

EXPLORING NEW FRONTIERS IN ACCESS TO HIGHER EDUCATION: THE CASE OF MOOCS

MOOCs (massive open online courses)—referred to as CLOM (*cours en ligne ouverts et massifs*) and FLOT (*formations en ligne ouvertes à tous*) in French—are online courses open to anyone and generally offered at no cost. For some, these acronyms represent a revolution and the long-awaited advent of the democratization of education by technology: just as the Web pushed back the frontiers of access to information, MOOCs might well be poised to push back the frontiers of access to knowledge. For others, however, they are merely buzzwords that signify nothing more than the repackaging of familiar contents as part of various institutions' marketing efforts.

Whether bona fide revolution or dud, MOOCs are nevertheless the product of an effervescent period of exploration. Although specialists and media have voiced much criticism and caution about MOOCs, they also report a great deal of real or potential positive benefits in connection with these courses. Should CEGEPs catch the wave or let it pass?

REASONS TO JOIN IN

An answer to many educational needs

There are many reasons to take a MOOC (Saadatmand and Kumpulainen, 2013). Whether to find out what it would be like to study a new field, to update math skills before taking a for-credit course, to learn the basics of astronomy as a matter of personal interest, or to develop computer skills in an informal context, a MOOC can be a valuable option. These examples suggest that colleges' expertise could allow them to effectively position themselves to meet such needs. Given that MOOCs are flexible, accessible, and free, they offer a promising avenue for the recognition of learning and skills, and can easily fill gaps in program offerings.

Moreover, MOOCs could help achieve the aims of economic, social, and cultural development inherent in the educational missions of Quebec colleges, given that this approach appeals to a variety of people and meets varied needs for

continuing education and beyond, such as non-credit training, educational assistance, remedial courses, and professional development classes. MOOCs have a broad range of potential applications, most of which have yet to be explored and developed. Among other things, they could contribute to developing financial, scientific, language, and numeric literacy, an issue whose vital importance has been recognized by the MESRST (Conseil supérieur de l'éducation, 2013). The OECD has likewise recently reaffirmed the societal importance of flexible education adapted to the needs of adult populations (OECD, 2013).

MOOCS AT A GLANCE

MOOCs are online courses that are open to anyone, usually free and with no obligation.

They generally fall under two broad categories: cMOOCs (connectivist approach) and xMOOCs (cognitivist approach). These two categories are endpoints in a fluid and continually evolving continuum of options.

cMOOCs are theme-based courses created collaboratively to meet the personal learning goals of users, who develop their knowledge as part of a network.

At the other end of the continuum are xMOOCs, which typically involve predominantly lecture-based teaching. These courses use short, punchy presentations in the form of video clips, which are complemented by readings and other learning resources. The video clips are often punctuated with formative questionnaires; evaluation takes place through assignments or tests that are corrected automatically or by peers.

MOOCs generally vary from two to ten weeks in duration and require students to do two to ten hours of work per week. All MOOCs offer a space for discussion, whether using a forum or social media.

Some universities offer recognition to students who complete and pass these courses. However, the practice is not common to all institutions.

Educational bridges

As the result of their preuniversity programs and certain technical programs, colleges play a key role as bridges between secondary and university education. As things now stand, only universities offer MOOCs, often through private funding (Dellarocas and Van Alstyne, 2013). Although these courses are theoretically open to all students, in practice, they are not geared for learners at all levels.



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MOOCs represent a practical, accessible educational solution that can meet the needs of many learners from different backgrounds. CEGEPs should seize this opportunity to assume their educational role, enhance their educational offerings, adapt to the needs of their students, and build new bridges. Of course, these bridges could lead to university, but they could also connect the secondary and college levels.

Educational innovation and research

Because they are being developed in a more flexible environment free of the many formal and administrative constraints of programs, curricula, and credits, MOOCs leave more room for the flexibility of teachers, course designers, and tutors; they are fertile ground for developing and piloting techno-pedagogical practices as well as research (Kay et al., 2013 ; Pritchard, 2013).

The expertise, know-how and techno-pedagogical resources developed in the context of MOOCs could subsequently be reinvested in enriching regular courses, whether offered face-to-face, via distance learning, or a combination of the two. In addition, given that the Quebec college system places great importance on instructional methods, student persistence, and academic success, CEGEPs could greatly benefit from the many opportunities MOOCs offer for experimentation.

