

## Text 2. MOOCs: a massive opportunity for higher education, or digital hype?

MOOCs (Massive Open Online Courses) are the latest addition to the acronym-bound lexicon of higher education, and quite possibly the most significant of them all. They represent a new generation of online education, freely accessible on the internet and geared towards very large student numbers.

5 The phenomenon has been likened by the president of Stanford University to "a digital tsunami", threatening to sweep aside conventional university education.

MOOCs are not entirely new. Both MIT and our own Open University have been offering open-source educational resources and short courses free online for some years. iTunesU, TED and Academic Earth are among non-university sources of excellent and free video lectures from eminent authorities. What is new about MOOCs is the scale, scope and pace of the ventures.

10 Many top-ranking universities offer a range of high quality courses, free to access, with varying degrees of online support, assignments, assessment and even certification for those completing programmes. Each is claiming to have signed-up hundreds of thousands of students worldwide, albeit with relatively small percentages persevering to complete their courses.

15 There are clear echoes here of the dot-com revolution of the late 1990s, reflected in the diversity of interpretations from higher education sector observers. Many share the view of the Stanford president that MOOCs replicate the disruptive innovations that have reshaped the global information, media and news industries.

20 Others are more sceptical, observing that the current MOOCs are essentially modern versions of the external correspondence courses that have been available for 50 years or more. Apologists for the university tradition point out that MOOCs do not offer degrees or even recognised credits towards the academic awards that distinguish 'proper' university graduates. Those with memories of the dot-com boom-and-bust years question the viability of a business model based on giving away your core products and potentially also your intellectual property rights.

25 The economic viability of open (read, free) online learning has yet to be established, but could be compared with other information-based internet industries. In the post-dot-com world, value and profits have come mainly from ownership of the technology platforms through which users access information and services. This gives the platform owners huge amounts of market intelligence and sales opportunities, generated by having hundreds of thousands of captive customers. That is why the global media and technology giants are queuing up to invest in this emerging market.

30 At this early stage of the MOOC revolution, it is premature to predict the impacts on conventional higher education providers. The current MOOC offerings are mostly digital versions of conventional pedagogies - what blogger Dan Butin has called "Learning 1.0 products in a Web 2.0 world" .

This can and will change through the incorporation of the kinds of user interactivity already well-established in social media technologies.

35 If, or perhaps we should say when, MOOCs mature in these ways, they will challenge our basic notions of higher education, just as our relationships with news, entertainment and other information have been transformed.

## Kids coding at school: 'When you learn computing, you're thinking about thinking'

Children across England have been back at school for a few weeks now, and with the launch of a revamped computing curriculum, they'll be learning some new skills: including programming.

Pupils as young as five will be learning about algorithms and computational thinking, as well as creating and debugging simple programs of their own, using a variety of tools. It's a big shakeup for children and teachers alike.

According to Bill Mitchell, director of education at BCS, the Chartered Institute of IT, "The huge challenge is to make sure all our teachers are able to be confident and enthusiastic about teaching the subject, which isn't going to happen by the end of this month".

Talk of the new curriculum being "tremendously positive" leads on to the other major criticism of the changes: whether teaching programming to younger children is a waste of time - or at least, an effective use of time and resources for schools.

One argument here is that making programming fun and accessible for five year-olds gives a false impression of the discipline's requirements when they get older. Another related criticism is that since only a small minority of pupils will become professional programmers, it is pointless making every child learn.

The most common defence against both accusations is that programming at an early age is more like learning a musical instrument or foreign language: something that can benefit all children beyond the specific skill being taught, rather than a drive to train up more professional musicians or translators.

### 20 Transferable skills

"To me, the basic idea of computing is you have to get a computer to solve a problem: you have to come up with an algorithm, a set of instructions. If you can do that, it's a hugely valuable skill whenever you're working as a team for any kind of project," he says.

He continues: "At school, when you learn physics, you're thinking about physics - and that can be wonderful. But when you learn computing, you are thinking about thinking, and about how thinking works. You're having to try to imagine how this computer is going to do something for you."

"What matters is are they better at inventing new algorithms, understanding how to break a problem down, and how to abstract away all the details they don't care about?" says Mitchell.

"You can learn really important things about computing without going near a computer. The transferable skills are mostly about those things. And this is transformative: it could have a massive impact on society in general," says Mitchell.

"When generation after generation of children have these computational thinking skills, it will change how they view the world around them, and what they can do to change that world so it works for them."

### Text 3: Technology makes higher education accessible to disabled students

Fionnuala Duggan theguardian.com, Sunday 28 April 2013

There are over 11 million people with a limiting long-term illness, impairment or disability in the UK. Many of them are using educational resources and completing university courses. Universities have a responsibility to provide these students, and all students, with the necessary learning materials regardless of their accessibility needs.

5 Textbooks are core to the university learning experience, yet for students with disabilities, particularly those with visual impairments, they can be a challenge. Static print sizes, outdated tools to translate print to speech, and complicated page layout and design can make it harder for those with a disability. This in turn impacts on the quality of their educational experience.

