is impossible and difficult for the prime teachers from famous universities to know

every student due to the limit of time, space and massive class size. Therefore, the students would possibly lack real interaction and intercommunication although they can get enough English input. The interaction and intercommunication that occur between students and Internet machine lack the communicative circumstance in the real world, which could not totally satisfy students' emotional and communicative need despite its high scientific technology. Hence, it is necessary to combine online and offline education so the blended learning could be performed to a maximum level.

The American educational psychologist Bloom divided the cognitive goals into knowledge, comprehension, application, analysis, synthesis and evaluation, which was regarded as theory of cognitive level. With the development of related subjects, Bloom's students Anderson and Krathwoh modified this theory in 2001, classifying the cognitive process as remembering, understanding, applying, analyzing, evaluating and creating. The level of creating is newly added and at the top of original theory system. According to the newly modified theory, the lower level includes remembering and understanding, and the higher level involves applying, analyzing, evaluating and creating. Application is the transition between lower level and higher level. The low-order thinking refers to the remembering of knowledge, barely understanding and applying the knowledge that students passively absorb. On the contrary, the high-order thinking means a comprehensive ability that mainly focuses on high cognitive level and the process of actively and creatively dealing with the source message. Additionally, the high-order thinking also emphasizes students' ability to solve problems, study independently and think innovatively and critically. [5] In the cognitive process, the input and output are both important. The input belongs to receptive ability, stressing absorbing the English language knowledge. Instead, the output belongs to productive ability, highlighting the application of English language knowledge. Only by a series of language activities the receptive ability could be transformed into the productive ability. Drove by the learning tasks that are related to the subject topic, students can consciously apply the English language that are learned and absorbed during online course, hence to achieve the output of English language. The output stresses both the process and result so teachers should help students make a smooth transition between input and output with the aim of developing and improving students' comprehensive application ability of English language.[6]

The multimedia teaching is more attractive to learners for its vivid characteristic. The dynamic design could positively stimulate students' senses to participate in learning, decrease the emotional resistance, arouse

the interest and improve learning effect by visual-audio-oral method. After students initiatively question, think and internalize the knowledge, they would find some confusing language points according to their English basis and ability. Therefore, the prompt feedback and intercommunication are significant. According to scholar Sewart's continuous concern theory, online education should offer consulting and tutoring service, whether by means of communication or computer, teachers could help clear up students' confusion through written or oral instruction and aid. The intercommunication enhances the sense of reliance and support, which strengthens students' confidence on learning English. Most of all, online education should avoid being developed into students' lonely learning about English material, especially those whose English foundation is not solid together with loose self-control. Without the service of study support, and instruction of appropriate learning method and habit, the online education would possibly not receive idealistic effect.

The feedback is an indispensable, necessary and integral part of blended learning, especially in the section of intercommunication. Students, as the main participant of processing information and initiative constructor of the meaning, could consolidate and adjust their knowledge structure according to teachers' positive or negative response about students' answers to teachers' questions. Besides, teachers, as the transmitter of information, should arouse students' initiative through some highly efficient means of intercommunication. Teachers can rearrange the structure, adjust the content, modify the strategy and optimize the process of teaching according to students' feedback and intercommunication. This kind of positive intercommunication and feedback adapt and integrate the educational styles of teachers and students and finally help achieve their tacit understanding.

The constructivism learning theory points out that learners grasp one thing through their own experience and background. On the online education, learners tend to find one dimension of knowledge due to their limited self-experience. In order to enable students to find other dimensions of English knowledge, intercommunication is indispensable. Because everyone possesses different convictions and experiences, they would figure out the different angles to grasp English language points. During the intercommunication process, the cooperation and discussion enable students to realize how various others' opinions are and they not only share but also transcend their own single understanding of English language, which could in turn help learners form a comprehensive understanding of English language.

The psychologist Piaget held that knowledge is neither the simple description of outward object nor the expansion of preformed structure. In fact, the

knowledge is the consequence of the interaction between main body and surrounding circumstance. The factor that decides the learning effect is neither external factor nor internal component, but the interaction between each individual and outside circumstance. This interaction might decrease the distance caused by the limit of space and time, strengthen the emotional bond and alleviate the indifferent atmosphere. The interaction and intercommunication create a vivid and energetic learning environment, arouse learning interest and effect. The society pays increasing attention to the knowledge reserve of talents as well as the ability, such as the ability to deal with problems, to acquire knowledge and to cooperate with others. Online education highlights interaction and intercommunication, which help cultivate students' social ability. The scholar Garrism deemed that the completeness of teaching process and teaching quality have a lot to do with the constant and reliable intercommunication. The quality of intercommunication is also embodied in the speed and degree of interaction. Teachers and students should keep prompt and smooth interaction by checking and instructing student's recent learning performance or getting the answers and explanation from teachers in time. The Internet platforms and tools, such as QQ, Ding Talk, WeChat, MOOC, Chaoxing, Pigai and the like, could be used wisely by teachers and students to communicate, give and receive feedback, and interact with each other whether in the oral or written form. After having a knowledge of students' learning difficulty and correcting students' assignments, teachers could explain and expand upon the difficult language points in details, expediting the internalization of acquired English knowledge. This balance of communication between teachers and students benefits a lot to the effect and quality of teaching and learning.

