



An Empirical Study on the Integration of MOOCs Resources and College English Education

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Abstract. Massive Open Online Courses (MOOCs) have been rapidly increasing globally. In recent years, MOOCs and flipped classroom have drawn great attention from educators around the world. In China, these new learning models are being practiced by more and more college English teachers and students in their teaching and learning. To better understand the impact of MOOCs on current and future e-education globally, this paper reports an empirical study of Yunnan Open University (YNOU). In this study there are totally 32 teachers and 145 students answered the questionnaires, meanwhile 10 teachers randomly chosen were asked to take part in the in-depth interviews which were recorded and analyzed. The survey results demonstrate that there are some strengths and some limitations as well in using MOOCs. Five suggestions have been put forward for college English teachers and faculty members. Taking the impact of MOOCs on college English education into consideration, three stages are initiated for the construction of efficient integration of MOOCs and college English education. Furthermore, opportunities and challenges of MOOCs for traditional classroom practices and adult program management are discussed.

Keywords: MOOCs · College English education · Integration

1 Introduction

Modern open and distance education is characterized by web-based instruction, web-based assessment and research. Web-based learning support services are considered as the most essential inputs for learners which offer ground for them to produce considerable outputs so as to achieve better learning outcomes. From the year of 2011, Massive Open Online Courses (MOOCs), as a new network education mode, have been rapidly developed around the world. Coursera, edX and Udacity are regarded as “three carriages” of global MOOCs platforms, which attracted many universities to join, including some famous home universities like Peking University, Tsinghua University and so on. In recent years, MOOCs and flipped classroom have drawn lots of attention from educators around the world due to its great impact on e-learning and life-long learning.

To better understand the impact of MOOCs on current and future e-education globally, this paper reports an empirical study of Yunnan Open University (YNOU for short). Totally, there are 32 college English teachers and 145 students answered the survey questionnaires, meanwhile 10 teachers randomly chosen were asked to take part in the in-depth interviews which were recorded and analyzed.

In order to have a successful integration of MOOCs resources and college English courses, this paper examines the strengths of how MOOCs impact college English education with special focus on improving college English teaching quality at first. Secondly, limitations are summarized so as to assist the feasibility and effectiveness of conducting online MOOCs. Thirdly, suggestions together with corresponding possible solutions have been put forward for college English teachers and faculty members at YNOU. Based on challenges and opportunities, future integration of MOOCs resources into college English teaching will be discussed in the last part.

2 Literature Review

2.1 The Definition of MOOCs

The term MOOCs is shortened for Massive Open Online Courses, the integration of information technology and multiple intelligence. More importantly, they are mostly free online courses to the public. Therefore, it is very crucial to make a clear explanation about its connotative meaning.

According to Wikipedia, the first letter 'M' stands for Massive, referring to large scale of audience, massive numbers can be hundreds, thousands or millions. The second letter 'O' represents Open, its resources open to every student who is willing to learn. The third letter 'O' is a short for Online, providing online courses 24 h with automatic online evaluation system, to break through the traditional learning mode of time and space restrictions. The last letter 'C' abbreviates for Courses, the learning material is a complete course system, including curriculum objectives, curriculum requirements, curriculum tasks, curriculum evaluation and so on [1].

Based on the theory of open and e-learning, the global spread of high quality education resources can be realized through MOOCs. There are five main characteristics in the whole [2]. (1) Great: education for large scale of learners; (2) Open: anybody can learn, anywhere can learn, no constrains of time and space; (3) Free: most of the courses are free of charge, especially some first level courses offered by famous universities; (4) Personalized: different levels of learners can choose what they need to learn according to his/her own learning speed/background; (5) Blended: face-to-face learning and online learning modes are mixed together so as to achieve better learning outcomes.

2.2 Studies of MOOCs Abroad

The study of MOOCs resources can be dated back to the year of 2008 abroad; it was not popular until 2012, the first international year of MOOCs. Andrew Ng and Daphne Koller created Coursera collaboratively in November 2011, Sebastian Thrun and

another two colleagues set up Udacity in February 2012, Edx online free courses platform was founded by MIT and Harvard University in April 2012. So far, Coursera, Udacity and Edx became three tycoons in MOOC era, leading the future of free university education by offering the world-top courses.

