

# The future of education

Education is necessarily shaped by the society we live in. In our rapidly developing times, schools and higher-education establishments must embrace new technological advances if they are to prepare students not only for the world of work but for life itself.

Current and emerging technologies can be used to engage students more in the learning process – to 'switch them on', so to speak – and to give them a stake in their own educational development. Teachers benefit as much as students, having access to information at their fingertips on the internet, along with ready-made lesson plans and guidance, online testing resources ... and the rest.

In the second decade of the 21st century it is clear that a drastic change is afoot – some would say nothing short of a revolution. Technology is facilitating one of the biggest changes we have seen in education: the individualization and customization of learning. Learning is becoming far more accessible too as computers and mobile technology are becoming ever more ubiquitous around the world.

The benefits of such technological advances are not only for technologically savvy people who study at an educational institution on a daily basis. There are people in many countries whose circumstances prevent them from attending school or limit their attendance – for example, people who live in remote, rural areas or people who have to work or look after a family. These people can now use technology, particularly mobile technology, to open up a whole new world of learning. Education no longer needs to take place in physical establishments such as schools and colleges, nor does it require a computer – sometimes a mobile phone or tablet will suffice. As the world moves more and more online, so does learning – making it accessible to anyone, at any time and anywhere.

No better examples of the new directions in education are Massive Open Online Courses, known as MOOCs. These are online courses that are open to people anywhere in the

world. No charge, or generally only a small charge, is made to access MOOCs. The courses that are available to the public are offered by some of the world's top universities, and taught by leading academics and industry experts. Starting in the USA with the universities of Harvard, Stanford and the Massachusetts Institute of Technology, MOOCs are now offered by universities in Asia, Australia, Europe and Latin America. Courses are many and varied across the arts, humanities, science, maths and technology. You can study Artificial Intelligence, Gamification, Music Theory, Equine Nutrition, Aeronautical Engineering and Writing Fiction – to name but a few. Teaching happens via video lectures, and students are provided with online and printable study materials, and can engage in online study groups and discussions with their peers.

MOOCs are not only available at higher-education level. The Khan Academy, for example, provides teaching materials from pre-school to secondary level in the form of 10-minute videos covering maths, science and humanities subjects. Furthermore, the academy also provides an adaptive assessment programme, which allows learners to study at their own pace. Students complete an activity, which is assessed, and the next activity takes into account their level of progress on the previous one.

Many people are excited by the availability of MOOCs, but the courses are not without their critics. Because they are open to all, the student-to-teacher ratio may be very high, and while this brings the cost down for the individual, some feel that the more personal touch of a school, college or university is missing. Is it really possible in a virtual world to replicate the face-to-face interaction between fellow students and staff, and the sharing of knowledge and experiences this brings? Furthermore, research indicates that 90% of students on MOOCs do not complete their courses. This high dropout rate could be due to a failure to provide a social environment that is conducive to sustained engagement and learning.

**1. Match the words from the journal article to the definitions.**

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|--------------|--|
| 1 drop out   | A make an exact copy                               |
| 2 embrace    | B make an action or process easier                 |
| 3 engage     | C stop attending a course permanently              |
| 4 facilitate | D participate or become involved in                |
| 5 replicate  | E provide as much as is needed                     |
| 6 suffice    | F begin using something or doing something eagerly |

**2. Read the journal article and choose the best summary of it.**

- A New technologies are engaging learners all around the world, not only in developed cities but also in rural and remote areas where there is unreliable internet connection. Free online courses are an example of how education is becoming more accessible to all. Many leading universities are offering them and students can study subjects such as Music Theory or Gamification free of charge.
- B Teachers and learners are benefitting from advances in technology, not just in urban areas but also places that previously had limited access to education. Free online courses are an example of how education is becoming more accessible to all. However, these educational changes also seem to have disadvantages, such as reduced personal contact between teachers and students.

**3. Choose the option that means the same as each extract.**

- 1 In the second decade of the 21st century it is clear that drastic change is afoot.
- A It is evident that a radical change is taking place in the 2010s.
- B It is apparent that a moderate change is taking place in the 2010s.
- 2 Learning is becoming far more accessible as computers and mobile technology are becoming ever more ubiquitous.
- A Learning is easier to access; consequently, computers and mobile technology are more common.
- B Computers and mobile technology are more common; consequently, learning is easier to access.
- 3 No better examples of the new directions in education are Massive Open Online Courses, known as MOOCs.
- A MOOCs, or Massive Open Online Courses, are not a good example of new educational directions.
- B Massive Open Online Courses (MOOCs) are the best example of new educational directions.
- 4 This high dropout rate for MOOCs could be due to a failure to provide a social environment that is conducive to sustained engagement and learning.
- A The lack of a social environment which promotes learning could explain why a lot of people do not complete their courses.
- B The large number of people who drop out of their courses may lead to negative social environments.