

**ACADEMIC LIBRARIES IN MASSIVE OPEN ONLINE COURSES
(MOOCs): THE CHALLENGES**

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ABSTRACT

The emergence of MOOCs cannot be ignored especially among academic librarians. The involvement of librarians in this worldwide open access movement is essential to realise the democratisation of higher education. This paper describes the concept and development of MOOC in previous years. It also highlights the structure and features of MOOC. It explains the challenges and roles of academic librarians in providing the best services to the MOOC environment and community. The paper also will briefly discuss the future of MOOC and the implementation of MOOC in Malaysia and in Open University Malaysia (OUM).

Keywords: Massive Open Online Courses; (MOOCs); Academic librarians; Distance education; Information literacy; Online learning

ABSTRAK

Perkembangan Massive Open Online Courses (MOOCs) memang tidak boleh dinafikan terutama bagi pustakawan akademik. Penglibatan pustakawan dalam MOOCs ini amat penting dalam menjayakan inspirasi pendemokrasian pendidikan tinggi. Kertas ini memberi penerangan tentang konsep dan perkembangan MOOCs dalam beberapa tahun terkini. Ia juga menjelaskan secara ringkas struktur dan ciri-ciri yang terdapat di dalam MOOCs. Cabaran dan peranan pustakawan akademik dalam menyediakan perkhidmatan terbaik dalam MOOCs ini turut digariskan. Kertas ini juga membincangkan secara ringkas inisiatif MOOCs pada masa hadapan serta implementasi MOOCs di Malaysia termasuk di Universiti Terbuka Malaysia (OUM).

Kata Kunci: Massive Open Online Courses; (MOOCs); Pustakawan akademik; Pembelajaran jarak jauh; Literasi maklumat; Pembelajaran atas talian

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INTRODUCTION

In 2012, MOOC has become a new buzzword in the educational sector. The New York Times called 2012 as “The Year of the MOOC” (Pappano, 2012). MOOC stands for Massive Open Online Courses, which has the following features:

Massive	: registration or participation is unlimited
Open	: participation is free and for all
Online	: courses are delivered entirely online
Course	: courses are often developed by top educators or are based on a module of a successful academic programme.

The concept and enthusiasm for MOOC is relatively new especially in this part of the world. The first MOOC was created at the University of Manitoba in 2008 (Mackness, 2010). MOOC, however, became widely known in 2011 when an open online course in artificial intelligence taught by two Stanford professors attracted over 160,000 students from more than 190 countries (Mahraj, 2012).

MOOC STRUCTURE AND FEATURES

MOOC offers anyone to take courses from any specialist or academician without any required course prerequisite. These courses have been presented over a period of time and follow a set of syllabus. As the courses are free and open to all, the number of takers is usually at least started by the hundreds or thousands of students. The dropout rates, however, are similarly massive. Most MOOCs have completion rates of less than ten percent. That ten percent, however, represents more students than most professors would teach in person in a lifetime. (Schwartz, 2013).

In order to ensure all courses are implemented in a well-organised manner, MOOCs need platforms or providers. Among major MOOCs providers are for-profit and non-profit establishments such as Udacity, EdX, Edemy, Khan Academy and Coursera. Coursera, with its inception in April 2012, has partnered 62 elite institutions and “registered 2.8 millions students”. Coursera offers over 300 courses, in a wide range of subjects including humanities, human science and science & technology (Empson, 2013).

Participants or students in MOOCs have to follow through the course over a set length of time. The teaching process includes the use of recorded web lectures, online reading list, weekly homework problems, and final exams. Students may complete as little or as much of the courses as they wish and at their own pace (Martin, 2012). MOOCs are at this moment offered on a course-by-course basis. However, with a growing demand of recognition and transferable credits, San

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Jose State University (2013), for example, is collaborating with Udacity to offer several online courses for credit. American Council on Education's College Credit Recommendation Service (ACE CREDIT) recently, in February 2013, completed the evaluation of five courses offered through Coursera and recommended all of them for college credit (Kolowich, 2013).

LIBRARIANS INVOLVEMENT IN MOOCs

The rise of MOOC creates unique challenges and opportunities for academic libraries (Wu, 2013). It is important to recall that the MOOC concept is at its infancy stage; therefore research on librarians' roles is very limited. The roles of librarians in MOOCs, obviously, are not comparable and significant with traditional courses and higher education environment. Among the roles and challenges to ensure the effective uptake of MOOCs include obtaining clearance of copyrighted content, promoting open content and Open Educational Resources (OER) to MOOCs community, and teaching information literacy skills.