Since then many of the related platforms had been formed in Europe following North America. For example, Futurelearn of Britain joined MOOCs in 2012 and Iversity of Germany engaged with MOOCs in 2013 by offering their first online courses. Asia had explored its local platform based on Coursera, Udacity and Edx, too. Japan, India and China had done a lot in exploiting courses as well as building MOOCs schools. Other areas like Pakistan and Australia had developed MOOCs actively. Therefore, MOOCs start from the foreign countries, they are the products of informationized development to post-traditional era, attributed to the successful application of scientific technologies [3].

2.3 Studies of MOOCs at Home

In China, the development of MOOCs lags far behind from the west. In 2013, East-west Universities' Course Sharing Alliance was established, thus the year of 2013 has been regarded as the first year of China MOOCs [4], and that year was also the beginning year of MOOCs and college English teaching research. To sum up, there are four features in the process of MOOCs' development at home [5]. (1) Brand name universities pay special attention to MOOCs than other ordinary universities; (2) Developed areas, such as Beijing, Guangdong, Zhejiang provinces focus most on MOOCs; (3) Mass media concerns highly on MOOCs than other media; (4) Male audiences surpass female ones a lot, especially university students between 20 to 29 years old.

In a word, MOOCs-assisted teaching and learning is widely acknowledged as a new learning model to promote students' learning by all kinds of means. It is assumed that this new mode of service will play a greater role in stimulating and facilitating students' learning. They are being practiced by more and more college English teachers and students in their teaching and learning. The following is an empirical study of practicing MOOCs in YNOU.

3 Research Method

3.1 Research Questions

The study aims to answer the following three questions:

- (1) What are the strengths and limitations of the integration of MOOCs resources into college English course in YNOU?
- (2) What are the suggestions to improve the integration of MOOCs resources into college English course in YNOU?
- (3) How can we conduct effective integration of MOOCs resources into college English course in YNOU?

3.2 Participants

There are totally 32 teachers and 145 students answered the questionnaires, meanwhile 10 teachers randomly chosen were asked to take part in the in-depth interviews. The subjects involved in the study are all the students registered at YNOU during the 2017 Autumn Semester. YNOU is the only Open University approved by the State Council in the Midwest region of China, and it aims to provide high quality distance education, with no exception of the utility of MOOCs resources for students from all walks of life in the area.

In the case of distance education in YNOU, it provides a complete and multi-functional system of assuring equal education opportunities in the Midwest, serving as an educational supply depot for all learning needs. Learners can be anyone who loves to study; they can study anywhere, at anytime, through YNOU learning platform and system. Among total more than 100,000 open and distant learning students, the majority are adult students whose College English is the toughest course. That is why the study has specific significance in improving learners' English education quality.

3.3 Instruments

The research instrument adopted in the study is composed of two, one is the questionnaire and another is the outline of the interview. The former contains a personal information sheet and a five point Likert scale of test in which the informants are asked to choose a response from strongly agree to strongly disagree. This is designed to explore the strengths and limitations of the integration of MOOCs. The latter contains a personal information sheet with six questions. It is designed to gain the suggestions. Both of them were based on works of Jonassen and Land [6], Wang and Zhang [7] and Linlin Huang, and distributed to the subjects after some modifications. A pilot study was conducted to further confirm its reliability and validity [8].

3.4 Procedures

The study was carried out in the Autumn Semester of 2017, lasting from November 2017 to April 2018. In the study, both quantitative and qualitative methods are applied, 32 teachers' and 145 students' questionnaires were collected by hard paper and 10 semi-structured interviews were conducted by the means of phone, We-chat and QQ Forum, when possible, face-to-face as well. The data of students' questionnaire performance was analyzed by descriptive method and the interview data by key words extraction method. Findings and discussion will be followed in the next part.

4 Findings and Discussion

4.1 Strengths of the Integration of MOOCs Recourses into College English Teaching

With the ever-increasing number of computers and the declining cost of using them, it becomes possible to take the advantages of MOOCs in students' learning process, so

does College English course. According to the study, YNOU offers MOOCs-based learning for both teachers and students with a lot of advantages.

Factors Concerning Tutors. First of all, teacher's information literacy is improved. It can provide teachers with knowledge about how to make a mini video, how to use the network platform, how well MOOCs are conducted and how to be a qualified teacher in an information age. 86.5% of teachers questioned agree that the study raises their consciousness of being a modern teacher.