Marketing and visibility

Over and beyond their philanthropic appearance of sharing and disseminating knowledge, MOOCs constitute a powerful new promotional medium based on the renown of certain leading institutions, faculty members, and researchers.

It must be recognized that one of the main reasons that institutions opt for MOOCs is marketing and visibility (Dellarocas and Van Alstyne, 2013). Carving out a strong position in a competitive educational market, attracting new student populations, and expanding local and international market shares are all aims pursued by the institutions that offer MOOCs.

MOOCs' universal access, easy enrolment, and absence of tuition are attracting high numbers of students. Some institutions are taking advantage of the opportunity to conduct market studies either to better understand the needs

and interests of their student populations or to recruit new, promising students for the regular stream. In the latter case, MOOCs serve a purpose similar to "student-for-a-day" programs, but feature longer, more extensive immersion.

MOOCs are especially effective in expanding institutions' market reach and visibility by eliminating geographic and economic boundaries, as well as by promoting access to knowledge and information for new students. From an international perspective, Quebec colleges could seize the opportunity of the visibility afforded by MOOCs for targeted recruitment, especially by offering preparation for potential foreign and immigrant students. At a more local level, such courses could be a way to reach individuals who are unable to enrol in a full-time or face-to-face program, but who are nevertheless interested in learning, competency building, or professional development.

Potential source of revenue and partnerships

A variety of business models are currently being used to support MOOCs and their host platforms, and many more are continuing to emerge. Certain trends are becoming apparent and suggesting novel financial avenues. Partnerships with private businesses and with public organizations are burgeoning with a view to providing mass education (Dellarocas and Van Alstyne, 2013).

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Examples of potentially lucrative applications for MOOC suppliers include the need for ongoing learning in the health sector or for software update training in major government institutions. These applications appear to be increasingly viewed as business opportunities for private investors who, probably for more mercantile than educational reasons, are interested in capitalizing on rich potential and in associating with educational institutions to support the development of this educational approach. Other indirect players view MOOCs as a significant opportunity for advertising their products or services, given that these courses reach thousands of people in a highly specific context.



Openness to the globalization of the knowledge industry also raises questions about traditional business models. The traditional boundaries established by geography, prestige, recognition, and certification are waning. The trend is shifting from a “situated” model to a “distributed” model. In the United States, for example, the Georgia Institute of Technology is focusing on student numbers rather than exclusivity to achieve cost-effectiveness; it has announced a new master’s degree in computer science via MOOCs at a cost of \$7,000, instead of the \$40,000 for the on-campus program (Morrison, 2013). Companies, universities and even governments appear to be eyeing the possibility of making money by charging students for a form of certification upon completion of such courses. This situation represents a major change in these institutions’ business models and missions, and colleges must be prepared to confront the market’s new dynamics.

A transitory and evolving phenomenon, MOOCs ... offer the Quebec system an opportunity to reflect on and enrich its practices.

WHY HESITATE?

Need to adapt instruction

Since MOOCs can be open to thousands of students, they raise considerable instructional, assessment-related, and communication challenges. Teachers and institutions wishing to introduce their first online courses also expose themselves to the criticism associated with distance education.

Developing a successful MOOC requires a basic command of online resources, techno-pedagogy, personalized paces of learning, and technology-based communications.¹ The diversity within MOOC student groups involves the rethinking of instructional practices to make them appropriate for different cultures, languages, and learning styles. Although some teachers have begun adapting their instruction to heterogeneous classes, MOOCs entail additional difficulties for two reasons: the huge number of learners and the format of distance education.

In light of recent experiences, we are also discovering challenges associated with quality control, course updating, and copyright management. Furthermore, xMOOCs are coming under criticism for their instructional approaches, which are more traditional and lecture-based than those made popular by modern trends. Might these courses be less effective for learning than face-to-face courses? Research is currently under way to identify best practices.