In the blended learning, students could follow a learning order from studying autonomously online, taking part in flipped classroom offline to reviewing and internalizing English knowledge online again. During the autonomous online study, students should preview related online course contents before classes begin and finish the tasks of different levels and difficulties, such as studying the note, previewing report, presenting program, raising questions and joining in discussion in forum and so on. Then in the flipped classroom, teachers refine the language points of related unit and organize a discussion or other activities with students, in which students share their harvest in the process of previewing and finishing missions by the ways of individual presentation, lecture, role-play, group discussion and debate and so on. Finally, when students come back to online review, they should accomplish the related assignments of the English course to deepen their understanding of the knowledge.

In the offline classroom, the size of class is smaller than that of MOOC and SPOC, which decreases the strangeness between teachers and students because they tend to be more familiar. This kind of familiar feeling, strengthening the reliance and improving the emotional bond between teachers and students, makes interaction and intercommunication possible and help keep the good balance of educational ecology. Teachers get rid of repeated job content, focusing on inspiring students' high-level thinking ability, instructing and organizing students to output the English language in the real communicative circumstance. On the other hand, students are encouraged to show their confusion or share their experience in understanding the knowledge. This output process exercises students' ability of communicating and thinking in English in the real circumstance. According to students' feedback and output performance, teachers could modify their way of teaching to suit the special requirement of each student by adjusting the teaching plan. The intercommunication not only shorten the distance between students and English knowledge but also the distance between teachers and students as well as among students themselves.

IV. THE PROBLEMS AND CONSIDERATION OF THE BLENDED EDUCATION ONLINE AND OFFLINE

The online education should optimize and integrate the learning sources and scientifically design learning tasks, avoiding learners' overloaded cognition caused by too difficult learning content and too complicated structure. If the learning tasks becomes overloaded beyond learners' inward cognition, it will have a negative influence on learners' educational effect. Besides, the online educational system should be smarter and possess the powerful ability of updating constantly. For example, the online system could flexibly upgrade itself when it receives the feedback of inconvenience during using online system. The easy access and operation of online system enable teachers to issue assignments or discussion and so on easily, in the meantime, students have an easy access to submit their assignments, finish the quiz and sharing their opinions and the like. In addition, teachers and students should accept training about information technology to improve their ability of operating the online education platform.

Owing to the high student-faculty ratio, MOOC and SPOC should adopt objective and automatic online evaluation system to achieve automatic process assessment. The automatic scoring function liberates teachers from repeated activities, such as creating lecture video with generally unchanged content and enables teachers spare time to focus on the activities of high value, such as researching deeply into the learning materials and solving problems that students possibly

confront. Furthermore, the instruction and direction of MOOC and SPOC should be clearer in the following aspects, such as making students easily find the scores distributing section, get the chance of retaking the exam which may be forced to quit by the broken Internet access, get the smarter judgement to the answers that are in large part similar with the reference answer to avoid a zero score because of a little bit difference in expression. The smarter and humanized automatic scoring system would inspire teachers and students' enthusiasm of using the online education platform, as a result, enhancing the effect of the blended teaching and learning.

V. CONCLUSION

It is easy to find that Internet plays an increasing important role in education domain and reconstructs the organization and service system of education. It becomes a trend to blend online and offline education. The independent learning embodies the flexible and economic advantages, while the intercommunication symbolizes the characteristic of cultivating students' social ability in learning English. However, the proportion of independent learning and intercommunication should be under control. If the proportion of independent learning is too high, the effect of learning will be weak because of lacking real communication and application in the realistic circumstance. On the contrary, if the proportion of intercommunication is too high, the flexibility of blended learning tends to be weakened because the size of online learning will be smaller and the financial cost will be increased.

Therefore, the proportion of independent learning and intercommunication should achieve a sustainable balance to seek to students' full potential in applying English, cultivating cross-cultural sense, communication ability, and autonomous learning ability, developing the global vision and improving comprehensive cultural appreciation quality.

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