Secondly, teacher's working efficiency is achieved. Open and distance education in YNOU, where tutors and students meet for tutorials only once every week or every month or even once a semester in some remote areas, it is more difficult to collect information by using the traditional means, online learning of MOOCs will completely fill this gap. 80.2% of teachers agree that the study achieves the goal of working by MOOCs. In addition, 4V specialties of MOOCs in big data era brings many advantages, to be specific, Volume, Variety, Velocity and Value, indicating that MOOCs are also high capacity, great variety, fast speed, time-saving, high efficiency, time and space free features [9].

Thirdly, teachers' curriculum design and classroom management ability is improved. To have a better control in online and face-to-face classroom, teachers can benefit a lot from the roles in the process of e-teaching. 65% of teachers agree that their roles have been changed in classroom management. They should master some management strategies of classroom activities, such as problem based learning, game based learning, group learning and so on.

Factors Concerning Students. Firstly, students' information literacy is improved. Students must equip themselves with the knowledge of how to study with the help of MOOCs, how to do homework online, how to download learning materials and how to submit pre-course exercises. 90% of students agree that their information knowledge is improved during the study.

Secondly, students' autonomous learning abilities are promoted. MOOCs-based teaching offer different level of learning materials for various needs, so as to deal with the specific difficulties, thus learning interests are greatly motivated. It also can offer opportunities for students' self-study at their own pace through MOOCs. 78.5% of students agree that their roles have been changed in autonomous learning. They are the key characters in the process, their former knowledge consumers have been changed to knowledge generators, assimilating the knowledge by forms of group learning and collaborative learning [10].

Thirdly, the students' listening and speaking ability are improved under this new mode of learning. The flipped class videos are first created for the students who cannot go to school on time [11]; they can watch the videos whenever they are free. The class requires learners to listen and watch the relevant videos before class, then to finish the cooperative assignments involving students' listening and speaking. 79.3% of students agree that their listening and speaking abilities are improving.

Fourthly, learners' critical thinking abilities are helped. Flipped classroom, as a form of MOOCs-based teaching, was advocated by Baker, teachers used network tools in teaching after class while doing cooperative discussion and problem-solving in class [12]. Students often have more hands-on activities both outside and inside the

classroom, more chances for communication and to help each other with the assigned tasks. 69% of students agree that their critical thinking abilities have been developed.

Lastly, students' learning environments are created. It provides a platform for building up a networked learning environment by integrating offline classrooms and cyber space, and is to change the traditional learning environment into a new, multiple and ecological one. 71% of students agree that their learning environment have been created.

4.2 Limitations of the Integration of MOOCs Recourses into College English Teaching

Based on the investigation, there are some potential problems for the utility of MOOCs in college English as far as modern technologies are concerned intensively. As a new learning method of MOOCs, the survey results demonstrate that it has limitations on college English for both teachers and students from the following aspects.

Factors Concerning Tutors. *Difficulty in Preparing Learning Materials.* MOOCs-based teaching requires lots of preparation before class. Teachers should face and realize that information technology is an inseparable part of today's world; they need work more to choose appropriate video materials to activate learners' motivation, to make the specific teaching resources for the learning difficulties. Then the most important and the toughest job is how to prepare the appropriate materials. Half of teachers do not know the principles of organizing text and multimedia; 60% of them have difficulties in allocating teaching tasks before and in the class; the others have confusions about how to evaluate learners' outcome.

Time-Consuming Course Design. Two thirds of college English learners in using MOOCs reach the consensus of that learning through service system is a very time-consuming process if they are not so familiar with computer skills and not easy to get access to computers or internet. In addition, it took college English teachers too much time for class preparation and video recordings, and many teachers complain about having increased burdens at the beginning of the reform.

During the evaluation process, teachers should check the learners' assignment online, answering the questions both online and offline, and offering feedback at anytime. In comparison with the traditional teaching mode, this complex course design is really time-consuming. Tutors have many new responsibilities added to their old ones required by traditional ways of teaching; all the extra time and efforts invested by the staff members involved in the application of the design should be taken into consideration in terms of the new type of workload.

Factors Concerning Students. *Poor Command of Computer Skills.* Some of the students understand the value of MOOCs as a means to improve their second language learning skills gradually. However, others might see their poor command of computer skills as the biggest obstacle to learn to use MOOCs as part of the supporting system, especially for those who are not familiar with this new learning mode. Most of the YNOU learners are not skilled in computer, such as taking part in the online activities, downloading the learning materials, participating in the online discussions and so on.

Besides, 79.2% of students have difficulties in learning the recorded videos on their own pace before tutorials. Nearly 80% of the students think the major difficulty they have with the system is that they do not have enough time for self-study, which lead to more troubles among students in the classroom.