10 Consider another statistic: according to the Office for Disability Issues, disabled people are around three times less likely to hold any qualifications than non-disabled people, and around half as likely to hold a degree-level qualification. A total of 19.2% of working-age disabled people do not hold any formal qualification.

15 Technology can change things. One area in which this is true is e-textbooks, the digital representation of a print text. In the shift from print textbooks to e-textbooks, accessibility can be moved to another level. Suddenly text isn't an unchangeable object; it can be scaled up or down depending on the student's needs. Images can be read aloud through tagging tools. Access to print-fidelity page images means students can follow along in lectures page by page. Simultaneously, access to text representation (suited to screen readers and text-to-speech software) means students can adjust their e-textbook according to their needs.

20 Through technology, learning is becoming increasingly flexible. It can move outside the lecture hall, on to podcasts, and across devices, becoming available anywhere and at any time. The Higher Education Academy noted that students with disabilities have a need for flexibility. Technology can help provide this. Students no longer have to carry around heavy textbooks. Nor do they have to go physically to the library or bookshop to access learning materials.

25 Resources such as e-textbooks have taken off in the past few years. In the US, the Student E-ment Pilot Project (STEPP) programme offers e-textbooks specifically modified for accessibility. A survey of 1,185 students found that 77% reported having saved money by renting their textbooks, and 80% who needed an accessible textbook were satisfied with the quality of accessibility.

30 Higher tuition fees and a growing awareness of disabilities will drive developments in technological resources. Yet there's another dimension to consider: in an era of increased fees, affordable educational resources are key. All students are concerned to find savings. Students with print-related disabilities should be able to enjoy the cost-saving benefits made possible by online learning materials. They also should be able to access the countless digital efficiencies of  
35 these resources, the types that their peers have enjoyed for years.

Providers need to go beyond content access and come up with more universal design study tools that assist all students. Technology has helped increase accessibility in universities, but there is still a way to go.

Kids coding at school questionnaire.

1. Find the equivalents of the following words in the text.

Lancement: ..... remodeler: ..... programme scolaire:  
.....  
..... recherche des erreurs de programmation:.....  
remaniement:..... énormément: ..... inutile:  
..... compétence: ..... un ensemble de: .....

2. Right or Wrong? Justify by quoting from the text.

Teachers and children are not yet prepared for the change.

.....

Learning how to code is part of today's culture.

.....

The problem is that you need expensive software to learn about coding.

.....

3. Draw a list of the positive and negative aspects of coding for kids.

Negative aspects	Positive aspects

4. Think about positive and negative aspects that are not mentioned in the text.

Negative aspects	Positive aspects

5. Take down a few notes and be ready to give an oral account of your document to your partners.

**Moocs questionnaire**

1. Give a definition of what Moocs are in your own words: .....

.....

2. Find the equivalents of the following words in the text.

À l'attention de: ..... balayer / éliminer: .....cours / conférences: ..... (à l') échelle (de): ..... envergure: ..... expérience: ..... de premier plan: ..... un éventail de: ..... devoirs: ..... évaluation: ..... révolutionnaire (deux mots): .....

3. Right or wrong? Justify by quoting from the text.

According to some people, Moocs are going to revolutionize higher education.

.....

Private firms also offer online courses.

.....

Students have to pay to access university online courses.

.....

Most online students manage to get a final certification.

.....

Moocs promise huge financial rewards.

.....

4. Draw a list of the possible negative points for universities and students mentioned in the text.

Negative points for students	Negative points for universities.

5. Identify the element which could really make a difference for people to choose Moocs.

.....

6. On your own. Make a list of the positive and negative points of Moocs that are not mentioned in the document.

Positive points	Negative points

7. Using your completed worksheet, take down a few notes and be ready to give an oral account of your document to your partner.

## Technology makes higher education accessible to disabled students worksheet

Identify the equivalents of the following words in the text.

Fournir... à: ..... quel que soit: ..... dépassé:  
 ..... mise en page: ..... agrandir / diminuer:  
 ..... décoller: ..... frais d'inscription à l'université:  
 ..... prise de conscience: ..... abordable financièrement:  
 ..... concevoir: .....

The titles of the paragraphs have been jumbled up. Put them back in the correct order. Justify your answers by quoting from the text.

Paragraphs	titles	Line
Line 5 to 8	Technology can break time and place barriers concerning education.	
Line 9 to 12	The solution to close the gap between able-bodied and disabled students.	
Line 13 to 19	Disabled students are at a disadvantage in higher education.	
Line 20 to 24	The high cost of studies is likely to boost technology-oriented learning material.	
Line 25 to 29	Everybody will benefit from the development of online learning material.	
Line 30 to 35	Learning material and special needs students.	
Line 36 to 38	The development of technology-related resources.	

Right or wrong? Justify by quoting from the text.

- R    W    11 million students are ill or disabled in the UK.
- R    W    Everybody should have unlimited access to education.
- R    W    Today's technology is well-adapted to suit the needs of disabled students.
- R    W    All in all, disabled students reach the same level of education as the able-bodied.
- R    W    E-text books favour flexibility.
- R    W    E-text books are just tools among others.

Using this worksheet, take down a few notes to give an oral presentation of your document to your partners. Be ready to answer their questions.