

On Strategies Based on MOOC to Promote Teaching Capabilities

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ABSTRACT: The popular application of MOOC has provided a timely opportunity for teachers to achieve a great-leap-forward development with new changes taking place in modern teaching by posing great challenges in terms of teacher roles, the concept of teaching, information literacy and teaching capabilities. To take these challenges, teachers must actively adapt themselves to MOOC development by reshaping their roles and striving for higher information literacy. For this purpose, this essay proposes some strategies to effectively enhance teaching capabilities on the basis of community cooperation on MOOC system.

1. An overview of MOOC and its major characteristics

1.1 An overview of MOOC

MOOC is the product by fusing modern teaching concepts and methods supported by the internet, big data and the cloud technology. It is a new mode of online course development having emerged in the past few years. MOOC is short for Massive Open Online Course, “*massive*” means the number of learners is much bigger than that of the traditional courses, “*open*” implies that the online courses are available to any learner, “*online*” denotes that all the courses are uploaded to internet, learners can use the resources regardless of time or space, and “*courses*” refers to the resources to help learners achieve academic proficiency. Born in 2008 in the United States, MOOC has been winning popularity among people from many countries and regions. The boom began to emerge in America in the fall of 2011 and has produced much great impacts on modern teaching and accordingly given it much new vitality. The magazine *New York Times* called the year of 2012 “the first year of MOOC”, thus ushered a new era when the system has been winning much wider acceptance and popularity.

1.2 The major characteristics

As a new channel provided to obtain knowledge, MOOC, conducting teaching activities supported with

internet, has some remarkable characteristics. One of them is its massiveness. Different from the traditional classes where the number of students is strictly limited, MOOC can accommodate thousands of participants in the huge number of interdisciplinary courses for the learners to select according to their personal interest. The next characteristic is its openness. The traditional courses often require both the teacher and learners to finish the work in the assigned time and space, but on MOOC, once finishing registration, participants can log in on such electronic devices as the computers or smart phones to operate the system for either learning or teaching regardless of time or space. Another characteristic is its online operation. The traditional courses have to be handled in the way of face-to-face instruction, but on MOOC supported with internet and big data system, teachers can construct elaborate mini-courses with the matching resources, and conduct teaching activities by publishing assignments and doing classroom quizzes. The learners, after logging in, can do online work by watching teaching videos published, download the resources to strengthen what they have learnt, do online quizzes assigned, ask question or make online interactions.

2. Opportunities for and challenges to teachers in MOOC environment

2.1 Opportunities for teachers

2.1.1 The opportunity for great-leap-forward development

The MOOC system is equipped with a mass amount of the best teaching resources produced from every part of the planet, so teachers can upload their videos, publish their resources based on their schedules, do online questioning, assign classroom work, and conduct online examinations and evaluation with the support of mobile communication, wifi and smart identification. On MOOC, this multi-functional singular teaching has much increased the teaching capacity and made classroom activities more interesting. It is believed that on MOOC teachers can play better roles in class organization, guidance and the promotion of student learning. Meanwhile, the affluent resources, adequate time periods, timely feedbacks and appealing classroom instruction can much contribute to learners' efficiency and knowledge acquisition. It can be clearly seen that MOOC system, fusing teaching and learning while emphasizing learner-centeredness, requires emphasis to be placed on both teaching and learning to create a more effective environment for learning results, which in turn will urge teachers to improve their capabilities to meet the needs of learners.

2.1.2 The new changes in the reform of modern education

The popularity and wide acceptance of MOOC system lie in its idea of individualized teaching to highlight

learner-centeredness. To adjust to this trend from internet and MOOC, teachers should take advantage of the opportunities available to create new methods to serve humanized and situational teaching with cooperation and interaction as the highlights for a better learning effect. Besides, teachers should explore effective combination of classroom teaching with virtual and mixed teaching for better results. As knowledge initiators, learning illuminators and stimulators, teachers should work harder to push forward the reform of modern teaching to build MOOC into a space where learners can perform learning, cognition, perception and academic exchange. In this sense, MOOC can work effectively to motivate teachers into creative working force keeping abreast of the time.

2.2 The challenges to teachers in MOOC environment

2.2.1 Challenges to the roles of teachers

In tradition, teachers are knowledge carriers, givers and thus authorities with high dignity and prestige in the classroom. But on MOOC system, the dominance of teachers are eliminated with the multiple accesses to knowledge besides the roles they used to play as knowledge givers. Accordingly, teachers have to guide and inspire learners in their work. So in the MOOC environment, teachers have to understand the fact that learners can no longer be regarded as imitators in learning, and both teachers and learners are equal and cooperative participants in the teaching process and course construction.

2.2.2 Challenges to teaching conceptions

In tradition, teachers have to dominate the class, tend to regard themselves as authorities in certain areas and neglect their needs to pursue further learning. But the classes offered on MOOC are all learner-centered where teachers can only assist their learning. This requires that all sections of teaching, i.e. designing and organizing the teaching materials, choosing the way to do the teaching, arranging and performing the classroom activities, be all centered around the learners. In this sense, teachers must forge ahead and bring forth new ideas in their work. Meanwhile, they should also realize that MOOC, as a new way to offer online courses quickly available and rich in information, is not perfect at all, so they must take sensible attitudes towards this system.

2.2.3 Challenges to teachers' information literacy

On MOOC system, the objects are learners who work on computers, smart phones and other electronic devices, and the interaction between teachers and learners must be conducted via internet. Therefore, teachers' information literacy determines the smoothness of MOOC progression. To make sure that they can well

operate these devices and the systems, construct superior mini-lectures with systematic materials, assign the required online work to learners, conduct necessary assessment and have effective interaction, teachers must improve their information literacy to get proficient with the new technology.

3. Strategies to enhance teaching capabilities

3.1 Reshaping the roles of teachers for higher capabilities

To improve teaching capabilities on MOOC, teachers must clearly understand the roles they have to play and make proper mental adjustments. They also have to be clear that the lectures they give and the materials they upload must all meet the needs of learners. In this sense, both teachers and learners must cooperate through effective interaction. On the other hand, before the construction of courses to be offered, teachers must participate in the courses as learners to check the possible problems in every technical and professional aspect to assure the smoothness of course progression. This dual identity implies that teachers have to improve their information literacy through the construction to learn about MOOC, and that they, as mentors in guiding and stimulating learners to learn, should give learners more time to develop their practical ability of speculative thinking.

3.2 Laying more emphasize on learner-centeredness in MOOC environment

MOOC, with abundant superior teaching materials open, makes information available to every part of the world, providing learners with enough access to thorough knowledge learning regardless of time and space. In this circumstance, teachers must realize the necessity to transform the teacher-centered classroom into learner-centered activities to stress learning-orientation. For this purpose, teachers at this turning point must keep abreast of modern teaching concepts for the progress in developmental, multi-variant and individualized ways of their work. Therefore, teaching must be transformed from teacher-centeredness to learner-centeredness.

3.3 Including information literacy in teachers' professional development

In this era when IT has been exploding and MOOC surging, the degree of information literacy and the ability to apply the technology can determine the quality of teaching. To better serve the students, teachers have to improve their information literacy which is important to the collection, analysis and processing of the teaching materials so that they can combine IT and what they teach to proficiently handle their work both online and offline. This involves the joint efforts of both the teacher individuals and the administrative authorities. To

improve teachers' information literacy, the administrative authorities should establish some corresponding departments to offer matching training programs to teachers.

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