Due to various reasons, 64% of students have unsuccessful experience in uploading their learning record and assignments. The main cause for this situation is that all the students are required to upload their learning records and assignments to the platform of OUC or YNOU. This makes the learning path very crowded, things are even worse if internet access has problems.

Difficult Access to Computers. Due to the lack of computers, more than half of the learners interviewed do not have easy access to computers. Since the number of computers at YNOU is limited, WIFI devices and the Internet speed is not very accessible sometimes, and the Learning Management System is still in the process of development. Over half of the learners do not have easy access to the internet; they complain that they are not given enough time online. Although WIFI devices are very common in most places in Yunnan, most students are working far from the study centers so that it is really not easy for them to get access to computers, and they might not necessarily have the internet anywhere meeting the requirements of the courses.

All in all, teachers should be encouraged to exploit MOOCs resources as a means to developing language skills and English classroom teaching quality. To this end, MOOCs materials can be introduced not only as a new dimension in college English teaching but also as a potential and possible solution to the above problems often mentioned by YNOU English teachers as a conundrum.

4.3 Suggestions on the Integration of MOOCs Recourses into College English Teaching

As far as our study concerned, teachers try to engage MOOCs in their courses, especially in the field of College English studies, but the results are not satisfied. Taking the impact of MOOCs on college English education into consideration [13, 14], especially opportunities and challenges of MOOCs bringing about for traditional classroom practices and undergraduate/graduate program management, five suggestions will be put forward to improve the English course learning outcomes for YNOU distance learners.

At first, attitudes toward the integration of MOOCs in college English should be changed. As Dowens [15] points out, the utility of MOOCs in college English, modern learners cannot learn by online MOOCs resources individually not only because of their ages but because of their attitudes towards modern technology. Reluctant learners are not willing to study through this system to some extent. Only enthusiastic learners can achieve the aim to meet the requirements of distance learning with web-based learning support services, to study online autonomously and freely.

Secondly, teachers' teaching mode should be changed. Since the utility of MOOCs in college English, the traditional mode of learning is being challenged; 'One Chalk One Blackboard' situation cannot be found anymore. i.e., sitting in the classroom and listening to lectures, distance learners do not feel safe and comfortable with the new

through the web-based multimedia learning system. Vast volume and fast speed computers can deal with lots of the target culture information. Teachers can integrate the target teaching content by using some multi-dimensional signals such as multimedia graphs, images, authentic and auto-kinetic effects so as to increase learners' sense of freshness, to enlarge learners' knowledge capacity, and to promote learners to understand the teaching content at a further step [16].

In addition, the advantages of MOOCs can offer the ground of extending the perception of some specific knowledge points, deepening the degree of learners' cognitive competence. The 'sea' (vast) resources online can promote education informatization in terms of resources integration and optimization. For instance, the world-class open courses like "Happiness" and "Justice" provided by Harvard University have great help on building western cultural value. Courses from British BBC world service and TED may show the real English accent, motivating the multi-dimensional English output.

Thirdly, more efforts should be put into improving learning surroundings. Adequate training should be provided to the participants who are poor at using a computer before the learning system is introduced. Multi-media classrooms with Internet access should be set up extensively. The use of smart phones, emails, facebook, Skype, Wechat, QQ forum and offering students online help should be intensified to keep their pace of learning. In addition, possible solutions, which include improving teacher's professional development and providing technical support for learning such as the use of computers and WIFI, should be made to improve the effectiveness of MOOCs method. Gradually, the college English teaching, management and evaluation system will be promoted.

Fourthly, formulating related management policies might be a key countermeasure to improve the perceived job relevance and encourage college English teachers' practice of applying MOOCs in teaching; external control includes supports in funds, technology and the latest learning support services for MOOCs as well as to improve the perceived output quality. Poor computer skills, difficult access to Internet and computers, unsuccessful upload experience will torture the utility of MOOCs in college English study by the new mode. Given students support concerning technical support, learning process management, learning strategies, emotional factors and learning cooperation are promoted and well-served; all the above mentioned problems can be solved gradually. Combining study on the computers with study through various MOOCs resources for the course, such as the course books, videos, multimedia courseware etc., from easy to complex, avoiding upload materials at rush hours, all these will definitely help to achieve the purpose of MOOCs-based learning and save time for utility of MOOCs in college English eventually.