CLEARING COPYRIGHTED CONTENT

Obtaining copyright clearance is the most critical and important challenge for librarians in MOOCs environment. Copyright clearance is about seeking permission, licensing negotiation, and fair use determination (OCLCResearch, 2013). Librarians must ensure that all instructional materials such as online lectures, learning modules, and quizzes are cleared from copyright issue. All materials assigned as reading materials must be cleared from copyright issue. This will not be an issue for traditional class environment. However, in MOOCs environment, copyright law does not address the unique structure and features of MOOCs. The use of copyrighted materials in a MOOCs does not fall neatly within the descriptions of fair use exemptions (Butler, 2012). Although the universities are not-for-profit organisation, the platforms and providers such as Udacity and Coursera themselves are for-profit organisations. Hence, permissible uses of materials in a traditional class might constitute an infringement in a MOOCs environment.

Recently, in April 2014, Copyright Clearance Center, Inc. (CCC), a global licensing and content solutions organization, has launched a MOOCs Content Licensing Solution. Through its partnership with leading course materials providers, CCC's solution provides copyright-cleared course content to participants enrolled in MOOCs, relieving the instructor or academician of the burden of securing permissions and distributing content (Copyright Clearance

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Centre, 2014). This offers the librarians a solution to obtain and retrieve copyright-cleared course content and references for MOOCs environment. Librarians in MOOCs environment also have to locate alternative sources such as from open source materials, Creative Commons materials and other free resources for academicians to develop courses, modules and assignment readings. They must take full advantage of the widely available Open Educational Resources (OER) to locate any information resource which may be appropriate for the courses. The bottom line is that librarians must carefully review the proper and legal use of each and every resource used in a MOOC to ensure that there is no license agreement violation or copyright infringement (Creed-Dikeogu & Clark, 2013).

THE PROMOTION OF OPEN EDUCATIONAL RESOURCES (OER)

The difficulties in obtaining copyright clearance have led many institutions to shift their academic resources to open or public domain content. Librarians should promote academicians whom are involved in developing MOOCs to obtain their sources from open content domain. The value of OER can be promoted in many ways. The ideal is probably a face-to-face conversation between librarian and content specialists (Butler, 2012).

Convincing academicians to publish their academic writings is another challenge to librarians in MOOC environment. This effort, however, is not very difficult as MOOCs itself is an 'Open Content' in nature. Most of the video lecture recordings, readings, quizzes and discussions are available for free or under an open access (OA) license such as the ones promulgated by Creative Commons. University of California (UCI), for instance, recently announced that its entire undergraduate chemistry curriculum is available on YouTube and its OpenCourseWare website. The University offers 15 video courses (22 hours per course) covering the entire UCI undergraduate chemistry major (Matkin, 2013). Librarians need to possess skills such as evaluating, organising and selecting information resources in order to select appropriate OER as sources and reading materials in MOOC. Librarians should be able to advise and recommend academicians the best OER for particular courses in MOOC. According to Kleymeer, Kleinman and Hanss (2010) "...librarians have relevant skills, including outreach and education, curriculum development, and instructional support, which could benefit OER programs." The authors also added that library infrastructure and assets such as search and discovery capabilities, copyright expertise, data storage, metadata and indexing, institutional repositories and preservation could potentially benefit university OER initiatives.

TEACHING INFORMATION LITERACY SKILLS

In addition to helping their institutions to properly use resources, academic librarians should also be involved in teaching and promoting information literacy skills to students taking MOOCs (Mahraj, 2012). One module on search techniques, for example, may be included in pre-recorded lecture in the course. A subject-based screencast or a YouTube video on plagiarism and citation can be also used in supporting MOOC students in their courses. Mahraj (2012) also suggested that academic librarians can teach/coach MOOC students by scanning student blog posts to find out where students are having problems evaluating sources and then providing comments to the posts. This effort, indeed, could take extraordinary amount of time and work. Mahraj also suggested that more efficient ways to reach MOOC students could be modeling appropriate citation, providing information-literacy skills self-assessment tools, and creating online information literacy tutorials.

The concept of embedded librarian may also be applied in this new learning environment. Embedded librarian typically participate in online discussions, respond to student post (in forum), offer classroom-type instruction using web-conferencing, and even troubleshoot problems using desktop sharing software (Hoffmann and Ramin, 2010).