High dropout rates

The available data on learners’ experiences (Karsenti, 2013) indicate that MOOCs face challenges associated with participant autonomy, motivation, and expectations. These factors strongly affect retention rates. Nevertheless, the estimated dropout rate for this type of education is likely to be artificially high, even more so than for distance education in general. In both cases, the dynamic of student persistence is not comparable to regular and for-credit courses. These statistics are also probably exaggerated by the “openness” of MOOCs, i.e., easy, free and no-obligation enrolment that allows prospective learners to “shop around” for courses—consequence-free—and choose to complete only those that truly interest and suit them.

The dropout rate in MOOCs may be high, yet, hypothetically, given a 90% dropout rate for a course with 10,000 students, 1,000 students will still have completed the course. Completion rates may be disappointing, but, in absolute terms, the number of learners who persevere is still very impressive. Ideally, to get the most out of MOOCs, institutions will need to develop strategies to promote retention and learner satisfaction, among other things, by means of quality offerings adjusted to the needs of the student population and the market.

Costs

Putting together a quality MOOC is expensive (Cusumano, 2013). Course design and production, the creation of materials and videos, the time of instructors and technicians, marketing campaigns, and massive course platforms can represent considerable expenses that must be taken into account when looking at a course’s potential benefits. Importantly, when advertising the flexibility of distance education in order to attract students, it would be advisable, by the same token, to offer online for-credit courses. Indeed, offering related for-credit courses, especially through distance education, can help support MOOC offerings as well as allow students to pursue their interests further.

Market competitions

MOOCs have the potential to significantly shake the deep-rooted structures of education systems. The main competitors of Quebec colleges today are, for the most part, other

¹ On this subject, see “Access to higher education and distance learning” by Violaine Page in this issue of *Pédagogie collégiale*.



Quebec colleges. The MOOC movement, like all phenomena resulting from globalization, brings into play multiple issues associated with competition between institutions...and even between education systems. Whether or not CEGEPs join in the MOOC movement, globalization will, sooner or later, catch up with the Quebec college system and leave its mark, as it has done in the manufacturing and industrial sectors.

In some countries, this globalization of knowledge raises concerns about the Westernization of education and about a kind of neocolonialism that threatens local cultures. The identity of the Quebec college system is not immune to such considerations. In reaction to such pressure, business models are already being readjusted. The rise of new protectionist measures—such as the application of certain quality standards to production and distribution, employers' adoption of qualification criteria, and institutions' establishment of certification measures—might eventually curb the global nature and freedom of MOOCs.

Another cause for concern in the education system is the possibility that employers or professional bodies will recognize the value of MOOCs, whether for credit or not, irrespective of current institutional structures. Will this affect the supply, demand, and perceived value of the traditionally for-credit courses offered by CEGEPs?

For the time being, only France has adopted a national policy governing the development of MOOCs.² In Quebec, nothing of the kind appears to be in the offing. Since introducing MOOCs into the Quebec college context would involve substantial costs and public money, it would be important to make sure that these MOOCs meet a genuine need in the population and truly promote access to higher education. In addition to aligning with the needs of employers, any such strategy should also provide good positioning, both in local and in international markets. Given the potential expenses involved, some thought needs to go into positioning, course offerings, and the coherence of the selected strategy.

▶ TAKING ACTION

The portrait of MOOCs that we have sketched is, of course, subject to rapid change, because the system is constantly evolving. Not so long ago, students only had access to a list of disparate and independent MOOCs. Today's offerings already include entire programs.

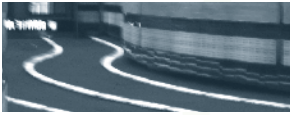
Possibilities for obtaining badges, certifications, and credits through MOOCs are growing. The student groups targeted for

these courses are fluid and changing. International avenues are opening, funding models are becoming more refined, and research data are beginning to emerge. A transitory and evolving phenomenon, MOOCs, primarily because of their lack of boundaries, offer the Quebec system an opportunity to reflect on and enrich its practices. Although some predict that MOOCs, in their original form, are doomed to disappear (Chafkin, 2013), the concept's evolution and the storm of ideas it is generating are sure to have an impact. Quebec society and the college system would do well to take a position and, if they so choose, fill this educational space and actively determine the scope of the impact that the phenomenon will have. ▶

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² On this subject, see [www.france-universite-numerique.fr/IMG/pdf/dossier-de-presse-france-universite-numerique-dpgf_scl_sc.pdf].



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