Lastly, tutor's workload should be reduced from a long term practices. Because "adults prefer face-to-face learning rather than learning through the use of video or audio communications" [17], it is not surprising that most of the tutors think the use of MOOCs has increased their workloads and they are really troublesome. Only few of the tutors are able to provide frequent and synchronous online help to students as this is a very time-consuming and demanding job. In addition, tutors have to get online to check students' learning process and mark students' written assignments uploaded as well.

From a long term point of view, once tutors are accustomed to the new mode of using MOOCs in college English, tutor's workload will be reduced.

5 The Construction of Efficient MOOCs-Based College English Teaching

With the increasing use of Internet in distance education, the possibility of conducting learning support services online is becoming greater. Teaching English with MOOCs by EFL teachers should be an essential part of teacher professional development programmes because it is more concerned with how language can affect personal and social change than it is with how to teach language more effectively.

From the stance of EFL teacher in Chinese context, a number of means are tried to improve second language learners' abilities, and College English, in contrast to other courses. It remains a kind of "being stuck", therefore it is very important to improve language ability via the application of MOOCs. The following three stages, namely pre-class, online class and post-class, are proposed to construct MOOCs-based College English teaching in this paper.

5.1 Pre-class Construction

In this process, the key point for teaching is getting familiar with videos of micro lectures, multimedia courseware, and videos online, and then to integrate these MOOCs resources' into learning objectives. As for teachers, choosing the most appropriate resources is a tough job. At first, make sense of the right materials to meet the exact teaching objectives and teaching content, so as to pave the way of good material preparation before class. Secondly, get to know learners' difficulties to make a targeted video clips to solve the major difficult teaching problems. Thirdly, make high quality videos to attract students' attention for different level of learners to help them prepare the class work in advance with great pleasure and relaxed feelings.

5.2 Online Class Construction

In this process, the key point for teaching is to change students into autonomous learners. Learning through the new mode is unprecedented and unstoppable; students have to learn on their own pace most of the time. The critical role of MOOCs-based college English teaching is to break through the traditional mode into an interactive and autonomous one, which activates learners' motivation at the most. This is undesirable as [18] argues that two key attitudes underlie learner autonomy: the first is learners' attitudes towards their own role in learning. The second is their attitudes towards their ability to learn and take responsibility for learning.

Firstly, teachers should pay more attention to the explanation of MOOCs resources, understanding learners' attitude to MOOCs at a further step, in order to construct a complete teaching mode of "Explore-Acquire-Answer-Feedback" in college English classrooms. Then teachers should try this pedagogy in the hope of diversifying their teaching methods, and enhancing classroom dynamics and interactivity for optimal instructional outcomes.

Secondly, teachers should conclude the problems rapidly, participating and conducting classroom discussions in order to solve pre-class problems. In the process, teachers can assign students into different groups, and guide them to follow the questions for cooperative learning designed by MOOCs materials. Cooperative works among students are encouraged.

Lastly, teachers can strengthen the content understanding by making good use of the flipped class and fragmental resources, leading students into some targeted questions, to form an automatic learner via autonomous learning, group discussion and communicative interaction.

5.3 Post-class Construction

During this process, the key point for the construction is the evaluation of MOOCs resources into College English teaching. The teachers should make a sound evaluation on students' learning outcomes and learning plan through MOOCs materials.

First, personalized learning environment is created to obtain a free and open evaluation so as to get an effective and fair appraisal system. Second, teachers should know the learning situation of every student at the post-class stage, carrying on a timely reflection and filling the gap between learning outcomes and teaching objectives. Third, teachers should take the advantage of the evaluation of MOOCs resources and teaching problems, in order to initiate a reasonable and scientific learning plan for the coming new stage.

6 Conclusion

This paper is devoted to the discussion of the employment of MOOCs in the target foreign language class by putting forward some feasible approaches and suggestions. Despite numerous studies done in supporting services, there has no research dealing with the integration of MOOCs with college English at YNOU. Therefore, it is worth and feasible trying to use and perfect them in the real situation. This paper ended by discussing some wider implications of MOOCs application in college English teaching.

MOOCs resources have many advantages by bringing the free and open idea of networked learning into College English course. For constructing a successful practice of MOOCs into English teaching, five corresponding possible solutions are summarized and three potential stages proposed so as to assist the feasibility and effectiveness of conducting MOOCs-based teaching. Within the three stages' integration of MOOCs and English course construction, the learners' outcomes will be greatly improved, increasing practical value in class and proving the integration with MOOCs is a good approach in modern e-education.

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