OTHER ROLES

There are other roles that libraries can be involved in a MOOC environment, and among the many, include offering a MOOC which focused on librarianship. The University at Albany's University Libraries and the Center for Distance Learning at SUNY Empire State College (ESC) have collaborated to offer a new Massive Open Online Course, 'Metaliteracy MOOC'. 'Metaliteracy' is the reinvention of information literacy for open learning and social media environments (University at Albany State University, 2013). MOOC for librarianship will provide opportunity for librarians or those related to information management 'to brush up on their skills to get hired, promoted, or just do their jobs better' (Schwartz, 2013).

Besides academic libraries, public library also must play their roles in MOOC environment. Public libraries can become a host institution for local MOOC students to gather and learn. Other roles are supporting production of MOOC content and learning materials and preserving MOOC content.

MOOCs IN MALAYSIA

In Malaysia, on March 2013, Taylor’s University has become the first university providing MOOCs. The course was titled, “Entrepreneurship” and has attracted a total of 1600 students from 115 countries with 60 on-campus engineering students (Al-Atabi & DeBoer, 2014). Following this successful course, the University launched the second MOOC titled "Achieving Success with Emotional Intelligence" in July 2013. The two courses are using OpenLearning.com as the platform to deliver the MOOCs.

OUM iTunes U

In July 2014, the Open University Malaysia’s (OUM) has introduced 5 courses in a MOOC ready platform for iOS devices via iTunes U app. The five courses are Principles of Corporate Communication, English for Written Communication, Strategic Management, Thinking Skills & Problem Solving, and Software Testing (Figure1). iOS users can download iTunes U app and register for any of the courses for free. The content of the courses includes i-lectures, course modules in pdf format, and audio files. All these courses are also offered in OUM’s blended learning mode.

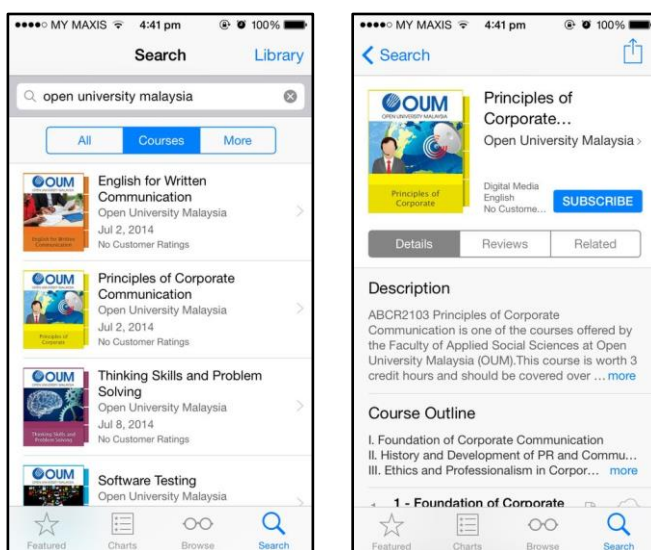


Figure 1: Screenshot of Open University Malaysia’s iTunes U

THE FUTURE

Firstly, there is a strong and growing demand for institutions in offering courses for-credit. Hence, in the next few years, there will be more MOOC to be credited. Secondly, in future, MOOC will be accepted as universities' existing on-campus curriculum. MOOC will be used to enhance traditional teaching methods with the introduction of MOOC blended learning. Thirdly, there will be more corporate institutions to join in the MOOC movement. In May 2013, the Georgia Institute of Technology announced that American Telephone & Telegraph Company (AT&T) has contributed funds to enable them to launch a professional online master's degree in computer science via the MOOC platform Udacity (Young, 2013). There will be in-person examination for the course. The cost for this course will be a lot cheaper than traditional full-time course. As MOOCs evolve towards for-credit, curriculum-embedded offerings and participation of corporate sector, the roles and requirement for the services of the librarians are set to increase (Gore, 2014).

CONCLUSION

MOOCs is still a relatively new phenomenon in the educational sector. Further researches need to be done to determine the effectiveness and benefits of MOOC to the society and nations. Various issues such as sustainability of MOOCs, determining the best instructional designs and teaching pedagogy, quality and completion rate, assessment and credit must be experimented and evaluated thoroughly to achieve the best impact of MOOCs. Academic librarians need to be prepared to be directly involved in supporting their institutions in implementing MOOCs. They should start to develop a deeper understanding of MOOCs in their institutions. Collaborative effort and actions among librarians must be taken to understand this worldwide movement in education. MOOCs definitely will be one of the tools in democratising education to the society.

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